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Dissertation Submitted in Partial Fulfillment of the Requirement for the Degree of LL.M. (Business Laws)

Promoting Efficiency of Arbitration in India by Using Technology

Under the Supervision of:

Prof. (Dr.) V. Nagaraj

Submitted by:

Meenal Garg

LLM/940/2020

CERTIFICATE

This is to certify that this Dissertation titled as "Promoting Efficiency of Arbitration in India by Using Technology" submitted by **Meenal Garg, ID No. 940** in partial fulfillment of the Degree of Master of Laws (LL.M.) for the academic year 2020-21, of the National Law School of India University (NLSIU), Bangalore is the product of the bona fide research and study carried out by him under my guidance and supervision. This dissertation or any part thereof has not been submitted elsewhere for the award of any other degree in any other university.

Date: **Prof. (Dr.) V. Nagaraj**

Place: Bangalore **(Supervisor)**

DECLARATION

I, Meenal Garg, do hereby declare that this Dissertation titled, "Promoting Efficiency of Arbitration in India by Using Technology" is the outcome of bona fide research and study undertaken by me in partial fulfillment of the Degree of Master of Laws (LL.M.) for the academic year 2020-21, of the National Law School of India University (NLSIU), Bangalore, under the guidance and supervision of Prof. (Dr.) V. Nagaraj.

I further declare that this dissertation is my own original work carried out as a Masters student of Business Laws, except to the extent that assistance from other in the Dissertation's design and presentation are duly acknowledged.

All sources used for the project have been fully and properly cited.

I also declare that this work has not been submitted either in part or in whole for any degree or diploma at any other university.

Sd/-

Date: 31.08.2021

Meenal Garg

Place: Bangalore

LL.M. (Business Laws)

ID No. 940

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CHAPTER 1: INTRODUCTION

Technological revolution is the next big phenomena since the industrial revolution. In this digital era, technological advancements have virtually transformed various industries. Naturally, the legal industry has not been a stranger to such technological revolution. From using online case management systems to holding virtual hearings through video conferencing, the legal landscape has changed drastically from the use of technology and for better.

With the advent of COVID-19, our legal system has been compelled to introduce more and more technological advancements into the dispute resolution game. Indian courts have moved from physical courts to virtual courts and have introduced concepts like e-filing etc.

While public forums have been welcoming technology with open arms, private adjudicative mechanisms like arbitration have had their own set of experiences and challenges in adopting these technological advancements, at least, as a necessity to deal with COVID-related circumstances.

While many are aware of this obvious change in the functioning of Indian arbitrations, many are still oblivious of the extent of technological advancements available for use in arbitration and the consequential challenges arising from such usage. One point to be noted here is that any literature available on the subject tends to compare India with the position prevailing globally without taking into account the unique framework of Indian arbitration landscape. Moreover, a lack of concrete literature and research into this area has prevented Indian arbitration players from benefitting from this ‘opportunity in disguise’. This study aims to make a comprehensive enquiry into the interplay of technology and arbitration in India. This paper takes into account the ground realities of Indian arbitration regime and aims to produce findings relevant for stakeholders to adopt more technological tools as a means to effectively and efficiently conduct arbitration proceedings.

1.1. Statement of Problem

Technology is being used in international arbitration and at least to a limited extent in the Indian arbitration regime. However, with more than one year into the pandemic,

the Indian courts have by and large, not come across any issue arising from the use of technology in arbitration. Moreover any literature available on the subject is either under the garb of online dispute resolution or deals in hypothetical possibilities with regards to use of technology in India. Moreover, there is no available literature which comprehensively deals with the impact of COVID on Indian arbitration.

This lack of literature and jurisprudence on the use of technology in arbitration can be indicative of three possible scenarios. The first one could be that the arbitral tribunals seated in India are not routinely using technology and thus, there are no issues arising from the use of such technology that could possibly reach Indian courts. The second scenario could be that the arbitral tribunals are using technology in a very limited sense and only to the extent that such usage is necessary to deal with the pandemic related exigencies and hence, more sophisticated issues do not arise for adjudication by the Indian courts. Lastly, the technology may be used by the parties privately without disclosing the same to the arbitral tribunal and hence, the non-user party may not be aware of any issues arising out of use of such technology. In any case, the existence of these three scenarios in itself indicates that there is no available knowledge or research pertaining to the use of technology in Indian arbitrations.

1.2. Research Objectives

The research aims to achieve the following objectives:

i. To compare global practices with respect to the use of technology in arbitration with the use of technology in Indian arbitration regime.

ii. To identify the degree of usage and proliferation of technology in India seated arbitrations.

iii. To examine the impact of COVID pandemic on the use of technology in Indian arbitration regime.

iv. To identify the issues and legal impediments in use of technology in Indian arbitration regime.

v. To bridge the gap between theory and practice with respect to use of technology in Indian arbitration.

vi. To suggest solutions for the better use of technology in Indian arbitration.

1.3. Research Questions

i. Whether the use of technology in Indian arbitration is only a response to COVID-19 and the inability to conduct physical hearings?

ii. Whether the use of technology in India seated arbitration in line with global practices?

iii. Whether due process concerns and fair opportunity of being heard pose any hindrance to use of technology in Indian arbitration regime?

iv. Whether the current Indian arbitration landscape is conducive to the use of technology?

1.4. Research Hypothesis

i. Indian arbitration players are using technology in some form or the other for the conduct of arbitration proceedings mostly due to the advent of COVID-19.

ii. Indian arbitration players are not using technology to the extent it is being used in international arbitration.

1.5. Scope and Limitation

The scope of this paper is limited to examining the use of technology in domestic arbitrations in India and international commercial arbitrations seated in India. A major part of the paper is centered on the concept of virtual arbitration as the same is assumed to be the most popular technological tool used by Indian arbitrations. Furthermore, this paper does not make any comment on the utility and problems in the use of technology in arbitration generally.

1.6. Research Methodology

The researcher has broadly adopted a doctrinal and analytical study of the research topic. Since the advent of technology in arbitration is a fairly new topic for the global arbitration community and more so for the Indian arbitral community, much of the data is secondary data except for limited case laws and statutory provisions.

Since confidentiality of arbitration proceedings is a general rule and much jurisprudence regarding the research topic has not reached Indian courts, the researcher has also undertaken few consultations with some practitioners and subject experts regarding their experience with technology in India. It is imperative to mention here that these consultations have not been undertaken to give any empirical finding with respect to the extent of technology proliferation in Indian arbitration but simply to identify the issues and experiences faced by such practitioners. Moreover, the individual viewpoints of the practitioners have not been pinpointed to ensure that their identities remain anonymous.

The first stage of the study was theoretical and involved literature review. The second stage of the study was empirical and involved conducting interviews with few practitioners. The last stage of the study was analytical as it involved organizing and interpretation of data and produce findings with respect to the research questions.

1.7. Chapertization

The research study has been divided into five chapters.

The first chapter introduces the research problem and research gap. It also lays down the research questions, the hypothesis and the research methodology adopted.

The second chapter identifies and summarizes the use of technology in the international arbitration regime. This involves classifying the current technological tools into categories and examining the extent of use of each category of tools. This chapter also summarizes the global trends pertaining to the research topic.

The third chapter deals with the contemporary position of Indian arbitration regime in adoption of technology. This chapter is further divided into two sub-chapters. The first sub-chapter lays down a brief synopsis of the current arbitration landscape in India and the second sub-chapter identifies the current use of technology in Indian arbitration regime.

The fourth chapter outlines the present and future possible challenges with regards to use of technology in arbitration in India. These concerns are discussed under three headings namely, legal concerns, practical concerns and technological concerns.

The fifth chapter embarks on an analytical study of the challenges proposed in the fourth chapter and by examining the data collected in the second and third chapters, offers suggestions for use of technology in India seated arbitrations.

1.8. Review of Literature

David Bateson, *Virtual Arbitration: The Impact of COVID-19*, 9 INDIAN JOURNAL OF ARBITRATION LAW 159 (2020): This paper is a note that comments upon the various concerns surrounding virtual arbitration in light of COVID-19. This paper takes into account the current practices employed by popular arbitral institutions around the globe and what challenges can crop up from use of technology in arbitration either actually or potentially.

2018 International Arbitration Survey: The Evolution of International Arbitration, QUEEN'S MARY UNIVERSITY OF LONDON (2018), http://www.arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey-report.pdf: Globally, this survey is considered the most authoritative empirical source to measure the efficacy and popularity of international arbitration. At the time of literature review, only the 2018 survey results were available in public domain and hence, they were used as a starting point to understand the proliferation of technology in international arbitration. However, during the course of this project the 2021 survey results were published and hence, the comparison between the two editions became a useful starting point for this study.

Centre for Arbitration & Research, *Virtual Arbitration in India: A Practical Guide*, MNLU MUMBAI (2020), https://mnlumumbai.edu.in/pdf/Virtual%20Arbitration%20in%20India,%20CAR%20MNLU%20Mumbai.pdf: This handbook is arguably the most comprehensive source to understand virtual arbitration in India especially in light of COVID-19. This handbook identified potential legal and practical concerns and what could be the possible solutions to facilitate a smooth virtual arbitration in India.

ARBITRATION IN INDIA (Dushyant Dave et al. eds., Kluwer Arbitration, 2021): This is one of the most recent publications concerning arbitration in India. This book features essays from various arbitrators and counsel specializing in Indian arbitration.

Therefore, this book provided useful insights regarding prevailing arbitration practices along with relevant statutory and case law review prevalent in India.

Niti Aayog Expert Committee on ODR, *Designing the Future of Dispute Resolution: The ODR Policy Plan for India*, NITI AAYOG 87 (Oct. 2020), https://niti.gov.in/sites/default/files/2020-10/Draft-ODR-Report-NITI-Aayog-Committee.pdf: This paper is the most recent publication pertaining to online dispute resolution (hereinafter "ODR") in general published by a government think tank. This paper identifies the history and development of ODR in India and its efficacy in India. It also proposes certain solutions and principles for further development in use of ODR in India.

1.9. Mode of Citation

Harvard Bluebook (20th ed.) has been followed as the uniform citation method throughout this study.

CHAPTER 2: USE OF TECHNOLOGY IN INTERNATIONAL ARBITRATION

Even before the advent of COVID-19 pandemic, international arbitration lawyers have been using technological tools for various purposes. Technological tools are used simply because they are more efficient, arguably cost effective, but most importantly these are time saving. Thus, these advantages prompt the usage of technology in international arbitration. Another motivating factor is necessity i.e. the pandemic. Due to restrictions and difficulties in the cross-border movement of stakeholders, technology has also become a necessity in the global arbitral community. This part of the paper would identify the key technologies available today and also identify some global trends with regards to the use of technology to discover the extent of popularity of technology in international arbitration.

2.1. Available Technological Tools

Technology can be used for various purposes at various stages of arbitration. These can be classified into four broad categories, namely, online tools, algorithm based softwares, assistive technological tools and app based tools. It is conceded here that there may be some overlap between some tools which may fit into more than one category depending upon individual viewpoints.

2.1.1 Online Conduct of Arbitration Proceedings

This is the most common use of technology in arbitration these days. It involves conduct of arbitral proceedings over a virtual platform and includes sending of documents via e-mail. Similarly, virtual arbitration hearings have been routinely used for case management conferences and preliminary hearings to set up a schedule and timelines for various stages of arbitration.

To facilitate virtual hearings and online arbitration, many popular arbitral institutions like Singapore International Arbitration Centre (hereinafter 'SIAC') have offered a one stop solution by collaborating with various service providers. Thus, they have introduced a common platform for conduct of proceedings, sharing documents etc.[1]

[1] David Bateson, *Virtual Arbitration: The Impact of COVID-19*, 9 INDIAN JOURNAL OF ARBITRATION LAW 159, 163 (2020).

This includes a mix of services like cloud storage softwares, video conferencing softwares etc.

In fact, as per one recent survey, the administrative support provided by an arbitral institution for the conduct of virtual hearings is the most prominent factor while deciding an arbitral institution.[2] This in itself shows the importance of use of technology in arbitration.

2.1.2. Algorithm based softwares

Algorithm based softwares or Artificial Intelligence (hereinafter 'AI') technologies have been the most remarkable contemporary technological tool in the arbitration landscape. AI tools have opened up new opportunities by providing services like data analytics softwares etc.

Lawyers are already employing AI to conduct low level legal tasks such as reviewing contracts, researching case laws and reducing due diligence tasks by screening evidence and eliminating unnecessary documents.[3] This has led to a significant reduction of time and costs which could be otherwise utilized to conduct other important jobs such as preparation of arguments, pleadings etc. Another example is use of softwares like ClauseBuilder® to draft arbitration clauses.[4]

Similarly, parties are using platforms like Arbitrator Intelligence to get reports on potential arbitrators and thereby appoint most qualified and suitable arbitrators according to their preferences and rankings.[5]

Parties may be skeptical in using AI technological tools at the adjudication stage particularly because arbitration produces a binding award. Given the present level of sophistication of such technologies, it is theoretically possible that an error may find its way into the award which may be irreversible. On the other hand, parties often use

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[2] *2021 International Adaptation Survey: Adapting Arbitration to a Changing World*, WHITE & CASE (last visited June 6, 2021), https://www.whitecase.com/publications/insight/2021-international-arbitration-survey.

[3] Daniele Verza Marcon, Erika Onin Dutra & Lukas da Costa Irion, *Artificial Intelligence in Arbitration: Should We Consider the Possibility of Decision-Rendering AI?*, 36 YOUNG ARBITRATION REVIEW 14, 16 (2020).

[4] *AAA-ICDR Technological Services*, AMERICAN ARBITRATION ASSOCIATION (last visited June 6, 2021), https://www.adr.org/TechnologyServices/aaa-icdr-software-and-online-tools.

[5] *About Us*, ARBITRATOR INTELLIGENCE (last visited June 6, 2021), https://arbitratorintelligence.com/about/.

other technology assisted techniques like e-negotiation and e-mediation during pre-arbitration stages as they do not necessarily lead to a binding outcome. Many such tools like Cybersettle use sophisticated algorithms to provide optimal settlement options.[6] This can certainly enhance the effectiveness of pre-arbitration machinery.

One recent phenomena related to AI is Blockchain arbitration. Blockchain arbitration emerged as a corollary to the increase in the use of Cryptocurrencies and smart-contracts. By its very nature, blockchain arbitration is in the nature of a self-executing contract where various legal obligations of the parties are automatically triggered on fulfillment of certain conditions. The chief advantage of this system is that the award is made in cryptocurrency or any other value on a Blockchain technology. Thus, the award can become self-enforcing after certain conditions are met thereby ameliorating the need for formal recognition and enforcement proceedings. Similarly, simpler steps like invocation of arbitration clause, appointment of arbitrator etc. can be done through Blockchain arbitration. Although, the popularity of this form of arbitration is not fully known yet there are players and arbitrators doing this kind of arbitration.[7] The most common service provider is CodeLegit which has published its own set of rules that may be applied in blockchain arbitration.[8]

Amongst these various tools, a recent survey has revealed that there has been a growth in the use of AI and the most common form of use of AI is technology assisted document review.[9] Nevertheless, AI has attracted significant attention of the global arbitral community with AI tools becoming a sine qua non in big law firms and small and midsized firms have also started adopting these technologies.

2.1.3. Assistive technologies

In the current scenario, cutting edge technologies like speech recognition which assist in translation, interpretations etc. have made human translators, secretaries etc. a thing of the past. Although limited human intervention is required to supervise and ensure

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[6] *Cybersettle*, CYBERSETTLE (last visited June 10, 2021), http://www.cybersettle.com/.
[7] Pietro Ortolani, *The Impact of Blockchain Technologies and smart contracts on dispute resolution; arbitration and court litigation at cross-roads*, 24 UNIFORM LAW REVIEW 430, 434-35 (2019).
[8] *CodeLegit White Paper on Blockchain Arbitration*, GOOGLE DRIVE (last visited June 27, 2021), https://docs.google.com/document/d/1v_AdWbMuc2Ei70ghITC1mYX4_5VQsF_28O4PsLckNM4/edit.
[9] WHITE & CASE, *supra* note 2.

the accuracy of the data, yet it has greatly improved the efficiency of arbitration proceedings.

Another point to note here is that unlike courtroom litigation, arbitration allows for procedural flexibility in making submissions and presenting arguments. Therefore, arbitration lawyers also employ basic tools like PowerPoint presentations to make their submissions which may not be permitted in a conventional courtroom.

2.1.4. App Based Technologies

With the emergence of smart phones and android operating systems, portable phones have become fully functional computers available on the go. Today, all of our daily activities are done through apps. Thus, arbitration has not fallen behind and it too has adapted itself to suit the busy life of a lawyer. However, at the outset, it is necessary to mention here that apps have not been very popular in the international arbitral community when compared with other technological tools.

Many of the technological tools discussed in the previous sub-sections are also available in form of an app. For example, simpler technologies like Google translate and PowerPoint presentations are available in the form of mobile apps.

Some arbitral institutions also use apps to create a user friendly platform to access their website and avail some of their services. The most common example of this is the ICC DRS app which allows the user to seemingly access International Chamber of Commerce (hereinafter 'ICC') resources and also arrange for bookings, meetings etc.[10] Similarly, the SIAC had launched an app in 2011 to access its website.[11] However, this app is not in vogue these days.

[10] ICC, *4 Reasons to Download the New ICC DRS App*, ICC (Sept. 18, 2019), https://iccwbo.org/media-wall/news-speeches/4-reasons-to-download-the-new-icc-drs-app/.
[11] John Savage, *SIAC Arbitration: Some Strong 2010 Numbers & an App*, KLUWER ARBITRATION BLOG (Feb. 24, 2011), http://arbitrationblog.kluwerarbitration.com/2011/02/24/siac-arbitration-some-strong-2010-numbers-and-an-app/.

Lastly, law firms, private organizations and other entities have launched their own apps providing access to a host of arbitration resources which can be accessed on the go.[12]

2.2. Global Key Developments

Given the abundance of available technological tools, the next question that arises is that how popular are these tools in the international arbitration landscape. Globally, there have been some key developments with respect to use of technology in arbitration. Of course some of these are in the aftermath of the pandemic, nevertheless, all these trends point to an increasing trend of using technology in arbitration.

2.2.1. **Initiatives by Arbitral Institutions**: In response to the pandemic, many arbitral institutions issued guidance notes for the use of video conferencing which are compatible with their institutional rules. For instance, the Hong Kong International Arbitration Centre[13] and the Chartered Institute of Arbitrators[14] issued guidance notes to deal with virtual hearings. These guidance notes are in the nature of clarifications expressly stating that virtual conferencing is compatible with the existing institutional rules. On the other hand, arbitral institutions like the London Court of International Arbitration[15] and ICC[16] have released new version of their rules that expressly incorporates the role of virtual hearings, electronic signatures etc. Apart from this, almost all arbitral institutions are encouraging dialogue on the subject through webinars, conferences etc. to increase awareness and encourage use of technology in arbitration.

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[12] *See e.g. Covington's Arbitration App Lays Key Resources at Practitioners' Fingertips*, COVINGTON (July 23, 2015), https://www.cov.com/en/news-and-insights/news/2015/07/covingtons-arbitration-app-lays-key-resources-at-practitioners-fingertips.

[13] *HKIAC Guidelines for Virtual Hearings*, HONG KONG INTERNATIONAL ARBITRATION CENTRE (May 14, 2020), https://www.hkiac.org/sites/default/files/ck_filebrowser/HKIAC%20Guidelines%20for%20Virtual%20Hearings_3.pdf.

[14] *Guidance Note on Remote Dispute Resolution Proceedings*, CHARTERED INSTITUTE OF ARBITRATORS (2020), https://www.ciarb.org/media/8967/remote-hearings-guidance-note.pdf.

[15] *LCIA Arbitration Rules, 2020*, LONDON COURT OF INTERNATIONAL ARBITRATION (Oct. 1, 2020), https://www.lcia.org/Dispute_Resolution_Services/lcia-arbitration-rules-2020.aspx.

[16] *ICC Arbitration Rules, 2021*, ICC (Jan. 1, 2021), https://iccwbo.org/dispute-resolution-services/arbitration/rules-of-arbitration/.

2.2.2. **Initiatives by States**: Mere amendment of institutional arbitral rules is not enough to legitimize the use of technology in arbitration. Since arbitration is a seat-centric concept, the use of technology cannot be permitted unless and until the seat (or the enforcing) state recognizes such arbitration proceedings.

Historically, the New York Convention does not expressly provide for the use of technology except for the formation of arbitration agreement through the exchange of telegrams.[17] Some countries like Hong Kong have extended this definition to include arbitration agreements formed by exchange of e-mails or other modes of data interchange.[18] However, in the past few years, some countries like U.A.E.[19], Netherlands[20], Jordan[21] etc. have expressly provided for use of technology in their laws by providing for the use of video conferencing, electronically signed awards etc.

Apart from the legislative efforts, judiciary around the globe has also been pro-active in encouraging the use of technology in arbitration. For instance, the American[22], Austrian[23] and Egyptian[24] courts have held that there is no indefeasible right to a physical hearing and virtual hearings do not raise any due process concerns or do not result in unequal treatment of parties. It is imperative to mention here that courts have not expressly ruled with regards to any other issue arising out of the use of technology in arbitration. However, the courts have also encouraged the use of technology in ordinary court proceedings. For instance, a U.K. Court in *Pyrrho Investments Ltd. v. MWB Property Ltd*.,[25] permitted the use of predictive coding technology for filtering electronic documents subject to a common protocol agreed upon by the parties. Since arbitration by its very nature is a consensual process, it is

[17] Convention on the Recognition & Enforcement of Foreign Arbitral Awards, art. III(2), June 10, 1958, 330 U.N.T.S. 3.
[18] Arbitration Ordinance, (2011) Cap. 609, § 19(4) (H.K.).
[19] Federal Law No. 6 of 2018 on Arbitration, Art. 28(2)(b) (U.A.E).
[20] Art. 4:1072b Rv (Neth.).
[21] Arbitration Law, No. 31 of 2001, Art. 17(b) & 21 (Jordan).
[22] Carlos Legaspy v. Financial Industry Regulatory Authority, No. 1:20-cv-4700 (N.D. Ill., 2020).
[23] Oberster Gerichtshof [OGH] [Supreme Court] July 23, 2020, 18 ONc 3/20s, https://www.ris.bka.gv.at/Dokumente/Justiz/JJT_20200723_OGH0002_018ONC00003_20S0000_000/JJT_20200723_OGH0002_018ONC00003_20S0000_000.pdf (Austria).
[24] Mah. kamat al-Naqd. [Court of Cassation], case no. 18309, session of 27 Oct. 2020 of 17 Feb. 1972, year 1442 (Egypt).
[25] [2016] E.W.H.C. 256 (Ch.) (U.K.).

reasonable to imply that the courts would have a pro-technology attitude towards the use of technology in arbitration if consensual and adequate operating procedures are adopted.

Recently, the Sao Paulo District Court has stayed enforcement of an arbitral award on the ground that the arbitration proceedings were tainted due to cyber hacking.[26]

2.2.3. **Research suggesting increase in the use of technology**: The 2018 Queen's Mary survey had indicated that 60% of the answering respondents had "always" or "frequently" used videoconferencing room technologies in their arbitration.[27] Moreover, the 2021 version of the survey has indicated an increase in the use of AI technologies in arbitration.[28] Interestingly, this survey has also indicated that the degree of use of video conferencing and hearing rooms has more or less remained the same implying that the use of such technologies has already reached the saturation point and has already become the industry norm in the international arbitration community.

Recognizing these developments, some global bodies have also published reports, guidelines, protocols etc. dealing with various aspects of technology in arbitration. For instance, the Seoul protocol on video conferencing[29] has become the talk of the town especially when the subject is the use of video conferencing in arbitration. Similarly, the IBA protocol on cybersecurity in arbitration[30] deals with important data privacy and technological issues which may arise from use of technology in arbitration.

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[26] Cosmo Sanderson, *Brazilian Pulp Award Leads to Cyber Hack Challenge*, GLOBAL ARBITRATION REVIEW (Apr. 12, 2021), https://globalarbitrationreview.com/cybersecurity/brazilian-pulp-award-leads-cyber-hack-challenge.

[27] *2018 International Arbitration Survey: The Evolution of International Arbitration*, QUEEN'S MARY UNIVERSITY OF LONDON 32 (2018), http://www.arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey-report.pdf.

[28] WHITE & CASE, *supra* note 2.

[29] *Seoul Protocol on Video Conference in International Arbitration is Released*, KCAB INTERNATIONAL (Mar. 18, 2020), http://www.kcabinternational.or.kr/user/Board/comm_notice_view.do?BBS_NO=548&BD_NO=169&CURRENT_MENU_CODE=MENU0025&TOP_MENU_CODE=MENU0024.

[30] *ICCA-NYC Bar –CPR Protocol on Cybersecurity in International Arbitration*, ICCA (2019), https://cdn.arbitration-icca.org/s3fs-public/document/media_document/icca-nyc_bar-cpr_cybersecurity_protocol_for_international_arbitration_-_print_version.pdf.

Lastly, the U.K. jurisdiction taskforce has recently published dispute resolution rules for resolution of blockchain disputes in which Blockchain arbitration has been proposed to be a substitute for the current escrow mechanism.[31]

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Thus, it can be seen that technology has penetrated almost all stages of arbitration including pre-arbitration and post-arbitration stages. Although, the pace of adoption of various technological tools may vary but it is amply clear that international arbitral community is rapidly adopting technology in arbitration. There is a lot of academic discussion going on with regards to the pros and cons of technology in arbitration which this paper has not touched upon. However, the development from all fronts in itself indicates how important technology has become in international arbitration.

[31] UK Jurisdiction Taskforce, *Digital Dispute Resolution Rules*, LAWTECH UK (2021), https://35z8e83m1ih83drye280o9d1-wpengine.netdna-ssl.com/wp-content/uploads/2021/04/Lawtech_DDRR_Final.pdf.

CHAPTER 3: CONTEMPORARY USE OF TECHNOLOGY IN INDIAN ARBITRATION REGIME

3.1 A Bird's Eye View of Indian Arbitration Landscape and Technology Law

The Indian arbitration framework is governed by the Arbitration and Conciliation Act, 1996 (hereinafter 'the Act').[32] The Act is broadly divided into four broad parts. Part I governs the arbitrations seated in India irrespective of the nationality of the parties. Part II deals with the recognition and enforcement of foreign arbitration awards. Part III deals with conciliation and Part IV deals with miscellaneous provisions.

India continues to prefer using ad hoc arbitration rather than institutional arbitration.[33] Furthermore, most arbitrators in India are retired judges of courts who continue to conduct arbitrations in the same rigid manner and procedure as a court. Therefore, frequent adjournments, insistence on procedural law etc. are a common sight in Indian arbitrations.

As far as technology law is concerned, it is governed by the Information and Technology Act, 2000 (hereinafter 'the IT Act').[34] The preamble to the IT Act states that it is an act enacted to "… provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication…." A cursory reading of the IT Act provides legal recognition to electronic records wherever such records are required to be in writing[35] and digital signatures[36]. Thus, any interaction of technology with arbitration in India would require an examination of the IT Act.

This part of the chapter will identify the current proliferation of technology in India.

3.2 Adoption of Technologies

3.2.1 **Historical Recognition**: The Supreme Court had recognized the role of e-mail at various stages of arbitration almost two decades before the pandemic. In the

[32] Arbitration & Conciliation Act, 1996, No. 26, Acts of Parliament, 1996 (India).
[33] *Report of the High Level Committee to Review the Institutionalisation of Arbitration Mechanism in India*, DEPARTMENT OF LEGAL AFFAIRS 14-15 (July 30, 2017), https://legalaffairs.gov.in/sites/default/files/Report-HLC.pdf.
[34] Information & Technology Act, 2000, No. 21, Acts of Parliament, 2000 (India).
[35] *Id.* at § 4.
[36] *Id.* at § 5.

case of *Grid Corporation of India Ltd v. AES Corporation*[37], the court held that while appointing the third arbitrator, it is not necessary that the two party appointed arbitrators physically meet or give their decision in writing. It was held that it is sufficient if the third arbitrator is communicated of his appointment by any mode including e-mail.[38] Similarly, the Court has also upheld the validity of arbitration agreements formed through an exchange of e-mails without actually signing a physical document.[39] In 2015, Sec. 7(4)(b) of the Act was amended to include arbitration agreement formed through "electronic means". The 246th law commission noted that this amendment was proposed to bring the Act in conformity with the UNCITRAL model law.[40]

3.2.2 **Shift to Virtual Hearings**: Social distancing has already compelled arbitral tribunals and arbitral institutions across the globe to switch over to tech savvy arbitral proceedings which are primarily conducted through the use of video conferencing technologies. In the Indian context, there is no statutory embargo regarding the conduct of arbitral proceedings via video conferencing or other means of technology. Sec. 19(2) of the Act allows the parties to agree upon the procedure of conduct of arbitral proceedings. Similarly, Sec. 19(3) of the Act enables the arbitral tribunal to conduct the proceedings in any manner it deems appropriate in case there is no agreement between the parties regarding the conduct of proceedings. Recently, the Delhi High Court has also affirmed this position and has held that no party has an indefeasible right to a physical hearing or a virtual hearing and the discretion as to the manner of hearing rests within the sole discretion of the arbitrator.[41]

Apart from this, new domestic players like CORD[42] and SAMA[43] have also introduced specific platforms with facilities like breakout rooms etc, to facilitate shift of physical arbitration to virtual hearings.

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[37] (2002) 7 S.C.C. 736.
[38] *Id.* at ¶ 23.
[39] Trimex International v. Vedanta Aluminium Ltd., 2010(1) S.C.A.L.E. 574; Shakti Bhog v. Kola Shipping, (2009) 2 S.C.C. 134.
[40] *246th Report of Law Commission on Amendments to the Arbitration & Conciliation Act, 1996*, LAW COMMISSION OF INDIA 42 (Aug. 2014), https://lawcommissionofindia.nic.in/reports/Report246.pdf.
[41] Result Services Pvt. Ltd. v. Signify Innovations India Pvt. Ltd. (O.M.P. (I) (Comm.) 23 of 2021, decided on May 17, 2021, Del. H.C.).
[42] *About Us*, CORD (last visited June 6, 2021), https://resolveoncord.com/about-us/.

One practitioner had noted that though virtual arbitrations have found their way into the Indian arbitration landscape, arbitral tribunals are always ready to switch back to physical hearings. This is because in international arbitration, parties from various jurisdictions are involved; therefore, it is feasible to employ video conferencing to save costs and time. On the other hand, in a domestic arbitration, parties are usually operating around the seat of arbitration and hence, it is easier to shift to physical arbitration.

3.2.3 **Ad Hoc Protocols for the conduct of arbitration**: Most practitioners noted that due to the absence of any guiding institutional rules, most arbitrators do not agree on any ex-ante protocol for the conduct of arbitration proceedings which certainly poses as a hindrance for the smooth conduct of virtual arbitration proceedings. However, some exceptions to this general position came to light during consultations with practitioners. The most common exception was the degree of experience and willingness of the counsels of both the parties. One practitioner pointed out that as a general practice; counsel for one party proposes a protocol which may be followed throughout the arbitration. Subsequently, the counsel for the other party may suggest certain changes to the proposed protocol and finally, a mutually consented protocol would be agreed upon by the parties. The sophistication of such protocols depends upon the skill of the practitioners. Nevertheless, these protocols usually cover the choice of video conferencing platform, submission of pleadings etc. Another exception that was disclosed is that arbitrators with heavy case loads have drafted their own protocols addressing major issues which they have faced in their arbitrations and these protocols are implemented as procedural guidelines. Lastly, it was pointed out by one practitioner that in a case, the arbitrator had implemented a protocol based on SIAC guidelines.

3.2.4 **Marginal shift towards Documents only arbitration**: Sec. 29B of the Act enables the parties to opt for fast track arbitration where the parties can submit all their pleadings along with relevant documents and the award is made on the basis of these documents and pleadings without any opportunity of oral

[43] *About Us*, SAMA (last visited June 6, 2021), https://www.sama.live/about-us.php.

hearing. The principle advantage of fast track arbitration is that the award has to be made within 6 months from the date on which the arbitral tribunal enters into reference thereby resulting in considerable time and cost savings. In spite of this advantage, it has been seen that parties rarely opt for fast track arbitration in India.[44]

In this respect it is noteworthy to mention here that even prior to the outburst of the COVID-19 pandemic, National Internet Exchange of India or NIXI was the only body in India which resolved all disputes through documents only arbitration. All disputes pertaining to '.in' domain names are mostly resolved through email where all submissions and documents are submitted via e-mail and even the award is pronounced online often without any opportunity of oral or virtual hearing.[45] Such a mechanism has ensured minimal disruption in resolution of domain name disputes in COVID times. Another practitioner, who also acts an arbitrator, noted that in less complex and low value disputes, parties may agree to documents only arbitration and employ case management softwares etc. where all the documents are uploaded and the final award is pronounced online.

3.2.5 **Rare Use of other technologies**: During consultations with practitioners, it was found that most arbitral tribunals have switched to virtual hearings as a means of necessity. Moreover, a practitioner revealed that use of mobile applications is not very prevalent except for organizing the calendar, calculating billable hours etc. However, it was also found that apart from video conferencing, other technologies like transcription services, predictive coding etc. were not being used even if the practitioner/arbitrator is routinely using such technologies in international arbitration. Some practitioners also revealed that other technologies usually involved the use of live transcription services and that too in very exceptional circumstances provided they had enough budget and consent of all parties to use these technologies. Nevertheless, the practitioners affirmed the fact that the use of such

[44] Alipak Banerjee, Sahil Kanuga & Payal Chatterjee, *Fighting an Arbitration in Times of Distress: An Indian Perspective*, BAR & BENCH (Apr. 22, 2020), https://www.barandbench.com/columns/fighting-an-arbitration-in-times-of-distress-an-indian-perspective.
[45] *INDRP Rules of Procedure*, IN REGISTRY (June 28, 2005), https://www.registry.in/indrp-rules-of-procedure.

technologies leads to cost savings. One practitioner opined that it could lead to cost savings of upto 8 times than the cost that would have been incurred on manpower in doing the same task. Furthermore, these technologies were found to be fairly efficient with minimal errors.

3.2.6 **Limited or no role of Court Annexed Arbitral Institutions**: In case of ad hoc arbitration, in case parties are not able to agree upon the appointment of the arbitrator, recourse must be made under Sec. 11(6) of the Act for appointment of the arbitrator. As per this section, in case of domestic arbitration, such an application is made to the High Court and in case of international commercial arbitration seated in India; the application is made to the Supreme Court. Once, the arbitrator is appointed, such courts usually direct their affiliated centers to conduct the proceedings (at the request or consent of both the parties). For instance, in Delhi, the proceedings are administered by the Delhi International Arbitration Centre (hereinafter 'DIAC'), in Punjab & Haryana, the proceedings are administered by the Chandigarh Arbitration Centre, in Orissa, the proceedings are administered by the Orissa Arbitration Centre, in Karnataka, the proceedings are administered by the Karnataka arbitration centre and so on and so forth.

In the pre-COVID era, these institutions mostly provided a physical venue for hearing and a commonplace to store documents and performed some ancillary functions. However, consultations with various practitioners has revealed that after COVID, whilst most privately managed arbitral institutions have efficiently adapted their working; the court annexed arbitral institutions have become redundant in as much as they have not provided any support for virtual hearing, guidance note etc. At the same time it was also noted that since majority of Indian arbitration caseload is handled by court annexed arbitral institutions, initiatives by private arbitral institutions have made little difference in the conduct of arbitral proceedings. Moreover, court-annexed arbitral institutions continue to be relevant today only when there is a need for physical hearing for examination of witnesses, submission of documents etc. Amongst these observations, DIAC has emerged to be an exception as practitioners stated that DIAC has been pro-active in arranging the logistics of

a virtual hearing. Nevertheless, in comparison to court proceedings and private arbitral institutions, practitioners expressed their general disappointment as these institutions have not even introduced the concept of e-filing.

A related point which needs to be mentioned here is that the rules for these institutions are also drafted by a committee of their supervisory high court. In this respect, no endeavors have been made to update these rules to provide for the use of technology. For instance, the Gujarat High Court had recently published new rules for the Arbitration Centre (Domestic and International), High Court of Gujarat.[46] In spite of experiencing virtual arbitrations, these rules provide for a physical set up of arbitration by using phrases like "oral hearing"[47] instead of "hearing", submission of "copies"[48] of pleadings instead of submission of pleadings etc. This indicates ignorance on part of state authorities in the use of technology in Indian arbitration and that the same is not even a priority.

3.2.7 **Effect of Electronically Executed Arbitration Clauses on related Court Proceedings**: As already noted, arbitration agreement through exchange of e-mails is recognized under the Act. However, it is difficult to imagine a scenario where the parties separately send e-mails for the purpose of entering into an arbitration agreement. Nowadays, most commercial contracts contain arbitration clauses. An exchange of contract document containing the arbitration clause and acceptance through e-mail would be covered by this clause.

With the advent of COVID-19 pandemic, more and more contracts and documents are being signed, executed and published online. This raises a question as to what happens if the contract is issued on a public platform in the form of a public tender and the lowest bidder electronically signs the same to create a binding contract that contains an arbitration clause. Although arbitration is not concerned about the concept of territorial jurisdiction as the arbitrator derives his jurisdiction from the arbitration agreement, the Act

[46] Arbitration Centre (Domestic & International), High Court of Gujarat Rules, 2021, Gujarat Government Gazette, pt. IV-C (Feb. 15, 2021).
[47] *Id.* at Rule 34.1
[48] *Id.* at Rules 24.3 & 25.5.

provides for various situations where court intervention is required.[49] These state courts operate on the concept of territorial jurisdiction and hence, it is imperative to examine the effect of technology on these proceedings.

The online execution of a contract can have an impact on the court proceedings under the Act which is slowly being explored by the courts. For instance, in a case, the Calcutta High Court declined to exercise its jurisdiction under Sec. 9 of the Act because under Sec. 13(3) of the IT Act, an electronically issued document is deemed to be issued from the place where such person ordinarily carries its business.[50] In this case, since, the place of business fell outside the original side jurisdiction of the Calcutta High Court, the court dismissed the application for lack of jurisdiction.

Similarly, the Punjab and Haryana High Court has held that in the absence of seat clause, the court exercising jurisdiction over the place of business arrived by applying Sec. 13 of the IT Act would have jurisdiction to entertain an application under Sec. 11(6) of the Act.[51]

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The aforementioned discussion and research has shown that any adoption of technology in Indian arbitration has been a consequence of the pandemic. However, this transition has been slow as the purpose of such adoption is to meet the urgent exigencies. Use of technologies apart from video conferencing has found its way into Indian arbitrations but only in exceptional circumstances. The positive take away that emerges from the research is that even though Indian arbitral community has had limited exposures to technology, users of such technology seem to recognize the benefits arising from the use of such technology and are ready to endorse more usage of technology in Indian arbitrations.

[49] *See e.g.* §§ 9, 11, Arbitration and Conciliation Act, 1996, No. 26, Acts of Parliament, 1996 (India).
[50] Golden Edge Engineering Pvt. Ltd. v. B.H.E.L., A.I.R. 2020 Cal. 217.
[51] Kundan Rice Mills v. National Commodities Derivative Exchange Ltd., 2011 S.C.C. Online P&H 4058.

CHAPTER 4: CHALLENGES

In the previous chapter, it has been identified and affirmed that India is not regularly using technology in arbitration when compared with international standards. This is because of various problems and concerns associated with the use of technology. Whilst some of these concerns may have been noticed in the previous chapter, this chapter will identify the existing and potential challenges in the employment of technology in Indian arbitration regime.

4.1 Legal Concerns

It is pertinent to mention here that till date Indian courts have not frequently confronted any legal issue arising solely because of use of technology or virtual hearing in arbitration. On the other hand, it has been seen that courts around the globe have increasingly been facing such concerns and therefore, it would be useful to identify and comment upon possible legal objections that may arise from use of technology in India seated arbitrations.

4.1.1 Unequal Treatment of Parties: Some concerns have been raised with regards to the impact of technology on the equal treatment of parties.[52] Sec. 18 of the Act states that parties to the dispute have to be treated equally. A white paper had noted that this issue may arise due to the use of different audio and video equipments by the parties or where one party may be present in person and one party may be present virtually.[53] During consultation with practitioners, it was found that such an issue is usually not raised in Indian arbitrations. Furthermore, such issue has not cropped up before the Indian courts but this lack of clarity certainly poses as a hindrance to the use of technology.

4.1.2 Fair & Reasonable Opportunity to present one's case: It has been seen that conducting virtual hearings is the only viable option left before the arbitral tribunals to proceed with the arbitration during the pandemic. However, it is

[52] Sonal Kumar Singh, Anish Jaipuriar & Sayantika Ganguly, *Artificial Intelligence in Arbitration: Revolutionary or Impractical*, MONDAQ (Jan. 19, 2021), https://www.mondaq.com/india/arbitration-dispute-resolution/1027248/artificial-intelligence-in-arbitration-revolutionary-or-impractical.

[53] Centre for Arbitration & Research, *Virtual Arbitration in India: A Practical Guide*, MNLU MUMBAI 35 (2020), https://mnlumumbai.edu.in/pdf/Virtual%20Arbitration%20in%20India,%20CAR%20MNLU%20Mumbai.pdf.

possible that virtual hearings may pose public policy concerns during enforcement of award made consequent to such proceedings. To illustrate, suppose an arbitral tribunal fixes a hearing via video conferencing which is opposed by one party on the ground of lack of digital copy of relevant documents. However, the tribunal rejects such opposition and proceeds with virtual arbitral proceedings. Now, the objecting party may argue before the court that it was denied full and equal opportunity to present its case and therefore, an award passed consequent to a virtual hearing is liable to be set aside. Conversely, suppose one party requests for virtual hearing and the arbitral tribunal insists on a physical hearing, the same may result in undue delay and misconduct on the part of the arbitral tribunal to conduct the arbitration proceedings. Apart from these difficulties, virtual hearings may also pose 'due process' concerns which may be raised before the enforcing court under the Act.

In India, a domestic arbitral award can be set aside only if a specific ground is made out under Sec. 34 of the Act. In this respect, denial of equal opportunity of being heard is an explicit and a valid ground to set aside an arbitral award.[54] Similarly, unexplained and inordinate delay in making of award is also a ground for setting aside an award.[55] These two grounds create a paradoxical situation. On one hand, undue insistence on virtual hearing or physical hearing during the COVID-19 could prove to be problematic as it may amount to denial of equal opportunity of being heard. On the other hand, indefinitely delaying the proceedings solely on the ground of COVID-19 may constitute as inordinate delay.

4.1.3 Lack of Clarity on Confidentiality: Confidentiality is a hallmark benefit of arbitration. However, Indian law did not expressly provide for confidentiality of arbitral proceedings. It was only in 2019 that Sec. 42A was introduced in the Act which provided for confidentiality of arbitral proceedings.[56] However, the wordings of Sec. 42A have raised concerns with respect to the effectiveness of this provision. It has been pointed out that only arbitrators,

[54] § 34(2)(b)(ii), Arbitration and Conciliation Act, 1996, No. 26, Acts of Parliament, 1996 (India).
[55] K. Dhanasekar v. Union of India, LNINDORD 2019 Mad. 11949 (India), ¶ 10.
[56] § 9, Arbitration & Conciliation (Amendment) Act, 2019, No. 33, Acts of Parliament, 2019, (India).

arbitral institutions and the parties are bound by this provision and not tribunal secretaries, witnesses etc.[57] Another issue related to confidentiality is its effect on non-signatories. Non-signatories are not "parties"[58] to the arbitration agreement but they are still impleaded as parties to arbitration in certain situations. It has been opined by commentators that the wording of Sec. 42A would not cover such non-signatories.[59] In response, this author is not in complete agreement with this comment. This is because there is a whole line of jurisprudence specifying when non-signatories may be impleaded as "parties" in arbitration.[60] There is no reason to speculate that the courts would adopt a strict definition of parties under Sec. 42A when the court has adopted a liberal definition of the term "parties" while ordering impleadment of a non-signatory. In other words, though it is admitted that impleadment of non-signatory is possible only in exceptional circumstances, whenever such an impleadment is allowed, the courts would adopt the same liberal definition of "parties" in extending the scope of Sec. 42A to non-signatories.

It is noteworthy to mention here that the interpretation of this provision has not come up before the courts and hence, it is difficult to predict the impact of this provision on the enforceability of an award. Nevertheless, breach of confidentiality can have practical consequences which may deter some parties from using third party softwares and technologies in their arbitrations.

4.1.4 Issues pertaining to Blockchain Arbitration: It has been noted that by its very nature, an award rendered through blockchain arbitration may be unenforceable in India because of its nature.[61] This is because since a blockchain award is distributed on a blockchain ledger, it raises questions of

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[57] Centre for Arbitration & Research, *supra* note 53 at 36-37.

[58] § 2(1)(h), Arbitration and Conciliation Act, 1996, No. 26, Acts of Parliament, 1996 (India) (Indian law defines party to mean a party to an arbitration agreement).

[59] Tariq Khan, *The Who, Why & When of Confidentiality in Arbitration Proceedings*, SCC ONLINE BLOG (Jan. 21, 2021), https://www.scconline.com/blog/?p=242532.

[60] Soorjya Ganguly & Somdutta Bhattacharyya, *Binding Non-Signatories to an Arbitration- Charting the Shifting Paradigms*, ARGUS PARTNERS (Nov. 22, 2019), https://www.argus-p.com/papers-publications/thought-paper/binding-non-signatories-to-an-arbitration-charting-the-shifting-paradigms/ (summarizing the Indian law on the subject).

[61] Ritika Bansal, *Enforceability of Awards from Blockchain Arbitrations in India*, KLUWER ARBITRATION BLOG (Aug. 21, 2019), http://arbitrationblog.kluwerarbitration.com/2019/08/21/enforceability-of-awards-from-blockchain-arbitrations-in-india/.

place of rendering of award, stamping of award, original copy of the award etc. Even assuming that such awards are self-executing and the need for instituting formal recognition and enforcement proceedings does not arise, the losing party may use these ambiguities to delay enforcement of such awards by securing interim orders in its favour.

4.2 Practical Concerns

As important as legal concerns appear to be, nevertheless, they tend to disappear when more and more technology is actually being used. Therefore, it becomes imperative to identify the ground realities which have hindered the adoption of technology in the contemporary Indian arbitration landscape.

4.2.1 Reluctance from Arbitral Community: During consultations with various practitioners and experts, it was found that a lack of awareness regarding the use of technology amongst the Indian arbitral community is the primary hindrance to the use of technology in India. This is because most senior practitioners, judges and arbitrators have spent their careers in a physical arbitration environment and hence, there is a passive and involuntary reluctance from the arbitral community to employ technology in arbitration. Moreover, such arbitrators also insist on submission of physical copies of all records and physical hearing as far as possible. Another observation which is noteworthy to mention here is that as per one practitioner, the general environment and the history of conduct of arbitration proceedings also poses hindrance for the adoption of use of technology. For instance, live transcription of arbitration hearings is not a routine practice in Indian arbitration. Therefore, it is difficult to imagine the employment of technology oriented transcription services in Indian arbitration even if they are available at cheaper rates. In other words, a technology oriented transcription service would not be seen as a cheaper alternative to human based transcription service, rather it would be viewed as an additional cost burden.

4.2.2 Untrained Arbitrators: As a corollary to the previous challenge, one reason that may explain the reluctance of Indian arbitrators is unfamiliarity with prevailing technologies. In the earlier part of this paper, various technological

tools and their uses in arbitration were identified. It is only natural to assume, that many readers would be coming across these tools for the first time and even those who are familiar with such technologies would testify to the fact that the use of such technologies requires a certain degree of training. As already noted, the parties themselves arrange for virtual hearing support. This sometimes leads to logistic problems. For instance, it was pointed out by a practitioner that due to the ad hoc nature of technological arrangements, there is no prior testing of equipment and software prior to actual hearing to ensure its functionality. This sometimes leads to interruptions and problems during actual hearings can lead to more time-consuming proceedings rather than time-saving proceedings. Another instance disclosed by another practitioner is the lack of awareness regarding features like break-out rooms. Therefore, the unfamiliar arbitrators usually deliberate their findings on the same platform or at a physical venue. This may lead to ego clashes, disruptions, health risks (due to COVID) etc.

In the ordinary court system, the Supreme Court of India has taken upon itself to champion Indian dispute resolution system into a tech-savvy era. In these COVID times, the Apex Court has been pro-active in training judges, advocates and staff in familiarizing them with technological tools.[62] On the other hand, the Indian arbitration regime is a decentralized regime largely working on ad hoc arbitrations. This further adds to the problem as to who would take the initiative for training Indian arbitrators in the use of technology. Hence, Indian arbitrators, lawyers and parties are oblivious and untrained in use of such technologies.

4.2.3 **High Cost**: Costs associated with the use of technology is a problem which has continuously plagued arbitration. Even the most sophisticated and repeat players are consistently worried about the costs incurred due to the use of technological tools in arbitration. Therefore, it is only natural that Indian parties belonging to a developing country would be more worried about the costs. Consultations with practitioners revealed that costs are not an issue with

[62] Sparsh Upadhyay, *Over 1.6 Lakh Lawyers, Judges, & Court Staffers Trained Online by Supreme Court E-Committee during Pandemic Period*, LIVELAW (Mar. 21, 2021, 8:03 PM), https://www.livelaw.in/news-updates/1.6-lakh-lawyers-judges-and-court-staffers-trained-online-by-supreme-court-e-committee-during-pandemic-171502.

respect to most India seated arbitrations. This is because Indian arbitrations only use video conferencing softwares which are either reasonably priced or may even use free softwares like Google meet etc.

Although with increased usage, pricing of videoconferencing platforms have come down, the costs of sophisticated AI tools continues to deter parties from using AI softwares.[63] Many practitioners noted that they used tools like transcription services etc. only when they have enough budget for the same. Another practitioner who frequently uses such technologies in international arbitration disclosed that in a domestic arbitration, his proposal to use a particular tool was opposed by the Respondent Public Sector Undertaking because of the high costs involved. Similarly, a leading law firm practitioner had also disclosed that his firm had taken an initiative to introduce more technology in Indian arbitration. However, this initiative could not take flight as parties viewed the costs associated with such technologies as additional and unnecessary burden.

4.2.4 Preference of Ad Hoc Arbitration over Institutional Arbitration: India continues to prefer ad hoc arbitration over institutional arbitration. While popular Indian arbitral institutions like MCIA etc. have encouraged the use of technology, such benefits have not reached down to most domestic arbitrations as the same are oblivious of institutional arbitration. Of course an ad hoc arbitration may get converted into an institutional arbitration when it is referred to a court annexed arbitration center; nevertheless, some practitioners have opined that there could be more use of technology if such an initiative is taken by arbitral institutions.

4.2.5 Lack of E-Stamping Facilities: Under Indian law, an award is to be sufficiently stamped before it can be enforced as a decree of the court. At the outset, it is clarified here that stamping is important for the enforcement of an award and not for making of an award. This is because Sec. 31 of the Act provides conditions for making an award. These conditions do not enumerate stamping of the award. The Delhi High Court has explained this distinction in the following words:

[63] White & Case, *supra* note 2.

> … [T]he Arbitration Act does not… create a legal obligation on the parties in arbitration to pay stamp duty on an award. It is only when they begin taking steps to enforce the award that the parties are obligated to ensure that the instrument has been duly stamped…. Thus, the Arbitration Act envisages that the payment of requisite stamp duty on an award shall only be required when a party is seeking to get the same enforced under Section 36.[64]

In this respect, it has been noticed that India is still at nascent stages of introducing the concept of e-stamping.[65] However, until such time, the parties are compelled to get their awards physically stamped. A caveat that needs to be mentioned here is that the concept of stamping is not strictly related to an arbitration proceeding. Moreover, practitioners do not recognize physical stamping as a major hindrance to the use of technology in Indian arbitration as they view it as an everyday affair. Thus, in all fairness, it may be noted that the concept of e-stamping can lead to a complete virtualization of arbitration process but it is not a hindrance per se.

4.3 Technological Concerns

It has been said that "You know what I like about pen and paper? Nobody can hack into … [it]."[66] A shift from pen and paper arbitration regime to a tech-savvy regime is bound to bring its own unique set of challenges which need to be identified before technological tools are adopted.

4.3.1 Concerns Regarding Witness Coaching: A common issue that emerged during consultations with practitioners is that of witness coaching. To elaborate, in a virtual cross-examination, a witness is cross-examined in a 2D virtual environment instead of 3D physical environment. Thus, there is a real possibility that a witness may open a chat service or a document on his screen during the cross-examination or there may be other person present in the room feeding answers to the witness. Another common issue is that a witness may fake internet disruption and rejoin after some time after being coached by his lawyer. In fact, it was found that this is such a prominent and pressing concern that even the most tech savvy arbitrators prefer to conduct witness

[64] Mohini Electricals Ltd v. Delhi Jal Board, 2021 S.C.C. Online Del. 3506.
[65] Martin Hunter, Simon Weber & Sadyant Sasiprabhu, *Arbitral Awards in Indian Arbitration, in* ARBITRATION IN INDIA 188 (Dushyant Dave et al. eds., 2021).
[66] KINGSMAN: THE SECRET SERVICE (20th Century Fox 2014).

examination in a physical set up. Moreover, the arbitrators may sometime propose a hybrid model of cross-examination where one person representing the cross-examining party would be present in the room to ensure that witness testimony is not coached. The obvious disadvantage of these solutions is that in a lockdown like situation, the arbitration proceedings are bound to be adjourned resulting in delay.

Some practitioners also disclosed that some arbitrators order for make shift technological solutions to counter this problem. For instance, one practitioner pointed out that during cross-examination, the witness would be ordered to log in from one additional device which would be placed behind the head of the witness providing additional vision. This mitigates the risk of witness coaching to some extent. On the other hand, other practitioner noted that they had used a 360° degree camera to counter this problem.

Thus, witness coaching is a big hindrance to the adoption of technology and complete virtualization of the arbitral process.

4.3.2 Cybersecurity Concerns: With arbitration being a highly confidential affair, the need to ensure integrity of data on third party platforms assumes high significance. In the past, websites of notable arbitral institutions like Permanent Court of Arbitration have been hacked which has led to leakage of highly sensitive data.[67] More use of technology would naturally lead to a higher risk of hacking and other cybersecurity concerns. In this respect, India has a poor reputation with respect to cybersecurity with data hacks being a common news affair. For instance, in 2018 the Supreme Court's website was hacked.[68] Thus, such concerns hinder the adoption of technology in Indian arbitration.

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[67] Luke Eric Peterson, *Permanent Court of Arbitration Website Goes Offline, with Cyber-security Firm Contending that Security Flaw was Exploited in Concert with China-Philippines Arbitration*, INVESTMENT ARBITRATION REPORTER (July 23, 2015), https://www.iareporter.com/articles/permanent-court-of-arbitration-goes-offline-with-cyber-security-firm-contending-that-security-flaw-was-exploited-in-lead-up-to-china-philippines-arbitration/.

[68] Ashok Bagriya & Bhadra Sinha, *Supreme Court Website Down, Reportedly Hacked, after Loya Case Verdict*, HINDUSTAN TIMES (Apr. 19, 2018), https://www.hindustantimes.com/india-news/supreme-court-website-inaccessible-reportedly-hacked/story-dFJFx9r34UKDKyNj9JAeLK.html.

4.3.3 Data Protection Concerns: With the emergence of global information economy, personal data is the new gold. Behavioral tagging, data profiling etc. are some of the reasons which has led to the development of data protection law. While most of the literature concerning data protection and arbitration is aimed at ensuring compliance with existing laws, failure to establish a data protection protocol can have adverse consequences. Since arbitration involves disclosure of highly sensitive and confidential information, an unrestricted transfer of the same without the consent of the parties can be disastrous. For instance, counsel and arbitrators may share personal data pertaining to a particular entity with a funder[69]. Such funder may use such data to determine the probability of that entity in succeeding in arbitration. Thus, such data processing can make or break a deal for the entity to secure a funding for its claim. A party that often loses may want to secure its data transfer so that its funding prospects are not diminished.

On the date of writing this paper, India still does not a have a data protection law. It is noteworthy to mention here that the Data Protection Bill, 2019[70] has been proposed to deal with the issue but the same is yet to see the light of the day. Moreover, there have been some concerns that whether the said bill would effectively cover or would be even applicable on arbitrations in India.[71]

In India, increasing attention is being paid to data protection especially since the Supreme Court recognized right to privacy as a fundamental right.[72] Now, in a scenario where arbitration players in India are already oblivious and skeptical of technological tools, a shabby data protection framework is undoubtedly a huge hindrance to adoption of technology in Indian arbitration.

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[69] Third Party funder refers to financing of a claim by an unrelated third party in exchange for a share from the proceeds of the award. For further discussion *see also*, Meenal Garg, *Introducing Third-Party Funding in Indian Arbitration: A Tussle between Conflicting Public Policies*, 6(2) NLUJ LAW REVIEW 71 (2020).

[70] *The Personal Data Protection Bill, 2019*, PRS INDIA (Dec. 11, 2019), https://prsindia.org/files/bills_acts/bills_parliament/Personal%20Data%20Protection%20Bill,%202019.pdf.

[71] Ananya Bajpai & Shambhavi Kala, *Data Protection, Cybersecurity & International Arbitration: Can they Reconcile?*, 8(2) INDIAN JOURNAL OF ARBITRATION LAW 1, 15 (2019); Tarun Krishnakumar, *Data Protection in India & Arbitration: Key Questions Ahead*, KLUWER ARBITRATION BLOG (Apr. 16, 2019) http://arbitrationblog.kluwerarbitration.com/2019/04/16/data-protection-in-india-and-arbitration-key-questions-ahead/.

[72] Justice K.S. Puttaswamy v. Union of India, (2017) 10 S.C.C. 1.

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There are major challenges to the use of technology in Indian arbitration. Some of these challenges are in consonance with the challenges faced by the international arbitral community when it had started adopting technological tools. Similarly, some of these challenges like high costs are also being faced by other jurisdictions. However, a majority of these challenges are unique to Indian arbitration regime because of its arbitration landscape and history.

The legal concerns appear to be ambiguous provisions in search of more interpretation. Barring witness coaching, technological concerns also do not seem to be very pressing concerns. However, practical concerns like reluctance from the arbitral community and untrained users appear to be the most prominent concerns hindering the adoption of use of technology in Indian arbitration. Although, parties, counsels and arbitrators may have devised temporary solutions to overcome these challenges, yet in the long run, these challenges are sure to become a bigger problem than they seem today. Practitioners have opined that a positive change is possible provided such challenges are properly addressed.

CHAPTER 5: CONCLUSIONS AND SUGGESTIONS

5.1 Suggestions

The research has revealed that there is a long road ahead before India can match international best practices regarding the use of technology. To cover this distance, this chapter offers suggestions which have been classified into three categories namely, immediate, short term and long term suggestions. Broadly, an immediate suggestion implies an ad hoc solution which needs to be implemented as soon as possible. A short term suggestion implies a suggestion which needs to be implemented within a span of one year. Finally, a long term solution is in the nature of continuous practice which needs to be adopted by various stakeholders to promote and sustain the use of technology in Indian arbitration.

A caveat that needs to be mentioned here is that some of the suggestions may be achievable prior to the time period classification mentioned here. However, the purpose of the present classification is to suggest an ideal time period for achievement of such solutions.

5.1.1 Immediate Suggestions

5.1.1.1 ***Procedural Guidelines by the Supreme Court:*** In the past, the Supreme Court has issued guidelines for the examination of witnesses through video conferencing.[73]In the pandemic, the court has also issued guidelines for functioning of courts through video conferencing.[74] Therefore, due to a lack of any other central body, it is necessary that such guidelines are issued by the Hon'ble Supreme Court for functioning of arbitral tribunals through video conferencing. These guidelines should account for witness tampering, cyber security, data privacy etc. Moreover, these guidelines should duly take into account the prerogative of the arbitrator to formulate his own procedure for conduct of arbitration proceedings.

Although there are some guidance notes available in the public domain, any guidelines issued by the Apex Court would obviously come with a sense of

[73] State of Maharashtra v. Praful B. Desai, (2003) 4 S.C.C. 601.
[74] Re: Guidelines for Court Functioning through Video Conferencing during COVID-19 Pandemic, (2020) 6 S.C.C. 686.

legitimacy and there is a higher probability that these guidelines would be accepted by ad hoc arbitral tribunals. Moreover, such guidelines would also give implied ex-ante clarity on the interpretation of certain provisions which are still in the gray area. In fact this is the reason why this paper has not proposed any model guidelines as the same would be another fish in the sea of non-binding guidelines, which may or may not be followed by the arbitral tribunals.

5.1.1.2 ***Addressing due process concerns***: It is necessary that the arbitrators consider various factors while allowing or rejecting a request for virtual hearing. These factors may include the stage of proceedings, reason for objection to virtual hearing, past conduct of parties in delaying the proceedings etc. Such a reasoned order would help in avoiding a challenge to the award under Sec. 34 of the Act or a procedural order, as the case may be.

5.1.1.3 Amendment of Arbitration Clauses: It has been proposed to include virtual arbitration in arbitration clauses to overcome some of the potential legislative ambiguities.[75] In conjunction with the same, this author opines that even the pre-pandemic drafted arbitration clauses should be amended to incorporate the experiences learnt from virtual arbitration.

5.1.1.4 ***Incentives from arbitral institutions***: Globally, some arbitral institutions have announced reduction in administration fee if the parties agree to use technology in their arbitrations.[76] Similarly, another incentive is the use of in-house case management portal of the arbitral institution on a trial basis for no extra charge. Some Indian service providers disclosed that they had entered into agreements with some arbitral institutions for the use of technology. Therefore, in light of the same, the burden to popularize such arrangements falls on the Indian arbitral institutions who can offer incentives to promote the use of such technologies.

[75] Tariq Khan & Pradhnya Deshmukh, *Scope of Online Arbitration & its Future in India*, USLLS ADR BLOG (May 1, 2021), https://usllsadrblog.com/scope-of-online-arbitration/.
[76] Allison Goh, *Digital Readiness Index for Arbitration Institutions: Challenges & Implications for Dispute Resolution under the Belt & Road Initiative*, 38 JOURNAL OF INTERNATIONAL ARBITRATION 253, 258 (2021).

5.1.1.5 ***Incorporating NDAs and data protection clauses with service providers:*** The previous section of the paper has shown that there is some uncertainty regarding confidentiality and data privacy obligations of technological service providers. Therefore, until requisite clarity is achieved, it would be advisable if parties include non-disclosure agreements and confidentiality clauses in their agreements with the technological service providers. Similarly, they may also prefer to put clauses regarding data privacy and data storage.

5.1.2 Short Term Solutions

5.1.2.1 ***More Indian service providers of technology and funders***: It would be a long time till technology in arbitration becomes an industry standard and therefore, the high costs associated with it would be a problem for some time. Therefore, to ensure that India capitalizes on the benefit of technological advancements a quicker solution is required. Consultations with various practitioners and service providers have shown that Indian service providers of technological tools are cheaper than the global service providers. Hence, entry of more and more Indian service providers into the market could address the high cost problem to some extent. Similarly, entry of funders who understand the benefits of technology and the Indian arbitration landscape can help nullify the apprehension of high costs by funding genuine claims.

5.1.2.2 ***Enactment of ACI as a training agency***: Many practitioners noted that lack of use of technology can be partly attributed to lack of any nodal agency which could take initiative in this respect. In this respect, it is noteworthy to mention here that the 2019 Amendment Act had proposed introduction of Part IA into the Act which provided for creation of the Arbitration Council of India (hereinafter 'ACI'). One of the functions of ACI was to train arbitrators and grade arbitral institutions to maintain appropriate standards.[77] Interestingly, the provisions pertaining to ACI have not been enacted till date. Therefore, it is imperative that ACI is established as only ACI can function as a nodal agency to promote technology in Indian arbitration. In other words, what the Supreme Court has done for the courts, ACI can do for arbitration. ACI can formulate a roadmap for training of arbitrators in the use of technology. Furthermore,

[77] §10, Arbitration & Conciliation (Amendment) Act, 2019, No. 33, Acts of Parliament, 2019, (India).

while grading of arbitral institutions, ACI may also consider the recently proposed Digital Readiness Index to motivate arbitral institutions to inculcate more and more technological tools in their proceedings.[78]

In the past, commentators have also argued for entrusting this function to some nodal agency.[79] However, the problem with such solutions is that the proposed nodal agencies lack statutory backing. Thus, any solution proposed on the bed rock of such institutions is flimsy and voluntary. Even if for the sake of argument such a solution is accepted, it would still involve a long legislative process in converting such agencies into statutory bodies. On the other hand, ACI can be established more quickly which could evolve hybrid policies having flavour of mandatory statutory compliances and incentive based voluntary initiatives.

5.1.2.3 ***Legislative Amendments to recognize technological tools in arbitration***: The research has shown that there is nothing in the Act prohibiting use of technology in arbitral proceedings. However, it can also been seen that due to a lack of precedent and legislative guidance, much of the contemporary discussion is centered on predicting the positive and negative consequences of use of technology in Indian arbitration. It is noteworthy to mention here that with the exception of Sec. 7 of the Act, there is no other mention of technology in the Act. In contrast to this, many recently enacted foreign legislations expressly provide for the use of technology at various stages of arbitration like witness examination, virtual hearing, award etc. Surprisingly, the Act has been amended 3 times namely in 2015, 2019 and 2021 but no endeavor has been made to inculcate express provisions with regards to use of technology in Indian arbitration. Furthermore, in case ad hoc arbitration continues to remain the norm, institutional guidance notes and ACI won't be able to make a major impact in use of technology in ad hoc arbitration. Therefore, it would be advisable if the legislature amends the Act to bring it in line with international technology practices.

[78] *See generally* Goh, *supra* note 76.
[79] *See e.g.* Nihal Raj, *New Technologies in Arbitration: Ensuring Independence & Impartiality*, ACADEMIKE (Dec. 10, 2020), https://www.lawctopus.com/academike/new-technologies-in-arbitration-ensuring-independence-and-impartiality/.

5.1.2.4 ***Enactment of Online Dispute Resolution specific Provisions/Policies:*** Hong Kong has introduced an online dispute resolution scheme for certain types of disputes provided that certain pre-conditions are satisfied.[80] Although various sectors and ministries may choose to adopt this route depending upon the nature of the sector, it would be beneficial if a specific provision is introduced in the Act. The Act already provides for a summary fast-track arbitration procedure which may be opted by the parties.[81] On similar lines, the legislature may enact a similar provision for online arbitration which the parties may choose. Niti Aayog, in its recent report had also noted that the Act should incorporate online dispute resolution specific provisions and supplementary rules.[82] The legislature may experiment this suggestion with small scale disputes. In India, the Micro, Small and Medium Enterprises Development Act, 2006[83] (hereinafter 'MSMED Act') was enacted that introduced the concept of statutory arbitration for resolution of small scale disputes.[84] The legislature can amend the MSMED Act to create a concept of mandatory statutory virtual arbitration. This suggestion is also in consonance with the fact that presently, there is comparatively a greater proliferation of technology in low value arbitrations. This amendment will not only provide legitimacy to online arbitration but also promote use of technology in arbitration.

5.1.2.5 ***Reimaging the role of Court Annexed arbitral institutions:*** Court annexed arbitral institutions cannot thrive by holding on to a brick and mortar model of arbitration. Sooner or later, technology is bound to revamp the Indian arbitration landscape. Private arbitral institutions have already started gearing up for this revolution. It is imperative that the infrastructure of court annexed arbitral institutions is ramped up to provide technological services. Also, the administrative staff of such institutions needs to be trained adequately to bring

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[80] *COVID-19 Online Dispute Resolution Scheme Launched Today*, GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION (June 29, 2020), https://www.info.gov.hk/gia/general/202006/29/P2020062900651.htm?fontSize=1.
[81] § 29B, Arbitration and Conciliation Act, 1996, No. 26, Acts of Parliament, 1996 (India).
[82] Niti Aayog Expert Committee on ODR, *Designing the Future of Dispute Resolution: The ODR Policy Plan for India*, NITI AAYOG 87 (Oct. 2020), https://niti.gov.in/sites/default/files/2020-10/Draft-ODR-Report-NITI-Aayog-Committee.pdf.
[83] Micro, Small & Medium Enterprises Development Act, 2006, No. 27, Acts of Parliament, 2006 (India).
[84] *Id.* at § 18(3).

these institutions at par with private arbitral institutions. The relevance of this solution assumes importance as one practitioner had noted that if such lethargic attitude continues to persist, government authorities may consider shutting down such institutions. Therefore, it is suggested that court-annexed arbitral institutions embrace this inevitable change before it becomes a pre-requisite for their survival.

5.1.2.6 ***Enacting the Data Protection Law:*** It is necessary that India enacts its own data protection law. Many foreign arbitral institutions may be already adhering to global data privacy standards because of mandatory compliance with foreign data protection laws. However, enacting this law would also mandate the indigenous service providers to pay attention to the data privacy concerns.

5.1.3 Long Term Solutions

5.1.3.1 ***More use of technology***: A simple solution to the high costs problem would be to let the market forces take on its full play. In other words, increased usage of technology would lead to more competition and consequent reduction in cost as and when such technology becomes the industry standard.

5.1.3.2 ***Co-ordination between Courts and Arbitral Tribunals:*** Co-ordination between arbitration and judiciary can be in two ways. Firstly, ACI can co-ordinate with Supreme Court and gain from judicial experience in introduction of technology in court proceedings. The Apex Court has revolutionized the Indian court system by adopting e-filing and virtual courts. Furthermore, the courts have also started adopting artificial intelligence to assist judges in decision making.[85] ACI can use these lessons to formulate better and more suitable guidelines for Indian arbitration. Secondly, assuming that use of technology increases, the courts need to ensure that their rulings are pro-arbitration and pro-technology. In this respect, Sec. 5 of the Act provides for

[85] Amit Anand Choudhary, *Use of Artificial Intelligence will Transform the Judiciary but Technology will not be Allowed to Decide Cases: CJI*, TIMES OF INDIA (Apr. 21, 2021), https://timesofindia.indiatimes.com/india/use-of-artificial-intelligence-will-transform-judiciary-but-technology-will-not-be-allowed-to-decide-cases-cji/articleshow/82183403.cms.

minimal judicial intervention. Moreover, the courts have circumscribed their powers to set aside an award under Sec. 34 of the Act to a great extent.[86]

5.1.3.3 ***Continued innovation by arbitral institutions:*** The research has shown that India based private arbitral institutions are in a better position to embrace technology in its functioning when compared to court annexed arbitral institutions. However, this development is limited to the establishment of the bare minimum video conferencing structure. On the other hand, global arbitral institutions have established their own technological platforms for the conduct of arbitral proceedings like NetCase created by ICC,[87] SCC Platform by the Stockholm Chamber of Commerce[88] etc.

Innovation is important as parties will move to those platforms where innovative digital tools are available.[89] Thus, it is not enough that arbitral institutions stay one step behind global arbitral institutions. To increase the use of technology in Indian arbitration, it is imperative that arbitral institutions and other service providers keep innovating new digital tools. In this respect, Niti Aayog has identified a set of principles which such service providers may take into account while innovating.[90]

It is noteworthy to mention here that one practitioner had opined that the burden of popularizing the use of technology cannot be solely shifted to arbitral institutions as in any case; the parties always have the residual option to themselves agree on a service provider of their choice. In this respect, this paper does not view arbitral institutions as the sole bearer of the responsibility of popularizing use of technology. No doubt this change can be brought only by the collective efforts of all stakeholders. Nevertheless, this paper views arbitral institutions as a key stakeholder and expects the same standards of functioning that have been set by global arbitral institutions.

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[86] Ssangyong Engineering & Construction Co. Ltd. v. National Highways Authority of India, 2019 S.C.C. Online S.C. 677.

[87] *ICC NetCase: A Secure Environment for ICC Arbitration*, ICC (last visited June 10, 2021), https://iccwbo.org/content/uploads/sites/3/2016/11/NetCase-Pamphlet-English.pdf.

[88] *SCC Platform- Simplifying Secure Communication from Request to Award*, STOCKHOLM CHAMBER OF COMMERCE (Sept. 2019), https://sccinstitute.com/case-management/.

[89] Colin Hutton, Rob Wilson & Laura West, *Innovation & Technology in International Arbitration: What lies ahead?*, LEXOLOGY (Nov. 26, 2019), https://www.lexology.com/library/detail.aspx?g=7d3d0aa5-dcbf-407c-8190-9ad68e06f9b3.

[90] Niti Aayog Expert Committee on ODR, *supra* note 82 at 92-97.

5.1.3.4 ***Developing Infrastructure:*** Use of technology essentially depends upon access to high speed and uninterrupted internet connection, computers, laptops, smart phones etc. The government should ensure that these necessities are available to everyone and there is no unwarranted disruption.

5.2 Conclusion

This paper has drawn out the existing use of technology in Indian arbitration landscape. The paper has affirmed the fact that contemporary Indian arbitral community uses technology as a response to the pandemic and does not stand at par with international arbitration in terms of technological proliferation and comfort whilst using technology. The paper has then enumerated hindrances in the use of such technology and finally, proposed a comprehensive plan involving all stakeholders to promote the use of technology in Indian arbitration.

On one end, international arbitral community has been rampantly adopting technology at all fronts. Current innovations and technological best practices are the result of international discussion and initiative. On the other hand, India has been playing catch up and it has barely scratched the potential benefits that can be derived from the use of technology in arbitration. Lack of use of technology in arbitration is the reason why the legal jurisprudence pertaining to the same is almost non-existent in India.

The Law Commission of India in 2014 had suggested use of tele-conferencing and video-conferencing in arbitration.[91] After 6 years, Indian arbitrators had to resort to this alternative albeit because of COVID. Practitioners have noted that although the use of technology was due to COVID, parties have recognized the advantages of the same especially in terms of cost and time saving. With respect to other technologies, India should not wait for another pandemic. It is amply clear that if used properly and rationally, technology can change the face of Indian arbitration. Moreover, reluctance to adopt further technological advancements would only pose as a hindrance in achieving the dream of making India a global arbitration hub.

Furthermore, COVID-19 cannot be seen as an end but only as the beginning of use of technology in India seated arbitrations. In other words, the end of the pandemic

[91] Law Commission of India, *supra* note 40 at 13.

(whenever the day comes) should not be viewed as an *au revoir* to technology in Indian arbitration. This is because in any case, the Indian arbitration community would have to match its standards to international arbitration. This does not mean that technology should be incorporated in similar fashion as it has been adopted by international community. Keeping true to its objective, this paper has advocated for a methodology to incorporate technology in arbitration keeping in mind the unique arbitral landscape of India. Nevertheless, continued hostility towards use of technology in arbitration would only lower the chances of India being selected as the seat of arbitration.

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