The smart contract as a financial contract: a new way to reinforce trust between co-contractors

Le contrat intelligent comme contrat financier : une nouvelle voie pour renforcer la confiance entre co-contractants

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Abstract: This paper is dedicated to the analysis of the legal panorama of smart contracts. In the normative framework of contract law, we already find norms applicable to smart contracts, some of which are general and others specific. On the other hand, we consider that alternative norms could be a way to harmonise the global context. An important harmonisation in this sense would be to strengthen the regulation of the new relationships that emerge from the technological approach. All these facts make it appropriate to use alternative standards, as well as governmental standards, in the regulation of new technologies, in order to overcome the feeling of legal insecurity that still prevails in this field. Beyond that, we highlight some thoughts on code as a faithful representation of the will of peers.

Keywords: Smart contract, Governance, Civil liability, Legal framework, Blockchain

Résumé: Ce papier est dédié à une analyse du panorama juridique des contrats intelligents. Dans le cadre normatif du droit des obligations, nous trouvons déjà des normes applicables aux contrats intelligents, dont certaines sont générales et d'autres spécifiques. Par ailleurs, nous considérons que des normes alternatives pourraient être un moyen d'harmoniser le contexte global. Une harmonisation importante dans ce sens serait de renforcer la régulation des nouvelles relations qui émergent de l'approche technologique. Tous ces faits rendent opportun le recours aux normes alternatives, ainsi qu'aux normes gouvernementales, dans le cadre de la réglementation relative aux nouvelles technologies, afin de surmonter le sentiment d'insécurité juridique qui règne toujours dans ce domaine. Au-delà, nous mettons en lumière quelques réflexions sur le code en tant que représentation fidèle de la volonté des pairs.

Mots clés : Contrat intelligent, Gouvernance, Responsabilité civile, Cadre juridique, Blockchain
Introduction

The concept of a legal contract has at least three different meanings under Moroccan law. First, it may be a written contractual document that records the agreement of the parties. We are referring to the lease contract (the contractual document bearing the signature of the parties) and its annexes (e.g. general conditions). Second, the contract may designate the contractual relationship. A tenant may thus say that he is a part of the lease (contractual relationship). Third, and this is the meaning we will retain in this section, contract as a bilateral legal act consisting of the exchange of consensual expressions of will (Article 2 of law n° 53-05 p).

When the lessor says that he has signed a lease, he is thinking of that precise moment when the two parties find themselves linked together, because they have mutually agreed on the essential elements of the contract.

In order to guarantee that a contract is effective, meaning that it will produce legal effects, it is necessary to verify the existence of at least three elements.

1. The mechanism for making a contract

It is a question of examining whether the exchange of wills has taken place properly. The basic mechanism consists of two stages: the offer and the acceptance.

An offer: is an expression of will, express or implied, by its maker to be committed by a contract with specific content, subject to acceptance by the receiver. An offer may be formulated "subject to withdrawal" when the offeror reserves the right to withdraw the offer before the acceptance is received, (Article 3 of law n° 53-05).

An offer is to be distinguished from a mere "invitation to make an offer", where a party merely declares its willingness to enter into a contract (e.g. a non-binding proposal).

Acceptance: is a will manifestation emitted by the receiver who unconditionally accepts an offer. The acceptance of an offer requires affirmative action on the part of the offeree.

The offeree must communicate his willingness to be bound by a contract containing all the objectively and subjectively relevant points described in the offer.

It is necessary to assess whether the expressions of will reflect an understanding of the parties on the essential aspects (objective and subjective) of the contract, (Article 3 of law n° 53-05).

In order to determine the will of the parties, it requires the use both objective and subjective interpretation. First of all, the judge must endeavor to determine the common and real intention of the parties, without stopping at the inaccurate expressions or denominations they may have used. Which they may have used, either by error or to disguise the true essence of the agreement.

If the real intention of the parties cannot be established or if it is conflicting, the judge must interpret the statements made by the parties and their conduct according to the theory of reliance.
The validity of the contract: This consists of examining whether the contract satisfies the legal conditions, and, is not subject to a defect in the contract.

When considering the possible interactions between a smart contract and a traditional contract, one must consider two likely scenarios:

The Smart contract is preceded by an effective contract (1.1) or that the Smart contract precedes the existence of a traditional contract (1.2).

1.1 The Smart contract is preceded by an effective contract

When a smart contract is preceded by a classical agreement, the parties begin by concluding a legal contract without using a smart contract or blockchain technologies. Then, use the possibilities offered by the smart contract’s to transpose the content of their legal agreement into computer code, automating the execution of their contract on the blockchain. Two main scenarios are possible:

1.1.1 The Smart Contract allows for partial enforcement of the contract

In these circumstances, the Smart contract is only a tool to execute at least one of the obligations under a contract between the parties, such as payment in a sale transaction. The technology is useful because the crypto-currency transfer is recorded transparently and tamper-proof on the blockchain, allowing the buyer to easily prove the payment as well as the moment it occurred. In addition, the payment can be made instantly without a trusted third party.

As an example. "An airline company representative and a passenger might conclude a physical contract for a trip ticket from Rabat to Rome at a specific price".

In order to secure and guarantee the execution of their agreement, both parties may agree that the payment could be made through a cryptocurrency on the blockchain. While the passenger's payment is made via the blockchain, the seller's right to board the plane and travel to the destination is made by transferring ownership and possession of the boarding pass via a physical shipment or some other technology such as an email.

2.1.1 The smart contract allows full execution of the agreement

The transition from common language to computer code in the form of the corresponding coding commands (e.g. "If ..., then ") can be very challenging. The more complex the contract, the more difficult it will be to fully reflect the agreement of the parties through computer code in a way that allows for smooth execution.

As an example. "The airline and the passenger agree physically on the sale of a flight ticket at a specified price payable in crypto-currency". The initial agreement contains a full range of terms and conditions that may occur during the course of the contract establishment, leading eventually to either a refund or an additional payment obligation (e.g., weather conditions, overbooking of the aircraft, cancellation of flights, extra luggage).

To ensure the contract execution, the entire agreement could then be incorporated into a computer code, the programmer would write a code incorporating the essential elements of the contract as well as the potential events anticipated by the parties.
Once the passenger has provided his identity and has made the payment through the blockchain, he would receive a token representing his ticket allowing him to get on the plane. If one or more terms emerge during the course of the trip, the passenger shall be automatically refunded or charged under the computer code.

Therefore, if the physical contract predates the Smart contract, it is the former that is legally enforceable, as opposed to the latter. This situation inevitably leads to questions about the accuracy of the translation into computer code, the implications of possible errors in the computer code, as well as contractual gaps.

1.2 The Smart contract precedes the existence of a traditional contract

In this case, a contract is concluded (and not only executed) using a Smart Contract. No expression of will is made in Arabic written language (or in any other language) but all rights and obligations are contained in a computer code, this does not prevent the general rules of the Code of Obligations to be applied on the contract, (Added by article 3 of law n° 53-05 promulgated by Dahir n° H1-07-129H of 30 November 2007 - 19kaada 1428; B.O. n° 5584 of December 6, 2007).

The exchange of willingness of the parties can occur via the exchange of information only on the blockchain. To do this, the proposer makes an offer by embedding lines of computer code in the blockchain, and then the recipient accepts the offer by sending information to the Smart Contract address, then the legal contract is recorded and stored in the blockchain.

From that moment on, the SC considers that the conditions are met for the execution of the contract to begin. The effects deployed by the computerized code are immediate and do not require intervention or validation by a third party. At this point, it may be noted that an offer formulated as a Smart Contract raises concerns similar to those of a contract with general terms and conditions. Both are difficult to grasp for the vast majority of recipients.

The fact that the Smart contract is written solely in computer code requires a certain level of protection for the recipient of the proposal who is not a computer scientist. Various issues, such as the conclusion of a Smart Contract, the content of a Smart contract, as well as the treatment of an invalid Smart contract must be carefully considered.

1.3 The Smart contract is preceded by an effective contract: Critical concerns

When the bilateral contractual legal act precedes the SC, we may ask three questions related to the law of obligations:

- The contract may be difficult to interpret and translate from the plaintext language of the contract into computer code,
- Failure to execute the contract properly due to errors in the SC,
- Challenges in overcoming gaps and adapting the contract to changing circumstances due to the use of the smart contract.

1.3.1 Translation of the contract into computer code

Translating the contracts into computer code is not an easy process for at least three reasons:
The contract language is very technical and cannot be easily replaced by imperative programming commands (e.g. "If ..., then ..."), especially when it contains legal concepts, such as withdrawal for "just cause", or for the "good faith".

Even if the contractual text could be precisely translated into programming orders, it is not the only element of legal interpretation. According to (Art. 3), it is necessary to search for the real intention of the parties, without stopping at any inaccurate expressions or names which they may have used (Dierkes et al, 2013), either by mistake or to disguise the true nature of the agreement.

Even if the parties have a common understanding of the legal agreement, they will need to carefully monitor the computer code of the SC to ensure that it reflects their agreement. Once the SC is stored on the blocks, it cannot be changed: any errors must be corrected from outside (off-chain process) after execution. The Smart contract in this regard will continue to work erroneously.

1.3.2 Failure to execute the contract properly due to errors in the SC

By using an SC, the parties generally agree that their obligations will be partially or fully executed automatically if certain conditions are fulfilled. Theoretically, an SC can anticipate many hypotheses of non-execution, imperfect performance, delay, and the impossibility of performance. Once a condition is fulfilled or the information corresponding to an external event is communicated to the blockchain system, the SC can provide for a consequence that is automatically implemented according to the "If ..., then ... rule".

However, an SC designed to ensure fully automated contract performance that may not (fully) achieve its objectives for a variety of reasons.

An SC can contain a bug: Thus, the lines of code may not reflect the obligations or the sequence agreed upon by the parties. As a direct consequence, the contract may run poorly on the platform.

An SC (E. Mengelkamp et al, 2018), like any other tool (e.g., a paper version), cannot anticipate all possible scenarios. Unforeseen situations occur constantly during execution.

In such a case, the SC could function incorrectly thus trigger either a non-execution or an imperfect execution. Even if an SC contained all possible scenarios (which is impossible), the law may change between the time the SC is programmed and the time of its execution. In this case, SC would have to be adapted, which is technically impossible, since what has been recorded on a blockchain is tamper-proof.

1.3.3 Challenges in overcoming contractual gaps

Contracts are always deficient because the parties are unable to draft a perfect contract containing all possible scenarios or to anticipate all future changes in circumstances. Therefore, the SC code will ignore them.

If an SC contains a gap, the immutable nature of the blockchain prevents it from being filled according to its protocols. Also, it is virtually impossible to provide a rule in the computer code that could automatically resolve any unexpected change in circumstances.
As a result, the SC is neither able to identify a gap and fill it, nor is it able to adapt the content of the implementation to new circumstances.

1.4 Classical contract preceded by a Smart Contract

When an SC serves as a basis for the conclusion of a contract, three questions at least arise in association with the law of obligation:

- How does an SC relate to the contract-making mechanism?
- Does the SC guarantee the existence of a contract or the very least the existence of an agreement?
- What happens in the case of defects affecting the validity of the contract?

1.4.1 Contract conclusion mechanisms based on a Smart Contract

As we have seen above, the mechanism for concluding a contract involves an offer and an acceptance. We have also seen that an SC is technically capable of concluding a contract in a legally defined sense. In the view of various authors; the SC permits the conclusion of a legal contract. The main argument for recognizing the conclusion and existence of a legal contract is the implicit manifestation of a will by the exchange of services within the framework of an SC. In this case, the expressions of the will of the parties are embedded in the blockchain, in a similar way to how a vending machine works: by setting up the vending machine with its operating instructions, the seller expresses his will to sell the goods inside the machine and makes an offer to potential customers. When a buyer inserts money into the machine and chooses a product, he accepts the seller's offer. Therefore, a contract is concluded, even if there is no express communication of will.

1.4.2 Offer

By virtue of the contractual and formal liberty, the offeror may propose an offer orally, in print, or by any other means that allow the communication of his will. Therefore, Moroccan law allows an offer to be made in computer code form. An SC may express a valid offer if the computer code represents a binding proposal to enter into a contract and describes all the terms of the agreement that the recipient may enter into by accepting the offer. Given the intangible nature of the SC stored on a blockchain, the offer has a "take it or leave it" character, as the recipient who wants to interact with the SC cannot change its content but only meet the conditions set in the computer code. In this, it is similar to consumer policies containing general terms and conditions that are globally integrated.

1.4.3 Acceptation

In principle, consent can be communicated in any form. The parties may, however, agree to give their contract a special form (reserved form). The conclusion of such a reservation is not subject to any form. Generally speaking, the offeror of an agreement in computer code will not authorize the other party to accept it in his preferred form, notably by replying to him in Arabic (or in another language). The computer code contains a specific form - a computer language - and the beneficiary can only validly sign the contract if he agrees to accept the offer in that specific form (Laarabi et al, 2020). Thus, the receiver will have to send the information provided by the SC, quite often an amount of ether - to the specified public address via the blockchain. The
blockchain records the exact time and date at which said party sends the relevant information, equivalent to accepting the offer and initiating the conclusion of the contract. The hash of the transaction is irrevocably recorded and can be verified by anyone at any given time.

2. Validity of the agreement concluded by a Smart Contract

The following section is devoted to possible defects in a contract concluded through SC, such as those relating to its purpose (2.1), design (2.2), or consent (2.3).

2.1 Failure of the object

A contract may be invalid due to a defect relating to its subject matter if its content is illegitimate, immoral, or impossible. We exclude from our discussion the intentional use of the blockchain and SCs for illicit purposes since the parties involved are not influenced by the contractual assessment of the validity of their actions. On the other hand, it is necessary to deal with the issue after the transaction.

The above-mentioned regulations apply in principle to legal agreements executed through an SC. The anonymity provided by blockchain technology does not protect illegal or immoral contracts from being invalid.

However, this anonymity may make it more challenging for a party to identify the person from whom it could claim the value of goods already delivered. However, although blockchain protects anonymity, it can provide a traceable address back to its source.

2.2 Design flaws

As we have already seen, under the law of obligations, that the validity of a Smart contract is only conditional on the existence of the observance of a particular form. However, there are exceptions, as demonstrated by the fact that the law sets out certain requirements for particular contracts.

When the law requires that the agreement must be written in text form, therefore it must be signed in manuscript by all persons to whom the agreement imposes obligations.

The legislator has introduced the electronic signature, a specific form of signature governed by the Moroccan Law on Electronic. According to the law, the blockchain could be used to record a contract with an electronic signature if two conditions are met.

- First, the blockchain should provide the technical capability to integrate the contract into the registry, with an electronic signature.
- Secondly, the contract should be readable in print.

We believe that if the current law stood still to its nature and impose that a contract must be written, the only possibility would be to sign, by hand or electronically, a preexisting contract. The parties could then record it in a decentralized registry using blockchain technology and executed using SC.

2.3 Consent failure
From a contractual point of view, a defect consists of a difference between reality as observed by a judge and the facts as perceived by a party at the time of the conclusion of the contract.

This misrepresentation of reality includes inaccurate representations, an error is "critical" if it’s included in the will declaration. (E. Hildenbrandt et al, 2018). The consequence of an essential error is that the beneficiary will not be bound by the contract if we accept the principle that a contract concluded through an SC can be rejected by a party based on essential error, we recognize that it is nearly impossible for the SC developer to anticipate all potential error.

Therefore, because the smart contract is unable to identify or correct the defect in the agreement, it will automatically enforce the legal agreement. The client/buyer will not be able to stop the enforcement of the Smart contract, despite being able to quickly realize his error and communicate his willingness to invoke the nullity of the contract because of the defect in his consent.

3. Solutions for a possible legal framework for the smart contract

"Ironically, if anything, it is often easier to apply an old law to a new situation rather than a new law to a new context." Certain answers to the legal questions relating to blockchain and smart contracts are to be found in the law of obligations. It is the analogy made earlier in this chapter between the smart contract and software that would make the protection regime of copyright applicable to it regarding the responsibility of the programmer.

3.1 Towards which regulation for the smart contract

Some authors claim that the smart contract is not a contract in its traditional sense. The legal framework of the law of obligations can be adjusted to include the smart contract.

In fact, we can consider a smart contract as a traditional form of contract in which the parties have a clause indicating that parties will employ a smart contract for its execution. Particularly since, as stated earlier, some conditions are not translatable to algorithms.

Though the Act came into force in 2007, few decisions have been made by judges based on the Law on the Legal Framework for Information Technology (Added by article 3 of law n° 53-05 promulgated by Dahir n° H1-07-129H of 30 November 2007 – 19 kaada 1428; B.O. n° 5584 of December 6, 2007).

Yet, this kind of law responds exactly to the necessity of evolving the traditional legal framework in the face of technological evolutions. Therefore, this form of "hybrid" contract could solve the problem of translating the variable components of the contract into computer code, such as good faith or the determination of the parties' capacity, for example.

This would allow one to maintain the application of the foundations of the law of obligations, in other words, to continue to protect the contracting parties by preserving the rules relating to the object, purpose, consent, signature, and capacity of the parties.
Each country plans to integrate blockchain technology in its way. In Europe, the Italian Senate introduced, in 2019, an amendment relating to "Distributed Registry Technologies”. However in the locale context, «It appears that Moroccan law is capable of dealing with a certain number of situations created by the use of blockchains. The legislation does not appear to be an essential obstacle to the use of this technology; on the contrary, its main guiding principles appear to apply to its use.

3.2 Adding contractual clauses to the smart contract

It is advisable for both parties to include a clause that allows them to withdraw from the agreement in case the oracle provides incorrect information, or fails to provide adequate information as once it is recorded in the blockchain, the information becomes the basis on which the smart contract will rely upon for its execution (Diamond, D. W, 1989). Therefore, failing to break the smart contract in execution, the inclusion of such a clause would make it possible to sanction the party who would fail to fulfill his contractual obligations during the execution of the contract.

Including a resolutory clause in the contract beforehand would appear to be a good solution for dealing with this problem. Besides the resolutory clause, parties could also include a unilateral termination clause which would not sanction a party for not respecting its obligations, but allow unilateral termination of the contract if a party wants to withdraw from the contract due to a change in the qualities of its co-contractor, for example.

4. Governance and civil responsibility aspect

The issue of governance is crucial for understanding the future of the proposed solution. In fact, in case of disagreement about the evolution of the blockchain communication protocols, the network risks splitting into several networks (hard fork) with unrelated currencies. The main point relates to the choice of the consensus rule for the validation of new blocks. Consent on the consensus must be reached. Which the technology alone does not seem able to provide.

It is important to notice that the pool distribution indicates clearly that the hash power is concentrated among a few groups, who therefore have considerable power in the decision process regarding the change of the protocol rules, holding also a huge civil responsibility. Since it is necessary to determine the responsibility, in the event of fraud, damage. It became too difficult to establish accountability in the event of damage caused.

As for smart contracts, they are determined by the proper execution of the algorithms that compose them and not by the will of the parties. The questions relating to responsibility concerning smart contracts must be assessed with regard to the traditional law of obligations framework. Are those regulations appropriate in the context of the smart contract?

The responsibility system applied differs according to the source of the fault as well as the parties involved. In fact, if the auditor commits a fault in the translation of the intention of the parties involved in the contract, the applicability of the contractual responsibility will be evident.
In this study, we will first deal with the case of damage due to an error caused during the preparation of the contract, by the parties, by the programmer, or by the auditor, then, in a second phase, we will assess the case of damage caused by the implementation of the smart contract by discussing, in particular, the applicability of the Oracle's responsibility.

4.1 Damage due to errors made during the implementation of the smart contract

This section aims to determine the causes of responsibility during the implementation of the smart contract; the parties involved in this phase of the process are basically the co-contractors, as well as the programmers.

4.1.1 Contractors' responsibility

In case a party fails to fulfill its duty and tries to interfere with the elaboration of the contract (for example, by intentionally omitting to include a clause in the contract, they could be held civilly responsible). Where a party fails to convey information or makes an error in transmitting their intentions to the programmer, the damage sustained will be compensated on the basis of contractual civil responsibility.

4.1.2 The programmer responsibility

Besides a failure on the part of the co-contractors to fulfill their obligation to inform the programmer, the reverse case can be considered, i.e. a failure of the programmer to translate the intention of the parties into a code.

4.1.3 In case of a mistranslation of the intention of the parties by the programmer

By using the term "smart contract", one might want to draw an analogy with artificial intelligence and thereby apply to it the legal framework applicable to robots. However, this comparison wouldn't be accurate today. The only scenario in which we might consider the smart contract to be a robot would be in the case where technology advances and Oracle is capable of finding the most accurate data to activate the smart contract; no intermediaries would be required for the Oracle to be pre-programmed so that it would be completely autonomous in its search for data.

However, this is not the state of smart contract today. In fact, according to the law, the person who, at the time of the damage, had the power over the property is considered the "custodian" of the property, therefore has the same level of civil responsibility. However, the miners on the blockchain network are the ones that hold a certain amount of control over the data as well as the validation of transactions; they could eventually also be called the "custodian". Nevertheless, it is difficult to identify the miners on a public blockchain since they are multiple. Due to this multiplicity of intermediaries (the miners) on the blockchain, it is not possible to hold any of them accountable. By virtue of their multiple, anonymous, decentralized nature. As a result, the miners cannot be considered as "guardians. So the question of who should be the "custodian" in the smart contract remains unanswered.

4.1.4 Implementation responsibility by programmers

Regarding the error, as in the case of contractual matters, it implies a breach of duty or a violation of a standard of practice by the programmer. Such breaches are usually evaluated according to the behavior of reasonable persons, under the same circumstances and with the same level of knowledge. This will be a failure to comply
with a known norm at a particular time. Having no norms such as standards, ethical rules, or professional order in programming, it is hard to define criteria governing the responsibility of programmers.

4.1.5 The Auditor responsibility
An audit can be used by the parties to ensure that their intentions have been correctly translated into code by the programmer. Like any traditional contract, the auditor will be considered accountable if the smart contract does not fulfill the business relationship that was intended by the parties. Its role is to ensure that the code developed by the programmer meets the requirements of the business logic intended by the parties. In the event of any damage caused as a result of a failure by the auditor, his contractual responsibility could be engaged.

As an example, according to the Moroccan law, “if the attorney proved to be negligent in their professional services, their responsibility towards the appellant is not only in the contract but in tort”. Therefore, the tort responsibility of the attorney, just like any other professional and especially the auditor, may be engaged on the basis of negligence or based on a breach of a duty to exercise diligence that arises from a sufficiently close relationship between the parties concerned. To fulfill its functions, it goes without saying that an auditor must have skills in understanding the programming language and functions of the blockchain. Eventually, firms could use smart contracts, created by other firms, already present on a blockchain, this would prevent having to verify the correctness and validity of the smart contract's code instructions, and would reduce "human" errors in the development of the smart contract.

4.2 In case of damage due to an error in the execution of a smart contract
It is impossible to change laws every time a new technology is introduced, and even if it were possible, too much regulation of these new technologies would be detrimental to their development. For this reason, it is essential for the law to adjust to new technologies. Here below we discuss the civil responsibility of the platform itself.

4.2.1 Oracle provides incorrect data
Firstly, we will assume the oracle is providing incorrect data as a result of a hack of the database on which it is based, followed by the hypothesis where the oracle provides incorrect data due to an error in the choice of the oracle itself.

4.2.2 Hacked Oracle
Earlier, we discussed the engagement of responsibility due to the fault of the co-contractor who damages the blockchain, thus preventing the execution of the obligations of each party. Suppose now that hacking is not coming from either party, but rather an unknown third party corrupting the source of the information that triggers the smart contract, namely the oracle. Therefore, could it be a fault of the oracle or a hacking?

The Smart Contract would enable the parties' consent to be questioned and exonerate them from their obligations once the contract has been fulfilled. Ultimately, in case of hacking, it would be regarded as an outside event, therefore the parties would be relieved from any civil responsibility, as long as they can prove it.
4.2.3 An error in the smart contract design

In a smart contract, an oracle selected beforehand by the parties could be the "victim" of misinformation. In this case, who is to blame: the code or the parties? If the code writers are responsible for selecting the data and the inputs, then both intentional and unintentional errors of the code may be attributed directly to them. In this context, we refer to the involvement of fault-based responsibility of a party to the contract as discussed above in this study. Nevertheless, if the Oracle is defective for any reason, and sends no information to the blockchain, it is in the parties’ best interest to have anticipated this possibility and included a clause allowing the restitution of the amounts compromised.

Conclusion

Smart contracts have a dual role to play in the contractual context. On one hand, a smart contract may be used after a legal agreement has been concluded, as a tool for enforcing the obligations of that contract, or as the initial contract itself, replacing the classical agreement.

However, the implementation of a legal agreement in a smart contract remains a real challenge. First, from an IT point of view, translating legal obligations to code is a complex process that requires a deep interpretation of the agreement.

Next, the inviolability of the SCs stored on the blockchain makes it difficult, if not impossible, to correct errors that are inevitably present in a computer code. Therefore, possible defects in the execution must be remedied through corrective procedures.

On the other hand, an SC can precede the legal contract. In this case, it is designed in such a way as to allow its conclusion, by guaranteeing the exchange of an offer and its acceptance. Today, this type of use of blockchain technology remains primarily theoretical. However, rapid technical developments, as well as a growing economic interest in this field, could lead to legal solutions in the near future.

References

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