GNLU SRDC ADR
MAGAZINE
VOLUME IV | ISSUE I

THE FUTURE OF BLOCKCHAIN ARBITRATION IN THE NEW 'SMART' WORLD

AUTHOR(S)

Sneha Vaitheeswaran

IV Year Student at School of Excellence in Law, Tamil Nadu Dr. Ambedkar Law University

Introduction

The expanding role of technology has resulted in the formation of a new class of the digital economy and the development of the latter has resulted in the emergence of the term 'smart contracts' which is paving the way forward for displacement of conventional contracts and growth of the digital world. This process of digitalisation has not only revamped contractual principles but its effects have now begun to seep into the dispute resolution infrastructure of numerous jurisdictional legal systems and as a result, blockchain dispute resolution has materialized as a viable option to contracting parties.

The legal environment must constantly adapt to the changes in the digital world to provide a lucrative field for technological advancement. This article argues that smart contracts and blockchain dispute resolution ["**BDR**"] are the future of digitalisation but understands and acknowledges that, at present, its growth and success cannot be guaranteed unless there is a revamping of various legal thresholds by the legislature. However, notwithstanding the synergy between arbitration and blockchain, it is necessary to analyse whether BDR can establish itself as a dynamic venture in law in the current day and age.

With the evolution of blockchain technology, smart contracts, which started as a niche phenomenon, are now poised to revolutionise the industry of commerce and challenge and capture the entire legal market. Smart contracts refer to contracts embedded in digital code. With contracts having undergone such a significant transformation, the legal system is also expected to adapt itself to the dynamic and changing circumstances and incorporate into it the newest trends in contractual law. The term "smart contract" was first coined by Nick Szabo in 1994, who propounded that such contracts "combine protocols with user interfaces to formalise and secure relationships over

computer networks."[1] However, it wasn't until the advent of the blockchain network that smart contracts could feasibly operate in an environment in the manner that they do so today.[2]

A smart contract can be defined as "a collection of computer code implemented using distributed ledger technology which executes automated functions when certain conditions are satisfied."[3] Such contracts intend to digitally enforce or verify the performance of obligations of the parties and govern the transactional agreements which take place within a blockchain network.[4] Simply put, smart contracts are agreements that are stored on the blockchain and are executed when the necessary criteria are met. The software of the contract executes performance automatically by allocating the digital assets embedded in it autonomously, and hence, there is no requirement for external monitoring or enforcement of contractual obligations. Through the process of embedding legal provisions into the code, it is ensured that the parties abide by their contractual duties and obligations and therefore, such contracts represent certainty, validity, sustainability, and viability.[5]

Synergy between blockchain and arbitration

Blockchain has penetrated every possible industry, and the legal industry is no exception to its effects.[6] The potential of blockchain technology has been heavily employed and is now being used widely as a foundation for the working of smart contracts. A smart contract essentially works through the digital structure contained in the blockchain and is, therefore, more transparent and less susceptible to manipulation of data.[7] Smart contracts are "self-executing software programs that automatically perform some function",[8] and these functions are protocols which operate on a blockchain.[9] As the very core components of blockchain are both decentralisation and immutability, it is noteworthy to point out that smart contracts are also subject to the same rigidity.

---

[1] Szabo, N. 'Smart contracts: Formalizing and securing relationships on public networks,' (1997) 2(9) <https://journals.uic.edu/ojs/index.php/fm/article/view/548/469/> accessed 16 April 2023.

[2] F Glatz, 'Smart Contracts, Platforms and Intermediaries' (*Medium*, 19 May 2015) <https://heckerhut.medium.com/smart-contracts-platforms-and-intermediaries-c3d30f5182a6> accessed 16 April 2023.

[3] Lloyd, Damian, 'Smart Contracts: When Functions May Give Rise to Legally Enforceable Obligations' (*SSRN*, 12 September 2020), <https://ssrn.com/abstract=4064283> accessed 18 April 2023.

[4] Hiroo Advani, Asif Lampwala, Ria Garg, 'Smart Contracts and Blockchain Arbitration: Smart Solutions Paving the Way for a Better Dispute Resolution Mechanism' (*SCC Online Blog*, 25April 2022) <https://www.scconline.com/blog/post/2022/04/25/smart-contracts-and-blockchain-arbitration-smart-solutions-paving-the-way-for-a-better-dispute-resolution-mechanism/> accessed 19 April 2023.

[5] A. Papantoniou, 'Smart Contracts in the New Era of Contract Law', Digital Law Journal (2020) 1 (4) <https://www.digitallawjournal.org/jour/article/view/30?locale=en_US> accessed 18 April 2023.

[6] Ghazal Bhootra, Ishan Puranik*, 'Arbi(Traitor)?: A Case against AI Arbitrators'*, 4 Ind Arb L Rev 28 (2022).

[7] Mik and Eliza 'Smart Contracts: A Requiem' (*SSRN,* 7 December 2019) <https://dx.doi.org/10.2139/ssrn.3499998> accessed 18 April 2023.

[8] Hileman, Garrick and Rauchs, Michel, '2017 Global Blockchain Benchmarking Study' (*SSRN,* 22 September 2017). <http://dx.doi.org/10.2139/ssrn.3040224> accessed 20 April 2023.

[9] Kadioglu, Cemre, 'A Brief Introduction to Blockchain Dispute Resolution,' (2021) 14 (2) Jhon Marshall Law Journal. <http://dx.doi.org/10.2139/ssrn.4083107>accessed 25 April 2023.

The utilisation of blockchain technology ensures that the execution of the contract is unstoppable; all human elements and discretion are eliminated from the enforcement and execution of contractual duties. The utilisation of a blockchain network obviates the need to place trust in any third parties or centralised authorities such as the State. This new system enforces agreements through code rather than "judges, jails or jurisdiction." Legal rules become largely irrelevant because the system itself establishes the basis for enforcement.[10] Broadly, blockchain arbitration can be divided into off-chain and on-chain arbitration. Off-chain arbitration encompasses traditional arbitral rules while utilising blockchain technology for automation of only certain elements before the Arbitral Tribunal, such as the appointment of the arbitrator.[11] On the other hand, on-chain arbitration involves the usage of a smart contract in the process of dispute resolution.[12]

The 'smart' way of dispute resolution: BDR

Technology has revolutionised our interactions and has further set a bar for what we expect in terms of standards, information, and, specifically, redressal. It is clear that litigation defeats the very purpose of smart contracts by eliminating both efficiency and recourse to a speedy mechanism. Thus, the question remains: which forum will parties turn to for redressal? The common approach would be for contracting parties to adjudicate disputes through courts or alternative dispute resolution ["**ADR**"] procedures operating within the current legal framework.[13]

However, an alternative approach deals with the settlement of disputes through a blockchain network and is the primary focus of this article. This method views smart contracts as separate or distinct entities as compared to digital substitutes for traditional contracts.[14] In this regard, with the expansion of both technology and digital services, it seems natural to resort to and embrace digital means of dispute resolution in this new day and age. The process of dispute adjudication has grown in its ability to transcend borders and escape from the clutches of complex legal

[10] Amy J. Schmitz and Colin Rule, 'Online Dispute Resolution for Smart Contracts', Journal of Dispute Resolution, 103 (2019) <https://scholarship.law.missouri.edu/facpubs/726> accessed 25 April 2023.
[11] Darshan Bhora and Aisiri Raj, 'Blockchain Arbitration – The Future of Dispute Resolution Mechanisms?', (*Cambridge International Law Journal*, 16 December 2020) <https://cilj.co.uk/2020/12/16/blockchain-arbitration-the-future-of-dispute-resolutionmechanisms> accessed 30 April 2023.
[12] Hiroo Advani, Asif Lampwala, Ria Garg, 'Smart Contracts and Blockchain Arbitration: Smart Solutions Paving the Way for a Better Dispute Resolution Mechanism' (*SCC Online Blog*, 25 April 2022) < https://www.scconline.com/blog/post/2022/04/25/smart-contracts-and-blockchain-arbitration-smart-solutions-paving-the-way-for-a-better-dispute-resolution-mechanism/> accessed 11 November 2023.
[13] Guido Governatori, Florian Idelberger, Zoran Milosevic, Regis Riveret, Giovanni Sartor and Xiwei Xu, 'On Legal Contracts, Imperative and Declarative Smart Contracts, and Blockchain Systems', 26 Artificial Intelligence Law 377 2018.
[14] Darcy W.E. Allen, Aaron M. Lane and Marta Poblet, 'The Governance of Blockchain Dispute Resolution' (2019) 25 Harvard Negotiation Law Review 75.

formalities in traditional methods of litigation. Fueled by the increasing e-commerce transactions, ADR has germinated in various directions by providing cheaper and more efficient avenues for redressal, one integral avenue being BDR.

BDR has emerged as a representation of a new form of decentralised arbitration.[15] As pointed out by one of the founders of a blockchain-based dispute resolution platform, "existing dispute resolution technologies are too slow, too expensive and too unreliable for an online real-time world. A fast, inexpensive, transparent, and decentralised claim adjudication system will be a key institution for the Internet Age."[16] There have been several initiatives undertaken for the provision of conflict settlement through a blockchain network and various platforms exist to provide this medium of decentralised justice. *Aragon* is one such platform that provides the means to resolve disputes through its blockchain network and is known to be the 'world's first digital jurisdiction'.[17] *Jur* and *Kleros* are two other platforms which allow parties to enter into smart contracts that contain a built-in dispute resolution mechanism via its network.[18]

If blockchain technology is indeed an anchor for crypto-commerce, then blockchain-based arbitration seems to be a promising and practical option for a decentralised dispute resolution process. However, merely on perception, blind acceptance and trust of such a process can be harmful and might have troubling judicial consequences. The sudden exponential rise of the digital world has struck certain chords in the justice delivery system by challenging the golden concept of the rule of law. It is not clear as to whether the boilerplate concepts of reasonableness and good faith have indeed been adequately captured by this technology,[19] implying that the novel nature of this mechanism may itself be the source for disputes.[20] In light of these circumstances, it is necessary to thoroughly analyse the system of digitised adjudication in order to infer whether there are any innate technological flaws which inhibit dispute resolution.

---

[15] Maxime Chevalier, 'From Smart Contract Litigation to Blockchain Arbitration, a New Decentralized Approach Leading Towards the Blockchain Arbitral Order' (2021) 12 (4).
[16] Federico Ast and Clément Lesaege, 'Kleros: A Protocol for Decentralized Justice', Dispute Revolution: The Kleros Handbook of Decentralized Justice (kleros.io 2019).
[17] Aragon.org, 'aragon app' (aragon.org) <https://aragon.org/aragon-app> accessed 5 May 2023.
[18] Jur (jur.io)<https://jur.io> accessed 2 Dec 2022.
[19] Sarah Chaplin, 'Blockchain and the future of dispute resolution', (*Financier Worldwide Magazine*, 2021 <https://www.financierworldwide.com/blockchain-and-the-future-of-dispute-resolution#.YpFyVC9Q1QI> accessed 5 May 2023.
[20] The Law Society, 'Blockchain: Legal & Regulatory Guidance, 3rd Edition', (*The Law Society*, September 2020) <https://www.lawsociety.org.uk/topics/research/blockchain-legal-and-regulatory-guidance-second-edition> accessed 6 May 2023.

Inadequacy of existing legal framework

At this juncture, it is pertinent to analyse whether the field of arbitration has accounted for smart contracts and its subsequent dispute resolution process. A concern that arises in the BDR network is the utter lack of a legal structure, framework and foundation as it suffers from an absence of judicial concepts and principles. Parties might have to argue each dispute from scratch which may result in highly localised and normative judicial decisions.

As compared to traditional contracts, a smart contract's essence lies in its automation, immutability, and pseudonymity which has a direct impact on the contractual relations between parties. As such, the jurisprudence evolved by courts pertaining to traditional contractual law might not be applicable in disputes involving smart contracts. For example, settled rules propounded by courts relating to the voidability of a conventional contract might be irrelevant in the case of smart contracts as the transaction becomes legally irreversible once executed. In such a situation, parties may agree upon entering into newer transactions to reverse the result of the void transaction and therefore, resolution of such disputes is aimed at restorative measures rather than enforcement remedies.

Additionally, a key aspect which is to be considered in this discussion is whether such novel decentralised justice systems propagate fairness, a crucial feature in the outcomes of traditional court systems.[21] However, at the outset, it must be clarified that the explanation of fairness is unsuitable in the present context as it has never been defined with regard to dispute resolution mechanisms. It includes several facets with the most significant distinction being between procedural fairness and distributive or outcome fairness.[22] Fairness, being the procedural rules used to resolve and analyse disputes, is still a major concern in the BDR network.[23] It is an undisputed fact that technology is touted to promote reduction in costs, an increase in efficiency and has thereby, enabled the growth of arbitration into new market segments. However, the dissemination of such technologies will invariably result in the emergence of complex disputes and concerns.[24] Primarily, owing to the submission of coded evidence, BDR excludes oral hearings which is an integral facet of the current justice delivery system. This is in juxtaposition with the

[21] F. A Kleros, 'When Online Dispute Resolution Meets Blockchain: The Birth of Decentralized Justice' (*Stanford Journal of Blockchain Law & Policy,* 30 June 2021) <https://stanford-jblp.pubpub.org/pub/birth-of-decentralized-justice/release/1> accessed 8 May 2023.

[22] John Zeleznikow and Noam Ebner, 'Fairness, Trust and Security in Online Dispute Resolution,' 36 Hamline University's School of Law's Journal of Public Law and Policy.

[23] Condlin, Robert J, 'Online Dispute Resolution: Stinky, Repugnant, or Drab?' (*Digital commons@UM Carey law*, 2017) <https://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=2580&context=fac_pubs> accessed 10 May 2023.

[24] Francisco Uríbarri Soares, New Technologies and Arbitration*,* VII (1) Indian J. Arb. L. 84 (2018).

foundational principle of natural justice that must be followed and adhered to in every adjudicatory mechanism.[25]

At this juncture, it seems pertinent to mention that the principle *'ex aequo et bono'* might help in enforcing fairness in this form of dispute resolution. It is a legal concept that confers upon arbitrators the power to resolve disputes based on their sense of fairness and good conscience.[26] Article 28(3) of the United Nations Commission on International Trade Law Model Law on International Commercial Arbitration ["**UNCITRAL Model Law**"] has expressly allowed the determination of cases on an *ex aequo et bono* basis provided that parties have expressly agreed to the same.[27] Kleros is one such platform for decentralized dispute resolution which employs the principle of '*ex aequo et bono',* morality and fairness when facilitating the rendering of disputes.[28]

One such concern that must be taken into consideration is the principle of 'off-chain resources' or 'oracles.' Oracles are data feeds that retrieve and access information stored outside the blockchain network and push the information to the blockchain at predetermined times.

On a perusal of Indian law and its legal provisions, it is apparent that smart contracts are legally valid and permitted under Indian Law as Section 10A of the Information Technology Act, 2000 ["**IT Act**"] specifically provides for the validity of electronic contracts.[29] However, a peculiar quandary that arises is with respect to the element of consideration in a smart contract. Since there exists no specific legislation which provides for the working of a smart contract, the Indian Contract Act, 1872 ["**Indian Contract Act**"] holds primary authority. As a result, the age-old essentials of a conventional contract such as lawful object, consent, competency of parties and most importantly, consideration; must be satisfied for a smart contract to be legally binding upon parties. Therefore, it is evident that the validity of a smart contract itself, is dependent upon the satisfaction of the requirement of lawful consideration.

---

[25] Darshan Bhora and Aisiri Raj, 'Blockchain Arbitration – The Future of Dispute Resolution Mechanisms?', (*Cambridge International Law Journal*, 16 December 2020) <https://cilj.co.uk/2020/12/16/blockchain-arbitration-the-future-of-dispute-resolution mechanisms/> accessed 10 May 2023.

[26] Aryan Tulsyan, 'Arbitration Tech Toolbox: The Rawlsian 'Veil of Ignorance' and Blockchain Arbitration' (*Kluwer Arbitration Blog*, 17 July 2023) <https://arbitrationblog.kluwerarbitration.com/2023/07/17/arbitration-tech-toolbox-the-rawlsian-veil-of-ignorance-and-blockchain-arbitration/> accessed 7 October 2023.

[27] United Nations Commission on International Trade Law, Model Law on International Commercial Arbitration 1985, Art. 28(3).

[28] Mauricio Virues Carrera, 'Accommodating Kleros as a Decentralised Dispute Resolution Tool for Civil Justice Systems: Theoretical Model and Case of Application' (*Kleros*, 2021). <https://ipfs.kleros.io/ipfs/QmcJAieUWo46VRuhpP7vyF8AcyryhdspQhRgYCGR21saNv/Accommodating%20Kleros%20as%20a%20Decentralized%20Dispute%20Resolution%20%20Tool%20for%20Civil%20Justice%20Systems_%20%20A%20Theoretical%20Model.pdf> accessed 7 October 2023.

[29] The Information Technology Act 2000, s 10.

In certain digitized contracts, cryptocurrency might form the element of consideration between parties and in this context, the author aims to create a birds-eye view upon the issue of enforceability of cryptocurrency as consideration. On a joint reading of Sections 23 and 25 of the Indian Contract Act, it can be established that an agreement without lawful consideration is void and for consideration to be lawful, it must not be forbidden by the law nor its operation, defeat the provisions of any law.[30] Hence, the relationship between 'law' and 'cryptocurrency' continues to garner attraction and at present, there is an absence of law pertaining to cryptocurrency. A result of this conundrum is that cryptocurrency is innately incapable of contradicting law in any manner whatsoever and subsequently, does not attract the limitations or restrictions laid down in the aforementioned sections. In light of the above, the usage of cryptocurrency as consideration in smart contract transactions is not *per se* unlawful but given the uncertainty and unpredictability of the current legal scenario, it is prudent to broaden the horizon of 'consideration'.[31]

Additionally, it is necessary to analyse the issue of consent under traditional contractual law and its role in the formation of smart contracts. There exists an utter lack of human touch in the process of smart contracting as technology is merely limited to the execution of code and has not yet reached the stage of understanding and analysing natural language. In this context, Section 13 of the Indian Contract Act is significant as it provides for the factor of *consensus ad idem* in the formation of a traditional contract.[32] However, due to non-readability of codes in smart contracts, it is difficult to determine whether valid consent was indeed present in the contractual equation. Even if parties have act according to the terms of the contract, it cannot be equated to consent if the offeror did not provide sufficient notice of the terms of the contract to the offeree. In such a situation, any prior correspondence or transaction entered into between the parties which gives an indication of mutual assent can be taken into consideration when establishing consent.[33]

Furthermore, there is no well-settled or definitive position of law with regards to the usage of digital signatures in a smart contract which poses certain complexities. It is imperative to analyse the provisions of the IT Act and the Indian Evidence Act, 1872 ["**Evidence Act**"] as there clearly exists a juxtaposition between the two. Section 5 of the IT Act recognizes the validity of digital signatures in contracts.[34] Section 35 of the IT Act permits the enforceability of such signatures

[30] Indian Contract Act 1872, s 23, 25.
[31] Kumar Manvee Saidha, 'Smart Contracts and Cryptocurrency – Is it Time to Revisit the Bounds of Consideration?', (*The Indian Review of Corporate and Commercial Laws*, 20 November 2021) <https://www.irccl.in> accessed 13 May 2023.
[32] Indian Contract Act 1872, s 13.
[33] Deepti Pandey & Harishankar Raghunath, 'Stationing Smart Contract as a 'Contract': A Case for Interpretative Reform of the Indian Contract Act, 1872' (*NUJS Law Review*, 2020) <http://nujslawreview.org/wp-content/uploads/2021/01/13-4-Pandey-Raghunath-Stationing-Smart-Contracts.pdf> accessed 9 October 2023.
[34] The Information Technology Act 2000, s 5.

when the same has been certified by a certifying authority designated by the Government.[35] Additionally, the Evidence Act clearly stipulates that for an electronic agreement to be valid and admissible in Court, it must be authenticated by a digital signature. This creates a form of disparity as it is at odds with the essence and principles of blockchain technology. Smart contracts on the blockchain utilise and employ a hash-key for the purpose of authorisation and authentication rather than certifying the same through a governmental authority.[36] On the other hand, conventional electronic contracts authenticate digital signatures through a government-designated Certifying Authority. This creates an additional hurdle for the smooth implementation of smart contracts as it impedes the admissibility of such agreements as evidence in a recognised court of law and hinders the legal process.[37]

In India, the present regulatory structure does confer upon contracting parties the autonomy and freedom to determine how arbitration would be conducted as per the contractual clauses and terms agreed upon. However, there are certain well-settled principles of arbitration which do not entirely support the working of BDR and smart contracts. On a decentralised network, there is no notion or idea of a hard copy of the award, as the same is only communicated to parties as an electronic record via a blockchain. This poses a conundrum as under the Arbitration and Conciliation Act, 1996 ["**Arbitration Act**"] parties are directed to provide an original copy of their arbitral award at the time of enforcement. [38]

Moreover, there arises certain difficulties with respect to post-arbitral proceedings, as blockchain arbitration results in automatic enforcement of the arbitral award. Sections 33[39] and 34[40] of the Arbitration Act provide for correction and interpretation of the award and application for setting aside the arbitral award respectively. Owing to smart contracts' automated nature, there is effectively no scope whatsoever for correcting or interpreting the award in post-arbitral proceedings. Therefore, from a purely legal perspective, there exists very little space for blockchain arbitration within the existing law as it is not entirely in consonance with the traditional principles of arbitration.

[35] The Information Technology Act 2000, s 35.
[36] Anirudha Bhatnagar, 'India: Smart Contract In The Indian Crucible', (*Mondaq*, 19 June 2018) <https://www.mondaq.com/india/fin-tech/711102/smart-contract-in-the-indian-crucible>accessed 16 May 2023.
[37] Sannidhi Agrawal, 'Smart Contracts: 'Functioning and Legal Enforceability in India', IJLS Vol. 7, 2021. <https://www.alliance.edu.in/ijls/ijls-2021/assets/documents/Smart-Contracts.pdf> accessed 17 May 2023.
[38] The Arbitration and Conciliation Act 1996, s 47.
[39] The Arbitration and Conciliation Act 1996, s 33.
[40] The Arbitration and Conciliation Act 1996, s 34.

It is significant to note that numerous international conventions, treaties, and agreements have recognised the need for autonomy in contracting and have provided contracting parties with the operational freedom to select their medium of dispute resolution.[41] Article 19(1) of the UNCITRAL Model Law allows parties themselves to determine the method of conducting arbitral proceedings.[42] Hence, it can be established that there is a significant degree of freedom awarded to parties to adopt blockchain arbitration as their medium of dispute settlement and there exists no restriction upon the same.

Furthermore, the United Nations Convention on the Use of Electronic Communications in International Contracts is one of the primary legal instruments which facilitates the use of blockchain-based contracts and specifically declares the validity of on-chain arbitration.[43] Article 2.1.1 of the UNDROIT Principles of International Commercial Contracts recognises the validity of automated contracting and self-executing electronic actions.[44] Additionally, the UNCITRAL Model Law on Electronic Transferable Records has expressly stated that its rules would apply to distributed ledger technology.[45]

However, the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958 ["**New York Convention**"], one of the leading instruments in international arbitration, does not provide any scope for blockchain arbitration or smart contracts by mandating that an arbitration agreement between parties must only be in writing. As a result, it remains unresolved as to whether there even exists some court of jurisdiction available for contracting parties to resort to at the time of enforcing their award.

At this juncture, it is noteworthy to mention that the New York Convention determines the seat of arbitration on the basis of territoriality.[46] If parties do not determine or pre-select their seat of arbitration or jurisdiction in the contract itself, there might arise complexities in determining the

[41] Rules of Arbitration of the International Chamber of Commerce Rules 2021, Art. 22(2); London Court of International Arbitration Rules, 2014, Art. 14.4; Singapore International Arbitration Centre Rules, 2016, Rule 19.1.
[42] United Nations Commission on International Trade Law, Model Law on International Commercial Arbitration, 1985, Art. 19(1).
[43] Sharath Mulia, Romi Kumari, 'Blockchain Arbitration: The Future of Dispute Resolution', (*FoxMandal*, 23 November 2021) <https://www.foxmandal.in/blockchain-arbitration-the-future-of-dispute-resolution/> accessed 28 April 2023.
[44] International institute for unification of Private law principles of International Commercial Contracts 2016, Art. 2.1.1.
[45] United Nations Commission on International Trade Law Model Law on Electronic Transferable Records Art. 1, para 18.
[46] Parthsarthi Srivastava, Siddharth Jain, Riya Singh, 'Blockchain Arbitration: Identifying The Odds', NLUO ADR- E Newsletter, Vol 7 <https://www.nluo.ac.in/wp-content/uploads/2023/02/ADR-NEWSLETTER-VOL-_VII.pdf> accessed 1 May 2023.

same as blockchain is, in essence, entirely decentralised and hence, there is no physical seat.[47] Therefore, owing to the insufficiency of the existing legislative framework which has pertained its scope only to conventional and more traditional methods of arbitration, a legal lacuna has emerged. At present, the system of BDR suffers from certain pitfalls that must be addressed by policymakers and coordinators before it is established as an integral system in the field of dispute resolution.

Conclusion

Owing to the presence of a multi-faceted globalised society, there is a call around the world to adopt BDR, the novel and more efficacious medium of dispute resolution through the mechanism of a smart contract. Technological advances, driven by a digital revolution, has transformed the entire legal industry. Both smart contracts and its mechanism of dispute resolution through the blockchain are two novel concepts that have gained popularity in the recent age and have captured the legal market, bypassing traditional methods. However, it is pertinent to note that blockchain infrastructure has no public or private regulation whatsoever and could potentially weaken the rule of law or lead to the exploitation of weaker parties. Accordingly, it is the need of the hour to implement a foundational dispute resolution system on the blockchain which governs the digital relations contained in a smart contract while protecting the interests of contracting parties. The law must adapt itself more rapidly to the emergence of technology and traditional or conventional norms must not stand in the way of development of technological law. Therefore, despite smart contracts and its subsequent adjudication having emerged as an inviting phenomenon in this new digital age, it is necessary to devise a standard system for resolution by incorporating foundational legal concepts and principles to uphold true equity.

[47] Aishwarya Julinka Anand, Shreya Gupta, 'Smart Legal Contracts – The Only Viable Approach to the Arbitration of Blockchain Disputes?', (*CADR-RGNUL*, 27 December, 2022) <https://www.rgnulcadr.in/post/smart-legal-contracts-the-only-viable-approach-to-the-arbitration-of-blockchain-disputes> accessed 3 May 2023.