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SMART CONTRACTS IN INDIA: LEGAL RECOGNITION, COMMERCIAL APPLICATIONS AND EMERGING CHALLENGES

DIVYANSHA SINGH

I. INTRODUCTION:

Technological advancement has transformed the ways in which commercial transactions are conducted. Smart contracts are an advanced way to execute contractual obligations wherein paper-based agreements and manual execution have gradually been replaced with e-platforms, automation and blockchain technology.[1]

There is no particular statutory framework applicable for smart contracts in India which is widely used for commercial transactions. There is no express provision in the Indian Contract Act,1872 and the Information Technology Act,2000 governing the self-executing agreements. However, there exists a statutory foundation to recognise such agreements executed electronically. It raises concerns relating to issues such as consumer protection, jurisdiction, liability and enforceability of the contract. Hence, in the light of the above, this blog will analyse the legal recognition of smart contracts in India, their commercial applications and their major legal challenges faced in their wide adoption.

[1] Nick Szabo, Smart Contracts: Building Blocks for Digital Markets, 16 EXTROPY (1996).

II. LEGAL RECOGNITION OF SMART CONTRACTS IN INDIA:

Smart contracts refer to digital agreements where the contractual terms are put in computer code and will execute upon meeting certain conditions. They increase efficiency and eliminate delays associated with the performance of contractual obligations since there is no manual intervention. A blockchain system acts as the platform where they can be recorded and executes securely and transparently.[2]

Under the Indian laws, smart contracts are not classified as a separate category of contracts. Both the Information Technology Act, 2000, and the Indian Contract Act, 1872, render them enforceable. According to section 10 of the Indian contract act[3], as long as an agreement meets all the essential elements of a valid contract, it is enforceable irrespective of the manner in which it is created.

This claim is further reinforced by the Information Technology Act, 2000. In accordance with section 10A[4], it shall not be possible to reject the legitimacy of the contract on the ground that it was made through an electronic medium. In the case of ***Trimex International FZE Ltd, Dubai v. Vedanta Aluminium Ltd***[5]**,** the Supreme Court ruled that the formation of an agreement can take place through electronic modes when all essential elements of a valid contracts are satisfied.

Although the smart contracts are legally acknowledged within the present system, there is still a requirement of clarifying the laws on certain issues such as automatic execution, programming mistakes, liability and dispute resolution.

III. USES OF SMART CONTRACT COMMERCIAL TRANSACTIONS:

Smart contracts have become popular with time due to their ability to automate contract execution, reduce intermediaries and enhance the efficiency of business transactions. Their ability to execute

[2] Primavera De Filippi & Aaron Wright, Blockchain and the Law: The Rule of Code (Harvard Univ. Press 2019).
[3] The Indian Contract Act, No. 9 of 1872, § 10 (India).
[4] Information Technology Act, No. 21 of 2000, § 10A (India).
[5] Trimex Int'l FZE Ltd., Dubai v. Vedanta Aluminium Ltd., (2010) 3 S.C.C. 1.

contract obligations automatically has seen them incorporated in various business dealings by many organisations.[6]

In the financial industry smart contracts are used in the automation of payments, digital lending, trade finance and rapid transaction settlement. They have also found applications in the insurance industry since their preprogrammed conditions make it easier to settle claims faster with fewer disputes and bureaucracy. The benefits of smart contracts in supply chain management in modern business are demonstrated by real time tracking and automated payment upon their acceptance.[7]

IV. LEGAL ISSUES EMERGING FROM SMART CONTRACTS:

A range of legal and regulatory challenges remains inadequately addressed by the existing legal framework, despite the advantages that smart contracts provide to businesses.

A. ABSENCE OF A PARTICULAR LEGAL STRUCTURE FOR SMART CONTRACTS

While electronic contracts are acknowledged under both the Information Technology Act, 2000 and the Indian Contract Act, 1872, neither piece of legislation specifically addresses the concept of blockchain based smart contracts. This raises important question regarding their interpretation and application.

B. ISSUES OF LIABILITY AND CROSS BORDER ISSUES

Issues related to accountability, jurisdiction, coding errors and consumer protection emerge when smart contracts execute automatically. The complexities of Cross border transactions combined with ambiguous legal protections, complicate enforcement and dispute resolution.

V. THE PLAN OF ACTION:

India should the promote the development of technology while refining the legal framework that governs smart contracts, ensuring their recognition and enforcement more clearly defined.

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[6] Primavera De Filippi & Aaron Wright, Blockchain and the Law: The Rule of Code (Harvard Univ. Press 2019).
[7] Marco Iansiti & Karim R. Lakhani, The Truth About Blockchain, 95 Harv. Bus. Rev. 118 (Jan.–Feb. 2017).

A. REGULATORY CLARIFICATION

Without the need for new legislation, a technology neutral strategy that clarifies the applicability of current contract and electronic transaction regulations will lessen uncertainty in law.

B. JUDICIAL GUIDANCE

In addition to promoting the broader commercial adoption of smart contracts, consistent judicial interpretation can increase legal certainty.

VI. CONCLUSION:

Smart contracts show a major step in the growth of digital commerce by offering a speedy and more efficient means to fulfil contractual obligations. Even while the current legal structure provides a foundation for recognising electronically created agreements, the absence of specific rules related to self-executing contracts still results in legal complexity. As technology keeps transforming commercial transactions, India must develop a balanced regulatory framework that promotes innovations while ensuring legal certainty, accountability and effective protection of stakeholders right.