International Journal of Law
ISSN: 2455-2194; Impact Factor: RJIF 5.12
Received: 06-12-2020; Accepted: 20-12-2020; Published: 06-01-2021
www.lawjournals.org
Volume 7; Issue 1; 2021; Page No. 07-12

Cyber arbitration and the future: The ideal state

Nawal Hend
Law School, Lecturer, OP Jindal Global University, Jagdishpur Village, Sonipat, Haryana, India

Abstract
In a century of rapid intelligence mechanical and technological revolution, the legal field as no exception has been substantively influenced and affected, whether by imposing regulations for the usage of intelligent cyber means in society, or through the implementation and adoption of cyber mechanisms in the legal industry itself. This has necessarily evoked the question of adopting cyber platforms and instruments as an integral agent in the adjudication process in general, and arbitration in specific. Thereof, Cyber Arbitration both as a theory and application has emerged as a controversial and developing subject matter. Cyber arbitration refers to the various uses of the Internet and cyber technologies as a method of conducting arbitral procedures. Cyber arbitration was successfully adopted and enforced under international conventions and treaties, along with the entailment of cyber arbitration platforms within the international arbitration institutions such as the Permanent Court of Arbitration. However, certain challenges have surfaced post numerous domestic and international trials of cyber arbitration as a dispute resolution mechanism in many fields -due to its joint nature- whether on a mere legal basis, or technological grounds. Thereof, reforms have been proposed as an effort of amending the loops and inadequacies of Cyber Arbitration. This article shall provide a coherent analytic study of the effectiveness and deficiencies of Cyber arbitration as a prospering adjudication mechanism on a mere legal, and technological grounds through a comparative study between traditional and Cyber arbitration undermining the ongoing technological revolution, and the capitalist global economic scene. This article shall examine the interplay between Cyber arbitration and sociology as fundamental element of the adjudicatory process. In addition to proposing solutions and providing a checklist for parties' as a way to conduct risk management strategies, for efficient Implementation of Cyber arbitration.

Keywords: cyber arbitration, arbitration, commercial arbitration, alternative dispute resolution mechanism, ADR. ODR

Introduction

Arbitration has "originally" emerged for the purpose of adjudicating high stake disputes while maintaining more stable diplomatic or commercial relationships by staying out of courts [1].

The first documented arbitration in modern History was conducted in Athena mainly in states' diplomatic and political disputes, during the ascendance of the *"Ideal State"* [2].

Arbitration as a non-state dispute resolution mechanism was not merely entailed for maintaining diplomatic and commercial relationships, but as well as a time and cost effective mechanism in comparison to the bureaucratic legal procedures before courts. This is not a mere abstract legal theory, arbitration has proved its effectiveness when it comes to conserving diplomatic and international commercial relationships, as well as a cost and time effective ADR [3].

This can't be more evident than it is in *the US- Iran Tribunal* where both interstate and disputes between nationals from both countries were successfully adjudicated [4].

Under the era of globalization and technological revolution, the need for *"Cyber Arbitration"* [5] became more eminent for its further due advantages of being time and cost effective especially for trans-border disputes. International governing conventions of arbitration seemed to be already receptive of Cyber Arbitration, for under the UNICTRAL Model Law, the New York Convention on Recognition and Enforcement of arbitral Awards, and the European Convention, imposed no restrictions on Cyber Arbitration. Some countries took the endeavor of amending their legislations to be in line with the international arbitration conventions and guidelines on Cyber Arbitration, such as the United States of America under the *Protocol on Cybersecurity in International Arbitration*, and the Turkish International Arbitration Law. However, the implementation of Cyber Arbitration has not been an effortless transition in the legal field, due to the non-readiness of domestic legislations in most countries to enact ODR [6] within its legal systems.

Most states deems the production of evidence through cyber means as a violation of law, mainly when it comes to witness statements adoption, and electronic signature

[1] *Rivkin, W. David. "*The Impact of International Arbitration on the Rule of Law". The 2012 Clayton Utz/University of Sydney International Arbitration Lecture, Arbitration International, Vol. 29, Issue 3, 1 September 2013, pp. 327–360.
[2] "Plato's ideal state was a republic with three categories of citizens: artisans, auxiliaries, and philosopher-kings, each of whom possessed distinct natures and capacities." Sevan G. Terizan, "The Ideal State, The Dialectical Method, Educational Programs, The Cultivation of Morals." www.StateUniversity.com
[3] ADR: Alternative Dispute Resolution Mechanisms.
[4] "The Tribunal has jurisdiction to decide claims of United States nationals against Iran and of Iranian nationals against the United States, etc." Jurisdiction & Procedure of the Tribunal". iusct.net.
[5] Cyber arbitration refers to the various uses of the Internet and any cyber intelligent technologies as a method of conducting the adjudication process under arbitration.
[6] ODR: Online Dispute Resolution.

accreditation before tribunals. This causes a substantive issue when conducting Cyber Arbitration in a seat where electronic forms of evidence holds no legal value, or when attorneys are governed by contradictory rules in regard to evidence production: causing unfair trial and unequal evidence production between counter parties. Regardless of those procedural arbitral issues, in application it is already existence in traditional arbitration. However, the difference hereunder relies when the seat of enforcement in contradiction to the governing substantial laws of arbitration deems Cyber Arbitration in general, or a mere cyber evidence production: a violation of public order. Thus, refraining from enforcing the arbitral award itself. This is a serious legal issue facing the cyber arbitration community at the moment. The issues of domestic arbitration laws deeming Cyber Arbitration in general, or the production of cyber evidence, as illegal and in violation of public order, lead to the inability of enforcing arbitral awards in most states, not only for its breach of domestic laws and public orders, but also as a violation of a core legal principle: *Audit et alteram partem* [7] which is emphasized under article 18 of the UNICTRAL Model Law [8]. This is definitely not a passing obstacle before Cyber Arbitration but a substantive one, for the New York Convention has ascribed enforceability of an arbitral award as *"the single most important pillar on which the edifice of international arbitration rests"* [9] Thereof, it is worth questioning if online arbitration is fully admissible and effective under the current legal framework, which is mostly restrictive to traditional paper- submissions. In this article the author shall mainly focus on addressing Cyber Arbitration on the basis of tech-legal, and sociological grounds.

Tech-Legal

As addressed above, Cyber Arbitration is the practice of arbitration through technological means, it can be referred to as Cyberspace. Parties of the dispute, the arbitral tribunal, expertise and witnesses do conduct the procedures of arbitration solely virtually. Thus, the technological means become a substantive part of arbitration in ODR on the contrary to traditional arbitration, where arbitral procedures and submittals are conducted face to face before an arbitral tribunal. Thereof, it is evident that technological means, and cyber platforms are not mere adjudicatory agents, but an essential part of the legal adjudication procedure, where any defects, shall lead to the defunct of Cyber Arbitration procedure. Deriving from this recognition, along with the legitimacy and validity given to ODR under the New York Convention and UNICTRAL Model Law, the world leading arbitration Institutes such as the WIPO (World Intellectual Property Organization), ICC, and American Arbitration Institute, provided platforms for arbitration proceedings to be carried out online [10]. In addition to non-institutional platforms which were entailed as a support of Cyber Arbitration online procedures', for i.e. *Arbitrator Intelligence:* [11] a platform established mainly for the purpose of arbitrators elections' by the parties as an element for their strategic case management, through highly confidential arbitral awards surveys. The efforts of regulating cyber means into arbitration laws, was not limited to international conventions and arbitration institutions, but domestic legislations as well. We can see that evidently in the Indian Evidence code where electronic signature was upheld equal to paper-signature before courts and arbitral tribunals. Regardless of those legislative endeavors to entail technological and cyber instruments within it as a mean of facilitating Cyber Arbitration. Cyber arbitration platforms in specific, and the network as a core basis of it, have several deficiencies, in which causes substantial defects and serious legal questions undermining the legal status quo of ODR.

Network Distribution

It might not be a fully comprehended fact in the legal field, that network distribution is not equal worldwide, at least not at present [12]. This is quite concerning in trans-border Cyber Arbitration, for it would mean a time effective access to cyber arbitration platforms and services in general, in contrast to the counter party where difficulties in evidence production and access to the ODR platform services, along with poor timely submissions might be faced. This shall cause a legal dilemma: a violation of *Audit et alteram partem* principle, not to mention that this issue in itself shall lengthen the arbitration procedure upon its occurrence, and perhaps cause additional costs that shall be paid upon the repairment of network weakness and deficiencies.

Technological Development

Since Cyber Arbitration fully and substantially relies on technological means. The necessity of developing and bettering such platforms as a confidential, time effective means is crucially essential. However, the surveys before us shows that only limited amount of countries are developed enough in the technological sector, providing safe platforms from cyber-attacks [13], along with enhanced knowledge and access to such platforms and means for people in general and professional intuitions in specific. Most if not all professional law firms worldwide have a high protective network systems, providing restrictive protection over confidential and non-confidential documents, where all lawyers and employees are comfortable enough dealing with technological systems. On the other hand law firms in underdeveloped countries on a micro level, lack an advanced protective network systems, not to mention that most of its lawyers are still paper work based with a low experience in cyber platforms. This technological underdevelopment in those law firms, set its roots in deeper grounds: the underdevelopment of technology overall in their countries, lacking adequate expertise, tools, funds, and knowledge. Scholars and arbitration practitioners based this

[7] "It is the principle that no person should be judged without a fair hearing in which each party is given the opportunity to respond to the evidence against them." "Audi Alteram Partem Definition". Duhaime Legal Dictionary, 14 September 2007. www.duhaime.org.

[8] Unictral Model Law, Art. 18: "The parties shall be treated with equality and each party shall be given a full opportunity of presenting his case."

[9] Wetter, J Gillis. "The Present Status of the International Court of Arbitration of the ICC: An Appraisal".
American Review of International Arbitration (1990) 1, pp. 91, 93.

[10] "Cyber Arbitration and Effective Dispute Resolution." Lawteacher, Oct, 2018. All Answers Ltd. 11 2020 www.lawteacher.net/free-law-essays/commercial-law/cyber-arbitration-and-effective-dispute-resolution-commercial-law-essay.php?vref=1.

[11] "Arbitrator Intelligence Website. 'About us". Arbitrator intelligence. com/about/.

[12] B. Lee, Timothy, "40 maps that explain the internet". VoxMedia, Jun 2, 2014, para. 12.

[13] Westgaver, Morel de Claire. "Cybersecurity in International Arbitration – A Necessity and an Opportunity for Arbitral Institutions", *Kluwer* Arbitration Blog, October 6, 2017.

issue on the mere non-regulatory of cyber means in underdeveloped countries, but I would like to point out to the fact that this is not the core of the issue. The underlying cause is the non-expertise and adequate funding for technological research and development. Thus a legislative amendment of those laws shall not value to more than a mere abstract effort, incapable of enforcement under their legal systems. Thus, the question remains the same, is cyber arbitration precisely in trans-border disputes under the variance of technological development shall fulfill a fair legal dispute resolution mechanism? I can comfortably provide a negative answer. But the question of would it be able to, in future terms when underdeveloped countries are more experienced with technological means is an entire different question.

Confidentiality & Cyber Platforms

Another tech-legal concern under Cyber Arbitration, is the risk of cyber-attacks. This has been intensively or at least adequately underlined from legal scholars. The risk of Cyber Arbitration confidentiality when it comes to arbitral awards and procedures, is not limited upon cyber-attacks. But also parties 'or third parties exposure of confidential submissions and awards by simply printing out the electronic forms of arbitration documents. This has been recently recognized by the legal sector, thus leading technical expertise to develop ODR platforms with limited management and access to arbitration documents. Nonetheless, until this very day none of the ODR platforms were able to manage "paper printing" of ODR electronic documents and awards, not to mention that this has made the identification of leakage quite difficult. We should underline that technical expertise have been constantly developing Arbitration platforms and systems in immunity from cyber-attacks. Nonetheless, with the advancement of Cyber arbitration Platform's security and immunity, cyber-attacks is also in parallel development. It is noteworthy, that risks of confidentiality is also quite present in traditional arbitration. However it might be less risky, for in cases of leakage in a traditional arbitration case, it shall merely affect the dispute parties themselves. On the other hand, in cases of ODR when the cyber platform itself has been attacked it will most definitely affect all other ODR submitted cases on the platform. This was seen in 2015, where the website of the Permanent Court of Arbitration was hacked during an arbitration session between the Philippines and China over a highly confidential and risky maritime border dispute [14], leading to the defunct of the ODR platform, and interrupting many other arbitration sessions simultaneously, leading to a subsequent shutdown of the website for maintenance. Moreover, this had also occurred through the hacking of law firm systems and not arbitration institutions where usually cyber systems are less advanced precisely in underdeveloped technological countries: this was witnessed in the Panama Papers' leak case [15], which involved the release of millions of encrypted attorney-client documents in the possession of a Panama-based law firm. In addition, remedial costs for such confidential deficiencies in the arbitration procedure, is more costly, than it is under traditional arbitration in terms of the needed expertise and tools.

This can be remedied by two elements: the advancement of ODR security platforms, and the imposement of highly strict penalties on ODR platforms cyber-attacks crimes. But the dilemma somehow remains the same, how costly is it to identify a hacker at current times? Perhaps, in future where technology is in absolute dominance, those questions shall become invalid. Issues with ODR and arbitration confidentiality are not limited to hacking and cracking merely, or the potential of printing out electronic forms without the capacity of effective tracking, but it is also the usage of open networks by attorneys or other practitioners, whether from their homes, hotels, or sometimes as it has been canonical in the international arbitration field: the necessity of using airlines' open networks during a trans-border dispute. Open networks are simply an internet web with low security and protection, leading to a quite easy cyber-attack to all the information saved on its web. This is also a concern practitioners shall consider under ODR.

Arbitration Principles.

As have mentioned above, it is evident that ODR in its legal status quo under domestic legislations, do violate some legal arbitration principles. Those violations can be summarized as:

a. The right of equal access to evidence.
b. *Audit et alteram partem* Principle
c. The basic principle of *consensus ad idem.* This derives from the standard form of cyber arbitration clauses in contracts, where a party shall be obliged in case of an arising of a dispute to adjudicate his claims under ODR, merely by clicking "I accept" [16].

Those technical issues are definitely not a dead end for ODR, they're simply a mere analysis of ODR status under the current domestic arbitration laws, and technological development worldwide precisely under-technological developed countries.

Therefore, if the technological revolution shall proceed with the same pace, ODR shall become inventible with the technological development in all countries.

This can be accomplished through:

a. Enhancement of ODR platforms security.
b. Imposement of strict penalties on cyber-attacks, and confidentiality leakage.
c. Legislative amendment of domestic arbitration laws, to enact ODR within its legal systems.
d. Providing legal training on ODR in Law firms and arbitration specialized institutions.
e. Providing mandatory classes and courses of ODR in law schools worldwide.
f. Imposing data protection regulations under domestic legal systems, international arbitration conventions and model laws. This can be done in line with the UNICTRAL Model Law on Electronic Commerce under article (6) (1) [17].

[14] Mark Manantan, "The Cyber Dimension of the South China Sea Clashes". The Diplomat, August 05, 2019.

[15] Aceris Law LLC- International Arbitration Law Firm, "Cybersecurity in International Arbitration". Aceris Law LLC.

[16] Sopan Vadav, Vikrant. "Cyber arbitration through lenses of Indian legal system: An analysis". International Journal of Law, Vol. 2, Issue 2. March 2016, pp. 31-33.

[17] UNICTRAL Model Law, Art.6.1: ""in writing" by stating that "[w]here the law required information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference".

Sociological

Human behavior has been an element of study in technological revolutions in general, and as an implementation in the legal field. The legal-tech field is no exception. As the technological and mechanical revolutions in precise "*Industry 4.0* [18]" arose and became present in every field and sector, human interactions diminished substantially and were replaced by machines, mainly for accuracy and efficiency purposes as it is more time effective on terms of speed, and cost effective on terms of stipulated salaries for "human" employees. Several academic works have presented the question of labor rights under the fourth industry revolution where machines and cyber means are no longer a mere assistance for employees but an actual replacement of them, due to its updated abilities of data collection, decisions making and predictive engineering qualities. Which eventually lead to the layoff of a substantive amount of employees. This issue and question is valid under ODR, it might not affect of course the main employees and players in ODR: arbitrators. However, on a micro-level arbitrators' assistants, and expertise like oral translators, expert witnesses, etc. Will most definitely lose their parts in the arbitration procedure under ODR. This is not the mere concern and issue of ODR under the sociological lens, but another concern arise hereunder: human interaction disconnection, aka the absence of man.

Dispute resolution mechanisms, from litigation to alternative dispute resolution mechanisms have been adjudicating disputes through face to face human interaction all throughout history. Human interaction was/is a fundamental element of adjudicating disputes. For the art of oral presentation, has been and still is being taught to law students worldwide as an integral part of presenting pleadings before tribunals and courts, due to the collective upheld of its effective delivery of legal arguments. Consequently, affecting the position of your client and the judge/ arbitrator decision. One of the main purposes of arbitration at the time of its establishment, was: adjudicating disputes without influencing the parties' relationships, due to its less rigid nature away from litigation, with a more flexible and Intimate environment. Thereon, human interaction was even a more of an influential variable under arbitration than it is in litigation. This arbitration pillar and element shall be completely diminished under Cyber Arbitration. Accordingly, we cannot help ourselves but ask the question: what are the influences of eliminating face to face factor from arbitration? Shall it affect parties' relationships negatively on the long run especially under inter-state and International Investment disputes? Would it lead to the issuance of a more rigid arbitral awards due to the lack of human interaction? And what is the new face of arbitration? Is it a mere amendment of principles, or a substantial reform? Our answer on the basis of the historical and practical aspect of arbitration lead us to believe that the elimination of face to face human interaction might not be as effective on small cases, or domestic disputes, but it shall most definitely hold its consequences with decision making on diplomatic, international investment and commercial disputes, due to the ability of face to face communication of providing clearer understanding of legal arguments, through venting feelings and emotions. For as *Joel Einsen* states: *"There is almost universal agreement that mediation is most effective if the parties to the dispute are physically present before the mediator."* This can be adequately applied upon arbitration, perhaps not to the extent of mediation where parties' oral communication is the core of the ADR procedure, but it can be easily questioned and applied on arbitration, where the presence of the human arbitrator and face to face adjudication have been one of the fundamental elements in arbitration, and one of the distinguishing characteristics from litigation. Therefore, there is a set of considerations to be contemplated under ODR and human sociology:

a. The effects of virtual communication on Diplomatic and International Investment relationships.
b. Limitation of Human employment under ODR.
c. The effects of a lack clear human interactions through the tone, body and emotional intelligent communications on decision making.
d. Lack of efficient parties' management by arbitrators due to their inability of recognizing the nature of parties' interactions, facial expression, and verbal tonality through cyber means.

The influences of intelligent human interaction and absence of man might not be evident at a surface level, but due to the sociological effect of verbal tones, facial expression, and body languages on the sub- consciousness and consciousness decision making process, there is no escape that it shall not influence arbitrators' decisions making, and the upheld or rejection of evidence production, especially: witness statements. In addition, to a serious reform of arbitration as an alternative dispute resolution mechanism, by subtracting one of its fundamental elements: the presence of man.

Conclusion

Thereof, we can state that ODR abstractly and in the context of the ideal legal environment, it was originally established to process in, is most definitely more time and cost effective than traditional arbitration.

However, several considerations in relation to arbitration legal principles, elements, and sociological grounds of ODR under the legal status regulatory of ODR in most legal systems, and the current technological development shall be taken.

Thus, the question remains wide open: would ODR be effectively applied and implemented in domestic legal systems in line with the international model laws and conventions? ODR undeniably shall be the future of arbitration if the mechanical and technological revolutions proceed in the same pace: Towards a further step to the mechanical *"Ideal State"* of man. The question is shall it be a state of man or no man?

References

1. Hörnle J. 'Online Dispute Resolution' Chapter 12 in J Tackaberry, A Marriott (EDS) Bernstein's Handbook of Arbitration and Dispute Resolution Practice (4th edition), Sweet & Maxwell London, 2004.
2. Online Dispute Resolution: Some Lessons from the E-Commerce Revolution; Katsh, Ethan, 28 N. Ky. L. Rev,

[18] "a new concept of manufacturing, involving the industrial automation and integrating new production technologies, in order to improve work conditions and to increase productivity and quality". M. Di Nardo., et. al. "The evolution of man–machine interaction: the role of human in Industry 4.0 paradigm", Production & Manufacturing Research, Vol. 8:1, pp. 20-34, DOI: 10.1080/21693277.2020.1737592.

2001, 810.
3. Arabic book. Mark Manantan, the Cyber Dimension of the South China Sea Clashes, the Diplomat, 2019.
4. Aceris Law LLC- International Arbitraion Law Firm, Cybersecurity in International Arbitration, Aceris Law LLC, Aceris Law LLC.
5. Claire Morel de Westgaver (Bryan Cave Leighton Paisner LLP), "Cybersecurity in International Arbitration – A necessity and an opportunity for arbitral institutions", Kluwer Arbitration Blog, 2017.
6. "Cyber Arbitration and Effective Dispute Resolution." lawteacher.net. 11 2018. All Answers Ltd. 11, 2020.
7. Gillis Wetter J. 'the Present Status of the International Court of Arbitration of the ICC: An Appraisal' 1 American Review of International Arbitration. 1990; 91:93.
8. The Impact of International Arbitration on the Rule of Law: The 2012 Clayton Utz/University of Sydney International Arbitration Lecture, David W. Rivkin, Arbitration International. 2013; 29(3):327-360.
9. Sopan Vadav, Vikrant. "Cyber arbitration through lenses of Indian legal system: An analysis". International Journal of Law. 2016; 2(2):31-33. Law researchjournal.com.
10. Goodman W, Joseph. "The Pros And Cons Of Online Dispute Resolution: An Assessment Of Cyber-Mediation Websites". Duke Law & Technology Review. 2003; 2:1-16. https://scholarship.law.duke. edu /dltr/vol2/iss1/2
11. New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958.
12. The UNCITRAL Model Law ("MAL") on International Commercial Arbitration, 1985.
13. Turkish International Arbitration Law, 2001.
14. Indian Information Technology Act, 2000.
15. Indian Arbitration and Conciliation Act, 1996.
16. The Protocol on Cybersecurity in International Arbitration, 2020 edition.
17. UNEP/EA.4/ Res.1 - Innovative Pathways to Achieve Sustainable Consumption and Production.
18. UNEP/EA.4/Res. 3 - Sustainable mobility.