

Artificial Intelligence and digitisation mark the beginning of a new revolution between humans and technology

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Abstract:

Artificial intelligence and digitalization today shape the features of a new revolution in the relationship between humans and modern technology. Artificial intelligence has become an essential part of many fields such as healthcare, education, industry, and services, It enhances humans' ability to process big data and make precise decisions in a short time, contributing to increased efficiency and productivity ,On the other hand, digitalization plays a role in transforming traditional systems into innovative ones, enabling instant communication and faster, more effective information exchange,These transformations open vast horizons for innovation and development, yet at the same time pose significant challenges related to cybersecurity, privacy, and their social and economic impacts. Therefore, it is crucial to strike a balance between benefiting from these modern technologies and protecting them from negative uses.

Keywords:Artificial Intelligence, Digitalization, Technology, Machine Learning, Robotics.

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INTRODUCTION

The world is undergoing a radical transformation that cannot be ignored, with artificial intelligence (AI) and digitisation becoming one of the main drivers of change in the relationship between humans and technology. This new technological revolution is not only changing tools and technologies, but also profoundly affecting the social, political and economic structures of countries. In light of these shifts, new policies based on digital transformation have emerged, which is a key pillar in the technological empowerment strategy of countries and companies alike.

Today, digitisation is at the heart of the national strategies of major countries, as governments seek to enhance competitiveness through the adoption of artificial intelligence and technological innovation. In this context, artificial intelligence has become a powerful tool for controlling and analysing data, providing new opportunities to raise productivity and achieve sustainable development, hence the role of digitisation in promoting the concept of the digital economy, which reflects a shift from traditional economies to economies that rely mainly on modern technologies.

On the other hand, this digital revolution may be accompanied by geopolitical challenges, as major countries race to digitally arm themselves and impose control over data as a strategic tool. This reflects growing tensions in the field of privacy and cybersecurity. While AI enhances the ability of states to make more accurate and faster decisions, the political challenge is how to regulate these technologies to ensure that they are not used to create social divides or threaten the sovereignty of states.

With this digital revolution, we need to define effective governance strategies and legislation that protects the interests of people in light of

the ongoing challenges posed by these new technologies.

The problematic of the topic:

The issue of ‘Artificial Intelligence and Digitisation, the beginning of a new revolution between humans and modern technology’ lies in the challenges resulting from the interaction between these modern technologies and the social and political system, in addition to their profound effects on international relations. While artificial intelligence and digitisation are key drivers of technological and economic development, the use of these technologies raises many issues that cannot be ignored, especially privacy and cybersecurity, as well as the social and economic impacts that may result from their use.

On the other hand, the question arises of how to regulate these technologies within the framework of government policies that promote their utilisation without harming individual rights or threatening the digital sovereignty of states. Major countries are in a frantic race to use artificial intelligence to improve their military and economic capabilities, which creates new threats to international security and raises a vital question about sharing the benefits and challenges resulting from this digital revolution.

In addition, the digital divide between developed and developing countries is a major issue, as some of them may not have the necessary infrastructure or policies to exploit these new technologies, which increases the economic and social gap. This raises questions about social justice and equality in accessing the benefits of these technologies.

Therefore, how can we balance the benefits of AI and digitalisation in promoting development and efficiency, with the privacy, social and economic gaps that may result from their applications? It is a question that branches out into many questions, which we summarise below:

- a. What are the most significant developments in artificial intelligence in the last decade?.
- b. What is meant by digitisation and how does it differ from digital transformation?.
- c. What are the main challenges that countries may face in adopting AI in the future?.

To address this issue, we propose the following headings:

- The first theme: Artificial Intelligence and its developments.
- The second axis: What is meant by digitisation.
- The third axis: Future challenges and opportunities associated with artificial intelligence.

1. The first theme: Artificial Intelligence and its evolution:

Artificial intelligence began in its early stages with simple techniques that mimic some human abilities, such as pattern recognition and problem solving, and over time it has been developed to include a variety of complex applications, such as machine learning, neural networks, and natural language processing. This tremendous development in artificial intelligence has opened new horizons in medicine, finance, education, and many other sectors, making us live in an era that is witnessing a qualitative shift in how we interact with and apply technology.

1.1 The first section: The concept of artificial intelligence:

Artificial Intelligence (AI) is a branch of computer science that aims to develop systems capable of mimicking human intelligence and performing tasks that normally require thinking and learning. This field enhances the ability to optimise performance and make decisions independently based on available data and information.

- a. **Language:** Intelligence: From ‘intelligence’, which means sharpness in something and penetration. ‘Intelligence’ in a person refers to the speed of understanding, mental alertness, and discernment, as intelligence means the speed of perception, the ability to analyse and synthesise, discriminate and choose, and adapt to different situations and is the sharpness of understanding and speed of perception.¹

The word ‘artificial’ comes from ‘making’ and ‘doing something’, meaning that it is something that has been made or created in an unnatural way, ‘artificial’ is what has been made or generated for the purpose for which it is required, and the ‘artificial moon’ is an example of something made with certain techniques and not natural.²

- B. Terminology:** Artificial intelligence is a device or technology that performs certain activities that require intelligence, such as real-time reasoning and self-repair, for programmers it is the science related to making machines and designing software that perform activities and tasks previously carried out by humans, this concept also refers to programmed devices that mimic human mental abilities to perform tasks, with the ability to infer information or perform patterns outside their programming, AI relates to the ability to think superlatively and analyse data more broadly or for a specific purpose, artificial intelligence relates to the ability to think on the fly and to analyse data.³

Aimed at significantly enhancing human capabilities, making it of great value, AI is manifested in this study through two main forms The use of AI to analyse important information.

- The use of chatbots to understand customer issues faster and provide more efficient answers.

Artificial intelligence is the use of computer systems to simulate the mental abilities of humans, giving them the ability to make decisions and carry out tasks in ways that resemble human intelligence, we find

applications of these technologies in many areas of daily life, as well as investment systems, along with many other applications that contribute to improving efficiency and performance across various industries.⁴.

Abdullah Moussa and Ahmed Habib Bilal defined artificial intelligence as: ‘a method of making a computer or robot controlled by a computer or a programme that thinks intelligently in the same way that humans do’.⁵.

AI is the science of making machines that do things that would require intelligence if done by humans.

Marvin Lee Minsky defined it as building computer programmes that engage in tasks that are satisfactorily accomplished by humans because they require high-level cognitive processes, memory organisation and critical thinking.⁶

Thus, AI is a scientific discipline that encompasses manufacturing and engineering methods for intelligent hardware and software. The goal of AI is to produce autonomous machines capable of performing complex tasks using reflexive processes similar to those of humans. AI programmes and applications are designed by studying how the human mind thinks, learns, decides and acts while trying to solve an issue, and then the results of this study are used as a basis for developing intelligent software and systems.

Artificial intelligence is a set of systems or devices that are designed to simulate human intelligence in order to perform specific tasks based on the data and information it collects, and is abbreviated as ‘**AI**’, which is an abbreviation for ‘**Artificial Intelligence**’.⁷.

One of the most prominent examples of the use of AI is robots, such as those used in electronic conversations to solve issues and provide answers quickly and more efficiently. AI is now more related to the ability to think and analyse data, reflecting applications that perform complex tasks that previously required human intervention. For example, smart systems are

used to communicate with customers online, where a programmed autoresponder performs these tasks. AI is also associated with devices that contain digital or electronic programmes such as computers, smartphones, and robots that perform multiple and precise functions.

2. 2 The second section: Types of Artificial Intelligence and its fields:

Artificial intelligence (**AI**) includes a group of types and techniques that differ based on the ability to learn, make decisions, and interact with the surrounding environment, it can be categorised into several types based on its capabilities and ways of working, and the most prominent of these types are:⁸

❖ Weak AI:

This type of AI is dedicated to performing specific tasks or solving a specific issue only, and this system does not have the ability to think or learn in multiple ways outside the framework of the tasks for which it has been trained.

Example: Personal assistant systems such as Siri or Alexa, or recommendation systems on websites such as Netflix or YouTube.

❖ General Artificial Intelligence (Strong AI):

This type of AI seeks to fully emulate human intelligence, i.e. to be able to perform any task that a human can perform, this type of system can think, learn, and adapt to different circumstances.

An example: Not yet fully realised, but research in this area includes systems such as robots that can solve various problems in the same way that humans think.

❖ Super intelligent AI:

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This type is the next level of AI that surpasses human intelligence in all areas of knowledge, Super AI is an unlimited ability to solve complex problems and make decisions.

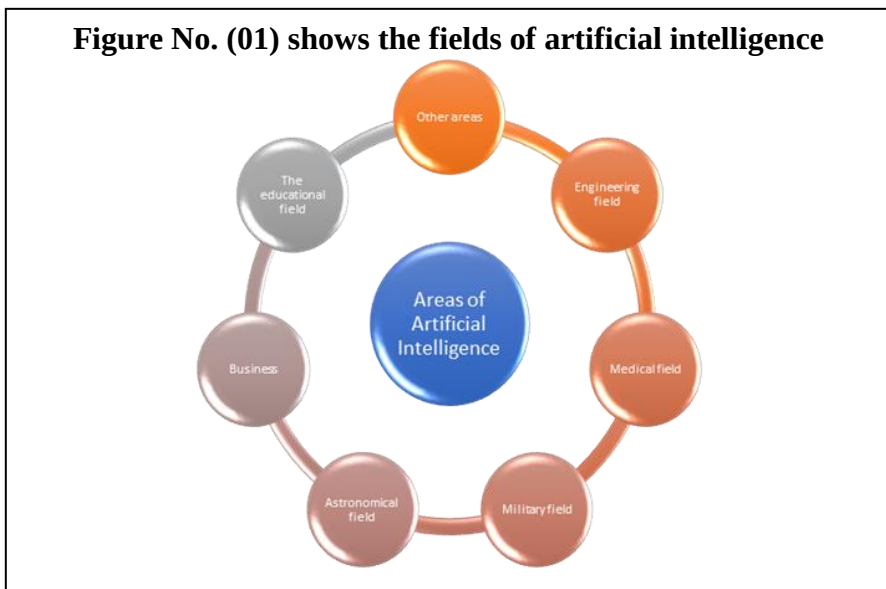
Example: This type of AI is considered a futuristic concept that has not yet been reached.

❖ **Learning AI:**

This type relies on systems learning from data, the system can improve over time based on the experiences and data it receives.

Example: Deep Learning-based systems such as self-driving cars that learn how to navigate in different environments

Artificial intelligence has an increasing role in many fields, and there are many sectors that benefit from it, the most important of which are ⁹.



sabak Amira, **Artificial Intelligence: Interdisciplinary Perspectives**, Vol. 1, Berlin, Germany: Arab Democratic Centre for Strategic, Economic and Political Studies, April 2024, p.14.

1) **Artificial Intelligence (AI) in engineering:** It has become an integral part of engineering, where it is used to improve the design of systems, solve complex engineering issues, and improve production processes, in civil engineering, AI is used to analyse data related to infrastructure and determine the necessary maintenance of roads and bridges, in addition to improving the design of buildings using smart algorithms to reduce costs and increase efficiency, in mechanical engineering, it is used to develop robots and smart devices that can perform complex tasks that humans cannot do, AI is also used in software engineering to analyse code

2) **Artificial Intelligence in the medical field:** AI offers a real revolution in diagnosis and treatment methods by analysing medical images such as X-rays and magnetic resonance imaging (MRI), AI can detect diseases that are difficult to observe by human doctors, such as cancerous tumours in their early stages.

3) **AI in the military:** It has become an essential tool for improving military strategies and enhancing defence capabilities. It is used in intelligent surveillance systems such as drones, which are used to gather intelligence and carry out accurate surveillance missions, and in self-defence systems that rely on artificial intelligence to detect potential threats such as hostile missiles and aircraft and respond to them immediately.

4) **Artificial Intelligence in Astronomy:** Artificial intelligence in astronomy has a major role in processing the huge data collected by space telescopes. Through machine learning techniques, astronomical images can be analysed faster and more accurately, and new stars and planets can be discovered.

5) **AI in education:** AI can improve the learning experience for students through smart educational systems that provide personalised content based on the student's level, used in interactive education through

applications such as smart robots or educational programmes that adapt to the needs of each student and provide different ways of learning.

6) **Artificial Intelligence in the commercial field:** AI mainly contributes to improving customer experience and increasing efficiency, in e-commerce, AI is used to analyse customer behaviour data, allowing for personalised product recommendations based on their previous interests.

7) **Artificial Intelligence in other fields:** In addition to the areas that have been mentioned, there are many other areas in which AI benefits greatly, in the field of environment, AI is used to analyse climate change data, predict natural disasters such as earthquakes and hurricanes, as well as monitor and protect wildlife, in the field of media and entertainment, AI contributes to improving the user experience across streaming platforms such as identifying users' favourite movies and music based on their previous interests, in the field of law, AI is used to analyse legal texts and improve the progress of cases by classifying legal documents and categorising them.

Artificial intelligence is a powerful tool that is having an increasing impact in various fields as these technologies evolve, opening the door to a more advanced future in every sector.

2.3 Third section: Artificial Intelligence from Idea to Practical Applications :

The idea of artificial intelligence began to emerge in the middle of the twentieth century, when scientists around the world began to think about the possibility of building machines that can simulate the functions of the human mind. This trend was driven by developments in the field of neuroscience, which began to clarify how the human brain works and the way information is processed in it. In addition, advances in computing and cybernetics, which allow machines to perform complex calculations, paved the way for the emergence of this new concept, and as computing

capabilities increased, it became possible to imagine building intelligent systems capable of performing complex tasks previously reserved for humans.

In 1956, the history of artificial intelligence witnessed an important turning point when American researcher John McCarthy coined the term ‘artificial intelligence’ during a famous workshop held at Dartmouth College. The workshop was attended by a group of prominent scientists at the time, such as Alan Newell and Herbert Simon, who had. Although this workshop did not lead to major scientific discoveries right away, it contributed to the establishment of AI as an independent scientific field, and it also marked the beginning of extensive collaboration between scientists, which helped push research forward significantly.

After the historic workshop at Dartmouth, universities and research centres around the world began to establish specialised AI centres, with the Massachusetts Institute of Technology (MIT) and Carnegie Mellon University among the most prominent.

The aim of these centres was to develop new methods and techniques that enhance the ability of machines to learn and make decisions, and from this research emerged systems that were inspired by the way the human brain works, such as artificial neural networks, these systems aimed to simulate some human cognitive processes such as pattern recognition and decision-making based on input data.

In the 1970s, AI began to find its place in practical applications, with many sectors, especially the banking sector, beginning to use AI techniques to optimise their operations in banks.

By the beginning of the 1980s and 1990s, AI techniques developed significantly, and new systems emerged that provided innovative solutions to the issues that were facing different industries, for example, Expert Systems were developed, which used a set of cognitive rules to make

specific decisions in fields such as medicine and engineering, and AI applications appeared in the field of natural language processing, such as machine translation systems, which had a role in improving communication between different cultures.

At the beginning of the 21st century, we witnessed a major shift in AI applications, thanks to the development of computing and big data technologies, AI has become an integral part of many industries such as healthcare, where it is used in diagnosing diseases and analysing medical images, and it also began to be widely used in the automotive industry with the emergence of self-driving cars. Major companies in the tech sector such as Google and Facebook have used AI to improve user experiences, through content recommendations and analysing personal data.¹⁰

From idea to application Artificial intelligence has gone through multiple stages of development, from simulating the human mind to the advanced applications we see today, this technology is not limited to just improving calculations, but has become influential in various aspects of our lives, from improving healthcare to developing technological industries, through creating innovative solutions to many daily issues, and research and developments in this field continue, indicating that artificial intelligence will remain at the forefront of future innovations.

2. The second axis: What is digitisation :

Digitisation is the process of converting traditional information and processes into digital formats using modern technology, aiming to improve efficiency, facilitate access to data, and promote innovation in various fields.

3.1 First requirement: Definition of digitisation :

In contemporary Arabic literature, many terms such as ‘digital writing’, ‘digital creativity’, ‘e-book’, ‘digital assessment’, and ‘digital human’ are

used to refer to a new concept in writing that arose as a result of the technological development in the fields of media and communication.

Despite the similarity of these terms, it is important to clarify their exact meanings to avoid confusion. Among these terms, the definition of digitisation encompasses a range of concepts that reflect the shift from traditional to digital forms of writing and documentation. Therefore, the meanings of these terms should be defined to clarify the nuances between them.

As for the definition of ‘digitisation’ in the Arabic language, it refers to a range of meanings related to writing and documentation. In the Arabic language dictionary, we find that ‘number’ can refer to writing or clarification by marks or dots, as mentioned in Ibn Manzoor's explanation: ‘Number and evaluation is the enlargement of the book’. This refers to the process of improving writing or clarifying texts by adding symbols or marks, so that the words become clearer .¹¹

So, we can understand digitisation as the process of transforming or activating writing and documentation through digital media, enabling new modes of communication and creativity.

Digitisation refers to the process of converting information and data from its traditional (physical or analogue) form to a digital form that can be processed and stored using modern technology. In other words, it is the conversion of content or data into a format readable by computers or digital devices, making it easier to access, transfer, and exchange through digital means.

It is the process of converting documents from traditional printed form to electronic form, including the process of electronic publishing. This definition focuses on the conversion of printed documents into an electronic format.¹².

Digitisation is not limited to text, but also includes images, sounds, and videos, it is part of the digital transformation that encompasses all aspects of daily life, from personal information to big data that is analysed using artificial intelligence techniques.

Digitisation is ‘the process of converting information sources in various forms, such as books, periodicals, sound recordings and moving images, into legible form by automated computer technologies via the binary system, which is the basic information unit of a computer-based information system’. Thus, digitisation involves converting information into a set of binary numbers, and this process is carried out using a range of specialised technologies and devices .¹²

3.2 The second requirement: Advantages of digitisation in the modern era :

Digitisation is a technology that is characterised by a number of unique characteristics that differ from other technologies, including .¹³

1. **Reduced time:** Digitisation speeds up access to information from anywhere, which contributes to a significant reduction in time in digital processes.

2. **Reduce distance:** Digital technologies make it possible to store large amounts of data in small spaces, with easy access anytime, anywhere.

3. **Sharing intellectual roles with machines:** Through the interaction between the researcher and the intelligent system, digital technology enhances knowledge and integrates the production process.

4. **Networking:** IT-based equipment combines to form efficient communication networks, enhancing the flow of information between different industries and activities.

5. **Interactivity:** Digital use allows users to participate in the communication process mutually, where they can exchange roles and enrich the interaction between different activities.

6. **Synchronicity:** Digitisation offers the flexibility to receive messages at any time that suits the user, allowing them to participate without having to wait.

7. **Decentralisation:** Digitalisation promotes autonomy by providing ICTs in a distributed and decentralised manner.

8. **Connectivity:** Digitisation provides the ability to connect different devices regardless of the manufacturer or place of manufacture, creating a global communication environment.

9. **Mobility:** Digitisation enables users to benefit from its services on the move using mobile devices such as mobile phones and laptops.

10. **Convertibility:** Information can be transferred from one medium to another, such as converting voice messages into written or readable text, allowing for a variety of communication methods.

11. **Popularity and diffusion:** Digitisation offers the possibility of directing messages to a specific audience or individual, allowing greater control over access to content.

12. **Global expansion:** Digitisation allows information to spread widely across continents and regions, contributing to an unlimited and rapid flow of knowledge.

This combination of characteristics makes digitisation an essential technology in many fields around the world, offering more efficient and flexible ways of dealing with information.

3. 3 Third Requirement: Digital Transformation in Management

Digital transformation contributes to reducing bureaucracy, increasing transparency, and achieving sustainability in administrative performance, which leads to better and faster services for citizens:¹⁴

A. Globalisation and technological changes:

Globalisation and technological developments in advanced societies have led to the emergence of e-administration, which is an effective tool to simplify procedures and improve administrative performance. The main objective of this administration is to get rid of bureaucracy and improve the relationship between the citizen and the administration by providing electronic services available at any time and any place. In light of these transformations, it has become necessary for countries to move from traditional administration to e-administration to keep pace with development and achieve greater efficiency and speed in government transactions.

B. E-governance as an alternative strategy:

Moving from traditional administration to e-administration is an important step in the development of administrative work. E-administration allows simplifying administrative procedures and minimising red tape, thus saving time and effort. Algeria, like many other countries, is beginning to realise the urgent need for change to keep pace with globalisation and digitisation. The transition to e-administration is not just an option but a necessity that requires investment in modern technologies and achieving tangible results in improving government performance and increasing transparency.

T. Utilising modern technology:

Transforming traditional administrative work into electronic work requires modern technology that suits the local reality. The most important of these technologies include: Advanced operating systems, word

processing software, and electronic networks such as the Internet. In addition, the human element is a key pillar in the success of this transformation, as training employees and providing political will to support the project will ensure its sustainability and success.

w. Internet networks and supporting technologies:

The Internet is one of the main pillars of e-administration, as it provides a strong infrastructure that helps secure and protect information systems. The Internet allows linking different systems within organisations, which facilitates the exchange of data and information. The intranet network that operates within government institutions can also be used to facilitate the process of communication and data exchange between employees in a safe and smooth manner, which increases the efficiency of administrative work.

The shift to e-administration is an urgent necessity to keep pace with the developments of the digital age, despite the obstacles that may face the implementation of this system in some countries such as Algeria, but the benefits provided by digitisation in speeding up procedures, improving administrative efficiency, and increasing transparency make this shift an inevitable choice

3. The third theme: Future Challenges and Opportunities Associated with Artificial Intelligence :

4.1 . The first requirement: The impact of AI on societies

People have always relied on the perspectives of faith and logic to understand the world, but with the entry of artificial intelligence into the scene, we now have a third perspective run by machines, this shift changes the foundations of our understanding of the world and opens new horizons that were unfamiliar in the past, AI will clearly impact many areas such as self-driving cars in the consumer sector, as well as scientific breakthroughs in the academic field. However, it also raises concerns in other areas, such

as the disqualification of a job applicant due to a decision made by an AI system.¹⁵

Once AI becomes an integral part of society, it becomes impossible to try to separate from it, as society's shift towards greater digitisation makes AI inevitable, just as 'digital natives' separated from previous generations, 'AI natives' will emerge with new and diverse perspectives and ideas.

With the increasing adoption of AI-powered learning, average human abilities are expected to rise significantly, but the technology will face challenges, such as the possibility of digital assistants favouring humans over them over time.

The world is experiencing an accelerated flow of information, which is creating new challenges for deep thinking and concentration. With the constant bombardment of information, there is less and less space for reflection and contemplation. The ability to set aside time for deep reflection is becoming increasingly difficult in the face of an information explosion.

Societies that do not address AI issues, such as social and educational impacts, are expected to fall behind those that adapt and integrate the technology into their organisations, so it is important that societies reform and develop new institutions to meet the challenges that may arise, in order to maximise the benefits of AI and minimise its negative impacts.

4.2 The second requirement: The impact of the digital revolution on human societies :

With the increasing reliance on artificial intelligence (AI) and the evolution of the digital human, global societies and economies will undergo radical transformations in the near future. These changes are expected to significantly affect the social and economic structure, as the concepts of work, education, and even human relationships will change. The

widespread use of artificial intelligence (AI) may radically change the labour force, contributing to the emergence of new jobs while traditional jobs disappear. At the same time, the digital human may contribute to enhancing social interaction.

One of the most obvious implications of the development of AI and the digital human is the significant impact on the labour market in the near future. Many jobs that were once done manually or required simple mental skills are likely to be replaced by AI systems. Jobs in sectors such as manufacturing, transport, and logistics may be threatened by automation. For example, robots and self-driving cars could replace drivers and workers on production lines, leading to the loss of millions of jobs.

One of the most prominent future impacts that AI will have on human societies is the changes in social relationships. As humans become more digitised, human interactions will become less physical and more technological. In the future, humans may be more connected to AI than to each other. These shifts will affect how social relationships are formed, as reliance on digital applications for interaction and communication may increase, limiting real-life interactions between individuals.

Moreover, with the use of smart systems that collect data and learn from individuals' behaviours, privacy issues will increase significantly, new legislation and legal frameworks will be needed to protect the privacy of individuals and ensure that personal data is not exploited, the spread of these smart systems can cause great concern about the use of personal data by companies and countries, requiring the development of strict policies to protect information.

Artificial intelligence and the digital human will lead to radical changes in the global economy. In the long term, AI can dramatically boost productivity, which could lead to increased economic growth. For example, AI can improve the efficiency of the productive and commercial sectors and reduce the operational costs of companies. AI can also be used to develop

new products and services, opening up great opportunities for innovation in the market.

However, this improvement in productivity may cause a divide between developed and developing economies. Countries that quickly adopt AI will be better positioned to boost their economies, while countries that do not have the capacity to adopt these technologies may find themselves at a disadvantage. The spread of automation may reduce employment opportunities in traditional industries, increasing socio-economic inequality in some regions

The advancement of artificial intelligence (AI) will lead to revolutionary changes in the healthcare sector. Intelligent systems will be able to diagnose diseases faster and more accurately than human doctors, which could reduce medical error rates and improve patient care. AI in analysing medical scans or performing genetic analyses can provide accurate diagnoses that help doctors provide personalised treatment plans.

The digital human in this field will also benefit from the development of technology-integrated self-treatment. In the future, individuals will be able to continuously monitor their health using smart devices and wear technologies embedded in their body to track sugar levels, blood pressure, and other vital data, promoting personalised disease prevention.

Although AI and the digital human hold much potential to improve the quality of human life, these transformations will significantly impact global societies and economies. Humans will need to adapt to changes that may include the labour market, social relationships, economic disparities, and privacy, while seeking a balance between innovation and ethical and environmental shifts.

4.3 Third Requirement: Challenges of AI application and digitisation :

AI applications face a range of challenges that must be overcome to achieve the desired benefits. These challenges are divided into several areas:¹⁶ .

A. Technical Challenges: Many small organisations and institutions suffer from a lack of financial and human resources to support AI applications. Poor internet connectivity and digital infrastructure hinder the ability of organisations to use AI effectively, and if the data is inaccurate or poorly integrated, the results will be unreliable, and if the data is not accurate or integrated, the results will be unreliable.

b. Professional challenges: Some decision makers are not convinced of the importance of employing AI technologies at the moment, which hinders the adoption of these technologies, and there is a shortage of skilled and specialised staff in the field of AI, which hinders growth and development.

C. Social challenges: Employees are concerned about their jobs being replaced by AI in the workplace, some organisations are facing criticism for not adopting AI in their decision-making processes and there is a fear that some organisations are over-reliant on technological inputs at the expense of human capacity.

W. Ethical challenges: The data fed into the algorithms must be protected to avoid any invasion of privacy, errors in or lack of data can lead to inaccurate results and some companies may focus on profit as the main goal in using AI, which may lead to unethical results.

5. Conclusion:

In conclusion, we can say that artificial intelligence and digitalisation represent the beginning of a new revolution that will radically change the nature of our lives and our relationship with technology. This revolution will open wide horizons for innovation and improvement in various fields, from education to healthcare, through industry and services, but with these

rapid changes comes a great responsibility in how to manage these technologies in a way that ensures everyone benefits and preserves human values, so we have proposed some recommendations that will serve the topic:

- A.** Individuals and communities should invest in continuing education to develop the skills needed to interact with these technologies effectively and safely.
- B.** It is necessary to develop an ethical framework that guides the use of AI, to ensure that no social group is discriminated against or exploited.
- C.** Research and innovation should be encouraged in the fields of AI and modern technologies that aim to improve the quality of life while preserving the environment and natural resources.
- D.** Work to create a collaborative environment between humans and technology, so that they complement each other to achieve the best possible results.

Artificial intelligence and digitisation are two of the most prominent features of the future, and can be a driving force for human progress if guided thoughtfully and responsibly.

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