World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

THE LEGAL NATURE OF SMART CONTRACTS PROGRAMMED USING BLOCKCHAIN TECHNOLOGY IN JORDANIAN LAW

Dr. Shadi Meeush Altarawneh
Researcher and legal consultant
shaditarawneh45@gmail.com

Article history:

Received: 6th February 2025
Accepted: 4th March 2025

Abstract:

Blockchain technology (Blockchain), or what is now known as the Internet of Transactions, is one of the technological solutions associated with the Fourth Industrial Revolution in the modern world. It is a secure cloud network through which transactions of various types are recorded, verified and executed. It is a chain of blocks that authenticate information that is created or modified electronically, and re-store and transfer that information. One of the areas that witnessed and kept pace with Blockchain technology is the conclusion of contracts and legal actions, and their implementation in an automated and automatic manner without the need for human intervention. So what are called smart contracts appeared, and the use of these electronic technologies in smart contracts requires a legal and regulatory framework, due to the modernity of this technology. This study includes an attempt to shed light on the legal nature of smart contracts using Blockchain.

Keywords: Smart Contracts, Programmed Contracts, Blockchain Technology, Law

INTRODUCTION.

The current Internet is the primary means of concluding smart contracts, which have witnessed tremendous technological development, the impact of which has extended to the field of contracts as a whole. Recently, what is known as (Blockchain) technology has appeared in the field of the Internet, which is an encrypted information program that undertakes the task of a unified record of transactions on the network. Each group of transactions is linked to a chain, allowing all participants in it to know what is happening in the entire system. It was later exploited to authenticate e-commerce contracts, government operations, and transfer of real estate ownership. The electronic transaction is completed through Blockchain technology with the presence of payment methods in virtual currencies, the most famous of which is now Bitcoin (Bitcoin(Al-Hasban, 2019).

Blockchain technology has made great leaps in the field of concluding contracts, as what is called smart contracts has emerged, which has become a new challenge to the traditional contract system. If the contract in its traditional concept is concluded between two people, the matter is different in the scope of smart commercial contracts, which are done electronically without any human intervention (Al-Dabousi, 2020). Smart contracts represent a development in the concept of electronic contracts, as they rely on technologies such as blockchain and encryption to implement the terms of the contract automatically, so that smart contracts contain pre-prepared terms, which depend on programming to implement its terms automatically when specific circumstances occur. Therefore, it can be said that smart contracts are a type of electronic contracts, but they are distinguished from them by self-execution and automation using advanced technology (Al-Khatib, 2024). As a result, we will discuss the study of the legal nature.For smart contracts programmed using blockchain technology.

The importance of the topic lies in studying blockchain technology and its most prominent uses in the field of smart contracts, as blockchain technology has enabled individuals to conduct their transactions and deals automatically and directly without the need for human intervention. Hence, the great importance of researching this modern technology for smart contracting and explaining its legal nature emerges.

The research problem surrounding the legal nature of smart contracts programmed using blockchain technology includes enforceability, legal implications, and regulatory considerations. This multifaceted problem prompts an in-depth exploration of the intersection between technology and law. The topic of smart contracts via blockchain technology raises many questions, including:

1. What is blockchain technology, and how does it relate to smart contracts?
2. What is the legal nature of smart contracts via blockchain technology?

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

The study aims to identify the nature of blockchain technology, its relationship to smart contracts, and the legal nature of smart contracts programming via blockchain technology.

The study relied on the analytical approach, by analyzing the legal provisions related to smart contracts programmed via blockchain technology, and the legal problems associated with them, in order to extract the best results.

The nature of the study required dividing it into an introduction, three chapters, and a conclusion including the most important results and recommendations.

Section One: The concept of smart contracts used in blockchain.

Contract law is one of the most advanced fields, as it is constantly evolving, and addresses the emergence of new business models and technologies, based on an analysis of the development of contracting methods, and the form of the principle of freedom of contract, as it can be said that every society has a prevailing form of contracting, as the parties to the contract negotiate all its terms based on equivalent foundations, and the simple form of contracting dominates the industrial society, while the information society goes further by limiting human participation in determining and implementing contractual terms, in addition to that, new types of agreements can be concluded without direct human intervention through electronic agents, and smart contracts are a good example of the development of contracting procedures in that direction (Muhammad, 2021), and to clarify this, we divided this topic into two requirements, which are: -

First requirement: Definition of smart contracts.

InnovateNick SzaboThe idea of the smart contract was introduced in 1994, and he called it that term and defined it as "a computerized transaction protocol that implements the terms of the contract."Pablo, 2019), and then defined it as "a set of promises specified in digital form, including the protocols through which the parties implement those promises" (Pablo, 2019).

It was said that it is "a computer program consisting of a set of codes that represent the terms and details written in agreement between two or more parties participating in the contract. If the terms written in the contract are met, that program is run and executed using one of the electronic platforms, such as Ethereum, which is the most famous platform for smart contracts" (Borgada, 2017).

It is broadly defined as: "Autonomous programs or software instructions that automatically implement the terms and conditions of the contract, without the need for human intervention. Smart contracts can include all information about the terms of the contract, the duties and rights of the parties, fees and all elements that should be present in the contract, so that all procedures are implemented automatically, without resorting to the services of intermediaries."(Bani Amer, Tahseen, 2019).

The United States of America has drafted a law that includes the legal concept of a smart contract. In the draft law of the state (2417.Arizona House Bill No. 10, defined a smart contract as an event management program that operates on a distributed, decentralized, shared, and replicated ledger that can take charge of, and order, the transfer of assets in that ledger (Bodo, Gervais, Quintais, 2018). The law defined the order asIin order toA smart contract is: "an interactive computer program,IYou will serveIn transaction automation,IdoOn a distributed, shared, and replicated decentralized ledger of accounts" (Dabash, 2018).

Belarus was the first country to legislate a smart contract in 2017, defined in a presidential decree as "computer code intended to operate on a distributed ledger for the automatic execution or implementation of transactions or other legal actions."Decree of the President of the Republic of Balarus 2017)(Muller, 2020)Malta also agreed (The Malta Digital Innovation Authority Act 2018) on the Malta Digital Innovation Authority Bill 2018, which defined a smart contract as "a form of innovative technological arrangement, consisting of: a computer protocol, or an agreement concluded wholly or partly in electronic form, which is automatically enforceable by computer codes, although some parts may require human intervention and control, and which is also enforceable by ordinary or dual legal means (Muhammad, 2021).

From the previous definitions, we find that there is no globally agreed-upon definition of smart contracts, and this is not surprising.Oh, lookOhDue to the very new nature of this phenomenon, and its complex technological basis.

Smart contracts using blockchain technology are defined as "smart contracts that are concluded and executed automatically using the decentralized technology known as blockchain technology, and rely on the Internet to execute transactions without the need for direct human intervention, by implementing a specific set of terms and conditions previously concluded between the contracting parties" (Hassan, 2023).

The second requirement: defining blockchain.

Blockchain is a digital technology based on a huge computational database, through which people can transfer money or complete transactions, via a network of decentralized computers spread around the world (Salah El-Din, 2021).

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

It was said that they are huge databases and information, collected and verified in various fields, then stored and saved through large networks of computers, and then displayed automatically on electronic platforms. This data is characterized by being updated and provided with new information and data on an ongoing basis (Abu Al-Layl, 2020).

It is also known as "a distributed database, as it appeared as a record of transactions in the virtual currency (Bitcoin), with the aim of preserving the data records of those transactions from manipulation, as it allows a secure exchange of money, shares or rights, as it works as an electronic record for processing and recording transactions, allowing all parties to track information through a secure network, which does not require verification by a third party" (Nakhal, 2020).

It is also known as "a distributed database of records or a public register of digital transactions or events, which have been executed and shared between participating parties, and each transaction is verified in the public register, the majority of participants in the system agree, once the information is facilitated in it it cannot be erased" (Khalil, Alwani, 2023).

Accordingly, Blockchain technology is a technological revolution specialized in storing digital transactions over the Internet, verifying their validity, licensing them, and securing them with the highest levels of security and encryption.

Section Two: Legal NatureRelated to the establishment of the legal relationship based on smart contracts.

One of the most important advantages provided by smart contracts from a legal perspective, which contributes greatly to the development of the traditional contractual system, is the automation of the contractual performance process for both contracting parties. To understand this, we have divided this topic into two requirements as follows:

The first requirement:Smart Contracts Pillars

1-Contract parties: They are those who wish to implement the contract to achieve its effects and reap its fruits according to certain conditions. They are anonymous if the blockchain is of the open type. Within the framework of this technology, some technicians have confirmed that the identity of the parties can be known by tracking and tracing.(Al-Kuh, 2024).

2-Electronic digital signatures: All participants are allowed to enter into the agreement by signing the contract via each party's private keys..

3-Contract Terms: A detailed series of processes that all participants must sign to express their satisfaction and agreement.(Al-Kuh, 2024).

4-Contract location: is what the program does so that it can restrict all matters related to the location to be dealt with technically..

5-A technical system based on decentralization: The smart contract is published in the blockchain and made available among the platform contracts (Fadad, 2020).

The components of the smart contract, as listed by technicians, have been summarized and condensed into three main interconnected and integrated components, representing the pillars of the smart contract that cannot be implemented without their availability, which are::

1-Signatories: The parties - regardless of their number - who use the smart contract, whether they agree or disagree on the terms.(Al-Kuh, 2024).

2-The subject of the agreement (contract): is within the smart contract environment, and enables the user to directly access this component without obstacles..

3-Protocol: It includes specific terms and conditions with descriptions through programming them with mathematical symbols (Abu JibHashem, 2019).

Based onThe above is necessarythatIAvailabilityIn the smart contractIAThe pillars of the contract stipulated by the jurists in their books are::- Parties to the contract,The contract is onIh,SILanguageThe contractAs follows:-

1-Parties to the contract:They meanParties to the contract,andIConditionFIThey areMind, noIWe holdforIAThe Madman and the Boy Who Doesn'tImind,The contracting parties in the contractandSmart DAndEnableFrom the sideIAndLookIAndthatIIt was completedEnsure their actual presence,And the peopleIThey are accusedTo contract from HIThAge and familyIAndMindIAndBy asking them,When opening the account and starting the contractual relationshipIAnd,As for the other sideIAndApplicationIQIAndverbIAnd,That is not itIbeingExcept by asking the contractor himself, then no.IEnableIn smart contractsIAndalready know someoneIAndThe other side, where you canIbeingThey areII-Robot- or under the legal age of contractIAnd((Rahmani, Felosi, 2022), and according to the provisions of Jordanian law, it is required that the parties to the contractual relationship be of full legal capacity, and not afflicted with any of its symptoms. Accordingly, in the event that a minor enters into contractual relations, the legislator has arranged absolute nullity in some cases, and considered the contract suspended in other cases, while he considered such actions valid, if they are purely beneficial to him (Article 169 of the Jordanian Civil Code, 1976). When looking at smart contracts, it is necessary to distinguish between: -

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

- If a smart contract is based on the existence of another contract between the two parties to the contract, the issue of the eligibility of the parties in the main contract is considered, not the supplement.
- The smart contract in which the consent was initially obtained on the blockchain platform between the two parties to the contract, it is very likely that a contractual relationship can be established in which neither party has the legal capacity stipulated in Jordanian law, especially since the identity and age of the persons in such types of contracts are often unknown to the other party, which results in legal obstacles represented in the possibility of invalidating the contract, according to the provisions of Jordanian civil law on the one hand, and regarding the legal relationship being subject to the rules of private international law on the other hand, especially since this type of contract is often transcontinental, which results in the issue of the validity of the contract or not remaining subject to the rules of jurisdiction, and thus the possibility of implementing this type of contract will be governed by the legal system governing that contract, and to address the legal consequences related to the capacity of the contracting parties, there must be a global legislative approach that protects those dealing with blockchain, so that they are requested to present evidence of their capacity, according to the text of Article (12/1), which states that "the civil status and capacity of persons shall be governed by the law of the country to which they belong." To them by their nationality, however, in financial transactions concluded in the Hashemite Kingdom of Jordan, and their effects are established therein, if one of the parties is a foreigner of incomplete capacity, and the incomplete capacity is due to a hidden reason that is not easy for the other party to discover, then that reason does not affect his capacity, except that the scope of that article will be limited to the availability of the following conditions combined in: that we are facing financial transactions, that the contract is concluded in the Hashemite Kingdom of Jordan, and that the legal effects are established therein, and that the issue of capacity is hidden (Qtaishat, Al-Tarawneh, Al-Naimat, 2022).

2-The contract is onIhThere are conditions for the contract.IhIt must be available:

1. thatIbeingExisting, noIWe holdforIAThe non-existent.
2. thatIbeingMoney because theIAexchanging money for money.
3. thatIbeingThe contract is a permissible project..
4. thatIbeingowned.
5. thatIbeingCapable of infiltrationIMAt the Contract (Sano, 2019))

andthatConditions are met in smart contractsIAnd,Even if some of itIcameContrary to what is statedITraditional contractsIDIAndand electronic contractsIAnd.

3-SILanguageThe contract:IIntendedWith the ballILanguageMeet theIJabAnd acceptance,so IcountingunlessIJabexhaustionII seeFinalIOhDecisive, conclusive evidence of the intention of the one who issued it to accept the contract in accordance with the terms and conditions ofINah(Rahmani, Flossy, 2022),AndILanguageunlessIJabAcceptance in smart contractsIAndFully committed, and achieved through the meansIfor himWriting indicating the consent of the contracting partyINAccording to the provisions of the Civil Code, concluding any contract requires the meeting of the offer and acceptance between the two parties to the contract, so that its effect is based on the subject of the contract (Article 169 of the Jordanian Civil Code, 1976). The important issue in concluding the contract, according to the provisions of Jordanian law, is the issue of expressing the will, and the issues related to the conformity of the offer with the acceptance. The Jordanian legislator has allowed the expression of the will in any way that leaves no room for doubt to express the innermost thoughts (Article 169 of the Jordanian Civil Code, 1976), including electronic means (Electronic Transactions Law, 2015).

andFrom the sideIAndShapeIAnd IEnableSaying that smart contractsIAndIt has been fulfilledIAThe elements of the contract stipulated by the presence of the contracting partyINAnd the peopleIThey are accusedTo contract - any SalahIThey are accusedTo oblige and commit - and provideILanguageContracts that are a click of a button to agree to the contract (Hassan, 2022)The conditions of the contract are also met.IhFrom the existence of owned money that can be transferredIMeh,GIRThe problem with smart contractsIAnd ISummarizeOn the type of money exchanged and the extent to which it is considered valuable money, as the mentioned contracts are not completed.IAndOnly by virtual currenciesIAndWhich did notIGet in touchAfter considering it as moneyOhCorrect.(Rahmani, Felosy, 2022).

The second requirement:Problems of smart contractsIAnd

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

thereSeveral issues of essenceIAnd IEnablechallengeIIt's goneas follows:
-Extent of obligationIAndSmart Contract LawIOh.
-The extent of recognition of virtual currencyIAnd.
-Ignorance of the parties to the smart contract.
1-Extent of obligationIAndSmart Contract LawIOh: noThe laws recognizeINSo far in digital currenciesIAndThe encrypted way smart contracts are executedIAnd,Which had a direct impact on dealing with these contracts, sofor you IcountingThe most prominent legal challenge is the legislator's refusal to accept this technology.IAndGenerally, because it needs to be changed.YesRRadical in lawINAnd the procedures andThe SII am sorry,This will notIIt was completedforINnestIAndExplain it, whatIYou will claimA lot of effort and timeIRINuntilIYou will decideThe situation for this technologyIAnd(Hassan, 2022).
andIStayThe judiciary is the first and last authority.IRWhen disputes arise in contracts,IHe took refugeThe litigants to the courts, but in the case of smart contractsIAndSIbeingThis is difficult, because the courts still do not recognize this contract and its obligation.Ite,Except for some scrutinyIAat-CatcherIAatnoIAndI amIZonaWhich issued a statementShitbillIgrantLegal status of smart contractsIAndbased on the currency of the twoIRIAndtoIIt was completedDealing with cravingsIAatBlockchain based in the same wayIQawhich any contract or agreement is dealt withIAClean upIMay" (Rahmani, Felosy, 2022).
2-The extent of recognition of virtual currencyIAnd: ContractsThe smart oneIAndnoIEnableTanfIIt went awayOnly by virtual currenciesIAndcirculating,The main problemtheT TqAaroundthatVirtual currenciesIAnd,It is notIRLicensed by the supervisory authoritiesIAnd,AndIRSupported,Or linked to any financial asset by institutions, so these virtual currenciesIAndGIRSupported and supportedIR licensed led to instability of QIMattha (Jawish, Basyouni, Abdullah, 2022), andInstability of QIWhat is it?Virtual currenciesIAnd IPerformTo damages that may be inflicted on the parties to the contract and may affect itIAremarket, or even lead to economic crises.IAndEven if these smart contractsIAnd Icatch up with herMany interestsIRahIt is easyItoTransactions andIRehaCurrency instability mayIbeingInfluenceIRIts harm is moreBar(Hassan, 2022).
3-Ignorance of the parties to the contract: ContractsThe smart oneIAndIt is done through digital platforms.IAndThese platforms are diverse.:

1. Including platformsApprovedTechniqueIAndBlockchain, especiallyLimited number of usersINaccording toOh toSpecific terms and conditions, for example:Digital platformsIAndFor financial institutionsIAndAnd companies,And the companies of the unionINAndIReha,Smart contractsIAnd The implementeronthatPlatformsIbeingpartyAThe contract is known to GodIAndAnd the familyIAnd,And allwhat IAttachedBoth of them are from BIAnatAnd information required by contracts and regulations of institutions(Al-Kuh, 2024).
2. Including the platformsIThis is itOn terms and conditionsIfriendshipImposed by countries, such as some countries that require platform users to have a number.IAndRegisterItoHe isIatAndIAnatuserIN.
3. Including open platformsthatnoHe knewIatuserINHINTanfIDContracts, and failure to verify eligibilityIAndSmart contract parties.(Rahmani, Felosy, 2022).

andIgnorance of the partiesthatContracts made through open platforms, and in the rightIQaThe thing is thatthatIgnorance is a showIAnd,Because of technical trackingIEnableKnowing the parties, as well as the fame of the contractINuserINAnd witnessing the creation of manyIRperhapsIhWith whatIAchieveThe contract is extendedIAIts componentsIfeverContracts and the obligations of all parties are the effects of not knowing the detailed status of the parties.ItoIAnd(Sanaa Rahmani, 2022).

The third topicDetermining the legal nature of the smart contract.

The concept of smart contracts creates many concerns and challenges when one tries to apply the classical or traditional concepts of contract law. Moreover, such challenges are of a global nature and go to the core of the provisions of contract law. In fact, the basic problem lies in the fact that smart contracts are created and developed in a technical world "parallel" to the legal field, without a retrospective view of any legal considerations such as the Internet in its early days. Therefore, the computer is indifferent to the basic legal principles (Hassan, n.d.). To understand this, we have divided this topic into two requirements as follows:

The first requirement: The opinions of jurists on the legal nature of the smart contract.

It differedJurists in determining the legal nature of the smart contract as follows::
1-In Russia he sees(Dyadkin et al) that the smart contract can be considered a form of contracts or a means of ensuring obligations, it is only a way to sign contractual transactions through the smart contract, it represents a special type of recording and executing

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

civil transactions, which have many specific characteristicsAnd(Muhammad, 2021).

2-AndHe sees(Yurasov et al) that the smart contract has a complex legal nature., soIt can be considered an additional agreement and an independent contract.soThat the agreement is independent with the suspension of implementation, andthe timeThe determinant isImplementedSmart Contract,Without relying on the will of the parties to the agreement,andSupporters of this trendThey are doneA smart contract is a legal document created and executed using blockchain technology.N (Atia, 2021).

3-In America, some jurisprudence considers a smart contract to be a real contract, while others consider a smart contract to be a computer code that is able to work automatically and according to pre-defined tasks, and this code can be stored and processed in the distributed ledger and any change in it can be written, and this is an admission that a smart contract is not necessarily a legal contract; it relies on a conditional approach based on the rule if it is achieved.... it is arranged if"if……then" written in computer code, in this sense smart contracts are not agreements, but rather technology designed to implement these agreements.Tpre-determined(Attia, 2021).

4-WhileFrance Divided jurisprudence on the legal nature of smart contracts:

1. Some believe that they are not contracts in the legal sense of the term, and are not in their entirety electronic contracts, because they have thorny implementation methods due to their special nature. Smart contracts are merely a digital guard assigned to serve the contract. They are computer programs used to conclude and implement real contracts, even if they can be considered a smart contract in the language of computer scientists. This classification will remain ineffective and misleading in the law because it is not related to contract law, and therefore is not subject to the provisions of Article 1101 of the French Civil Code amended in 2016.(Al-Hamrawi, 2022).
2. Some jurisprudence considers that a smart contract can be considered a contract within the meaning of Article 1101 of the French Civil Code.,Whereas the Monetary and Financial Law after the decree of April 28, 2016 stipulates that recording the transfer on the blockchain"Blockchain" replaces the written contract, in this caseAndThe general law of contracts will apply. (Al-Khatib, 2020).
3. While he sawSome jurisprudence states that smart contracts, although similar to contracts, are somewhat specific and very strange.(Al-Haqsha, 2023).

When looking atComponents of Smart Contracts Find the pillars of the contractIt is the offer and acceptance, and it isParties to the transaction - two or more contracting partiesIt is represented byThe shopinSubject of the contract, availableOn the terms and conditionsAgreedEach side, but storedpreviouslyIn a protocol through a specific programming language, on a peer-to-peer basis, i.e. if youI'm boredThe conditions are met in a contract that is automatically executed and has its effects according to what is stated in the conditions signed by everyone..

The second requirement: Legal problems associated with the mechanism of smart contracts.

The mechanism of smart contracts is as follows (Qatishat, Al-Tarawneh, Al-Naimat, 2022):

- Preserving the terms of the agreement concluded between the parties to the relationship, without the need for a third party to document the contract.
- Close follow-up and monitoring by the programmer, to ensure that certain conditions agreed upon between the parties are met.
- Automatic execution once the condition and its answer mentioned above are met.
- Save the transaction to a general ledger (Public Ledger) It cannot be modified or changed.
- Despite the spread and prevalence of smart contracts, there are some problems associated with their mechanism of action, most notably the rigidity and stability that characterize them, in addition to the special language in which these contracts are written, and the connection of the issue of contract implementation to external influences, and the problems that surround that.

The Jordanian legislator has taken into account the special nature of time contracts in which time plays an important role in their implementation. The legislator has addressed the issue of force majeure in the text of Article (247) of the Jordanian Civil Code, which stipulates that "in contracts binding on both parties, if a force majeure occurs that makes the implementation of the obligation impossible, the corresponding obligation shall expire with it, and the contract shall be terminated automatically. If the impossibility is partial, the equivalent of the impossible part shall expire. Partial impossibility is similar to temporary impossibility in ongoing contracts, and in both, the creditor may terminate the contract on condition that the debtor is aware (Jordanian Civil Code, 1976). The Jordanian Civil

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

Code also addressed exceptional circumstances in the text of Article (205), which stipulates that "If exceptional general incidents occur that could not have been foreseen and their occurrence results in the performance of the contractual obligation, even if it does not become impossible, becoming burdensome to the debtor in a way that threatens him with a huge loss, the court may, according to the circumstances and after balancing the interests of both parties, reduce the burdensome obligation to a reasonable limit.Justice so requires. Any agreement to the contrary is void.(Jordanian Civil Code, 1976), and accordingly, the Jordanian legislator has arranged for the contract to be terminated in the event that a force majeure occurs that makes the implementation of the obligation completely impossible. However, if the impossibility is partial, the legislator has explicitly stipulated the expiry of what corresponds to the impossible part. However, in the case of exceptional incidents, the Jordanian legislator has given the court the right to intervene to provide balance between the two parties to the contract, by returning the obligation to a reasonable limit in order to achieve justice, in accordance with the conditions set by the Jordanian legislator (Qatishat, Al-Tarawneh, Al-Naimat, 2022).

While smart contracts are characterized by stability and are executed automatically without the need for a third party to guarantee the execution process, it is very difficult to take into account the developments that may face the contractual relationship after its conclusion and before the full implementation of the provisions associated with it, due to the conflict between smart contracts and the idea of amending, canceling or suspending the implementation of its provisions established on the blockchain platform. In other words, all powers granted to the parties and courts to intervene in the execution process of these contracts have been taken away, and the idea of any intervention or compensation has been cancelled in the event that the contract is executed incorrectly, because the computer program cannot introduce unspecified legal concepts related to unexpected external circumstances into the contract execution process (Al-Khatib, 2024).

One of the legal problems associated with smart contracts is the stage of interpreting the contract. Interpreting smart contracts requires a special nature, as the terms of the contract that impose obligations on both parties are translated by a specialized programming technician, using one of the programming languages, into algorithms that work on automatic and automated execution, without human intervention. The smart contract is written in the form of algorithms that are executed by the machine, using one of the programming languages. The language is completely different from the human language, and accordingly there is no room to talk about the issue of interpreting the language that was used to formulate the smart contract, whether it was judicial or not. Accordingly, it can be said that the programming language is characterized by rigidity compared to the human language, which can be easily interpreted to respond to some circumstances that may surround the contractual relationship. Perhaps this rigidity is what gives smart contracts the advantage of stability and guaranteeing implementation. The programming language is capable of limiting the difference in points of view when implementing the contract, and thus providing a kind of additional guarantee for the issue of implementation without any significant obstacles, and without judicial intervention. In the event of a dispute over an issue related to the implementation of the original contract between the contracting parties, and recourse is made to the judiciary, the issue of interpreting the contract is not an easy matter. Those working in the law, and it becomes necessary to seek the help of a translator to translate programming languages into human language, and this is not consistent with the Jordanian legislator's approach to the issue of contract interpretation, as the Civil Code gave the judge the task of interpreting the contract (Qatishat, Al-Tarawneh, Al-Naimat, 2022), and judicial jurisprudence has settled that the court of subject matter has full authority to interpret contracts and conditions in a way that it deems achieves the intent of the contracting parties, and to demonstrate the common intention therein, taking into account not to deviate from the apparent meaning of the terms of the contract and the severity of the interpretation of contracts contained in the Civil Code (Rights Cassation, 3922/2019), (Rights Cassation, 6119/2020).

One of the most prominent obstacles associated with smart contracts is the issue of linking the implementation of the contract terms to external sources, from which the smart contract obtains its information, known as (Oracles) which confirms the occurrence of a certain event in the real world, and that this linking process poses a special challenge for smart contracts, because individuals, by using smart contracts, have excluded the presence of a third party in that relationship, but the reality indicates that smart contracts work to obtain information that confirms the occurrence of something from external sources, which may lead to the contract being executed incorrectly due to the inaccuracy of the information provided to the program responsible for executing the smart contract, in addition to the possibility of breaches or temporary

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

interruption of service for external sources, which also results in obstacles in the process of executing the smart contract, which was initially designed to ensure the execution of the basic contract without any significant obstacle (Attia, 2021).

CONCLUSION:

After we finished our research on the topicThe legal nature of smart contracts programmed using blockchain technologyWe concluded with a set of results and recommendations, the most important of which are the following::

FIRST: RESULTS

The research concludes with several results, the most prominent of which are:

1- Smart contracts are concluded by first linking the computer used to conclude them to the blockchain platform, then the transaction data, or the contract to be concluded, is entered, including the terms and conditions of the contract according to what is recorded in the platform data..
2- Smart contracts are closely linked to virtual currencies, especially blockchain, as blockchain technology is the digital platform through which smart contracts are executed and conducted, while virtual currencies are the currency used to complete these contracts.
3- The difference between the offer in smart contracts and the offer in traditional contracts is that in order for it to be completed, there must be a preceding stage, which is the stage in which the contractual terms are formulated, agreed upon, and then converted into a programming code by writing them in one of the programming languages, and this is done on the blockchain network..
4- There are a number of countries that have recognized smart contracts in their legislation, including Malta and America.And Italy.
5- Smart contracts are based on two basic elements: the blockchain and the existence of an encrypted digital currency. The blockchain is the application platform for smart contracts, while the encrypted digital currency is the medium through which payment is completed, contracts are completed, and smart contracts are based on these two elements, which distinguishes them from traditional contracts.
6- One of the most important advantages that smart contracts provide compared to traditional contracts is that obligations are automatically executed when the conditions of the smart contract are met, so there is no need for human intervention in the implementation phase, nor for a third party to mediate the smart transaction.

SECOND: RECOMMENDATIONS

1- The necessity for the Jordanian legislator to pay attention to organizing the provisions of smart contracts with detailed legal texts, in order to keep pace with the rapid development in blockchain technology, and achieve the strategies that countries aspire to in that field..
2- The necessity of introducing a feature in blockchain technology for the purpose of verifying the identity and personality of the parties in smart contracts.
3- Given the global nature of blockchain technology, the development of cross-border dispute resolution mechanisms for smart contracts is of paramount importance, and efforts should be made to establish international standards for resolving disputes arising from smart contract transactions.

LIST OF SOURCES AND REFERENCES.

First: Arabic books.

1. Abu Al-Layl, Ibrahim Al-Dasouqi (2020), Smart contracts and artificial intelligence: their role in automating contracts and legal actions.
2. Abu Jeeb, Moataz, Hashem, Ashraf, (2019), Types of Cryptocurrencies, Research Submitted to a Symposium at the International Islamic Fiqh Academy on Electronic Currencies.
3. Al-Haqsha, Fayhan bin Faraj (2023), Smart Contracts: Their Reality and Ruling, Qitaf Magazine, Issue 17.
4. Bani Amer,flowery,Improvement (2019),Alaa Tahseen, Exploring Blockchain Technology and its Applications in Islamic Finance, Paper presented to the conference: Blockchain and the Innovation Revolution in Workers' Organizations, organized by: Tamkeen for Administrative and Technical Development, Dead Sea, Jordan.
5. Bourgda, Nariman Masoud (2017), Contracts concluded by modern electronic systems, PhD thesis, University of Algiers - Faculty of Law.
6. Gawish, Khaled Mohamed Mahmoud, Basyouni, Hala El-Sayed Mohamed, Abdullah, Mohamed Amin Hani (2022), The risks of using digital currencies on economic growth in some Asian countries,Journal of Advances in Agricultural Research (JAAR) Volume: 28.
7. Al-Hasban, Mustafa Muhammad (2019), The Legal System of Blockchain Technology (Blockchain) In the Light of E-Commerce

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

Legislation, Journal of Law and Humanities, Vol. 2, No. 3.
8. Hassan, Hossam El-Din Mahmoud Mohamed Mohamed (n.d.), Smart Contracts Concluded via Blockchain Technology, Legal Journal.
9. Hassan, Heidi Issa Hassan Ali (2022), Problems of Smart Contracts in Private International Law: A Comparative Analytical Study, Journal of Economic Legal Research, No. 82.
10. Hassan, Heidi Issa Hassan Ali (2023), Smart Contracts: A Comparative Analytical Study, Security and Law Journal, Vol. 31, No. 1.
11. Al-Hamrawi, Hassan Muhammad Omar (2022), Expression of Will in Electronic Contracting viaWebsiteAnd the means of its protection: A comparative study between civil law and Islamic jurisprudence, Journal of Jurisprudential and Legal Research, Issue 39.
12. Al-Khatib, Lama Ayman Ismail (2024), Legal Controls to Protect the Consumer's Right in a Smart Contract, Master's Thesis, Middle East University, Faculty of Law.
13. Al-Khatib, Muhammad Irfan (2020), Smart Contracts.. Credibility and Methodology, An In-Depth Critical Study in Philosophy and Authentication, Kuwait International Law School Journal, Year 8, Issue 2, Serial Issue 30.
14. Khalil, Abeer, Alwani, Nawal (2023), Blockchain Technology Revolution in Commercial Transactions, Master's Thesis, University of May 8, Algeria.
15. Al-Dabousi, Ahmed Mustafa (2020), Legal Problems of Smart Agent Concluding Smart Commercial Contracts in the Blockchain Era, Kuwait and the UAE as a Model: A Comparative Analytical Study, Kuwait International Law School Journal, Year 8, Special Supplement, Issue 8.
16. Rahmani, Sanaa, Felousi, Masoud (2022), Smart Contracts and the Role of Jurisprudential Rules in Arbitrating Them, Ihya Journal, Vol. 22, No. 30.
17. Sano,Qutb Mustafa (2019), Smart ContractsIAndIn light of the origins, purposes and outcomesIAndSolveItoIAnd,Within the research of the International Islamic Fiqh Academy, the twenty-fourth session, Dubai.
18. Salah El-Din, Al-Dhaheri Zainab (2021), The Impact of Blockchain Technology on the Security of the Digital Future of Economic Transactions, Journal of Legal Studies, Vol. 53, No. 2.
19. Dabash, Ahmed Ali Saleh(2018), techIAndSmart contractsIAndAnd its impact on the stability of financial transactionsIAndStudy of jurisprudenceIAndlawIAnd,Evil Role ConferenceIAaLaw in the stability of societies, the first scientific conference for allIAndEvilIAaLaw, Al-Azhar UniversityIF.
20. Attia, Muhammad Yahya Ahmad (2021), Smart Arbitration as a Mechanism for Resolving Contract Disputes Concluded via Blockchain Technology (Blockchain), Journal of Jurisprudential and Legal Research, Issue 36.
21. Fidad, Al-Ayashi Al-Sadiq, (2020), Smart Contracts, Al-Salam Journal of Islamic Economics, Issue 1.
22. Qteishat, Enas Muhammad, Al-Tarawneh, Bassam, Al-Naimat, Osama (2022), The Legal Nature of Smart Contracts According to the Contract Theory in Jordanian Civil Law, Jordanian Journal of Law and Political Science, Vol. 14, No. 4.
23. Al-Kuh, Muhammad Badr Ahmad Othman (2024), The Nature of Smart Contracts, Al-Azhar University Journal, Cairo, extracted from the first issue 3/3, No. 39.
24. Mohamed, Abdel Razek Wahba Sayed Ahmed (2021), The concept of smart contract from the perspective of civil law: an analytical study, Arab Journal of Sciences and Research Publishing, Arab Journal of Sciences and Research Publishing, Journal of Economic, Administrative and Legal Sciences, Vol. 5, No. 8.
25. Nakhal, Ayman Mohamed Sabry (2020), The impact of using blockchain technology on the auditor's responsibility, Accounting Thought, Kafr El-Sheikh University, 24 (1).

Second: Laws and judicial rulings.

1. Jordanian Civil Code of 1976 and its amendments, revised and updated until 2025
2. Electronic Transactions Law, 2015.
3. Discrimination Rights 6119/2020, Qistas Publications (6119/2020).
4. Discrimination Rights 3922/2019, Qistas Publications (3922/2019).

Third: Foreign books.

1. Bodo, Bala´zs, Gervais, Daniel, Quintais, Jo~ao Pedro, 2018, Blockchain and smart contracts: the missing link in copyright licensing?, International Journal of Law and Information Technology.
2. Müller, Christoph, (2020), Les «Smart Contracts» en droit des obligations suisse. Unine.ch.
3. Pablo, Sanz Bayón, 2019, Key Legal Issues Surrounding Smart Contract Applications, KLRI Journal of Law and Legislation, Volume 9,

World Bulletin of Management and Law (WBML)
Available Online at: https://www.scholarexpress.net
Volume-44, March -2025
ISSN: 2749-3601

Number 1, June 15, 2019. p. 3. Available at SSRNhttps://ssrn.com/abstract=3525778