



ANALYSIS OF LEGALITY AND SCOPE OF SMART CONTRACTS IN INDIA

By Saurav Kumar

From Dr. RML National Law University,
Lucknow

Abstract

Smart Contract is a revolutionary tool that works on blockchain and has a potential to transform the markets associated with online transactions. The present article aims to establish the legality and enforceability of smart contracts vis-à-vis Indian statutory provisions. The author has perused the nuances of smart contracts with respect to a dichotomized analysis of Indian laws. The associated drawbacks and irregularities in the provisions have been entailed and suggestions have been forwarded at the end of the article.

Smart Contracts and Blockchain

Nick Szabo, an American cryptographer and computer scientist, coined the term "smart contract" in 1994. Only in 2008 did practical applications become widely used and understood.

*'A smart contract is a computer system (series of rules) that allows two parties to digitally facilitate, verify, and enforce their agreements. It stores data on public databases and conducts transactions without the involvement of third parties via a distributed ledger system (blockchain).'*¹

The Blockchain technology is based on the use of an encrypted code that is stored on a computer for the purposes of enforcement and execution. When using Smart Contracts, parties do not need an intermediary or a middleman to help them execute their transactions. We may use the example of vending machines to further understand Smart Contracts. A code is already encrypted in a vending machine, therefore there is no need to involve a third party. As a result, self-execution becomes possible. Each item in the Vending Machine has a cost price, and the Code is encrypted correspondingly. Only when the Vending Machine receives an amount equal to the predetermined cost price does it dispense the item from within. As a result, the Machine moves on to the execution stage once all of the Code's conditions have been met.

As a result, Smart Contracts based on Blockchain technology work similarly to a vending machine. The parties enter into a contract with each other based on a mutually agreed-upon Code that is stored digitally in a computer. The Code contains all of the terms and conditions that the parties have agreed upon, and the contract is only completed when all of these terms and conditions are met. These Smart Contracts are thus referred to as "Consumer-driven Contracts"² in plain terms.

A smart contract is a self-performing³ contract in which the conditions of an agreement between a buyer and a seller are directly encoded into lines of code. The code, which contains all of the agreement

¹ Szabo N., *Contracts with Bearer*, Nick Szabo's Essays, Papers, and Concise Tutorials. (1997)

² Charlotte R. Young, *A Lawyer's Divorce: Will Decentralized Ledgers and Smart Contracts Succeed*

in Cutting Out the Middleman, 96 WASH. U. L. REV. 649, 680 (2018).

³ George SK, *The Enforceability of Smart Contracts in India*, 6 CT. UNCOURT 6 (2019).



provisions, is stored in a distributed, decentralized blockchain network. The code also contains information that executes transactions and ensures that they are monitored and irreversible, in addition to the agreements. As a result, a smart contract can be defined as a type of computer protocol that performs the functions of facilitation, verification, and enforcement (i.e., contract performance) digitally.

Working of Smart Contracts

The contract's code is made up of the provisions of the contract in question. Smart contracts interpret, verify, and execute any transaction that is in accordance with the terms.

Let's look at an example⁴ of a rent contract that has been converted into a smart contract to understand how efficient and effective a smart contract can be. The tenant will pay the rent in cryptocurrency to the house owner, and once the payment is received, the code will carry out the transactions according to the parameters of the contract as entered into the code. When the transaction is completed, the homeowner will receive a receipt and the key to the house will be released. The system works on the If-Then principle, which means that hundreds of people who are part of the blockchain will be able to see the transaction and witness the contract. If the homeowner hands over the key, he will undoubtedly be compensated. If the tenant pays the rent, he will very certainly be given the key. One operation cannot be accomplished without the other, resulting in a system that is both efficient and effective.

⁴ *Id.*

Smart contracts, like traditional contracts, specify the rules and penalties that apply to an arrangement, but they also carry out those responsibilities automatically. The "Ethereum" platforms, which comprises of two elements: currency and contracts, are used to construct these contracts. Smart contracts are contracts in which the interaction medium is switched from paper to an electronic platform. This raises the question of whether smart contracts can still be governed by existing legal frameworks or if they need to be governed by a new legal system.

Global regulation of Smart Contracts

The following elements of a conventional contract must be met by smart contracts in order for them to be considered valid;

- A legitimate offer;
- A properly communicated acceptance;
- Lawful consideration pertaining to the subject matter;
- Consideration;
- Consent of all competent parties in regards to all aspects of the contract

In 1999, the Uniform Electronic Transactions Act⁵ (UETA) was enacted in 47 states across the United States. The UETA established rules for electronic contracts, records, and signatures, stating that electronic contracts would be valid and that electronic signatures would be a legal way to provide contractual consent. The Rome I Regulation is the regulation of the European Union (EU) that establishes the legitimacy of all EU civil and commercial transactions.

⁵ The Uniform Electronic Transactions Act, 1999 (USA)



The UK Law Commission, which was established by Parliament under the Law Commissions Act⁶ of 1965 to evaluate and recommend changes to England and Wales law, has initiated a research project on revisions that would make the use of blockchain-based smart contracts legally apparent. Smart contracts, according to the Law Commission, increase "trust and certainty" while also improving business-to-business transaction performance. As a result, in order to improve business and make the current UK legal system adapt to evolving technology.

Statutory Provisions in India

A normal contract is a legally binding agreement that includes an offer⁷, acceptance⁸, and consideration⁹, and is mostly governed by state laws. If I used the cricket match as an example and filed a lawsuit in an Indian court, it would be denied because betting is illegal in India¹⁰. So, while the contract we discussed would not be valid under Indian law, does this mean that smart contracts would be completely unenforceable?

The Indian Contract Act of 1872 eliminates some requirements for a legal contract. These elements are essentially the gold standard or yardstick against which any agreement should be judged in order to be considered genuine. A legitimate contract is one that is made with the free assent of competent parties for a lawful consideration with a lawful intent, as stated under section 10¹¹ of The Indian Contract Act, 1872. So, Smart Contracts meet all of the requirements of

Section 10 of the Contract Act. As a result, Smart Contracts are lawful and valid contracts under The Indian Contract Act, 1872.

The Information Technology Act of 2000 has a number of laws that address the importance, use, authentication, and generation of "Digital Signatures."¹² The IT Act clarifies that when a document or information is required to be validated through the affixation of signatures, it is assumed to be satisfied if the information is authenticated using a digital signature¹³. As a result, digital signatures are employed as authentication mechanisms. Simply put, if the parties' digital signatures are affixed to an electronic document, assent to it can be easily established in a court of law. Then there's the power of certifying authorities, the licensing method, and the certifying authorities' responsibilities. In addition, there are standards governing the award, suspension, and revocation of such licenses, as well as digital signatures. The author's goal in citing several types of digital signature procedures is to convey the sense that the government is inferring through these regulations that self-generated digital signatures are uncertified and thus invalid.

Cryptography is used to code Smart Contracts into the ledger-based system, as previously stated. Digital signatures are also used in Smart Contracts for authentication and secured limited access. The main issue is that digital signatures made using Blockchain Technology are not the same as those approved under the IT Act of 2000. Self-

⁶ Law Commission Act, 1965 (U.K.)

⁷ Indian Contract Act, 1872, § 2a, § 3, § 4, § 9

⁸ Indian Contract Act, 1872, § 2a, § 4, § 5, § 7, § 9

⁹ Indian Contract Act, 1872, § 2d, § 23, § 24, § 25

¹⁰ Indian Contract Act, 1872 § 30

¹¹ Indian Contract Act, 1872, § 10

¹² Information Technology Act, 2000, § 3

¹³ *Id.* at § 5



generated digital signatures are possible using Blockchain technology. This means that Smart Contracts can be used for any purpose where a document, information, or form must be authenticated by the affixation of signatures, but they are not certified under the controlling statute. Furthermore, contracts digitally signed are admissible in court under Section 65B¹⁴ of the Indian Evidence Act. As a result, the government is able to take legal action to resolve disputes between the parties.

Legality of Smart Contracts in India

Smart contracts are essentially a platform for contracting with parties who may or may not know one another and who may be exposed to risks. Smart contracts may be enforceable under Indian law, but if caution is not exercised when dealing with the party with whom you are contracting, the repercussions of a failed transaction must be carried out on your own, as the legal system lacks a complex structure to control smart contracts. If the contract's consideration was not mutual, a smart contract might not be enforceable under Indian law. If the contract is unilateral, this can happen. Contracts without mutual consideration are not valid in Indian courts; however, smart contracts without mutual consideration can still be enforced through code; however, a breach of such a contract would not be considered a breach in Indian courts because there would not have been a contract in the first place due to a lack of mutual consideration, an important factor of a contract.

The legality of smart contracts in India allows for their use, but it does not provide legal protection to the parties involved in the smart

contract if they become liable or suffer damages because there is no regulatory framework in place to govern smart contracts. However, if the smart contract falls within the boundaries of contract law, the law will assist to the best of its ability.

Risks associated in the present scenario

Despite the fact that Indian law permits electronic contracts, Ponzi schemes, which are aided by blockchain technology, raise concerns about the viability of defending people's interests.

The problem is that there are no well-established legal frameworks to control Crypto-transactions anywhere in the globe, whether in India or elsewhere. An electronic signature can only be received through a government-designated certifying authority, according to Section 35¹⁵ of the IT Act. This creates concerns because the blockchain technology generates the hash key that is to be used as an identification to authenticate the smart contract, yet there is currently no legal authority that sanctions electronic signatures.

The Indian Evidence Act, Section 88A¹⁶, specifies that the court presumes that an electronic record brought in court is genuine, but it makes no assumptions regarding the contract's sender. As a result, using a signature obtained through blockchain technology will only complicate the admissibility of a smart contract because the signature was obtained outside of the Information Act. This not only invalidates the blockchain technology's encryption scheme for smart contracts, but it also prevents smart contracts from being used as evidence in

¹⁴ Indian Evidence Act, 1872, § 65B

¹⁵ *Supra note 11*, at § 35

¹⁶ *Supra note 13*, at § 88A



court. Moreover, it is tough to regulate force majeure clause in smart contracts, especially taking in account the covid pandemic. Furthermore, because smart contracts are automated, an incorrectly entered force majeure event could result in an accidental suspension, resulting in a loss to the parties. As a result, it is critical that the force majeure clause be given careful consideration and that events be properly defined.¹⁷

Way Forward

There is no doubt that the deployment and expansion of smart contracts is the next step in innovation, with the potential to save billions of dollars in administrative costs while improving the overall efficiency of the system. However, there are regulatory concerns, particularly in India, where there are no regulations governing the finer points of a smart contract. If no special restrictions are enacted, a widespread deployment of the technology will necessitate changes to the Indian Evidence Act of 1872 and the IT Act. Following the Supreme Court of India's decision¹⁸ on virtual currencies, organizations authorized by the Reserve Bank of India are no longer prohibited from providing financial services for the purchase or selling of virtual currencies. Customers may be able to link their bank accounts with the accounts of virtual currency exchanges and platforms to make virtual currency purchases and sales easier in India. However, the virtual currency business still faces challenges: if tabled and enacted by Parliament, the draught Banning of Cryptocurrency and Regulation of Official

Digital Currency Bill, 2019¹⁹, could strengthen the government's position on virtual currency trading in India.

As a result, while there has been some progress in terms of legislation and the business sector adopting the smart contract concept, the law remains in a grey area, and a strong commitment is necessary to develop an intricate structure to regulate the working of smart contracts in India.

¹⁷ Rachit Bahl, *India: Blockchain Comparative Guide*, MONDAQ (June 19, 2021, 8:03 PM) <https://www.mondaq.com/india/technology/935294/blockchain-comparative-guide?type=mondaqai&score=66>

¹⁸ Internet and Mobile Association of India Ltd. vs Reserve Bank of India, (2020) 10 SCC 274

¹⁹ Banning of Cryptocurrency & Regulation of Official Digital Currency Bill, 2019.