



The Age of Artificial Intelligence: Defining Traits and the Rise of a New World Order

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Abstract

The Middle East, Ukraine War, Armenia-Azerbaijan conflict, Pacific tensions, COVID-19 pandemic, and free trade agreements between the US and Pacific Rim countries have led China to establish economic blocs like BRICS and the Shanghai Cooperation Organization. This response to the unipolar world order pursued by the US is a strong indication of a new world order. China believes in a multipolar world order, while the US and Britain seek a new world order led by American economic poles, leveraging digital transformation. Major US tech companies, backed by the US government, are poised to take over global governance, replacing traditional nation-states and deterrence mechanisms.

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1. **Introduction**

When following the global affairs and conditions, one undoubtedly realizes that the world is heading towards a new phase of human life, in which machines will overwhelmingly take the reins after humans relinquish most of their tasks to them. This is the new electronic age, or the age of "cloud computing" or the age of "artificial intelligence." Perhaps the latter term, "artificial intelligence," is the most frequently used these days and is highly indicative of intelligence and power. This concept has permeated all aspects of social life, aiming to overturn traditional concepts of social life and integrate them into a new process led by "artificial intelligence." How so? In our daily lives, this concept is summarized in terms we hear, such as smartwatches, smartphones, smart TVs, smart cars, smart trains, smart homes, and smart cities. It is the intelligent automation of all aspects of social life in its various sectors and services, such as health, education, and economics, and even more so in our personal affairs, in a continuous and boundless process that will be explained in this forward-looking analytical article.

The first and the most immediate connotation that comes to one's mind from this concept is the word "artificial," which leads us to the farthest belief, which is the power to control the machine and adjust its capabilities through intelligent software via

electronic devices and computers, which have become an important part of our social life. It would not be an exaggeration to say that we have delegated some of our affairs to the machine, which performs tasks such as work, guarding, sensing, consulting, and more. The features of this process are evident in the concepts that we have become accustomed to hearing daily and repeatedly, such as "Internet of Things," "Artificial Intelligence," and "New Internet," which are symbols that indicate the beginning of humanity's transition to a new electronic age that is completely different from our current age. Experts predict that this transition will occur around 2025 if certain desired developments accelerate worldwide, or it may be delayed until 2030 or 2032, depending on the developments and transformations that occur globally.

The future of technology conceals an unimaginable power of breakthroughs in the medical, industrial, and even in human thought and physiology. Perhaps most notably, we have heard of "artificial intelligence" revolutionizing the interaction between humans and machines through natural language processing and converting it into a virtual machine language, enabling human-machine interaction for tasks such as virtual assistance, language translation, image recognition, and speech transcription. We have also heard of the development of

driverless vehicles, which are now officially operating in some regions of technological countries like Germany, such as Mercedes' freight vehicles, and the use of taxis in Japan. Indeed, there is a revolution in transforming transportation as we know it. Moreover, "artificial intelligence" has demonstrated the ability to provide personalized advice and recommendations, enhancing user experiences. This is all revolutionizing how we use technology, especially in online shopping, through its powerful capabilities in fraud detection and protecting financial transactions to ensure the security of our digital interactions within the AI-powered virtual environment.

It has also been realized that "artificial intelligence" has empowered companies through actionable insights, improving decision-making and operational efficiency, as multinational corporation PepsiCo has done with barcode data, which will become obsolete with QR code technology. The integration of "artificial intelligence" into smart home devices and the transformation of homes into intelligent ecosystems has enhanced comfort, reduced energy consumption, and preserved the environment. Furthermore, its application in robotics has revolutionized industries, enabling machines to perform complex tasks with precision and efficiency. These are just a few examples of the capabilities of artificial intelligence, making the use of "artificial intelligence" indispensable in our

daily lives to simplify tasks and provide valuable assistance.

Artificial intelligence is expected to revolutionize and play a more significant role in shaping our future as technology advances, permeating all aspects of social life. Thus, it will contribute to environmental protection, disaster prediction, early warning systems, and the detection of subtle environmental changes. As per the field of healthcare, AI will enable early disease detection, even before symptoms appear, allowing for timely interventions to save lives and reduce human error. Furthermore, it will facilitate remote medical consultations, diagnoses, and treatments. Artificial intelligence will also be instrumental in economic development by creating jobs, generating new opportunities, and bridging the digital divide through enabling remote work and promoting economic inclusion. Humanity is moving towards automating repetitive tasks, allowing employees to enhance their skills and focus on higher-value work. This shift will lead to the emergence of new professions such as AI trainers, data analysts, and ethical AI specialists.

This situation prompts us to raise several fundamental questions about the future of humanity, particularly regarding the overlap in tasks and the eventual outcome of this tremendous development. How can these services be utilized to enhance our daily lives? How will artificial intelligence create new job opportunities while

simultaneously serving as a substitute for human labor? What are the problems and risks associated with this development? How secure is the age of artificial intelligence if machines are to take our place? What is the purpose of the arrangements made by companies and countries in what is known as cloud computing? What is the relationship between artificial intelligence and cloud computing? What is meant by generative artificial intelligence? What is the meaning of big data? And how will the ethical issues arising from modern technology be addressed? Numerous questions have been raised in this regard.

Perhaps the discussions and debates currently taking place at the World Summit on the Information Society, the International Telecommunication Union, and conferences on artificial intelligence and big data exhibitions in London, Europe, and America serve as a testament to the new orientation that will place humanity at a new crossroads, surrounded by many doubts and uncertainties about the future of humankind.

2. A General Overview of Geopolitical Transformations in the World

2.1 From Traditional Theory to Technological Determinism

What is most palpable regarding the ongoing geopolitical transformations, often occurring intermittently, is the creation of

conflict zones and tensions, as seen in cases like Algeria and Morocco, Turkey and Greece, or Armenia and Azerbaijan. These transformations can also occur continuously, as exemplified by the COVID-19 pandemic and the Arab Spring uprisings. Moreover, they can accelerate rapidly by simultaneously activating the aforementioned factors when the situation demands it.

The future is uncertain. An undeniable reality in our world today is that these geopolitical transformations have exposed the weakness inherent in the current global order, which is based on the traditional theory of deterrence and hegemony. This current global order is simply unable to keep pace with the vast, accelerated, and infinite changes in the field of technology, which harbors much obscurity, doubt, and uncertainty. These transformations therefore serve as a prelude to the emergence of a new world order governed by technological means based on artificial intelligence.

To further clarify, the profound and simultaneous impact of modern communication technologies on the many conflicts and tensions worldwide is undeniable. From the Arab Spring uprisings of 2011 to the COVID-19 pandemic of 2019 and the current hotspots like Ukraine, Gaza, the Gulf, and Sahel-Saharan States, these technologies have acted as catalysts for global crises. The

United States and its allies have been the primary actors in orchestrating and managing these crises on a global scale. The administration of former U.S. President Donald Trump serves as a prominent example illustrating the visible shifts in global orientations and changes in international cooperation and interaction systems, particularly in the realm of economic transformation and the competition for gains between China and the United States. Tensions between the two countries escalated to the point of mutual boycotts and restrictions on Chinese goods, and even expelling Chinese companies from certain regions worldwide, as was the case with Huawei. Additionally, there was intense competition over chips and semiconductors, introducing a new dimension for many countries in shaping their future international relations. Consequently, there is a significant shift in this form of international relations, at least on the economic front, as evidenced by issues related to energy, food, and supply chains. Further complicating these relations are leadership challenges rooted in technological factors that profoundly influence global concepts, traditional policies, and the intricate dynamics of society, state structures, and the environment. This includes issues such as espionage, cyber warfare, smart weaponry, space conflicts, and the fifth-generation infrastructure proposed by Huawei, which sparked sharp disputes between China, the UK, and the United States.

Geopolitically, it is observed that the United States has had numerous free trade, security, and economic agreements and has formed blocs with Pacific Rim nations such as Malaysia, Japan, Australia, Singapore, Vietnam, and Taiwan, excluding the People's Republic of China. Notably, whenever China seeks to join any bloc, the United States tends to withdraw. Moreover, we observe a new orientation among some nations, such as Spain and Norway, to recognize a Palestinian state within a two-state solution framework. Such orientations also represent a shift in international relations.

The United States' attempts to curtail China's global growth are evident in its efforts to sever Sino-Russian ties in the fields of security and economics, and to prevent broader forms of convergence between the two nations or with other countries. These geopolitical shifts can also be interpreted as the US seeking, as previously mentioned, to create hotspots in any region where China attempts to establish a foothold. This is because China's expansion impacts the economic and commercial interests of both the United States and Britain. Hence, it becomes clear that the primary arena of conflict is the economy. Consequently, the future belongs to large corporations that will rely on intelligent technology as a highly effective tool for managing global affairs, effectively replacing the role of states and entities. This is evidenced by the technological

systems they seek to create, such as big data systems, cloud computing, and the Internet of Things, to monitor people's behaviors, tendencies, and needs in real-time. Undoubtedly, this will necessitate a reassessment of many international regulatory considerations, leading to numerous violations in this field.

2.2 The Concept of Artificial Intelligence

Various definitions of artificial intelligence can be found in the Cambridge Dictionary, including:

- the use or study of computer systems or machines that have some of the qualities that the human brain has, such as the ability to interpret and produce language in a way that seems human, recognize or create images, solve problems, and learn from data supplied to them.
- a particular computer system or machine that has some of the qualities that the human brain has, such as the ability to interpret and produce language in a way that seems human, recognize or create images, solve problems, and learn from data supplied to it (Cambridge Dictionary, 2024).
- Artificial intelligence (AI) is the theory and development of computer systems capable of performing tasks that historically required human intelligence, such as recognizing speech, making decisions, and identifying patterns. AI is an

umbrella term that encompasses a wide variety of technologies, including machine learning, deep learning, and natural language processing (NLP) (Coursera Staff, What Is Artificial Intelligence? Definition, Uses, and Types, 2023)

There is much discussion today about the "Internet of Things revolution," where "things" refer to any object that can be connected to computer technology, whether these are goods, products, devices, or machines such as televisions, cameras, refrigerators, coffee equipment, medical devices, production equipment, and more. In the Internet of Things, a "thing" might even be a person wearing a pacemaker (AO Kaspersky Lab, What is the Internet of Things? Definition and explanation, 2024) or individuals with brain implants. The term Internet of Things explicitly refers to human efforts to connect these devices and tools, termed "things," to computer technology. Moreover, it involves connecting these things to each other and enabling them to communicate and be controlled by an electronic mind without human intervention. This is the crux of this process, as it opens up a new vision of the future world, one that will undergo significant changes in this regard.

It is evident from the aforementioned concepts that they are strongly interconnected and interdependent. The Internet of Things, per se, utilizes artificial intelligence. Conversely, artificial

intelligence also employs the tools of the Internet of Things. The relationship between the two is complementary, and together they represent the current digital revolution.

The primary objective of the Internet of Things is to connect devices, tools, and software within a network that allows these objects to exchange information and data with each other without human intervention, as previously mentioned. Artificial intelligence, on the other hand, aims to enable these objects to analyze the vast amounts of data collected from Internet of Things devices and make appropriate decisions more quickly and accurately.

3. Elements of the Internet of Things

3.1 Smart Devices

These are objects that have been "internetized," if one may use such a term. In other words, they are interconnected devices linked to internet protocols and systems. These objects are equipped with sensors and monitoring systems to collect data from their surrounding environment and transmit it to the cloud computing system where it is processed and acted upon as required. This implies that these devices are capable of independent computation. Examples of such devices include smart watches, smart bands, smart cars, smartphones, smart locks, etc.

3.2 Cloud Computing

Cloud computing refers to the on-demand delivery of computing services—including servers, storage, databases, networking, software, 1 analytics, and intelligence—over the Internet 2 to deliver faster innovation, flexible resources, and economies of scale. A cloud service provider (CSP) makes these resources available to customers on a pay-as-you-go basis (IBM, Qu'est-ce que le cloud computing ?, 2024). In essence, cloud computing allows customers to utilize the infrastructure and applications provided by the internet, as well as the entity supplying these technological services. This has led to intense debates in the field, particularly regarding data usage, access, ownership, retention, security, and quality. These discussions are shaping the future of cloud computing and driving innovation. Consequently, cloud computing serves as the infrastructure for artificial intelligence, enabling data analysis and providing the intelligent services and applications.

3.2 Applications

Applications are codes, symbols, icons, and software programs embedded in smart devices that enable users to do technological tasks such as control, guidance, and other electronic services. They can also be websites used to connect to and control smart devices. This process can be automated, requiring no human intervention, which is a hallmark of artificial intelligence.

4. Elements of Artificial Intelligence

Upon close examination of the concept of Artificial Intelligence (AI), it becomes evident that its scope overlaps with the elements of the Internet of Things. AI seeks to process the data provided to it, assigning appropriate meanings and interpretations, and offering suitable solutions adapted to the given situation. This is done in a timely manner to save time. Perhaps the most important elements upon which AI relies are:

4.1 Robotics

These are devices and tools in various forms, programmed to perform specific tasks based on human instructions. Depending on the environment of use (land, air, or sea), they are referred to as drones and rovers. In the oil industry, they are used in innovative and beneficial ways in production, to deliver different parts of drill pipes during drilling, as well as in maintenance and repair tasks underwater and in exploration to map outcrops and build digital models for geologists, and in field operations to inspect remote locations and difficult terrains that may pose a risk to humans during travel (Fatai , 2021). Robots can also be applications in virtual space that mimic human behavior. We sense this type of robot when we try to download programs from some websites that place an access barrier or CAPTCHA test to ensure that the user is not a machine. Even cookies

are essentially robots programmed with data to accomplish a specific goal.

4.2.2 Algorithms or Computational Intelligence

Artificial intelligence relies on algorithms, or what experts refer to as artificial computational intelligence, which focuses on utilizing data and extracting value from it. Numerous algorithms are designed to construct machine learning models, such as artificial neural networks, decision trees, and random forests, etc. (Fatai , 2021)

4.3.3 Natural Language Processing (NLP)

Natural Language Processing (NLP) is a branch of artificial intelligence (AI) that combines computational linguistics—rule-based modeling of human language—with statistical and machine learning models to enable computers and digital devices to recognize, understand, and generate human language (IBM, What is natural language processing (NLP)?, 2024).

The primary goal of NLP is to develop machines capable of answering questions in natural human language and interacting with humans, either through speech, written text, or both. The ultimate objective is for AI algorithms to comprehend and interact with human language, starting with speech recognition, which converts spoken language into textual data in a machine-

readable format, followed by interpretation of the word's meaning.

It appears that applications have surpassed this goal and are continually evolving. For instance, Tesla's announcement of the Optimus robot in 2021, which can respond to commands with ease, is a testament to this progress. Moreover, the significant buzz generated on social media regarding Elon Musk's alleged marriage to the AI-powered robot "Catnilla," the first of its kind produced by Tesla, highlights the growing interest in AI-driven human-robot interaction. This robot can interact with human language and is equipped with sensory capabilities such as sadness and happiness, with the aim of becoming a human companion, similar to the fictional character in *The Terminator*.

5. *How will AI become dominant?*

Artificial intelligence experts associate the year 2030 with a pivotal shift from the current system to a new artificial intelligence paradigm. This transformation is anticipated to crystallize with the emergence of a new global order, whose outlines began to take shape amid global - arguably orchestrated- crises, starting with the COVID-19 outbreak in 2019. This shift was also preceded by attempts by the United States to marginalize China as a rival power on the international stage. This strategy was made explicit when Donald Trump openly declared opposition to China's growing influence worldwide,

aiming to curtail its ambitions, particularly those linked to the Belt and Road Initiative that connects China with Asia, Europe, and Africa. This opposition has taken various forms, including leveraging environmental organizations, particularly in Europe, and compelling entire nations and entities, such as Japan, Taiwan, and the Netherlands, to counter China through alliances and economic organizations in Asia that exclude China, such as the Indo-Pacific Economic Framework (IPEF) (J.C. avec AFP, 2022) and the Pacific Islands Forum (PICS), within the broader context of the Free and Open Indo-Pacific Strategy. Additionally, the Quadrilateral Security Dialogue, or "Quad," which includes the United States, Japan, Australia, and India, exemplifies this strategy (Abdel Nabi Sayed, 2023). Notable actions also include expelling Chinese companies, particularly Huawei, from the U.S. market, imposing sanctions on these entities, and restricting China's access to semiconductor technology, primarily through allied nations such as the Netherlands, South Korea, and Taiwan. Recently, however, China has reportedly achieved 7-nanometer semiconductor technology production capabilities, indicating significant strides towards closing the technological gap with its Western counterparts.

In conclusion, the United States and its allies, or more precisely, the architects of the proposed new world order, have

identified China as the primary obstacle to the establishment of this system. Consequently, efforts are underway to curtail China's influence, as evidenced by the COVID-19 pandemic, the instigation of conflicts such as the Ukraine war, and the tensions between Armenia and Azerbaijan, Turkey and Greece, as well as in Sahel-Saharan States and Arab Mashreq States, including the war on Gaza. This list is far from exhaustive and awaits further developments. The ultimate goal is to prevent China's expansion into these regions and to curtail the so-called Silk Road Initiative. This correlation can be observed by examining the countries where China seeks to expand its investments and those where conflicts and tensions have emerged. The correlation between these two phenomena is clear. Therefore, it can be concluded that the core of this conflict is purely geoeconomics, pitting two economic superpowers against each other.

Evidently, Western countries, led by the United States, are attempting to subdue China by prescribing a specific trajectory for its development. This trajectory is designed to usher in a new world order that is unipolar, with the United States holding sway not as a dominant government or nation-state but as a collection of powerful corporations. The hallmarks of this discourse are evident in the meteoric rise of the GAFAM companies—Google, Apple, Facebook, Amazon, and Microsoft—which dominate the digital marketplace.

However, the ambitions extend beyond this, as exemplified by the Starlink project launched by SpaceX, owned by Elon Musk. Starlink aims to establish global dominance by providing ubiquitous internet access to every corner of the planet. Statistics show that SpaceX currently operates approximately 4,000 satellites, (Vanlerberghe, 2018) constituting nearly half of all active satellites worldwide.

On the other hand, we also observe a competition among numerous countries. For instance, Russia wants have about 2,600 satellites in orbit by 2036, according to Yury Borisov, the head of the Roscosmos space agency. (Starchak, 2024). According to reports from Russia Today, the Russian President announced a project to launch more than three thousand satellites in the future.

From 2026 to 2027, it will send another 648 satellites into orbit to realize global network coverage. It plans to deploy all 14,000 satellites to offer global users satellite broadband internet service with high speed and reliability by 2030. (Science and Technology Commission of Shanghai Muni, 2024) Therefore, there is something highly intriguing about the future of global communications, where the world will be flooded with data driven by artificial intelligence in an unbounded mission. This dynamic is characterized by information generating more information across various areas of daily life, even

surpassing the boundaries of physical reality, especially with the concepts of human cloning and hologram technologies in fields like social life, education, and medicine.

5.1 Artificial Intelligence in Everyday Life

Undoubtedly, our future social life will undergo several changes supported by artificial intelligence through what is known as "virtual assistants" such as Siri, Alexa, and Google Assistant. These applications allow you to ask them vocally about anything that comes to mind, such as weather conditions, currency news, nearby hotels and stations, directions, scientific information, etc. These applications work as voice assistants supported by artificial intelligence algorithms, as they can respond to and answer questions posed, as well as perform tasks and control smart devices.

Furthermore, our future life will witness a new type of transportation and mobility, such as that promoted by the term "self-driving vehicles," like those being developed by major automotive companies such as Tesla, Mercedes, and Waymo. These companies have indeed created self-driving cars that operate using artificial intelligence and sensors distributed on sidewalks, road edges, and various suitable places. Through these, these cars and vehicles can move and make appropriate driving decisions.

The matter does not stop there, as artificial intelligence algorithms have encompassed various fields, such as translation, where people have become accustomed to using language translation tools powered by artificial intelligence in real-time, both text and spoken (voice), as is the case with Google Translate. The same applies to smart home devices that can be used to control many different aspects of the home, such as controlling temperature, adjusting security, and lighting, such as LG and Samsung smart home applications, Nest, and Ring. More astonishingly, even the things we wear, such as smart shoes and smart shirts, will surprise us with holographic technologies.

5.2 Artificial Intelligence in Geopolitics

Artificial intelligence (AI) is playing an increasingly significant role in geopolitics. The balance of power today is increasingly measured by a nation's ability to harness, develop, and manage AI. Indeed, power now resides with those who possess the AI tools to influence global politics. It is evident that countries worldwide are competing to dominate the economy and lead technological advancements. For instance, information will flow globally at an unprecedented rate, granting individuals greater access to worldwide events, whether through leaks or public disclosures. This will likely erode trust between nations in the field of digital sovereignty, as each country becomes reliant on its ability to control its

technological destiny. The elements of power and dominance will be concentrated in the hands of those who possess digital sovereignty. China, for example, is rapidly closing the digital gap with the United States in AI research and applications.

5.3 Artificial Intelligence in Healthcare

Artificial Intelligence (AI) systems are revolutionizing the healthcare industry by enhancing the accuracy of medical diagnoses, tests, and early disease detection. These systems rapidly analyze medical data, assisting physicians in making timely diagnoses and identifying appropriate treatments. Furthermore, AI significantly contributes to improving healthcare by enabling routine monitoring, providing patient guidance and advice, and supporting surgical procedures. Surgeons utilize AI to guide and perform surgeries, (Luke A. , 2020) while AI also accelerates medical research and drug development by analyzing large and complex health data. AI further supports public health by tracking diseases, responding to epidemics, and managing health systems (Coursera Staff, AI in Health Care: Applications, Benefits, and Examples, 2023). Notably, IBM Watson serves as a leading example in this field with its AI-powered conversation platform, IBM Watsonx Assistant, designed to aid in various healthcare applications.

5.4 Artificial Intelligence in Higher Education

A question that frequently arises is whether the educational process can be improved through the use of artificial intelligence. Educational technologies such as personalized learning, support technologies, educational robots, and chatbots provided by educational platforms which aim at assisting learners in acquiring knowledge and skills, lead us to discuss the benefits of artificial intelligence in the field of education. Several positive points can be inferred in this regard, such as:

- Rapid analysis of student data and prediction of their behavioral patterns. This feature helps us to solve problems, identify trends, and make predictions that can improve the educational process.
- Virtual assistants or chatbots provided by educational websites and platforms which offer immediate responses to students' inquiries related to their field of study, specialization, and the overall educational process. Notably, Microsoft has introduced Copilot, a cutting-edge AI-powered virtual assistant currently in testing. Copilot can assist users in finding answers and inspiration on the web, fostering creativity and collaboration, and helping users focus on their tasks. Compatible with Windows, Copilot can enhance productivity, creativity, and even assist with computer settings. Microsoft is also working on integrating Copilot with GPT-4 Turbo, OpenAI, and other features currently under development, with plans for release in the

coming weeks, according to company announcements (Microsoft, 2024). Consequently, the near future promises even more remarkable innovations and advanced capabilities in artificial intelligence.

- It is crucial to acquire the appropriate technology that enables the use of artificial intelligence in developing the educational process. This involves leveraging modern communication tools and technologies. The latest technologies will be equipped with AI, as evident in Microsoft's decision to discontinue support for previous Windows operating systems, including Windows 10, which will cease to be supported in 2025.

- Artificial intelligence helps automate personalized learning. By analyzing data related to learners' performance and behavior, it can identify areas where they face difficulties and then tailor education to the specific needs of each learner. Additionally, it can provide personalized recommendations to improve learning outcomes. The educational process becomes automated and carefully guided, with AI contributing various services necessary for this process, such as supporting and enhancing collaboration and communication among students, as well as facilitating their engagement with educational content.

- Detecting plagiarism and fraud to ensure academic integrity can be achieved through

the use of plagiarism detection websites and software such as <https://www.duplichecker.com/>, <https://plagiarisma.net/>, and the APLAG software.

- Automated assessment, where artificial intelligence can assist in automating routine tasks such as grading (Nguyen, 2023). In this regard, numerous AI applications can be found in this sector, such as remote learning platforms supported by AI algorithms, including Ruwaq, Idrak, Dual, and Model. In the research field, AI applications like ChatGPT and ChatBot AI are gaining prominence.

6. Challenges and Problems Facing Artificial Intelligence in the Future

To begin, some of the challenges facing higher education in the field of artificial intelligence are examined as an example through which we can try to explain what the future holds for us in general. Accordingly, there are many challenges facing educational institutions in general when applying artificial intelligence in education, perhaps the most prominent of which are:

- The weakness of most educational institutions in providing advanced infrastructure.
- The weakness of educational policies, which are mostly imported models.

- The dominance of face-to-face education over distance education.
- Delay in digitizing and updating educational curricula.
- Privacy and security issues.
- Weak budgets allocated to the education sector, while, on the other hand, there is a high cost of tools and technologies.

Accordingly, we can identify some of the risks resulting from the use of artificial intelligence in the future, most importantly:

6.1 Privacy and security issues

We have previously mentioned a key feature that humanity will accept in the age of artificial intelligence, which is that information generates information in an infinite dynamic series, where devices connected to the internet, as well as people connected to the virtual space, will generate a huge amount of big data in a cumulative manner. Without a doubt, this will lead to exposing this sensitive data and information to the risk of hacking. For example, a team of researchers from Microsoft and the University of Michigan was able to find security vulnerabilities in Samsung's smart home platform (Andrew , 2016).

6.2 The Problems of Excessive Data Collection

6.2.1 The problem of unwanted third-party cookies

accessing virtual spaces and websites via various devices and tools now necessitates accepting terms of service. These terms, often lengthy and burdensome documents, are imposed by virtual entities to collect users' personal information for commercial, security, or other purposes. Users are often compelled to agree to these terms to gain access to desired services, leading them to surrender their privacy. Furthermore, cybercriminals exploit this practice to spy on users and compromise their personal data.

6.2.2 The Problem of malware

The increasing connectivity of devices to the virtual world has escalated the risk of exploitation by malware and ransomware. According to Kaspersky Lab, IoT botnet malware has emerged as a prevalent threat (AO Kaspersky Lab, What is the Internet of Things? Definition and explanation, 2024). Moreover, artificial intelligence is being exploited for nefarious online activities. Numerous reports document the use of AI suspicious activities in committing cybercrimes.

6.3 Limitations of Knowledge in Artificial Intelligence

A salient feature of artificial intelligence in the forthcoming electronic systems is generative or creative AI, which will

astound humanity beyond imagination and encompass various aspects of social life. ChatGPT, DALL-E, and Google Bard are examples of generative models in content production. However, despite the boundless challenges in this area, AI will continue to have limitations in deeply understanding phenomena as the human mind does, as it relies on cloud computing data.

6.4 Ethical Issues

It is undeniable that issues of individual privacy in modern technology are subject to doubt, especially after individuals have discovered that they are vulnerable to surveillance by these tools. Numerous experiments have proven that individuals are victims of privacy violations, whether in terms of their affiliations, race, religion, or other attributes. Therefore, regardless of the level of advancement of these technologies, ethical concerns remain among the most significant future challenges posed by AI.

7. CONCLUSION

In conclusion, it is worth noting that the revolution of artificial intelligence has already begun, and its dominance is looming on the horizon. This is evident in the advanced countries that are now called information societies or technology societies, as they have become increasingly reliant on artificial intelligence in their daily lives. However, a matter of concern is the potential danger to humanity that could

arise from such rapid progress, which is difficult to keep pace with. On the other hand, artificial intelligence possesses incredibly impressive characteristics and advantages. For instance, it can now know almost everything about us, including our habits and behaviors. It can even schedule appointments, provide assistance, and perform various tasks and services. This raises a significant question: What limits will be set for artificial intelligence? And what will become of the human mind in the face of this tremendous development? In truth, no one can predict the extent to which this rapid development will go. We may eventually be unable to keep up with artificial intelligence in the future, as it will become the dominant and controlling force in tomorrow's world. Humans will have relinquished control, allowing artificial intelligence to take the reins. This is certain and undeniable, as many routine tasks have already been automated, and machines have become the dominant force.

Humans will relinquish most of their services and tasks to this machine, which will take on their roles and even surpass them, becoming the leading force in control. This role may even extend beyond our physical world. Artificial intelligence has the ability to generate ideas, stories, images, and forms that do not exist in our real world. To illustrate this more clearly, consider the following example: Once artificial intelligence recognizes you, it can immediately create your generated avatar,

speak in your voice, imitate your movements, and anticipate your needs as if you were talking to yourself. It will be your personal guide wherever you go.

When "humans" we referred to here, it doesn't necessarily mean all of humanity. Some experts argue that the new era does not imply that all countries will have the same opportunities to possess advanced technology characterized by artificial intelligence, which is a hallmark of developed countries. Instead, the world will be divided into two parts: the first part represents countries that possess technology and are on the path of the new technological era, symbolizing the illuminated part. The second part represents countries that do not possess technology and are symbolized by the dark part. This new division will replace the traditional concept that divides the world into developed and developing countries, or the Global North and the Global South.

The emerging new world order, which is expected to take shape in the coming years, will be anything but benevolent, given the significant transformations we are witnessing in global politics and economics. It is no secret that many countries are striving to establish a new multipolar world order, as concepts such as sovereignty, borders, regional states, and power have been radically altered. In fact, such concepts have completely collapsed. Traditional sovereignty, for instance, where

a state exercised authority over its borders and territorial airspace, has significantly eroded in many areas. This is particularly evident in the realms of security, defense, intelligence gathering, tracking, data analysis, and geographical exploration. A case in point is the shutdown of communication technologies and internet services during wars and crises, as seen with Google Earth during the Iraq War, or the current impact of artificial intelligence on international relations and its influence on states. SpaceX's announcement of Starlink to support aid organizations in Gaza, as well as its provision of military information about the Russian war in Ukraine, are clear examples of technology penetrating national sovereignty and monitoring even geographical changes within countries without their consent.

The dawn of this new era is evident in the series of events unfolding worldwide as the world transitions to a phase dominated by those who possess the tools and elements of artificial intelligence. The challenges will be much bigger than they are now, as it will become increasingly difficult for countries to enter this new phase due to a lack of the necessary capabilities. This will inevitably exacerbate the dependency of some countries, as the technological advancements that have bridged the temporal and spatial gaps have narrowed.

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