

Peer - Reviewed & Refereed Journal

The Law Journal strives to provide a platform for discussion of International as well as National Developments in the Field of Law.

DISCLAIMER

ISSN: 2581-8503

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Editor-in-chief of White Black Legal — The Law Journal. The Editorial Team of White Black Legal holds the copyright to all articles contributed to this publication. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of White Black Legal. Though all efforts are made to ensure the accuracy and correctness of the information published, White Black Legal shall not be responsible for any errors caused due to oversight or otherwise.

EDITORIAL TEAM

Raju Narayana Swamy (IAS) Indian Administrative Service officer



and a professional Procurement from the World Bank.

Dr. Raju Narayana Swamy popularly known as Kerala's Anti Corruption Crusader is the All India Topper of the 1991 batch of the IAS is currently posted as Principal Secretary to the Government of Kerala . He has earned many accolades as he hit against the political-bureaucrat corruption nexus in India. Dr Swamy holds a B.Tech in Computer Science and Engineering from the IIT Madras and a Ph. D. in Cyber Law from Gujarat National Law University . He also has an LLM (Pro) (with specialization in IPR) as well as three PG Diplomas from the National Law University, Delhiin one Environmental Management and Law, another in Environmental Law and Policy and a third one in Tourism and Environmental Law. He also holds a post-graduate diploma in IPR from the National Law School, Bengaluru diploma Public in

ISSN: 2581-8503

Dr. R. K. Upadhyay

Dr. R. K. Upadhyay is Registrar, University of Kota (Raj.), Dr Upadhyay obtained LLB, LLM degrees from Banaras Hindu University & Phd from university of Kota.He has successfully completed UGC sponsored M.R.P for the work in the ares of the various prisoners reforms in the state of the Rajasthan.



Senior Editor



Dr. Neha Mishra

Dr. Neha Mishra is Associate Professor & Associate Dean (Scholarships) in Jindal Global Law School, OP Jindal Global University. She was awarded both her PhD degree and Associate Professor & Associate Dean M.A.; LL.B. (University of Delhi); LL.M.; Ph.D. (NLSIU, Bangalore) LLM from National Law School of India University, Bengaluru; she did her LL.B. from Faculty of Law, Delhi University as well as M.A. and B.A. from Hindu College and DCAC from DU respectively. Neha has been a Visiting Fellow, School of Social Work, Michigan State University, 2016 and invited speaker Panelist at Global Conference, Whitney R. Harris World Law Institute, Washington University in St.Louis, 2015.

Ms. Sumiti Ahuja

Ms. Sumiti Ahuja, Assistant Professor, Faculty of Law, University of Delhi,

Ms. Sumiti Ahuja completed her LL.M. from the Indian Law Institute with specialization in Criminal Law and Corporate Law, and has over nine years of teaching experience. She has done her LL.B. from the Faculty of Law, University of Delhi. She is currently pursuing Ph.D. in the area of Forensics and Law. Prior to joining the teaching profession, she has worked as Research Assistant for projects funded by different agencies of Govt. of India. She has developed various audio-video teaching modules under UGC e-PG Pathshala programme in the area of Criminology, under the aegis of an MHRD Project. Her areas of interest are Criminal Law, Law of Evidence, Interpretation of Statutes, and Clinical Legal Education.



ISSN: 2581-8503

Dr. Navtika Singh Nautiyal

Dr. Navtika Singh Nautiyal presently working as an Assistant Professor in School of law, Forensic Justice and Policy studies at National Forensic Sciences University, Gandhinagar, Gujarat. She has 9 years of Teaching and Research Experience. She has completed her Philosophy of Doctorate in 'Intercountry adoption laws from Uttranchal University, Dehradun' and LLM from Indian Law Institute, New Delhi.



Dr. Rinu Saraswat

Associate Professor at School of Law, Apex University, Jaipur, M.A, LL.M, Ph.D,

Dr. Rinu have 5 yrs of teaching experience in renowned institutions like Jagannath University and Apex University. Participated in more than 20 national and international seminars and conferences and 5 workshops and training programmes.

Dr. Nitesh Saraswat

E.MBA, LL.M, Ph.D, PGDSAPM

Currently working as Assistant Professor at Law Centre II, Faculty of Law, University of Delhi. Dr. Nitesh have 14 years of Teaching, Administrative and research experience in Renowned Institutions like Amity University, Tata Institute of Social Sciences, Jai Narain Vyas University Jodhpur, Jagannath University and Nirma University.

More than 25 Publications in renowned National and International Journals and has authored a Text book on Cr.P.C and Juvenile Delinquency law.



ISSN: 2581-8503

CITALINA

Subhrajit Chanda

BBA. LL.B. (Hons.) (Amity University, Rajasthan); LL. M. (UPES, Dehradun) (Nottingham Trent University, UK); Ph.D. Candidate (G.D. Goenka University)

Subhrajit did his LL.M. in Sports Law, from Nottingham Trent University of United Kingdoms, with international scholarship provided by university; he has also completed another LL.M. in Energy Law from University of Petroleum and Energy Studies, India. He did his B.B.A.LL.B. (Hons.) focusing on International Trade Law.

ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

LEGAL

AN ANALYSIS ON THE SMART CONTRACTS AND THEIR VALIDITY UNDER TRADITIONAL CONTRACT LAW

AUTHORED BY - AKSHAYA R

ISSN: 2581-8503

Introduction

In the digital age, traditional contract law is being challenged by emerging technologies, particularly smart contracts—self-executing agreements that operate on blockchain networks. Smart contracts automatically carry out predetermined provisions when certain conditions are satisfied, as contrast to conventional contracts, which depend on human interpretation and third-party enforcement. By doing away with middlemen, this automation boosts productivity and lowers transaction costs. Though they have many benefits, smart contracts' legality under conventional contract law is still a major concern. Whether or not smart contracts meet the requirements for a legally binding agreement—offer, acceptance, consideration, and mutual consent—determines their enforceability. Furthermore, whereas smart contracts lack built-in procedures for managing legal disputes or unforeseen events, traditional contract law permits dispute settlement through judicial interpretation. Because smart contracts function on decentralized networks that are not governed by a single legal system, concerns about jurisdiction, governing law, and remedies also surface. The validity, enforceability, and regulatory issues of smart contracts are examined in this article as it intersects with conventional contract law. Additionally, it looks at legal precedents, jurisdictional issues, and possible ways to incorporate smart contracts into current legal frameworks. By tackling these problems, this study seeks to shed light on how legal frameworks might change to accept smart contracts while maintaining equity, legal clarity, and dispute settlement procedures. Establishing a clear legal framework that strikes a balance between the advantages of automation and the protections of conventional contract law is crucial as smart contracts grow more and more common in financial transactions, supply chain management, and other industries. This conversation is important for developers and engineers who want to design legally compliant smart contract solutions, as well as for legislators, attorneys, and corporations.

Volume 3 Issue 1 | April 2025

Smart Contracts Are: Legal and Technical Views

ISSN: 2581-8503

Smart contracts are self-executing contracts that are implemented on a blockchain and contain coded terms. Unlike traditional contracts, which rely on third-party enforcement mechanisms (e.g., courts), smart contracts execute automatically when predefined conditions are met. This automation decreases the need for intermediaries, promotes efficiency, and minimizes disagreements. From a technical perspective, smart contracts operate on decentralized blockchain networks such as Ethereum, Solana, or Hyperledger. Once implemented, these contracts cannot be arbitrarily changed because they are immutable and are coded in languages like Solidity. They are attractive for a number of applications, such as supply chain management, real estate transactions, and banking, because of their transparent and impenetrable implementation. However, from a legal standpoint, smart contracts cast doubt on their applicability under conventional contract law. Even though they make automated transactions easier, they don't always fit neatly into legally enforceable agreements. Legal experts and courts argue over whether smart contracts are legally binding agreements or just automated instruments that carry out preset tasks. Ensuring that smart contracts adhere to established contract law principles—such as consideration, mutual assent, and enforceability in disputes—is the main difficulty. Several countries are making efforts to recognize smart contracts in spite of these obstacles. For example, the UK Law Commission has proposed that, as long as smart contracts adhere to the law, current contract law is sufficiently adaptable to support them. Similar to this, some U.S. states, including Arizona and Tennessee, have passed legislation expressly acknowledging smart contracts as enforceable. The major conclusion is that, despite the technical benefits of smart contracts, their legal acceptance is still a complicated matter that needs more regulatory clarification and legal adaption.

Key Components of a Binding Contract and How They Apply to Smart Contracts

According to conventional contract law, a contract must meet a number of requirements in order to be enforceable:

Offer and Acceptance: A precise offer and an unequivocal acceptance are necessary for a contract to be enforceable. This is frequently shown in smart contracts by deploying code (offer) and starting execution when certain criteria are met (acceptance). But problems occur when parties question whether they truly accepted the terms of the contract, particularly when dealing with automated systems.

Consideration: The exchange of value between parties is referred to as consideration. This could include cash, products, or services in conventional contracts. Although digital assets or cryptocurrencies are typically included in smart contracts, it is debatable whether automated execution always meets the "bargained-for exchange" criteria.

Legality and Capacity: Parties must have the legal capacity to enter into a contract and it must have a legitimate purpose. unlawful transactions, like those involving fraud or other unlawful activity, can occur with smart contracts. Legal challenges can arise when assessing the contractual ability of participants in pseudonymous blockchains.

Intention and Consent on Both Sides: Contracts call for a "meeting of the minds." However, consent is frequently granted in smart contracts by code interaction, which raises questions about whether parties fully comprehend the requirements. Problems like incorrect transactions or defects in smart contracts might cause disagreements over what constitutes true permission. Completeness and Certainty: Conventional contracts call for precise language. The subjective terms "reasonable efforts" and "good faith," which are prevalent in traditional contracts, are difficult for smart contracts to handle, even though they can precisely enforce established requirements.

Overall, there are still certain ambiguities, particularly with regard to intent and consent, even if smart contracts can frequently satisfy traditional contract criteria. Legal doctrines may need to be modified by courts in order to handle these issues.

Smart Contract Enforceability: Obstacles and Case Law

One of the most important questions in contract law is whether smart contracts can be enforced. Courts assess enforceability by looking at whether the contract satisfies legal requirements and whether violations can be successfully fixed.

Principal Obstacles to Smart Contract Enforcement:

Lack of Legal Clarity: The legal standing of smart contracts is unclear in many jurisdictions due to the absence of specific laws governing them.

The concepts of immutability and errors Since smart contracts cannot be changed once they are deployed, errors or malfunctions could have unforeseen consequences for which there would be no way to recover.

Dispute Resolution: While smart contracts don't have built-in dispute procedures, traditional contracts permit negotiation and judicial interpretation in disagreements.

Legal Developments and Precedents

UK Jurisprudence: According to the UK Law Commission, smart contracts may be enforceable under current contract law as long as they adhere to core contract principles. U.S. Case Law: In certain situations, especially when it comes to financial transactions based on blockchain technology, U.S. courts have acknowledged smart contracts. International Recognition: According to the UNIDROIT Principles on International Commercial Contracts, if an electronic contract satisfies legal criteria, it shall be regarded in the same way as a traditional one.

In light of these considerations, courts could have to create new legal frameworks or broaden preexisting doctrines to account for the special characteristics of smart contracts.

Regulatory and Jurisdictional Aspects of Smart Contracts

Smart contracts run on decentralized networks, making it tough to ascertain jurisdiction and applicable law.

Key Jurisdictional Issues:

Choice of Law - Traditional contracts identify controlling law, while smart contracts applied on a blockchain may lack jurisdictional clarity.

Regulatory Compliance - Some jurisdictions regulate smart contracts under securities, banking, or consumer protection laws, impacting their enforceability.

Cross-Border Enforcement — Smart contract disputes involving parties from various countries present significant legal problems about enforcement and appropriate rules.

For instance, the European Union's Digital Markets Act (DMA) and the U.S. SEC's regulatory stance on decentralized finance (DeFi) impact how smart contracts are treated in financial transactions. Similarly, China's restriction on cryptocurrency-related smart contracts

demonstrates regulatory disparity abroad. Overall, while some governments have adopted smart contracts, regulatory uncertainty remains a key challenge.

Smart Contracts vs. Traditional Contract Remedies: Legal Implications and Future Outlook

Traditional contract violations allow for remedies such as:

Damages - Compensation for damages suffered.

Specific Performance — A court judgment requiring contract fulfillment.

Rescission: Terminating the agreement because of a serious violation.

However, there are particular difficulties with smart contracts:

Automated Execution: Once activated, smart contracts carry out their own actions without requiring legal intervention.

Absence of Judicial Oversight: Smart contracts do not have the same flexibility as traditional contract law, which depends on courts to interpret and enforce agreements. Code Vulnerabilities: Traditional legal frameworks are unable to handle the unexpected repercussions that can result from bugs or exploits (such as the DAO attack).

Prospects for the Future

To incorporate smart contracts into established legal frameworks, legal modifications might be required. Among the possible remedies are:

Hybrid Contracts: These combine traditional and smart contracts to enable human interpretation as needed.

Blockchain Arbitration: creating decentralized methods for resolving disputes. Legislative Adaptations: To address smart contract enforcement and remedies, governments may pass particular legislation. Legal systems must change as smart contracts proliferate in order to strike a balance between automation and legal protections, guaranteeing enforceability while maintaining contractual fairness.

Conclusion

Smart contracts, which use blockchain technology to enable automated, self-enforcing agreements, represent a revolutionary shift in contract execution. Finance, supply chain management, and real estate are just a few of the industries that find them appealing due to their technical advantages, which include efficiency, transparency, and security. Nonetheless,

there is ongoing discussion regarding their legal standing under conventional contract law. Smart contracts pose issues with regard to mutual consent, intent, and enforceability, even though they can satisfy essential contractual components like offer, acceptance, and consideration. Blockchain's immutability poses questions regarding how to handle disputes, contract errors, and regulatory compliance. Global adoption is further hampered by jurisdictional ambiguity and the absence of generally recognized legal frameworks. Globally, legal frameworks are progressively adjusting to make room for smart contracts. While some governments are investigating new regulatory frameworks, others have acknowledged their validity. Smart contracts, however, pose a challenge to established legal procedures for contract enforcement and dispute resolution because of their decentralized nature. Agreements made only through code may be difficult for courts to evaluate and uphold, particularly when they contain ambiguous legal language or unanticipated events. Automation and legal oversight must be balanced for smart contracts to be completely included into traditional legal frameworks. In order to handle the particular difficulties presented by smart contracts while maintaining contractual fairness and legal certainty, it is necessary to modify current legislation or create new legal frameworks.

ISSN: 2581-8503

Suggestion

To enhance the legal validity and enforceability of smart contracts, the following steps are recommended:

- 1. Develop Hybrid Contract Models: A combination of smart contracts and traditional legal agreements can help mitigate enforcement issues. By embedding smart contracts within legally recognized traditional contracts, parties can retain the benefits of automation while ensuring a fallback mechanism in case of disputes.
- Standardized Legal Frameworks for Smart Contracts: Governments and international
 agencies should strive toward unifying legislation governing smart contracts. Clear
 principles on jurisdiction, dispute settlement, and legal recognition can assist decrease
 confusion and encourage adoption.
- Integration of Dispute Resolution Mechanisms: Smart contracts should contain built-in
 dispute resolution methods, such as blockchain arbitration or off-chain mediation. This
 would allow for greater legal flexibility and eliminate irreversible errors caused by
 coding weaknesses.

Volume 3 Issue 1 | April 2025

4. Smart Contract Audit and Certification Standards: Establishing audit and certification standards for smart contracts can boost trust and reduce risks related with coding errors and security vulnerabilities. Legal and technical audits should be necessary for smart contracts in high-stakes applications, such as finance and insurance.

ISSN: 2581-8503

- 5. Judicial and Legislative Adaptation Courts and lawmakers must be educated on blockchain technology and smart contracts to make informed decisions. Legislative reforms should define how smart contracts fit inside existing contract laws and create guidelines for their enforcement in specific industries.
- 6. Promoting Legal and Technological Collaboration: To guarantee that smart contract technology advances in a manner consistent with legal principles, legal experts, software engineers, and regulators should work together. This multidisciplinary approach can contribute to the development of smart contract solutions that are more practically and legally sound.

