

IS INTERNATIONAL ARBITRATION LAW CAPABLE OF DEALING WITH LEGAL ISSUES ARISING OUT OF WEB3?

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1. INTRODUCTION

How can disputes arising out of innovation which lacks legal definitions, party identification or proper jurisdiction be resolved? Disputes relating to Web3 are on a steady rise with increasing momentum of creation of platforms and usage by stakeholders of the Web3 ecosystem during this internet evolution.¹ This stage of evolution which includes semantic advancement and introduction to decentralised internet is referred as 'Web 3.0'.² The term 'Web3' was coined by Gary Wood, the co-founder of Ethereum in 2014.³ It is also referred to as the 'Decentralized online ecosystem based on the blockchain' or 'Decentralized web' which aims to eliminate intermediaries and gives users control over their data. This decentralized internet ecosystem is a part of the internet evolution, with its users as its network stakeholders. In the absence of intermediaries, this network would be permissionless, self-governing, verifiable, censorship-resistant, connective and open-for-all. These features also indicate a lack of reliance on centralised rules and regulations created by International Arbitration bodies and governments. It may be of note that Web3 and Web 3.0 are

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¹ Nell Perks, 'Crypto disputes on the rise – a 2024 look at litigation, arbitration and regulation' (*Finextra*, 31 January 2024) <<https://www.finextra.com/the-long-read/926/crypto-disputes-on-the-rise--a-2024-look-at-litigation-arbitration-and-regulation>> accessed February 21, 2024.

² Victoria Shannon, 'A 'more revolutionary' Web' (*The New York Times*, 23 May 2006) <<https://www.nytimes.com/2006/05/23/technology/23iht-web.html>> accessed 20 February 2024.

³ 'Introduction to Web3' (*Ethereum*, 1 March 2024) <<https://ethereum.org/en/web3/>> accessed 21 February 2023.

often used interchangeably, hence, this article would be focusing on Web3, which is powered by blockchain and cryptocurrency. Non-fungible Tokens (“NFTs”), Decentralised Applications, (“DApps”), Decentralised Finance platforms (“DeFi”) are use cases built using the blockchain technology. While Artificial Intelligence, Machine Learning (“AI/ML”) and Natural Language Processing (“NLP”) are also a part of the current internet evolution, their primary role is semantic advancement, their usage in nexus with Web3 is nascent and merely interdependent, not foundational.

Web3 technologies and use cases are disrupting major industries that involve financial transactions and human interaction, like finance, marketing, gaming, and the legal industry due to the need of rule of law.⁴ A robust dispute resolution mechanism is an urgent and critical part of this ecosystem, that delineates ways through which on-chain and off-chain issues can be resolved. There has been a significant rise in legal-tech startups that have begun developing Online Dispute Resolution (“ODR”) platforms using blockchain or metaverse.⁵ The rise in legal-tech seems to be a part of the solution but not the complete cure. Several pertinent issues concerning this nascent area remain unresolved which require legal intervention due to the complexities in the technology and gap in incorporation of principles of the international arbitration regime; issues related to and arising out of Cryptographic assets or Virtual Digital Assets (“VDAs”), NFTs, Smart Contracts, Decentralized Autonomous Organizations (“DAOs”), Wallets, DApps, Decentralised and Centralised Exchanges (“DEX” and “CEX”

⁴ Jamilia Grier, ‘Legal Compliance Is Crucial For Web3 Mass Adoption’ (*Forbes*, 21 December 2022) <<https://www.forbes.com/sites/forbestechcouncil/2022/12/21/legal-compliance-is-crucial-for-web3-mass-adoption/>> accessed 21 February 2023.

⁵ Christine Hall, ‘Legal tech startups bring law, order to fragmented industry’ (*TechCrunch*, 16 March 2022) <<https://techcrunch.com/2022/03/16/legal-tech-startups-bringing-law-order-to-fragmented-industry/>> accessed 21 February 2023; Vidhya Sivaramakrishnan, ‘From parking tickets to divorces: A legal tech startup digitising mediation’ (*YourStory*, 28 July 2022) <<https://yourstory.com/2022/07/resolve-disputes-online-india-made-legal-tech-startup-helps-access-justice>> accessed 21 February 2023.

respectively) and more such use cases. Part 1 of the article glosses over the issues while highlighting the need for international arbitration which has popularly grown to be known as, Part 2 is an analysis of the existing international arbitration framework and how the principles may apply to the new industry, Part 3 is an attempt to study the present limitations, followed by Part 4 which analyses how to channel the existing framework and broadening it to adapt with Web3. Finally, the conclusion will reflect upon the pressing need for a unified framework that consolidates Web3 principles and establishes a reliable system for dispute resolution.

2. NEED FOR INTERNATIONAL ARBITRATION

Since the new generation of the internet is based on the Read-Write-Own philosophy,⁶ the primary parties therein are those who have a direct interest in the Web3 space through ownership over virtual assets i.e. the users, founders, developers, service providers and investors. VDAs such as NFTs, and cryptocurrencies such as Bitcoin or stablecoins like USDT, are assets that represent a value and can be exchanged. This value may differ depending on the characteristics, protocol used to build the asset and use of the asset.⁷ They can be used in virtual marketplaces, DeFi, exchanges, games and apps with the help of wallets. These digital wallets store funds and assets, enable transactions and act as a door to Web3 projects. For example, MetaMask wallet can be used to log into Decentraland, a virtual world platform and to purchase VDAs on the platform.⁸

International arbitration is relied upon for its procedural fairness, neutrality, party autonomy, flexibility, privacy, the enforceability of

⁶ Him Gajria, 'Web 3.0' (*Medium*, 26 May 2020) <<https://medium.com/variablelabs/web-3-0-e0d817ec05c6>> accessed 10 March 2024.

⁷ 'Demystifying cryptocurrency and digital assets' (*PwC*) <<https://www.pwc.com/us/en/tech-effect/emerging-tech/understanding-cryptocurrency-digital-assets.html>> accessed 21 February 2023.

⁸ 'Buying NFTs' (*Decentraland*, 17 February 2022) <<https://docs.decentraland.org/player/blockchain-integration/buying-nfts/>> accessed 25 February 2023.

award and cross-border accessibility.⁹ These features are consonant with features of blockchain. Blockchain Arbitration is already a phenomenon being used to since Web3 parties may be from different corners of the world and, international arbitration can be useful to resolve disputes that:

- a. Occur On-chain – Issues that are caused on the blockchain by acts within the blockchain without involvement of external factors.
- b. Occur Off-chain - Disputes where issues arise by acts in real-world involving actors and stakeholders that impact the technology.
- c. Hybrid in nature - Issues may be caused by acts within the blockchain with involvement of external factors or acts outside blockchain which may cause dispute the on-chain.

Some of the primary conflicts that have been witnessed or may occur soon are:

Breaches

While blockchain is more secure than traditional systems of data storage,¹⁰ it is not free from vulnerabilities. There is a scope of attacks through wallet-cloning, hacking through majority control of the mining process, also known as 51% Attack.¹¹ Apart from wallets, there have been breaches with crypto exchanges too. In recent times, the cryptocurrency exchange Bancor was hacked and stole approximately \$23.5 million were stolen in digital currencies. The breach, which occurred on July 9, 2018, involved the compromise of a wallet used for smart contract upgrades. Although Bancor was able to freeze the BNT tokens to mitigate

⁹ Gary B Born, *International Commercial Arbitration* (2nd edn, Kluwer Law International 2014) ch 15, 2120-2318.

¹⁰ Nazanin Zahed Benisi, Mehdi Aminian, and Bahman Javadi, 'Blockchain-based decentralized storage networks: A survey' (2020) 162 JNCA <<https://www.sciencedirect.com/science/article/abs/pii/S1084804520301302>> accessed 25 February 2023.

¹¹ Jessica Groopman, 'Web 3.0 security risks: What you need to know' (*TechTarget*, 16 February 2023) <www.techtarget.com/searchsecurity/tip/Top-3-Web3-security-and-business-risks> accessed 21 February 2023.

part of the loss, the other tokens remained at large. Bancor has assured that no user wallets were compromised during this incident. The company announced initiatives to enhance cybersecurity across the cryptocurrency industry by forming a "crypto defenders" coalition. This group aims to collaborate on crime-fighting tools, share blacklists, and assist each other during security crises.¹²

Another such instance is the Coinbase Case.¹³ Coinbase is an online platform for trading cryptocurrency, recently several wallet users lost millions in cryptocurrency due to scammers who used malicious smart contracts to gain access to user wallets to withdraw their crypto. Due to the user agreement, the users had to resort to Arbitration in the US jurisdiction. Users claimed that there were no warnings given by Coinbase against such activity. Coinbase users preferred US jurisdiction due to issues with the platform's arbitration agreement. The internal process requires users to follow a strict pre-arbitration procedure, which would prima facie appear to be biased to Coinbase. Critically, the arbitration clause has been perceived as one-sided, compelling users to arbitrate disputes while not imposing similar requirements on Coinbase. This has led to legal challenges where courts have sometimes ruled the arbitration agreement as "unconscionable," favouring Coinbase disproportionately.

Scams and Fraud in Cryptocurrency and NFTs

There have been different types of scams and frauds occurring over the Web3 space, some through malicious smart contracts, some

¹² William Suberg, 'Bancor Creates Crime-fighting 'Crypto Defenders' as Scorn Over \$12 Mln Hack Escalates' (*Cointelegraph*, 13 July 2018) <<https://cointelegraph.com/news/bancor-creates-crime-fighting-crypto-defenders-as-scorn-over-12-mln-hack-escalates>> accessed 21 February 2023.

¹³ Cyrus Farivar, 'Victims Claim Coinbase Didn't Protect Them From \$21 Million Crypto Scam' (*Forbes*, 14 October 2022) <www.forbes.com/sites/cyrusfarivar/2022/10/14/victims-claim-coinbase-didnt-protect-them-from-21-million-crypto-scam/?sh=55884af12469> accessed 21 February 2023.

through emotional manipulation, namely ‘Pig butchering’.¹⁴ The U.S. Department of Justice has been active in seizing cryptocurrency linked to “pig butchering” scams, where scammers build trust with victims over time and then persuade them to make large crypto investments in fraudulent schemes. Recently, nearly \$9 million in crypto was seized, linked to an organization that exploited victims through romance and investment scams.¹⁵

Intellectual Property Rights

Metaverse has been a creative space for creators and gamers, however, there have been multiple cases where real-world brands like Nike¹⁶ and Hermès¹⁷ have faced problems with trademark infringement and copyright issues, with their brands being used by artists in NFTs, supposedly misleading the buyers into thinking the NFTs are the product of the actual brand. While the Intellectual Property Rights (“IPRs”) are protected in the Web3 space in a manner similar to their protection in the offline space, enforcing these rights is a cumbersome and expensive process without a proper procedural landscape, as seen in the cases mentioned. Despite the rise in trademark registration for brands in the metaverse, and coupled with increasing creators in the space, there is a correlation with increasing number of trademark and copyright

¹⁴ Lily Hay Newman, ‘Hacker Lexicon: What Is a Pig Butchering Scam?’ (*WIRED*, 2 January 2023) <www.wired.com/story/what-is-pig-butchering-scam/> accessed 21 February 2023.

¹⁵ Department of Justice, ‘Justice Department Seizes Over \$112M in Funds Linked to Cryptocurrency Investment Schemes’ (Press Release Number 23-362, 3 April 2023) <<https://www.justice.gov/opa/pr/justice-department-seizes-over-112m-funds-linked-cryptocurrency-investment-schemes>> accessed 21 February 2024.

¹⁶ Nike, Inc. v. StockX LLC, 1:22-cv-00983 (NYSDC); Pavitra Priyadarshan, ‘Nike V. Stockx: An Analysis of the Trademark Infringement in the Metaverse’ (*IPLF*, 29 September 2022) <<https://www.ipandlegalfilings.com/nike-v-stockx-an-analysis-of-the-trademark-infringement-in-the-metaverse/>> accessed February 21, 2023.

¹⁷ Cam Thompson, ‘Hermès Wins Trademark Lawsuit Against MetaBirkins NFTs, Setting Powerful Precedent for NFT Creators’ (*CoinDesk*, 8 February 2023) <<https://www.coindesk.com/web3/2023/02/08/hermes-wins-trademark-lawsuit-against-metabirkins-nfts-setting-powerful-precedent-for-nftcreators>> accessed 21 February 2023.

infringement cases through creation of deepfakes.¹⁸

3. EXISTING INTERNATIONAL ARBITRATION FRAMEWORK IN WEB3 SPACE

Sources relied upon at each stage of international arbitration have established a comprehensive framework. However, it may not entirely be accommodating of Web3 and its technologies yet in terms of arbitral practice and practices in the usage of technology to resolve disputes.

International Treaties

The Convention on Recognition and Enforcement of Foreign Arbitral Award, New York, 1958 (“New York Convention”, 1958)

Arbitration awards are generally enforceable in countries party to the New York Convention (“Convention”), which provides for the recognition and enforcement of foreign arbitral awards. This is particularly important in the Web3 context, where parties may be located in different countries and may have concerns about the enforceability of court judgments across borders.

Enforcement issues can be both on-chain and off-chain depending on the nature of transactions implicating the users and their assets. There must be a valid arbitration agreement for arbitration machinery to be set into motion. Article II (2) of the Convention can be liberally interpreted to include online agreements which are signed through digital signatures. The International Council for Commercial Arbitration (hereinafter “ICCA”) advises judges while applying the New York Convention Article II(2) that it “*can be reasonably construed as covering equivalent modern means of communication.*”¹⁹ to facilitate electronic agreements. However, smart

¹⁸ Lily Li, ‘Metaverse Law featured in OC Lawyer Magazine’ (*Metaverse Law Blog*, 19 January 2024) <<https://www.metaverse.law/2024/01/19/metaverse-law-featured-in-oc-lawyer-magazine>> accessed 21 February 2024.

¹⁹ *ICCA’s Guide to the Interpretation of the 1958 New York Convention: A Handbook for Judges* (with the assistance of PCA, ICCA 2011).

contracts, Ricardian contracts and the involvement of DAO may not fit into this interpretation entirely due to the complex framework for human interpretation and the difference in the legal recognition of a contract.

While due process is protected alongside principles of natural justice and the parties can present their cases, there may be difficulty establishing grounds for challenge and determining who the parties are due to party anonymity; the principle of autonomy extends to jurors as well, which makes enforcement of an award a challenge.²⁰

With UNCITRAL Model Law on Electronic Commerce, (“Model Law on Electronic Commerce”) the interpretation of Article VII has also expanded, with parties being able to take recourse of the advantages of ‘most favourable rule’ for suitable conventions, treaties, and domestic law for recognition and enforcement of awards as may be relevant.²¹ Other UNCITRAL initiatives for the inclusion of blockchain disputes are the Model Law on Electronic Signatures, the Convention on the Use of Electronic Communications in International Contracts, the Model Law on Electronic Transferable Records, the Rotterdam Rules, and the Model Law on Secured Transactions.²²

The updated version of the UNCITRAL arbitration rules that were adopted and completed was covered in the 2010 Report of the United Nations Commission on International Trade Law.²³ The rules offer a thorough set of guidelines for how disputes originating from business contracts agreed upon by all the parties should be

²⁰ Elizabeth Chan and Emily Hay, ‘Something Borrowed, Something Blue: The Best of Both Worlds in Metaverse-related Disputes’ (2022) 15(2) *Contemp. Asia Arb. J.* 205.

²¹ *ibid.*

²² Tonya M Evans, ‘The Role of International Rules in Blockchain-Based Cross-Border Commercial Disputes’ (2019) 65 *Wayne L. Rev.* 1. <<https://repository.globethics.net/handle/20.500.12424/4006269>> accessed 25 February 2023.

²³ UN Commission on International Trade Law, *Report of the United Nations Commission on International Trade Law* (A/65/17, Forty-third session, 21 June-9 July 2010).

handled. Administrative arbitrations and ad hoc arbitrations frequently follow these rules. They include a model arbitration agreement, information on all facets of the arbitration process, and other crucial frameworks and guidelines for conflict settlement.

International Arbitration Rules

ICC and ICC Rules

The International Chamber of Commerce (“ICC”) has been proactive in incorporating the usage of blockchain and other Web3 technologies to create more effective and efficient proceedings. For increased efficiency, appendix IV of ICC Rules 2021, under clause(f) provides, “*using of telephone or video conferencing for procedural and other hearings where attendance in person is not essential and use of IT that enables online communication among the parties, the arbitral tribunal and the Secretariat of the Court.*”²⁴ ICC released a commission report ‘Leveraging Technology for Fair, Effective and Efficient International Arbitration Proceedings’ in January 2023, wherein a special emphasis has been laid on incorporating AI & ML in arbitration under Article 5.2²⁵ to make the proceedings less cumbersome by determining the merits of the case and by providing instant and cheaper translations of documents. The limitations and concerns are also addressed to protect the interest and privacy of the parties.

LCIA Rules

London Court of International Arbitration Rules, 2020 provide that the Arbitral Tribunal’s power under Article 14.5 (iii) includes the making of any procedural order to expedite the procedure to be adopted in the arbitration by employing technology to enhance the efficiency and expeditious conduct of the arbitration (including

²⁴ ICC Rules 2021, app IV, cl (f) <<https://iccwbo.org/disputeresolution/dispute-resolution-services/arbitration/rules-procedure/2021-arbitration-rules/>> accessed February 22, 2023.

²⁵ ICC Commission on Arbitration and ADR, *Report on Leveraging Technology for Fair, Effective and Efficient International Arbitration Proceedings* (February 2022).

any hearing).²⁶

Domestic Laws

Digital Dispute Resolution Rules (“DDR rules”) and the English Courts

DDR rules are given by the United Kingdom Jurisdictional Taskforce (“UKJT”) envisioning digital dispute resolution through the on-chain arbitration process. The resolution process can be availed in two manners, either through an automatic dispute resolution process which allows parties to choose a person, panel, or AI agent to take a decision and apply it through a digital asset system, making it binding or through submission to an arbitrator who uses a private key for implementation of their decision on the blockchain. The English courts deal with jurisdictional issues by allowing non-designation of jurisdiction for issues relating to crypto assets as they are located on a distributed network. They also identify the need for enforcement of orders in other jurisdictions outside of England and Wales.²⁷

The *Kleros* case²⁸ sheds light on the importance of on-chain arbitration and the upgradation of the existing domestic legal framework. Herein, a blockchain arbitration protocol-based arbitral award (“Blockchain Arbitral Award”) was enforced by Mexican courts. The growth of blockchain arbitration will be greatly impacted by this decision. To guarantee full compatibility with the pre-existing arbitration framework, the Blockchain Arbitral Award was not directly enforced in this case but was

²⁶ LCIA Arbitration Rules 2020 art 14.6.(iii).

²⁷ Greg Lascelles and Alan Kenny, ‘Litigation & Dispute Resolution Laws and Regulations Report 2022-2023 The English Courts’ Approach to Disputes Involving Crypto-Assets’ (*International Comparative Legal Guides International Business Reports*) <<https://www.cov.com/-/media/files/corporate/publications/2022/02/iclg-litigation--dispute-resolution-2022--the-english-courts-approach-to-disputes-involving-cryptoassets.pdf>> accessed February 22, 2023.

²⁸ Mauricio Virues, ‘How to Enforce Blockchain Dispute Resolution in Court? The Kleros Case in Mexico’ (*Kleros*, 10 January 2022) <<https://blog.kleros.io/how-to-enforce-blockchain-dispute-resolution-in-court-the-kleros-case-in-mexico/>> accessed 22 February 2023.

included by reference in a conventional arbitral ruling.²⁹

Arbitration Agreements

The Arbitration Clause in Terms of Service Agreements

Arbitration clauses are included in terms of service agreements of several metaverse platforms. It provides the seat of arbitration and the rules to be followed for the procedure. The assent of users to these terms is derived from their response to the click-wraps agreement by selecting “I agree to the terms and conditions.”³⁰ For these agreements to be valid, the arbitration provision has to be within reasonable notice of the user.³¹ In some cases there might be browser-wrap agreements, where the mere use of the website constitutes as user’s assent to the terms and conditions.³²

Decentraland, a metaverse platform, has provided a multi-tiered ICC arbitration clause under Article 18 of its terms of use, with Panama as the seat of arbitration, as well as its headquarters.³³ Similarly, Roblox under Article 16 of its terms of use designated the AAA rules and California as its seat of arbitration. Binance under Article 10 of the Terms of Use provides for arbitration under the HKIAC Rules, with the seat as Hong Kong. Jupitice, an Indian legal-tech startup has incorporated Blockchain and AI technology with an arbitration clause in their terms of use as well, by the

²⁹ Maxime Chevalier, ‘Arbitration Tech Toolbox: Is a Mexican Court Decision the First Stone to Bridging the Blockchain Arbitral Order with National Legal Orders?’ (*Kluwer Arbitration Blog*, 4 March 2022) <<https://arbitrationblog.kluwerarbitration.com/2022/03/04/arbitration-tech-toolbox-is-a-mexican-court-decision-the-first-stone-to-bridging-the-blockchain-arbitral-order-with-national-legal-orders/>> accessed February 22, 2023.

³⁰ Ed Bayley, ‘The Clicks That Bind: Ways Users “Agree” to Online Terms of Service’ (*Electronic Frontier Foundation*, 16 November 2009) <www.eff.org/wp/clicks-bind-ways-users-agree-online-terms-service> accessed February 25, 2023.

³¹ Benjamin Stearns and Carlton Fields, ‘Determining Whether “Clickwrap Agreement” Provides “Reasonable Notice” of an Arbitration Agreement Is a Fact-Intensive Inquiry’ (*JD Supra*, 14 July 2020) <www.jdsupra.com/legalnews/determining-whether-clickwrap-agreement-36227/> accessed 25 February 2023.

³² Jason Crawford, ‘The Importance of Clicking on “I agree to the terms and conditions”’ (*WebsitePolicies*, 9 May 2017).

³³ ‘Terms of Use’ (*Decentraland*) <<https://decentraland.org/terms/>> accessed 6 May 2024.

Arbitration and Conciliation Act, of 1996.³⁴ These examples show an increased reliance on institutional arbitration and ad-hoc arbitration as the way forward.

4. CURRENT LIMITATIONS OF INTERNATIONAL ARBITRATION

International arbitration as the go-to dispute resolution mechanism in Web3 space can be due to its fundamental nature and objectives. It resounds with the ideology behind Web3 for a decentralized space, with user independence/party autonomy; the pinnacle of International Arbitration is the choice.

Correlation of Preferred Seat with Regulation

For effective development and to enable adoption of the new technologies, regulations are awaited. These regulations would be extremely pertinent in deciding the seat of arbitration; as per current trends, arbitration hubs like Hong Kong, London, Paris, Singapore and Geneva are the most preferred seats due to their pro-arbitration legal frameworks.³⁵ However, many countries with complex legal systems like India are still in the process of formulating fair regulations to address the right issues and provide proper mechanisms and appoint the right authorities to deal with the issues.³⁶

³⁴ Tariq Khan and Anand Kumar Maurya, 'Arbitration: A Preferred Mode Of Dispute Resolution Mechanism In Metaverse' (*LiveLaw.in*, 22 August 2022) <www.livelaw.in/columns/arbitration-a-preferred-mode-of-dispute-resolution-mechanism-in-metaverse-207171> accessed 22 February 2023.

³⁵ Abbey Cohen Smutny and Norah Gallagher, '2021 International Arbitration Survey: Adapting arbitration to a changing world' (*White & Case LLP*) <<https://www.whitecase.com/publications/insight/2021-international-arbitration-survey>> accessed 25 February 2023.

³⁶ KPMG, *Metaverse and Web: Opportunities in India* (November 2022) <<https://assets.kpmg.com/content/dam/kpmg/in/pdf/2022/11/metaverse-and-web-opportunities-in-india.pdf>> accessed 25 February 2023; Manish Agarwal, 'An ideal policy framework for India's Web3 industry' (*Livemint*, 19 August 2022) <www.livemint.com/opinion/columns/an-ideal-policy-framework-for-india-s-web3-industry-11660764147066.html> accessed 25 February 2023.

Lack of Understanding of Virtual Spaces

Accessing Metaverse and other Web3 platforms is still a hassle for users.³⁷ There is an increased use of 'terms of use agreements' and a lack of user awareness regarding their rights, obligations, and legal recourses when they give assent to agreements. Moreover, the determination of the platform is unclear in many such terms, they do not act as sufficient enforcers of agreement.

Lack of Digital Infrastructure

While virtual hearings are gradually becoming a part of legal frameworks worldwide, there is a lack of awareness about the proper virtual tools and the lack of equipment and infrastructure to ensure the smooth functioning of proceedings.³⁸ Majority of the population in developed countries relies on institutional arbitration while developing countries are still adapting to institutional arbitration and are presently more reliant on ad-hoc proceedings.³⁹ There is a need to provide prerequisites which consist of what the mode for dispute resolution could be, and these requisites should be in congruence with established protocols to ensure the protection of data.

Arbitrable Cases and Validity of Agreements

One of the major areas of conflict in Web3 has been IPR, an area of ambiguity under international arbitration due to some rights being *right in rem* which are not arbitrable, and some being *right in personam* which are arbitrable.⁴⁰ Different jurisdictions have a

³⁷ Parmy Olson, 'Web3 is Useless If It's Not User Friendly' (*Bloomberg*, 12 April 2022) <www.bloomberg.com/news/articles/2022-04-12/web3-is-useless-if-it-is-not-user-friendly?leadSource=uverify%20wall> accessed 25 February 2023.

³⁸ PRS Legislative Research, *Standing Committee Report Summary: Functioning of Virtual Courts* <<https://prsindia.org/policy/report-summaries/functioning-of-virtual-courts>> accessed 25 February 2023.

³⁹ Joseph T McLaughlin, 'Arbitration and Developing Countries' (1979) 13(2) *The International Lawyer* 211.

⁴⁰ Yash Vardhan Garu and Hetvi Mehta, 'Arbitrability of Intellectual Property Rights' Disputes: An Affirmative Step' (*SCC Blog*, 26 December 2022) <www.sconline.com/blog/post/2022/12/26/arbitrability-of-intellectual-property-rights-disputes-an-affirmative-step/> accessed 25 February 2023.

different stance on the enforcement actions, e.g. Switzerland has a liberal approach allowing IPR cases of infringement as well as the validity of IPR to be arbitrable, but Japan has a restrictive approach, allowing IPR infringement to be arbitrable but not the cases of validity.⁴¹

Data Theft and Privacy Issues in Virtual Courts, ODR Spaces and Case Management Platforms

Virtual Courts, ODR spaces and case management platforms would contain sensitive and confidential information about the parties and regarding the case. The idea to create a safe decentralised web, with user control over the data is still an ongoing process and is still not full-proof; it would take a significant amount of time to build the safe space as proposed.

5. INNOVATION FOR THE FUTURE OF INTERNATIONAL ARBITRATION

The increasing dialogue around the future of technology and its impact on dispute resolution presents the opportunity to gather insights from global experts on disputes relating to Blockchain, Crypto, AI and Metaverse. Without intervention of technical experts and collaboration with long-term experts in the domains, it would be futile to build mechanisms for dispute resolution. This space considers the “*Code is law*”, which does not circumvent the fact that “*Law is the Law*” but creates a scope for understanding and incorporating technological explanations and reasoning to the dispute resolution protocols being developed around these advancements.⁴²

⁴¹ Chinmoy Pradip Sharma, ‘Resolution of Disputes involving IPR through Arbitration in India – An Analysis of the Legal Position’ (*Bar and Bench*, 21 May 2019) <www.barandbench.com/columns/resolution-of-disputes-involving-ipr-through-arbitration-in-india> accessed 25 February 2023.

⁴² Oster Jan, ‘Code is code and law is law—the law of digitalization and the digitalization of law’ (OUP Academic, 3 July 2021) <<https://academic.oup.com/ijlit/article-abstract/29/2/101/6313392/>> accessed February 25, 2023.

Identity Verification Systems

Disputes arising out of inter-avatar interaction are yet to be identified as arbitrable since there's a lack of a valid contract. These issues can be resolved with amicable and conducive spaces like mediation and negotiation. Internet and its territoriality may not ever be defined properly, thus, usage of metaverse to resolve issues arising therein would be a prudent option. Moreover, providing validity to an avatar with a verified identity could allow ease of enforcing the procedures.⁴³ Incorporating Know Your Customer ("KYC") measures within the platforms would be a way to meet enforcement agencies in the middle.

Court Adoption and Experimental Models

Placing reliance on the framework provided under the DDR Rules by UKJT, Hon'ble Chief Justice DY Chandrachud spoke at the IVth edition of the International Conference on 'Arbitration in the Era of Globalisation' held in Dubai in 2022, addressed the need to infuse the newer technologies with the traditional arbitration system.⁴⁴

To fast-track the process of adopting arbitration as the primary dispute mechanism, courts would play a significant role by adopting the technologies and promoting arbitration. A separate institute or judicial body could be set up with dedicated fund allocation to deal with these cases in an experimental model, much like a Sandbox.

⁴³ Ben Chester Cheong, 'Avatars in the metaverse: potential legal issues and remedies' (*Intl. Cybersec. Law Review*, 7 June 2022) <<https://link.springer.com/article/10.1365/s43439-022-00056-9>> accessed 25 February 2023.

⁴⁴ Sohini Chowdhury, 'Smart Contract Arbitration An Effective Alternative To Traditional Arbitration Which Has Now Started To Resemble Traditional Litigation: Justice Chandrachud' (*LiveLaw.in*, 20 March 2022) <www.livelaw.in/top-stories/justice-dy-chandrachud-arbitration-international-conference-litigation-system-smart-contracts-194521> accessed February 22, 2023.

Coalition of Automated Legal Application (“COALA”) Model Law for DAO⁴⁵

To create uniformity in the legal framework for DAOs, COALA devised a Model Law addressing major issues about DAOs which gave an insight into the development of arb-tech and dispute resolution mechanism in Web3. It requires that parties “*refer to or furnish a Conflict Settlement Mechanism*” under Article 4(1)(j) and (k). One of the essential requirements for DAOs to be granted legal personality is that they comply with this commitment, which applies to “DAO, Members and Participants” as well as any affected third parties (Article 4(1) of the Model Law). According to Article 3(9) of the Model Law, a “*Dispute Resolution Mechanism*” is an “*On-Chain alternative dispute resolution system, such as arbitration, expert determination, or an On-Chain alternative court system, which enables anyone to resolve their disputes, controversies, or claims with, arising out of, or in connection with, a DAO.*”⁴⁶ The dispute resolution clause would be a part of the DAOs code. One peculiar aspect herein is that minimum standards of due process do not need to be met, this may cause an issue in the long run, but the purpose of this inclusion is to allow the ease for dispute resolution and gradually strengthen the framework.

Alignment with Green Arbitration

The net-Zero movement has gained importance globally, the future is paperless and carbon footprint reduction is key, this can be done by creating a better digital infrastructure for virtual hearings, which would reduce travel, with virtual case management and data storage

⁴⁵ Coalition of Automated Legal Applications, *Model Law for Decentralized Autonomous Organizations (DAOs)* (2021) <<https://www.lextechinstitute.ch/model-law-for-decentralized-autonomous-organizations-daos/>> accessed 22 February 2023.

⁴⁶ Sophie Nappert and Elisabeth Zoe Everson, ‘The Model Law For Decentralized Autonomous Organizations – Reinventing Due Process’ (*Delos Dispute Resolution*, 15 June 2022) <<https://delosdr.org/the-model-law-for-decentralized-autonomous-organizations-reinventing-due-process/>> accessed 22 February 2023.

platforms, which would facilitate a paper-free proceeding.⁴⁷

6. CONCLUSION

The framework of international arbitration has witnessed many unprecedented situations over the past several years but has also managed to resolve some of the most unique cases. The unprecedented field of Web3 is no different; it requires more attention from the legal fraternity to help build a conducive dispute resolution framework, which can catch up with the speed of the current tech revolution and upcoming advancements. International arbitration as a decentralized dispute resolution mechanism for a decentralized space would lead to much-awaited justice. Remodelling of international arbitration with reduced legalese, and increased legal ease would establish the Web3 stakeholders' faith in the ADR mechanisms, reducing the additional financial and institutional burden on traditional courts to adapt to the technology. Gradually, the tech adaptation would become a part of the whole legal machinery.

There's a requirement for a unified (not necessarily centralised) framework to help incorporate the principles and technologies of Web3 in the existing framework to be able to understand the inner-working of the technology as well as to be able to deal with issues effectively. The expansion of the scope of international arbitration in Web3 space would help increase the scope of arbitrable issues as well, beyond smart contract disputes, some IPR disputes and commercial disputes, to more industry-specific issues. The unified framework would help create a trustable system for dispute resolution thereby, improving economies by enhancing the ease of doing business and increasing investment in countries with high growth potential in the Web3 space.

⁴⁷ Tariq Khan, 'Green Arbitration: The Uncharted Road Towards Sustainable Arbitration' (*SCC Blog*, 24 August 2022) <<https://www.sconline.com/blog/post/2022/08/24/green-arbitration-the-uncharted-road-towards-sustainable-arbitration/>> accessed 25 February 2023.