Payment of Civil Liability for Damages Arising from the Use of Artificial Intelligence Technologies

Nour Muhsen Modhi Almasaeid
Postgraduate student, PhD in Private Law
noor.almassaed@gmail.com

Jihad Al-Jarrah
Professor of Private Law at the International Islamic University
dr.jihad.jarrah@gmail.com

Abstract: *This research addressed several issues, including clarifying the nature of artificial intelligence technologies in terms of definition and characteristics, in addition to stating the general and specific reasons for paying civil liability, so that we reached the conclusion There are many general and specific reasons that may lead to the denial of civil liability for damages arising from the use of artificial intelligence technologies. Hence, the inadequacy of the rules governing the provisions of civil liability in Jordanian civil law becomes clear, and the same is the case in many legislations.We have concluded that in light of the absence of civil liability, it is necessary to find alternative means so that these means re financially sufficient and have the ability to provide compensation to the injured party, including insurance for these damages, or a savings fund for the purpose of compensating for the damages arising from the use of artificial intelligence technologies. Hence, the need for such means becomes clear, and the Jordanian legislator must use these means.*
Keywords: civil liability, damages artificial intelligence, technologies

INTRODUCTION

It can be said that the term artificial intelligence is of recent use, and perhaps researcher John McCarthy was the first to propose the term artificial intelligence at a scientific conference held at Dartmouth University in the United States . In the same context, the Czech playwright Karle Capek coined the word "robot" to refer to a robot.

At present, and in light of the amazing developments that the world has witnessed on all levels, the term artificial intelligence has become so well-known that no one can

ignore it. for him This is due to its features and characteristics that help the world as a whole to accomplish tasks related to all areas of life, despite the challenges that it may face and which require legal and legislative frameworks that keep pace with this development.

In light of the current spread of artificial intelligence technology, damages must arise as a result of this use, and the conditions and pillars of civil liability must also be met for the purposes of compensation. After the elements of tortious and contractual liabilities for the use of artificial intelligence technologies are achieved, the law arranges appropriate compensation, whether the compensation is in kind or in cash, but there is a case in which the causer of the damage can pay the existing liability and relies on some of the means granted to him by the law in accordance with the requirements of justice. Therefore, this research will be divided into two sections. The first section is about the nature of artificial intelligence and the second section is about paying the civil liability arising from the use of artificial intelligence technologies.

The problem of the study and its importance.

The main problem lies in This research is about the possibility of eliminating civil liability when damage resulting from the use of artificial intelligence technologies occurs.
Based on the above and in light of the research problem, this study seeks to answer several questions, including:
What are artificial intelligence technologies?? ●
The extent to which civil liability for damages arising from artificial ●
intelligence technology is excluded?
Reasons for the absence of civil liability? ●
Importance of the study

The practical importance of this study lies in the fact that the Jordanian government is moving towards a more advanced and prosperous future and the use of technology in various sectors, so it has become necessary. Knowing the cases in which responsibility is not available so that the user of artificial intelligence can be highly attentive when using it.

Study objectives
This study aims to clarify the following elements:
Definition of artificial intelligence techniques. ●
Reasons for the exclusion of civil liability for damages arising from the use of ●
artificial intelligence technologies.

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Previous studies

Civil Liability Arising from the Use of Artificial Intelligence Technologies in   -1
Jordanian Legislation, Majdaloun Rasmi Badr, Master's Thesis, Faculty of
Law, Middle East University, This study addressed the issue of civil liability
arising from the use of artificial intelligence technologies in Jordanian
legislation. This study differs in that it will focus only on the absence of civil
liability and using a comparative study with different legislations.
   -2
Study methodology
In this study, the researcher relied on the descriptive analytical approach in describing
and analyzing civil liability texts.To know the cases in which civil liability is not
waived and the necessary reasons for that.

Study plan
To answer the previous inquiries and to achieve the desired goal of the study, the
study was divided into two sections:
The first topic : What is artificial intelligence.

The first requirement: Definition of artificial intelligence.

The second requirement: Characteristics of artificial intelligence technologies.

The second topic : Payment of civil liability for damages arising from the use of
artificial intelligence technologies.

The first requirement : Reasons for paying civil liability for the consequences
resulting from the use of artificial intelligence technologies.

The second requirement: Special grounds for paying civil liability arising from the use
of artificial intelligence technologies.

The first topic: the nature Techniques artificial intelligence.

Artificial intelligence has many definitions around the world, as it is considered today
Techniques Artificial intelligence is the cornerstone of technology that the world is
witnessing.(Mohammed, 2020) It is based on many different inferential processes that
feed on it in order to be able to simulate human behavior known as
intelligence.(Bonia, 1993)The period between 1940-1950 is considered the beginning
of the emergence of the first features of artificial intelligence, and the creation of

neural networks contributed to this. The concept of artificial intelligence at that time meant simulating the mind through a group of programs that simulate the work of neural networks in the brain and link them together to perform a specific task.(2014, Hubbard).

Accordingly, this topic will be divided into two sections. The first section is a definition of Techniques Artificial intelligence and its types. As for the second requirement, we will discuss the characteristics and features of Techniques artificial intelligence.

First requirement: Definition of artificial intelligence

The term artificial intelligence is considered a controversial term, through the realization of the technologies that artificial intelligence relies on to understand and interact with the surrounding reality.(Al-Khawli, 2021)It can also be considered one of the branches of computers and one of the main pillars on which the technology industry is based at the present time..

Before entering into the definition of artificial intelligence, it is necessary to point out what is meant by technology, which is defined as all human capabilities used to change things existing in nature to meet human needs. Melvin Cranberry defined it as the application of knowledge and knowledge of application. From here, it can be inferred that technology is nothing but a matter that includes many aspects of life, such as health care, food, housing, and other services.(Hakar, d.t.).

As for the term artificial intelligence, it has many definitions. Artificial intelligence can be defined as an information system that has intellectual capabilities like those of a normal human being, or it can be defined as a computer application or a machine that performs the operations performed by a human being..

Artificial intelligence is defined as the science concerned with making computers perform tasks similar to human processes, including deduction and learning.(Daghneem, 2017).

Artificial intelligence is also known as the science of Turn on Building the Operations Which performs tasks that require human intelligence when performed by humans(Mahmoud, 2005).

It is known as a science concerned with creating machines that perform actions that humans consider intelligent.)Abdul Nour, 2005)It can be defined as one of the newly emerging computer sciences that seeks, through various methods, to reach and

perform tasks and conclusions that are similar, even if to a small extent, to those attributed to human intelligence.(Abdul Majeed, 2009).

It is also known as the science of meaning Studying and designing computer software to perform tasks that require a normal human being to use his intelligence.(Abdel Nour, 2005)Another defined it as "the simulation of human intelligence processes by machines and software, especially computer systems."(Al-Azab, 2021)It is known as an effort to develop computer-based systems with the aim of giving them the ability to perform tasks that mimic what a normal human being does in terms of several aspects, including the ability to think, learn, and other matters.(Al-Najjar, 2010).

Through all the previous definitions, the researcher sees that there are several common features that unite these definitions, which are: Techniques Artificial intelligence is able to move flexibly and can perform various and diverse tasks. The most important of these features that make this techniques partner with man is the ability to make decisions.

and It is noteworthy that there are many legal legislations around the world that do not address a comprehensive and exclusive definition of Techniques Artificial intelligence, but during the last two decades there has been a great interest that has begun to appear in countries around the world as a whole in digital transformation and artificial intelligence technology.

By referring to these laws and making a comparison between them in terms of similarities and differences, we find that the Jordanian legislator did not address the definition of artificial intelligence through the relevant laws in an explicit and clear manner, but it came in Article No. (2) of the Jordanian Electronic Transactions Law and defined the electronic intermediary as "the electronic program used to implement a procedure or respond to a procedure automatically with the intention of creating, sending or receiving an information message." Here we find that the legislator defined the electronic intermediary in a manner close to the definitions of artificial intelligence, as the definition of the intermediary included several characteristics in common with artificial intelligence and was limited to some others.(Al-Dahiyat, 2019).

While the UAE legislator came up with a similar definition under the name of automated electronic intermediary, the UAE government has made great strides in adopting artificial intelligence systems.(Article 1, UAE Commercial and Transactions Law)

We find that the Bahraini legislator defined the artificial intelligence system in the Electronic Transactions Law No. (28) of 2002, where Article 2 defined the electronic agent as a computer program or any other electronic means to carry out an action or to respond to electronic records or actions without review or intervention from any individual at the time of the action or response.

The Iraqi legislator defined the electronic intermediary as an electronic agent, a program or an electronic system for a computer or any other electronic means used to implement a procedure or respond to a procedure with the intention of creating, sending or receiving an information message.(Article 8/1, Iraqi Electronic Distribution Law).

The European Parliament on Humanity also indicated that there are no legal texts that address the issue of intellectual creations derived from artificial intelligence, and although the current legal rules address some issues, they cannot cover all of these issues to ensure legal protection. These laws need in-depth study and fundamental amendments that contribute to establishing legal frameworks that protect artificial intelligence technologies.(The project, 2016),However, the foreign legislator generally transferred the idea of the thing to the idea of the animal person, i.e. granting legal personality to the animal and was not satisfied with granting it to the human being only. The French legislator stipulated in the French Data Protection and Freedoms Act of 1978 that:YIt stipulated that personal data should not be used by operators, including in the field of artificial intelligence, and should be respected, especially for smart machines with digital storage. The position of the French legislator was supported by the recent European Directive of 2016 on the protection and circulation of private data of natural persons..

The position of the Qatari legislator was not different from the rest of the legislation, as it needs to determine its position regarding the legal protection of issues related to artificial intelligence, as it needs to amend the legal rules in a manner consistent with the changes in a manner consistent with the rest of the legislation, as Law No. (13) of 2016 regarding the protection of the privacy of personal data confirmed(Personal Data Privacy Protection Law issued in Qatar under No. (13) of 2016, Articles 3-7)However, every individual has the right to protect the privacy of personal data, and this data may not be modified except within the framework of transparency and honesty and in accordance with the provisions of the laws.

Some jurisprudence defined artificial intelligence as "a machine that has the ability to understand and comprehend something complex, and can make appropriate decisions in various circumstances. It can be defined as a mechanical device that can be

controlled electronically, and performs tasks instead of humans."(Nasser, 2021)It can also be said that artificial intelligence is nothing but the automation of an activity that requires cognitive processes when performed by a natural human being.(Harry, 2019).

Artificial intelligence is considered a modern and contemporary phenomenon in society, because what artificial intelligence technologies involve is the creation of machines capable of thinking individually. What distinguishes artificial intelligence most is that its technologies are spread across all medical, engineering and legal specializations, making them one specialization.(Barak, 2022).

In international jurisprudence, the United Nations report in 2005 defined a robot as a device that has the ability to be reprogrammed and operates independently to carry out manufacturing operations or provide welfare services to humans.

The World Intellectual Property Organization defined artificial intelligence as "a specialization in computer science concerned with developing systems that require the performance of tasks similar to those performed by human intelligence."

Jurisprudence differed in setting a specific and clear definition of artificial intelligence in different legislations, which led to defining artificial intelligence in several ways.(Abdulrazzaq, 2020).

Hence, the researcher sees that the different legislations are similar to each other in terms of not establishing legal frameworks and providing an appropriate legislative environment, especially for artificial intelligence technologies, but rather they were satisfied with stipulating a simple part that provides legal protection for some issues related to artificial intelligence. However, the foreign legislator differed from the Arab legislator by introducing the legal personality of the animal and was not satisfied with granting the legal personality .Anonymity The American Institute defined a robot as "a multi-functional manual manipulator capable of self-reprogramming and concerned with the transportation of specialized materials."(Salama, 2014)The Japan Robotics Association defines the industrial robot as a multi-purpose machine that has a memory device to perform many procedures and has the ability to take the place of a human being through movement and thinking. The National Text Messaging and Dictionary Center defines the robot as a device that has been specially designed. To do Several Jobs in various industrial and scientific fields.

The researcher believes that all the previous definitions are similar except for the Japanese definition, which did not recognize the robot. In operation Programming, that is, leaving the task of manually merging identifiers to humans.

The second requirement: Characteristics of artificial intelligence technologies

Enjoy the technology Come on Artificial intelligence has several characteristics and types that we will learn about in this section as follows:

The first branch: short age Techniques artificial intelligence

From the previous definitions, it becomes clear to us that Techniques Artificial intelligence has many characteristics and features, and perhaps the most prominent of these characteristics are the following:

Ability to search experimentally: meaning that artificial intelligence   -1 techniques choose a specific method to reach the correct solution without using sequential steps, and have the ability to change the solution method if it is not clear that the first method is the best for reaching the fastest solution.(Udaybat, 2021).

The ability to think, through perception, visualization, understanding   -2 visual things, recognizing fingerprints and images, and it is possible to gain knowledge through data analysis.

Representing knowledge: You can use a special way to describe   -3 knowledge, which includes a set of facts and a description of the relationships between them and the rules that link them together.(Arab Democratic Center for Strategic, Political and Economic Studies, (2019)).

Ability to deal with incomplete information: If the information is   -4 incomplete and missing, it has the ability to provide appropriate solutions that are consistent with the data it has.

Conclusion: It has the ability to reach new facts through old data and uses   -5 two types of deductive and inductive inference.(Salah, 2017).

Ability to learn: If AI technologies are connected to a machine learning   -6 program through the Moment Or benefit from some information, and from here it begins to improve its performance, and only benefits from the important information and neglects the extra information..

Despite these advantages of artificial intelligence technologies, they are not without flaws, including their lack of knowledge of the moral values that humans possess, and their flaws include: With it Also, its inability to change its system on its own, in addition to the high cost of such technologies.

The second topic: Payment of civil liability for damages arising from the use of artificial intelligence technologies.

Before talking about paying civil liability, we must point out the practical example that led to the emergence of the idea of paying the lack of civil liability, as there was a lawsuit filed by a patient against the hospital in which the operation was performed and the smart surgical robot called Da Vinci to perform a prostate removal operation, and during the operation Da Vinci was exposed to several errors.

However, it was not stopped, and this led to several diseases for the patient, including reproductive system and abdominal pain, but the court's ruling was to dismiss the case for lack of legal evidence (Al-Atoum, 2022). Hence, we had to research the reasons for paying and not paying civil liability. Therefore, this topic will be divided into two requirements. The first requirement is the general reasons for paying civil liability arising from the use of artificial intelligence technologies, and the second requirement is the general reasons for paying civil liability arising from the use of artificial intelligence technologies.

First requirement: - General reasons for paying civil liability for artificial intelligence technologies

The general reason for legal defense is the argument that the plaintiff adheres to to convince the court of his lack of responsibility, and to show the invalidity of the injured party's statements that he is responsible for the damage and compensation for it (Younis, 2018). The general reasons for defense of civil liability can be summarized as follows:

Force Majeure: Force Majeure can be defined as any exceptional circumstance   -1 that cannot be avoided or anticipated, and thus makes the implementation of the obligation impossible. The Jordanian legislator stipulated in Article 261 of the Jordanian Civil Code that " If a person proves that the damage arose from an external cause in which he had no hand, such as a divine disaster, a sudden accident, force majeure, the act of a third party, or the act of the injured party, he shall not be obligated to provide compensation unless the law or agreement provides otherwise.".

Article 448 also states: The obligation expires if the debtor proves that fulfilling it has become impossible for him due to an external reason for which he has no hand .In this regard, Article 247 also states: In bilateral contracts, if a force majeure occurs that makes the implementation of the obligation impossible, the corresponding obligation is extinguished and the contract is

automatically terminated. If the impossibility is partial, the equivalent of the impossible part is extinguished. Partial impossibility is similar to temporary impossibility in ongoing contracts. In both cases, the creditor may terminate the contract on condition that the debtor is aware of it.".

Here we find that the Jordanian legislator referred to the impossibility of implementation in more than one article and referred the impossibility to the external cause, so that he limited the external cause to heavenly disaster, which is considered one of the accidents caused by nature (Khater, 2009), or force majeure or a sudden accident, and here we show that both of them must be present together, since the accident cannot be predicted and force majeure cannot be prevented (Al-Sanhouri, 2000), or the act of another or the act of the injured party, which negates the causal link.

In comparison with the Iraqi legislator, we find that Article 165 of the Egyptian Civil Code stipulates that: If the person proves that the damage arose from an external cause for which he had no handy our accident sudden Or force majeure or Error of the injured party or error of a third party It was not binding .To compensate for this damage Unless otherwise stated or agreed upon."

Here we find that there is a great similarity between the Jordanian and Egyptian legislators, except that the Egyptian legislator did not use the term heavenly disaster as a foreign cause. The researcher believes that the position of the Egyptian legislator is the most correct, as the term sudden accident and force majeure indicate a heavenly disaster. Therefore, the inclusion of the term heavenly disaster was an addition by the Jordanian legislator.

As for the Iraqi legislator, he stipulated in Article 211 of the Iraqi Civil Code that: If the person proves that the damage arose from an external cause, then Bad If there is a divine disaster, sudden accident, force majeure, the act of another, or the fault of the injured party, he is not obligated to guarantee it unless there is a text or agreement to the contrary..

The researcher finds that the Iraqi legislator agreed with the Jordanian legislator in the first part and agreed with the Egyptian legislator in the second part, thus mentioning the heavenly disaster as a foreign cause like the Jordanian legislator, in addition to the fact that the Iraqi legislator and the Jordanian legislator used the term guarantee as an indication of compensation, while the Egyptian legislator used the term compensation.

Therefore, by applying all of the above to artificial intelligence technologies, we find that the person responsible for the damage can evade civil liability resulting from the

use of artificial intelligence technologies if it is proven that the damage caused by the robot was caused by lightning, for example, and thus led to an electrical short circuit (Wahba, 2020).

The act of the injured party: The causal link is severed if it is proven that the   -2 damage resulted from the act of the injured party himself, and thus civil liability is negated if the act of the injured party was the main cause of causing the damage. The act of the injured party is also considered one of the forms of foreign cause, but the question that can be raised is: if the act occurred due to two causes, one of which was caused by the injured party and the other by the act of another, then who is responsible for compensation?

To answer, we must know the contribution of each act to causing the damage, which leads to knowing the percentage of compensation. We find that the Jordanian legislator in Article 265 of the Jordanian Civil Code states: "If there are multiple persons responsible for a harmful act, each of them shall be responsible in proportion to his share in it, and the court may rule equally or jointly and severally among them," meaning that he distributed the compensation to those responsible for it, each according to the gravity of the act.

Third party action: A third party is defined in civil liability as anyone who   -3 contributes to an act that leads to the occurrence of harm, and the harmful act is not attributed to him. Here, the act committed by him is a reason to exempt the person to whom the harm is attributed from civil liability, or to mitigate it according to the proportion of his act in the occurrence of the harm (Al-Qudah, 2011). However, if this act is the sole cause of the harm, he alone bears responsibility. However, if the act of another was the result of force majeure or a sudden accident, he is not responsible or obligated to compensate.

An applied example of the act of others is the case of hacking an artificial intelligence application and affecting its currency system and algorithms, and this effect leads to damage, such as an electronic bank that is managed by artificial intelligence applications, such that others can hack the bank system and manipulate the amounts, deposits and electronic banking movements, and transfer money from one account to another without a legitimate reason, so here the civil liability of the party that manufactured the artificial intelligence application falls (Othman, 2021).

At the same time, the action of a third party may interfere with the action of the manufacturer, programmer, or owner if this action contributes to the occurrence of damage. An example of this is when the designer provides the hacker with a mechanism to enter the website (Othman, 2021).

In light of all the above general reasons for paying civil liability, we conclude that the civil liability of artificial intelligence technologies applies to what applies to other matters for which civil liability is due. Evidence of this is the possibility of denying civil liability of artificial intelligence technologies by proving the foreign cause.

Despite all the tremendous progress of artificial intelligence technologies and their ability to learn on their own, which gives them complete independence, this cannot be a reason for exemption from civil liability. Accordingly, the legislator must take legislative measures represented in closing all mechanisms or methods that lead to the involvement of artificial intelligence technologies in technical networks based on Internet technology, which leads to the exchange of experiences and information with other devices and may cause damages that are difficult to detect the person responsible for (Khalifa, 2017).

The second requirement: Special reasons for paying civil liability arising from the use of artificial intelligence technologies.

Artificial intelligence technologies have a special nature that distinguishes them from the concept of a thing according to the provisions regulating civil liability, and therefore they have special reasons that negate civil liability, which we will explain as follows:

1- Independence in decision-making is one of the characteristics of artificial intelligence technologies, as mentioned previously, and it means the ability to interact with the environment without human intervention, and the action issued by artificial intelligence applications is not subject to guidance and therefore will not be subject to accountability, even the general rules of civil liability are absent here and we are either a legislative deficiency (Al-Ahmad, 2020).

That is, the more independent AI technologies become, the more difficult it is to assign civil liability to the person responsible for monitoring, because the monitor can prove that this technology cannot be monitored, directed or supervised in some cases where the guard or monitor is the user and has no experience in dealing with the AI technology system. Also, increasing independence increases the ability of these technologies to make decisions without human intervention.

Therefore, in the event that artificial intelligence technologies emerge that have a great capacity for independence and decision-making, how can the rules of applied civil liability be applied to them? Here, the inability of the rules of civil liability for harmful acts will appear, because the basis for their establishment depends on the guardian or monitor of things that need care to avoid harm, because the idea of guardianship is based on the availability of supervision and guidance by the guardian, and thus when the guardian can prove that artificial intelligence technologies enjoy independence and are not subject to his supervision, his responsibility is negated (Abdul Karim, 2021).

However, the researcher believes that there should be a renewal of the rules of civil liability for things, especially within the framework of artificial intelligence applications that are independent in making decisions without human intervention. In searching for a solution to this problem (Fatiha, 2020), we find that the solutions to avoid it are that the company that manufactures artificial intelligence technologies is the guardian and the actual guardian of these technologies, so that the company is responsible for all damages arising from the use of artificial intelligence technologies, because the company is based on the idea of a commercial project and must, as it gains profit, bear the risks and compensate for the damages. There is another solution for the company that manufactures artificial intelligence technology to appoint highly experienced and efficient programmers and developers who specialize in artificial intelligence technology work in a way that ensures that people are not harmed.

The researcher believes that the second solution is the most appropriate, as it preserves the rights of the manufacturing company and ensures reducing the expected damages. However, this does not mean that when a risk occurs, the company's responsibility is negated. The company is responsible for the risks, as it is the primary beneficiary of artificial intelligence technologies, and it must bear the risks and compensate for the damages.

Despite all of the above, there must be a clear and specific means that enables us to determine who is directly responsible for the damage in a way that cannot be manipulated or changed.

2- The ability of artificial intelligence technologies to move from one place to another, as most of these technologies can move since they are turned on, and they differ according to their types in terms of being subject to control. An example of this is self-driving cars that have four levels, each level differs in the extent of human intervention. In the fourth level, they do not need human intervention, and they have a

high ability to determine paths and take all measures that ensure safety and prevention.

The same is true of smart robots working in the medical and construction fields. It is clear from the above that the more artificial intelligence technologies are subject to control and guidance, the easier it will be to identify the person responsible in the event of damage.

3 - The ability of AI technology makers to create technologies that possess electronic awareness, and are able to sense everything that happens around them, and to deal as an independent and autonomous entity that is not subject to its maker, guardian, or user. Thus, we move here to a stage where AI technologies are equal to humans, and these technologies can create an interactive environment among themselves capable of exchanging experiences and information. The researcher explains that we have previously mentioned that this matter is inconceivable for the aforementioned philosophical and religious reasons.

However, it cannot be ignored that there is an opinion that adopts this idea, although at the present time it is not possible to predict the state that artificial intelligence technologies may reach, but there are many who support the idea that artificial intelligence technologies are a match for humans or even surpass them in some cases.

The researcher believes that the legislator must intervene to enact legislation that prohibits obsessive manufacturers from manufacturing artificial intelligence technologies that enable it to be an independent entity, in order to protect society as a whole.

The ability of artificial intelligence technologies to learn, although these   -4 technologies are programmed on multiple and specific data within the scope of their work, there are some artificial intelligence technologies that follow many learning systems through which they can form relationships between data to form new hypotheses, and the question raised here is what if artificial intelligence technologies received information from an open source.

Therefore, you can get scattered data that leads to a malfunction through the artificial intelligence application reaching hypotheses based on processing the updated data, which leads to causing harm to others. Can the person who caused the harm deny his responsibility for causing the harm, and can the compensation claim be rejected?

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To answer this question, the responsible persons must be identified, including the programmer and developer, because the damage is the result of an error in the interaction of artificial intelligence technologies with data. Here comes the developer and proves that the data on which he trained the artificial intelligence technologies is high-quality data and that he did not make any mistakes when developing the system on which the technology works. The programmer argues that he developed the application to obtain the best information in terms of accuracy and neutrality.

The developer argues that he works at a global level and uses algorithms approved by the global system and has not violated the technical and professional foundations of software development. Moreover, such incidents are unusual and impossible to prevent, and the programmer then stops the artificial intelligence techniques to prevent similar damages. Therefore, if the programmer and developer can prove what was mentioned, the incident that caused the damage will be considered a force majeure case because the incident is unusual and unexpected.

Here, the researcher believes that the legislator must enact a law that includes the obligation to insure artificial intelligence technologies, and establish a special fund to cover damages resulting from some rare and unexpected cases.

The concept of guardianship does not apply to some artificial intelligence   5- technologies. Artificial intelligence applications that have a physical existence can be controlled, directed, and are subject to oversight, and thus the concept of guardianship applies to them. As for artificial intelligence technologies that have a moral existence that is not subject to actual control, they fall outside the concept of guardianship because they are of a different nature.

This is what Article 291 of the Jordanian Civil Code indicates, which states: Anyone who has at his disposal things that require special care to prevent their damage or mechanical machines - shall be liable for any damage caused by these things, except for what cannot be avoided, without prejudice to the special provisions contained in this regard."

CONCLUSION

At the end of this research, after it was presented in two sections, we discussed in the first section the definition of artificial intelligence and clarification of its types, and in the second section we discussed the legal nature of artificial intelligence technologies

and the extent of recognition of the legal personality of artificial intelligence technologies. We reached several results and recommendations as follows: -

Results

Jurisprudence has not established a unified, comprehensive and exclusive   -1 definition of artificial intelligence, and most definitions are based on the capabilities of humans and machines. The researcher can clarify a definition based on what has been discussed as programming practical machines that possess a high capacity for intelligence that enables them to combine many fields at the same time.

There are many general and specific reasons that may lead to the denial of   -2 civil liability for damages arising from the use of artificial intelligence technologies. Hence, the inadequacy of the rules governing the provisions of civil liability in Jordanian civil law becomes clear, and the same is the case in many legislations.

Recommendations

We recommend that the Jordanian legislator enact a special law on   -1 artificial intelligence that includes a definition of artificial intelligence, which will enhance the legal systems to confront the challenges resulting from artificial intelligence.

There are means of compensation that can be proposed to resolve the issue   -2 of the absence of civil liability, such that these means are financially sufficient and have the ability to provide compensation to the injured party, including insurance for these damages, or a savings fund for the purpose of compensating for the damages arising from the use of artificial intelligence technologies. Hence, the need for such means becomes clear, and the Jordanian legislator must use these means.

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