The future of humanity in light of the advancement of artificial intelligence مستقبل البشرية في ظل تقدم الذكاء الاصطناعي



Hocine SALEM ^{1*}

¹ University of M'sila, Algeria

hocine.salem@univ-msila.dz

Date of transmission: 09/03/2024 date of acceptance: 14/04/2024 date of publication: 01/06/2024

Abstract:

This research paper aims to shed light on the profound implications and influence of artificial intelligence over the future of humanity. This impact is evidenced by understanding its pivotal role in shaping our daily routines and social dynamics, particularly as AI approaches human-like intelligence. Steve Wozniak has additionally forecasted a future scenario where artificial intelligence might regard humans in a manner akin to pets. Some experts believe that the emergence of artificial intelligence will make most people better off during the next decade; however, most of them have concerns about how advances in artificial intelligence will affect what it means to be a human being and to have free will, as expected that networked artificial intelligence will lead to It amplifies human effectiveness, but it also threatens human independence and capabilities

Through my perspective and discussion of this critical and sensitive topic concerning individuals' daily lives, privacy, and surroundings, this study aims to highlight key insights from researchers and specialists in the field of artificial intelligence. By delving into this topic, we underscore the significance of understanding its implications for the future of humanity, emphasizing the importance of continued research in this domain. Discussion and analysis of this topic are imperative due to its profound connections to humanity, human intelligence, and the significant advancements in technology, particularly in artificial intelligence (AI). This intersection prompts numerous inquiries, such as: What constitutes the concept of artificial intelligence? What objectives and traits define AI? What impacts and potential hazards does AI pose to human existence in the future?

keywords: Humanity, Advancement of artificial intelligence, Future

ملخص:

تهدف هذه الورقة البحثية إلى تسليط الضوء على الآثار العميقة وتأثير الذكاء الاصطناعي على مستقبل البشرية ويتجلى هذا التأثير من خلال فهم دوره المحوري في تشكيل روتيننا اليومي وديناميكياتنا الاجتماعية، خاصة عندما يقترب الذكاء الاصطناعي من الذكاء الشبيه بالإنسان .بالإضافة إلى ذلك، توقع ستيف وزنياك سيناريو مستقبليًا

Hocine SALEM

حيث قد يتعامل الذكاء الاصطناعي مع البشر بطريقة تشبه الحيوانات الأليفة .ويعتقد بعض الخبراء أن ظهور الذكاء الاصطناعي سيجعل معظم الناس في وضع أفضل خلال العقد المقبل؛ ومع ذلك، فإن معظمهم لديهم مخاوف بشأن كيفية تأثير التقدم في الذكاء الاصطناعي على ما يعنيه أن تكون إنسانًا وأن يكون لديك إرادة حرة، كما هو متوقع أن الذكاء الاصطناعي المترابط سيؤدي إلى تضخيم فعالية الإنسان، ولكنه يهدد أيضًا استقلال الإنسان و قدرات ومن خلال وجهة نظري ومناقشتي لهذا الموضوع المهم والحساس الذي يتعلق بحياة الأفراد اليومية وخصوصيتهم ومحيطهم، تهدف هذه الدراسة إلى تسليط الضوء على رؤى أساسية من الباحثين والمتخصصين في مجال الذكاء الاصطناعي .ومن خلال الخوض في هذا الموضوع، فإننا نؤكد على أهمية فهم آثاره على مستقبل البشرية، مع التأكيد على أهمية مواصلة تهدف فذه الدراسة إلى تسليط الضوء على رؤى أساسية من الباحثين والمتخصصين في مجال الذكاء الاصطناعي .ومن البحث في هذا الموضوع، فإننا نؤكد على أهمية فهم آثاره على مستقبل البشرية، مع التأكيد على أهمية مواصلة البحث في هذا الموضوع، فإننا نؤكد على أهمية فهم آثاره على مستقبل البشرية، مع التأكيد على أهمية مواصلة البحث في هذا الموضوع، فإننا نؤكد على أهمية فهم آثاره على مستقبل البشرية، مع التأكيد على أهمية مواصلة ولمع المري والتقدم الكبير في التكنولوجيا، وخاصة في الذكاء الاصطناع .(A) ويثير هذا المعالة العميقة بالإنسانية والذكاء البشري والتقدم الذكبار في التكنولوجيا، وخاصة في الذكاء الاصطناعي (الماته العميقة بالإنسانية والذكاء البشري والتقدم الكبير في التكنولوجيا، وخاصة في الذكاء الاصطناعي (A) ويثير هذا التقاطع تساؤلات عديدة، مثل: ما والمخاطر المحتملة التي يشكلها الذكاء الاصطناعي الهمات التي تحدد الذكاء الاصطناعي؟ ما هي التأثيرات والمخاطر المحتملة التي يشكلها الذكاء الاصطناعي على الوجود البشري في المتقبل؟

*Corresponding Author

Introduction:

All experts, researchers, and those interested in the field of technology agree that we have entered the era of a new revolution, namely the artificial intelligence revolution, whose effects may exceed the agricultural revolution and even the industrial revolution. We are also living at the end of the final stage of technological development led by humans, but artificial intelligence will introduce us to the technological era. The next will determine the course of our future.

In this regard, Faisal Musleh believes in his book "Politics in the Shadow of Artificial Intelligence," recently published by "Abaad House 2023," that artificial intelligence will chart humanity's future path and future. He considers it to be the most important subject at present and proposes the use of artificial intelligence technology at this time. There are currently several questions and concerns about the changes used by this technology and its impact on humanity in the future. Also, will this technology control the fate of humanity in its ideas, ambitions, and privacy, meaning will it remove humans? All of these questions repeatedly present themselves about the future of human life after the advancement of artificial intelligence. it covers all aspects of humanity, and

The future of humanity in light of the advancement of artificial intelligence

more precisely, can a machine replace a person in his various activities and functions? The most important output of the Fourth Industrial Revolution is represented by artificial intelligence due to its versatility in various industrial, technical, economic, military, etc. fields. It can also be expected to open the doors to limitless innovations, which in turn bring about a radical change in human lives.

Indeed, with the ongoing technological revolution, artificial intelligence is poised to become the driving force behind progress and growth shortly. Through continuous innovations, AI has the potential to forge a new world that may appear fantastical but is rapidly approaching realization.

Likewise, robots are proficient in performing very complex tasks. They can process large amounts of data, but they often face difficulties in dealing with simple forms of human interaction, as a study published by the British newspaper The Guardian indicated the positivity of artificial intelligence, for example, in its ability to spare humanity serious epidemics, but we find it incapable. On the performance of communication, telepathy, and scientific discovery.

This study aims to try to reveal the future of humanity in light of the growing artificial intelligence and clarify whether this new psychology will work to eliminate the role and function of humans or will have positive repercussions on the lives of humanity. It also reveals a double truth that surrounds the potential of artificial intelligence as a benevolent ally of humans and a formidable adversary. With risks.

So this topic deserves research, discussion, and analysis because it is linked to humanity and the developments surrounding it in the field of technology, especially artificial intelligence technology.

In light of this, the following problem can be raised: To what extent can it be said that artificial intelligence will limit the activity and functions of humanity and control its future after several years? Will he be able to control our opinions and daily movements and remove all our privacy? This problem results in a set of sub-questions, which are as follows:

- What does the term "artificial intelligence" encompass, and how does it diverge from human intelligence?
- What are its goals and characteristics?
- What are the types and areas of use of artificial intelligence?
- What are the effects and risks of using artificial intelligence on the future of humanity?

- What are the future scenarios for artificial intelligence?

Hypotheses:

General hypothesis: Artificial intelligence is in rapid and continuous progress, which has surpassed humans in some areas, but this does not mean...The disappearance of human tasks and functions. Rather, it is complementary to the work and mission of humans, and in simulation with human intelligence.

This general hypothesis results in partial hypotheses, among which we find the following:

- Artificial intelligence will help and enhance the performance of humans instead of replacing them with machines.
- If the artificial intelligence revolution is misused and misemployed, it will ultimately have a devastating impact on the privacy and performance of humans without thinking about compensating for new needs for lost tasks.
- Removing a person and violating his rights and privacy is unacceptable in morals, humanitarian, and legal norms.

Research Methodology:

In this study, the descriptive approach was used, which describes the phenomenon of artificial intelligence, its rapid progress and its effects on the future of humanity, and its interpretation and analysis to finally reach conclusions about the phenomenon studied.

The first topic: What is artificial intelligence?

The first requirement: The concept of artificial intelligence.

The second requirement: The difference between artificial intelligence and human intelligence.

The Third requirement: Objectives and characteristics of artificial intelligence.

The fourth requirement: its types and fields

The first requirement: the concept of artificial intelligence:

The first appearance of artificial intelligence was after World War II at the hands of a group of researchers, led by the English mathematician Alan Turing. Alan Turing and mathematician John McCarthy are considered the first to use the term artificial intelligence, and the primary goal of creating artificial intelligence was to try to simulate the human mind and perhaps sometimes surpass it.¹

Artificial intelligence is a branch of computer science related to how machines simulate human behavior. In this sense, it can be said that artificial intelligence is the process of simulating human intelligence through computer systems. This is done by conducting a study on human behavior by conducting experiments on its behavior. Their behavior and condition in certain situations, and then monitoring their reactions, the way they think, and how they deal with these situations.

In the 1940s, the initial concept of artificial intelligence emerged, and with its subsequent development over the years, it has evolved into what we see today. This evolution has been fueled by the availability of vast amounts of data, which has enabled artificial intelligence to attain capabilities unprecedented in the past.²

The first attempt to build an intelligent machine that enables us to imitate the human mind was by Frank Rose Noble Tin in 1957, he developed a simple model of a neural network that somewhat resembles neurons in the human brain.

In the middle of the twentieth century, research in the field of artificial intelligence witnessed a tremendous development in the science of machine control. This is of course due to the progress achieved at the level of digital computers, so that, thanks to several experiments, artificial intelligence became widely used, such as medical diagnosis, data collection, education, etc. ³.

The second requirement: The difference between artificial intelligence and human intelligence:

1- In terms of concept: Human intelligence is defined as the ability of the human mind to learn and use library knowledge through previous experiences, and this is for the purpose of adapting to developments in the situations and environment surrounding it. On the other hand, artificial intelligence represents one of the branches of science that has recently appeared, and it is defined as a technique or technology that

¹-Mustafa Imad Muhammad Al-Bayati, The limits of artificial intelligence and the liability arising from it at the international level, Al-Qadisiyah Journal of Law and Political Science, the number2, Volume 13, 2022, sp. 270-271.

² -Asba. International conference, Asbar world form, Harnessing artificial intelligence for the future we want: November 4-6, 2019, For more information, please visit the following link: <u>https://youtu.be/ox30jjog6jA</u> Date of visit: 01-28-2024.

³ -Nermin Magdy, Artificial Intelligence and Machine Learning, Introductory Booklets Series, Issue 3, Arab Monetary Fund, Abu Dhabi, 2020, pp. 5-6

simulates the thinking and tasks of the mind. It copies human behavior to perform various jobs.

- 2- **In terms of nature:** It is known that human intelligence uses cognitive functions to explain phenomena and adapt to the surrounding environment through the knowledge that it has acquired, while artificial intelligence focuses on designing machines and their ability to simulate human behavior.
- 3- **In terms of learning power:** Human intelligence, in terms of learning, depends on the principle of trial and error and solving problems by analogy with similar situations previously in the individual's life. As for artificial intelligence, the machine can learn through data or continuity in order, and it is impossible to achieve the distinctive thinking process of the human mind.
- 4- **In terms of memory usage:** Humans possess the unique ability to utilize memory and cognitive processes to solve problems, a capability that is not inherently present in artificial intelligence systems.
- 5- **In terms of the method of creation:** God Almighty created human intelligence. He distinguished himself with enormous intellectual and cognitive abilities. As for artificial intelligence, it is man-made and does not match the ability of God the Creator.
- 6- In terms of dominance: Artificial intelligence can overcome human intelligence in some areas, for example, chess is a mental game that humans specialize in, but with the availability of a computer, it has been able to overcome the human player in this game. The separations and distances between rich and poor countries.¹

Third requirement: Objectives and characteristics of artificial intelligence:

1-Its goals:

The goals of artificial intelligence, in general, revolve around basic axes, which are: It improves human life, serves humans, helps them with all their jobs and in various fields, and builds digital computer-based devices capable of performing human tasks with high intelligence.

Among the many goals of artificial intelligence, we find the following:

• Building intelligent machines that are similar to humans and cannot be distinguished between them.

¹- Dania Nashati, the difference between artificial intelligence and human intelligence, more details are available at the following link:,https://mawdooe.com, D . V: 01-02-2024.

- Creating devices capable of performing human tasks with high intelligence, in order to assist humans in their tasks.
- Using cognitive simulation to learn how to retrieve old memories and events just like the human mind¹.

2 -Its characteristics: As a continuation of the above definitions of the term artificial intelligence, we must look at its most important distinguishing characteristics and find among them the following:

- A. **Machine learning:** Catherine Noyce defined it as a large and diverse group of methodologies that provide programs with the required data, making them improve their performance permanently and in harmony with their environment. Here, the learning mechanism is similar to the learning mechanism in humans because it will lead to a kind of independence for artificial intelligence in its decision-making.
- B. **Independence:** One of the most prominent characteristics of artificial intelligence is independence, as it is considered a multi-level concept that depends in degree on the presence and intervention of the human element, through which it is possible to work relatively or completely independently in the future.

Nonetheless, this independence continues to raise debate about two fundamental issues: the limits of the scope of artificial intelligence's independence and the responsibility attributed to it.².

Among the characteristics of economic intelligence, we can summarize them in the following elements:

- The ability to acquire and apply knowledge.
- The ability to learn and understand from previous experiences and experiences.
- The ability to use old experiences and employ them in new situations.
- The ability to use trial and error to explore different matters.
- As well as the ability to respond quickly to new situations and circumstances.
- Ability to deal with difficult and complex cases.
- Ability to distinguish the relative importance of elements of the presented cases

¹-Roaa Salama, What are the goals of artificial intelligence and its applications, March 21, 2023. More information is available at the following link: <u>https://www.arageek.com</u> D V: 02-04-2024.

²- Mustafa Imad Muhammad Al-Bayati, previously mentioned reference, p. 272.

- The ability to imagine, create, understand, and perceive visual matters.
- Finally, the ability to provide information to support administrative decisions.¹.

Fourth requirement: Types of artificial intelligence and its fields: First: its types:

Through this, we can distinguish several different types of artificial intelligence, usually referred to as "weak artificial intelligence, strong artificial intelligence, and superhuman artificial intelligence," and they can be explained as follows:

1-Weak artificial intelligence: Alternatively referred to as "narrow artificial intelligence," this form of Artificial Intelligence is currently the most prevalent. It is designed to execute a specific task, such as checking the weather or playing chess, rather than exhibiting general intelligence across multiple domains.

2-Strong artificial intelligence: This type refers to machines that mimic human intelligence, meaning that artificial intelligence can replace human performance, especially in intellectual tasks.

3-Super artificial intelligence: which exceeds human intelligence, meaning it is superior to it in all aspects: such as creativity, general wisdom, and solutions to complex problems, meaning this type possesses an intelligence that we humans do not possess.².

Second: Its fields:

There are many fields of artificial intelligence due to the diversity of manifestations of human intelligence, as we find it in many things around us. The trend has been to design or create various programs in several fields.

Among these areas, which can be said to be the most important applications of artificial intelligence, we find:

- **A. Natural languages:** In the field of natural languages, the branches of computational linguistics, physiological science, recognition, and understanding, in addition to sound synthesis, machine translation, and philosophy have flourished.
- **B. Computer vision:** Computer vision has contributed to the development of fingerprint recognition techniques and the development of electronic means and techniques that mimic natural human vision systems.
- **C. Robotics:** Through this field, it pushed industrial robots and the branches of mechanical engineering, control, and electronics to far-reaching natural depths in the economic and scientific sense.

¹-Abdul-Jabbar Hussein Al-Dhafri, Artificial Intelligence, Pre- Master's Thesis, Yemen University, 2020-2022, p. 8.

²-Muhammad Al-Durani, Ibrahim Asaidi, Yousef bin Hamad Al-Balushi and others, The Future of Work in Light of the Artificial Intelligence Revolution, Arab Center for Research and Policy Studies, Qatar, 2022, p. 139.

- **D. Games and matches:** Games also contributed to the advancement of artificial intelligence by introducing user intelligence into programs and also led to the development of computer science and administrative games.
- **E. Proving theories:** Artificial intelligence has contributed significantly to the development of science, especially mathematics, logic, and philosophy.
- **F.** Automated programming and theory of computation: This field led to the development of computers and mathematics.
- **G. Hierarchical or sequential search:** It is represented in the mechanism of various types of research, and it also leads to the development of expert systems.
- **H. Computer hardware components:** These computer hardware components contributed to the development of electronic hardware components and the development of arithmetic in general.
- **I. Programming languages and systems:** It has had an impact on many sciences, such as management sciences, operations research, field engineering, chemistry, and the petroleum industry.
- **J. Developing solutions to the problems raised:** It led to the development of psychology, mathematics, and logic.
- **K. Cognitive modeling of perception:** This also had a great impact on various sciences, including philosophy, psychology, human skills, physiological sciences, as well as music¹.

The second topic: The effects and risks of artificial intelligence on the future of humanity.

The first requirement: in the area of infringement on the right to privacy and loss of human functions.

The second requirement: in the field of developing lethal weapons.

The third requirement: in the field of the danger of artificial intelligence terrorism.

The fourth requirement: in the economic and social field.

The first requirement: in the area of infringement on the right to privacy and loss of human functions.

Although artificial intelligence has many benefits and importance in human life that we cannot hide, this does not mean that there are many risks to the future of human behavior resulting from the increasing use of its secretions in various areas of life.

¹-Abdul-Jabbar Hussein Al-Dhafri, previously mentioned reference, pp. 10-11.

Therefore, a group of experts, philosophers, and ethicists saw the need to control this matter, and among the risks and effects of artificial intelligence, we find the following:

First: Violating the right to privacy:

The methods of privacy for the individual and society by exploiting the capabilities of artificial intelligence can result in personal and social harm without taking into account the scale of the disaster that surrounds us, and privacy is a human right.

In certain instances, we inadvertently disclose personal information such as our name, age, location, and preferences. Tracking companies exploit this by gathering our online activities, and potentially selling our private data to other entities without our consent. Furthermore, our personal information shared on social media platforms is susceptible to exploitation, as it can be transferred to cloud servers for tracking and processing, ultimately sold to the highest bidder.

Second: Loss of human jobs:

With the advancement and development of technology, the use of artificial intelligence in various sectors will or will certainly replace the performance and tasks carried out by employees and workers, and according to a report issued by the McKinsey Global Institute, employment sectors are likely to lose 800 million jobs around the world by the year 20230, and this is due to That robot TIt does not need to be paid salaries or health and social insurance, and in light of this, owners of artificial intelligence in various parts of the world will reap exorbitant amounts of money, which will widen the gap between the rich and the poor.¹.

The second requirement: In the field of developing lethal weapons:

These deadly weapons are called robots Lethal is the third revolution in the field of warfare after gunpowder and nuclear weapons, and the development that occurred in the past of land mines and intercontinental missiles can be considered the beginning of the actual independence of artificial intelligence and its integration into the killing process by searching for specific people and making decisions to engage them and then killing them completely without interference. Human and these combat weapons are robots Military and drones: that is, self-operating drones that can carry out their missions accurately according to pre-programmed instructions. The majority of major countries seek to possess and use this weapon in their wars. Experts and scholars in this field agree that humans are not decisive in the occurrence of independent wars, but rather the use of lethal weapons based on Artificial intelligence is an inevitable reality.

¹-Hossam El-Din Fayyad, Artificial Intelligence and the Future of Humanity, Al-Hiwar Al-Mutamaddin, Issue No. 7532, 2023. More details are available at the following link: https: www.ahrwar.org.D. V: 02-06-2024.

The third requirement: in the field of the danger of artificial intelligence terrorism.

These autonomous weapons and cyber-crimes can cause unintended harm to civilians. For example, these drones used in deadly attacks can detect movements without human intervention, and because these drones are small in size and sometimes cannot be monitored, as they are agile and intelligent, the difficult problem now is Some experienced amateurs can easily manufacture such aircraft and they are sold to people who can use them for serious terrorist purposes. Therefore, artificial intelligence terrorism may cause serious harm to humanity and threaten its stability. These weapons have proliferated on the Internet and social media platforms, where they can be easily sold. Criminals and terrorists might exploit them to further their agendas, potentially jeopardizing humanity and the environment. Therefore, urgent measures are necessary to curb these terrorist applications of artificial intelligence, which have now become alarmingly widespread.¹

Fourth requirement: in the economic and social field.

It is noted that in the past, the impact of artificial intelligence was covered up, as businesses, governments, and people lost their confidence in what artificial intelligence promises. However, currently, and what is being promoted as propaganda for artificial intelligence, this stage has been more productive, which has led to commercial investments. Examples of companies include: "Google", "AMAZON" and other technologies that have become mature, such as deep learning and machine control, have reached achievements that have a significant impact, and among them, we find autonomous cars, natural language processing, and automatic language translation that were mentioned at the beginning.

The remarkable pace of social and economic transformations driven by artificial intelligence is undeniable. However, this rapid progress has also led to the displacement of numerous jobs, unfairly impacting vast segments of the global population. Additionally, AI presents threats to stability and national security. Therefore, it is imperative to devise thoughtful plans, designs, and programs that can adapt to and mitigate the effects of technological advancements, particularly in artificial intelligence.²

Artificial intelligence technologies also shape the future of work and its various aspects, both for those workers who already exist, and for those workers who are expected to perform new tasks and roles, and this workforce who remains in the large-scale work environment, and the routine and manual mechanism that leads to independence and greater imposition of work, and with this technology it is possible to Workers are subjected to greater monitoring and

¹-Ibid.

²- Asunde A. Osoba, and William Welser IV, Artificial Intelligence Risks to Security and the Future of Work, An Analytical Perspective, RAND Foundation RAND, 2017, p. 16.

reduced autonomy through machines typically equipped with sensors. In this regard, several questions arise about the equality effects of artificial intelligence technology. For example, artificial intelligence can use the mechanism to define and enhance processes, and speed up the process of screening job candidates, which leads to improving the formation of individuals' roles to work within the work environment. ¹

The third section: The pros and cons of artificial intelligence The first requirement: its advantages

The second requirement: its negatives

The first requirement: its positive aspects

Among the advantages of artificial intelligence that can be considered advantages over humans are the following:

- 1- **Reducing human error**: In this statement we say that humans can make mistakes, but if computers are programmed well and correctly, we will not find errors committed like human errors.
- 2- Accelerate decision making: The thing that is valuable in making decisions quickly and making you feel confident in them is finding ways to save time, and even implementing them through faster procedures as well.
- **3- Available 24 hours a day during the week:** Because artificial intelligence never knows rest, while compared to the human body and mind, they need rest to continue working.
- **4-** It works to reduce risks: One of the great advantages of artificial intelligence is that it can perform very dangerous tasks, the consequences of which will be very dangerous for humans.
- **5- Automating repetitiveness**: These days, we notice repetitive tasks in many jobs and often do not use the highest capabilities of human workers. Artificial intelligence enables the automation of repetitiveness in several ways: such as responding to emails, manufacturing tasks, etc.
- **6- It provides digital assistants**: Many organizations currently use digital assistants to interact with customers, and this work may significantly reduce the increase in the number of customer service employees.
- 7- It identifies patterns: Another positive of artificial intelligence is that it efficiently identifies patterns within your data, and through this, it can make predictions quickly.
- 8- It works to identify better human workflows: It includes developing better human workflows to find ways to work more efficiently and increase productivity.

¹- Mohamed Mohamed Al-Hadi, The impact of artificial intelligence and its effects on work and jobs, Egyptian Journal of Information, Compute, Issue Twenty-Four, 2021, pp. 23-24.

9- Excellent in working with huge data sets: So more data is available to artificial intelligence to understand all of this in a short time.¹.

Among the advantages of artificial intelligence in the education sector, we find the following:

- He has the ability to learn and the ability to organize and understand science.
- He has the ability to explain study materials and provide immediate feedback on the answers.
- It provides academic advice and guidance to students about the best department or major to join in college or a study that is compatible with their mental abilities.
- It can help make classes accessible to everyone, especially if they speak different languages or have certain hearing disabilities.
- Through the data it analyzes, forecasting can identify a student who is at risk of failure or dropping out of education and thus enables the institution to intervene at the appropriate time.
- The ability to enable the student to obtain information and data quickly and from one source.²

The second requirement: Its negatives there is no doubt that the terrible and rapid spread of artificial intelligence has affected various areas of our current lives. The significance of artificial intelligence has experienced a rapid and substantial surge in recent years. This term has swiftly integrated into our daily lives, bringing about numerous positive impacts. However, it is crucial not to overlook or disregard its negative aspects. It is imperative to exercise caution and vigilance regarding the potential risks associated with artificial intelligence. By acknowledging and addressing these negatives, we can strive to mitigate their impact and navigate the advancements in AI more effectively.

- **From the human and moral side:** The process of human contact with machines would gradually separate the human being from his natural, social, and human surroundings, leading to human relations losing their flexibility and traditional norms, and becoming more rigid. Even the goal of human relations will change, after it was originally moral, and will become material.

 ¹ - Wissam Imad Al-Juhani, Pros and Cons of Artificial Intelligence, research paper, 2023, pp.
2-3. More details are available at the following link: <u>https://fliphtml5.com/trkbn/xdcs/%D8%A5./2</u>,
D.V. 02-09-2024.

²-Hanaa Rizk Muhammad, Artificial Intelligence Systems and the Future of Education, Journal of Studies in University Education, No. 52, 2021, pp. 574-575.

Hocine SALEM

- **From the security aspect:** Artificial intelligence technologies pose serious negatives, represented by their threat to human beings' right to life. Examples of this include: lethal combat systems such as drones that carry weapons, as well as robots on the battlefield to carry out specific tasks, where the danger lies in that these devices are programmed by Basically, it is destroyed, and the most dangerous thing is when it falls into the hands of the wrong person, especially when the algorithms that control it are manipulated, as this is where the major catastrophe will occur.
- **From the economic side:** There is no doubt that artificial intelligence will affect the size and quality of jobs and job opportunities available, as robots are expected to negatively impact jobs in the manufacturing industries, the electrical appliances industry, and the automobile industry, in addition to customer service.¹.

One of the negatives of using artificial intelligence technologies that affect the entire society, especially the emergence of unemployment, is significant because it has replaced the workforce in many jobs and tasks.

Also, the violation of private life and human privacy is one of the most important negatives that will result from the growth and development of artificial intelligence without restrictions, limits and legal controls, because now all technological services impose on workers the obligation to allow artificial intelligence programs and designs to withdraw certain personal data through means of communication such as the phone, for example. In order to access this technology, what is currently most dangerous is what now raises the question: Are the crimes of using artificial intelligence technologies limited to loopholes that exist in the current system? Or will the development of the capabilities of artificial intelligence entities to make autonomous decisions reach a limit?

Therefore, actions and behaviors are committed outside the programmed framework, and here we can find a difference in the answer in both cases.

- As for the first case, we give an example of this when a murder occurs as a result of a collision with a self-driving car due to a programming error or gaps in the system, meaning that this error results from an error in the software code that the programmer put in. In this case, the matter does not present any problems. So that there is criminal liability towards whoever is proven to be at fault.
- As for the second case, where the parties do not have any role in the crime, whether the programmer, the owner, or the external party, the reason is due to the developed intrinsic ability of the artificial intelligence entities to

¹-Abdul-Jabbar Hussein Al-Dhafri, previously mentioned reference, p. 16.

develop themselves, learn, and issue autonomous decisions outside the programming system designed for them. In this case, artificial intelligence emerges. From a cloak manufactured to control itself independently, and the criminal behavior committed by it emanates from free will without the intervention of the owner, i.e. from the factory. Here the problem is completed in the sense that can penalties be applied to these crimes committed by robots that adopt behaviors emanating from free will? Therefore, through these fears and the persistence of the phenomenon of artificial intelligence, it is necessary to fill these legal gaps that may arise from the application of the use of artificial intelligence, by enacting legal legislation that fills these legal gaps.¹.

The fourth topic: future scenarios for artificial intelligence

The first requirement: the traditional scenario or the common path.

The second requirement: The basic scenario, artificial general intelligence within twenty years.

Third requirement: Extreme scenario, artificial general intelligence within five years.

Despite the great difference between the positions of the world's leading thinkers, experts, and those interested in the field of technology regarding the advancement of artificial intelligence in the future, and the many scenarios on this subject, we cannot place our hopes on one scenario and formulate our various plans, including: social, economic, and security, on its basis, but this There is no denying that we are putting forward some multiple scenarios that can illuminate the future path of this technology and its repercussions on humans and their privacy. Among the three scenarios that can be put forward, we find the following:

The first requirement: the traditional scenario or the common path: The development of artificial intelligence contributes to enhancing productivity and automating large groups of cognitive tasks. It also produces new opportunities for workers affected by the transition to other new jobs that are more productive on average, because their previous jobs have been replaced by artificial intelligence. This perspective holds that the capabilities of the human mind to solve... The tasks of increasing complexity are unlimited. The man was at the forefront of automated development, especially during the period of the Industrial Revolution, where he was able to succeed in automating simple "mechanical and cognitive" tasks and then redistributing labor to perform more and the remaining more complex tasks.

The second requirement: The basic scenario, artificial general intelligence within twenty years: As artificial intelligence gradually develops over the next

¹ - Fayek Awadin, Uses of Artificial Intelligence Technologies between Legality and Illegality, National Criminal Journal, Volume Sixty-Five, Issue One, March 2022, pp. 14-15.

twenty years to reach the point of artificial general intelligence, at this stage it becomes capable of performing all human jobs and tasks at the end of the period, which leads to a decline in the value of labor.

This perspective assumes that there is a maximum limit to the complexity of the tasks that the human mind can perform, and in this regard information theory indicates that the human mind is a computer device that is always working to process large amounts of data, and the mind's inputs include everything that is perceived by the senses, visual sightings, sounds, etc. The outputs of artificial intelligence manifest in various forms, including physical actions, thoughts, and emotional responses. These outputs are akin to computergenerated results stemming from intricate interactions among neural circuits and vital reactions. From a chemical standpoint, this perspective suggests a theoretical upper limit to the complexity of tasks that the human mind can accomplish.

Third requirement: Extreme scenario, artificial general intelligence within five years: This scenario roughly indicates or simulates the second scenario, only its time frame is much shorter, as artificial general intelligence and all its implications for work become a tangible reality during this period, that is, a period of five years.

The evident disparities arising from the three scenarios underscore the critical need for developing policy frameworks capable of adapting to future advancements and responding promptly to emerging challenges.¹

If we talk about the likely scenario for artificial intelligence, which our future will resemble from the development of events, policymakers must monitor the most important indicators and metrics across multiple sectors, recognizing that all efforts made to predict the pace of progress face a lot of uncertainty, and among them we find the measure of technological performance. The volume of investment flows within the framework of the development of artificial intelligence, as well as the levels of uses of artificial intelligence technologies in various sectors, and the best indicators are technological performance indicators because they are the best direct measure of the efficiency of artificial intelligence systems in performing a huge amount of work tasks, but the future will most likely surprise us with a possible scenario that we have never seen before. We do not expect it in the future. Because this technology and its rapid expansion will carry within it a double-edged sword if it is used well and monitored and kept up with. It can be positive for a person and complement his performance and tasks. On the other hand, if it is not used well,

¹- Anton Korinec, Planning Future Scenarios for Artificial General Intelligence, Finance and Development Journal, International Monetary Fund, December 2023. More information is available at the following link: <u>https://www.imf.org/ar/Publications/fandd/issues/2023/12/Scenario-Planning-for-an-AGI-future-Anton-korine</u>: 11-02-2024.

it can be negative and lethal for a person by violating his rights and removing his privacy.¹

As a result of these presented scenarios, it can be said that it is difficult to prefer one scenario over the other because this issue concerns an advanced technological technology at a high speed that threatens humanity with its rights and privacy. Although it is programmed and designed to do and perform something, it may get out of control by causing an action that was not programmed for it, that is, it will happen. On its own. Therefore, if we want to understand our future and the surprises that await us, we must monitor this technology and measure its performance indicators. It is essential to exercise caution in developing precautionary plans for artificial intelligence, ensuring that it progresses along a path that promotes positive technological advancements for the betterment of humanity, rather than leading to its destruction or detriment.

Conclusion:

The world has witnessed qualitative leaps in many fields, and this is with the help of artificial intelligence technology. The development of artificial intelligence technology continues to shroud in mystery, given its profound impact on humans. The effects and repercussions of AI are as significant as its benefits, if not more so. Therefore, it is imperative to delve deep into the associated challenges and seek actual, realistic solutions. This entails illustrating AI and data analysis solutions that address these problems comprehensively.

Moreover, in the end, we must note that the poor use and employment of artificial intelligence will bring disasters and destruction to humanity, especially if the moral factor is absent in this use, that is, in illegal ways to achieve immoral gains. When it comes to removing the human being and ending His rights and privacy are unacceptable according to the ethical standard and the humanitarian and legal norms.

Through this, the following results can be reached:

- The diverse definitions of artificial intelligence often exhibit a high level of generality, lacking precise delineation and control over the term. This ambiguity stems from AI's encompassing capacity, which spans numerous sciences, technologies, and applications. Consequently, this poses a legal challenge in establishing a regulatory framework that effectively governs AI. This difficulty arises from a lack of understanding regarding the nature of AI's actions and the legal ramifications they entail.
- The ability of artificial intelligence to perform continuous effort and production has doubled due to the machine's ability to work permanently.

¹- Ibid.

- Artificial intelligence has saved humans a lot of time and effort, especially in the field of applications and uses.
- Artificial intelligence has contributed significantly to bridging digital gaps, through controlling and analyzing data to implement software and designs that were programmed by the programmer.
- We also conclude that machines are increasingly complementary to human labor in the workforce, and here we will need to open an interactive pop-up window.
- The future of work and all specializations require openness to technology in preparation for continuous and permanent learning and skills development, and this is done by taking advantage of the potential of artificial intelligence and directing it towards the public good.

List of sources and references

Books and magazines:

- Mustafa Imad Mohammed Al-Bayati, The limits of artificial intelligence and the liability arising from it at the international level, Al-Qadisiyah Journal of Law and Science political, the number2, Folder 13, 2022.
- Nermin Magdy, Artificial Intelligence and Learning Machine, chain Brochures Definition, the number 3, Sundog Arab criticism, Abu Dhabi, 2020.
- Abdul Jabbar Hussein Al-Dhafri, Intelligence artificial, University premaster's thesis Yemeni, 2020-2022.
- Mohammed AL- Durrani, Ibrahim Asaidi, Youssef bin Hamed Al Balushi, and others, The future of work in light of the intelligence revolution artificial, Arab Center for Research and Study policies, Qatar,2022.
- Asunde A., Osoba, and William Welser IV, Artificial Intelligence Risks to Security and the Future of Work, an Analytical Perspective, RAND Foundation RAND, 2017.
- Mohamed Mohamed AL Hadi, The impact of artificial intelligence and its effects on work and jobs, Egyptian magazine for information, Compute, issue twenty-four, 2021.
- Hanaa Rizk Mohammed, Artificial intelligence systems and the future education, Journal of Studies in Education University, Issue fifty-two, 2021.

- Fayek Awadin, uses Artificial intelligence techniques between legality and non-legitimacy legitimacy, National Criminal Journal, Volume Sixty-Five, Issue First, March 2022.
- web sites:
 - Anton Korinec, Planning Future Scenarios for General Intelligence artificial, Finance and Development Journal, International Monetary Fund, December 2023. More information is available at the link: <u>https://www.imf.org/ar/Publications/fandd/issues/2023/12/Scenario-Planning-for-an-AGI-future-Anton-korinek</u>. 1102-2024.
 - Wissam Imad Al-Juhani, Advantages, and disadvantages of intelligence artificial, paper research, 2023. More details are available at the following link: <u>https://fliphtml5.com/trkbn/xdcs/%D8%A5./2</u>, : 09-02-2024.
 - Hossam al deen Fayyad, Artificial intelligence and the future Humanity, Dialogue civilized, Issue No. 7532, 2023, more details are available at the following link: https://www.ahrwar.org. D. V: 02-06-2024.
 - Dania You posted on the difference between artificial intelligence and intelligence human, more details are available at the following link, <u>https://mawdooe.com</u>. D. V: 01-02-2024.
 - Visions safety, what are the goals of artificial intelligence? And its applications, March 21, 2023. For more available on the link next: https://www.arageek.com 02-04-2024.
 - As Bar International conference, As Bar World conference harnessing artificial intelligence for the future we want: November 4-6, 2019. For more information, available at the following link: https://youtu.be/ox30jjog6jA, 01-28-2024.