

Achieving expeditious Justice: Harnessing Technology for Cost Effective International Commercial Arbitral Proceedings

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**Achieving expeditious Justice: Harnessing Technology for Cost Effective
International Commercial Arbitral Proceedings**

Kariuki Muigua* and Jeffah Ombati**

Abstract

Expeditious access to justice in commercial and business transactions is a fundamental human right whose inviolability cannot be compromised. Alternative Dispute Resolution (ADR) and especially arbitration, is considered as one of the most viable means of access to justice due to some intrinsic advantages over litigation. Notably, it bridges the gaps and challenges that arise from transacting across borders as well as managing the disputes that come with such transactions. The developments in technology have changed the way in which people communicate and interact with one another. This has inevitably impacted the ways in which disputes are also managed and resolved. Various technological platforms such as email, video/audio conferencing, online platforms, electronic signatures and e-filing have already manoeuvred their way into the realm of arbitration. Technology has both positive and negative consequences that have the potential to impact and disrupt arbitral proceedings in a myriad of ways. This necessitates a discussion on achieving expeditious justice through harnessing technology for cost effective arbitral proceedings.

1.0 Introduction

Globally, international commercial arbitration has been regarded as the legal bridge that transcends the differences in legal systems to enable the business and commercial people to manage their disputes without having to deal with the potential challenges faced by these legal systems.¹

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¹ See McConnaughay, P.J., 'The Role of Arbitration in Economic Development and the Creation of Transnational Legal Principles' *PKU Transnational Law Review*, Volume 1, Issue 1, pp. 9-31, pp. 11-12; See also Muigua, K., 'Building Legal Bridges: Fostering Eastern Africa Integration through Commercial Arbitration,' Chartered Institute of Arbitrators (Kenya), *Alternative Dispute Resolution*, Vol. 3, No 1, (2015), pp.45-87.

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Scholars have observed that ‘the high degree of uncertainty and risks associated with litigating international business disputes in national courts have been contributing factors in the prominence of arbitration as the preferred method of resolving international business and commercial disputes’.² The challenges necessitating the use of international commercial arbitration in international business and commercial transactions disputes are summarised as follows:

International business and commercial transactions are affected by significant levels of risk and uncertainty. The more complex and lengthy the contractual relationship, the higher the likelihood of disputes arising between contracting parties.³ International business transactions also have increased uncertainty and risk due to financial and monetary factors (e.g. the cost and availability of capital and currency exchange fluctuations), political and legal factors (e.g. the possibility of war, revolution, violent civil unrest, nationalisation, inconvertibility of local currency and precipitous government acts or omissions), language differences (e.g. linguistic barriers created by parties having to communicate in a foreign language and use of interpreters), communication and logistical factors (e.g. difficulties created by geographical distances and limitations of technology), and cross-cultural barriers and difficulties posed by the interaction of parties with different cultural backgrounds.litigating disputes arising in international business and commercial transactions in national courts pose various problems and creates legal complexities given the potential involvement of several different legal systems. It may be difficult for the parties to find the most appropriate forum to litigate the dispute.⁴

International commercial arbitration is associated with a number of advantages and the same is also considered as an important method of dealing with disputes in private cross-border or transnational economic transactions.⁵ These advantages can be summarised as follows:

² Lynch, K. and Lynch, K.L., *The forces of economic globalization: Challenges to the regime of international commercial arbitration*. Kluwer Law International, 2003, p.7. Available at https://books.google.co.ke/books?hl=en&lr=&id=PZKHwaTNz1oC&oi=fnd&pg=PA1&ots=zm686eQWLI&sig=Cb8bgLUuo_clkGZmo9F-34bUpX0&redir_esc=y#v=onepage&q&f=true [Accessed on 3/12/2018].

³ Ibid, p.4.

⁴ Ibid, p.4.

⁵ Ibid, p.1.

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The major advantages are a relatively well-defined legal structure for international enforcement of arbitration agreements and arbitral awards, considerable insulation from the application of national public policies extrinsic to the intentions of the parties, procedural flexibility, free choice of decision-makers, and confidentiality. *Disadvantages include additional costs and less effective tools of discovery.*⁶

Generally, arbitration, is considered potentially cost effective.⁷ However, it must be clarified that this depends on a number of factors including the willingness of the parties involved to move the process forward. Even where parties are willing to save time and costs, some resultant costs may be inevitable. For instance, in most cases, especially those involving parties from different jurisdictions, the parties will have chosen a jurisdiction different from their own, that is the juridical seat and the venue, as a measure to avoid bias, and this usually means inflated costs. With time, commercial arbitration has also become very expensive in terms of filing fees and the legal fees. This usually results in very high final costs of the arbitral proceedings. It is therefore important that measures aimed at avoiding unnecessary costs and cutting down those that can, should be explored by the parties at every stage of the proceedings.

It is against this background that this paper seeks to explore the opportunities that information technology presents to parties in international commercial arbitration, as a means of keeping the costs of these processes at a minimum or eliminating them all together, where necessary.

Arbitration is one of the ADR Mechanisms in common use in the modern world.⁸ It has widely been used in settling disputes both at the international and the national levels.⁹ For instance, arbitration has been applied in the settlement of several disputes in

⁶ Nelson, S.C., "Planning for Resolution of Disputes in International Technology Transactions," *Boston College International and Comparative Law Review* 7, no. 2 (1984): 269 at p.279.

⁷ Shah, A., "Using ADR to Resolve Online Disputes." *Richmond Journal of Law & Technology* 10, no. 3 (2004): 25.

⁸ Muigua K., *Settling Disputes Through Arbitration in Kenya*, 3rd Edn, Glenwood Publishers Ltd, Feb., 2017, pp. 34.

⁹ Ibid.

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numerous areas of law including commercial, family and environmental.¹⁰ Disputants often resort to settle their disputes through arbitration due to its several advantages which include: party autonomy to determine the law and seat of arbitration, flexibility; cost effectiveness and confidentiality.¹¹

2.0 International Arbitration and Expeditious Access to Justice

The positive attributes of arbitration enable disputants to get expeditious settlement of disputes. The top benefits of arbitration are specialized expertise, time savings and privacy.¹² Arbitration of international disputes provides awards that are enforceable through worldwide treaty conventions.¹³ Besides, arbitration offers a private decision-making process that is favoured particularly where confidential business information or trade secrets are at issue.¹⁴ Although cost, time and expertise are concerns in both litigation and arbitration, the opportunity for decision-making by specialized practitioners and time savings are viewed as significant advantages of arbitration compared to litigation. Privacy, streamlined processes and flexibility are also ranked high as benefits provided by arbitration.¹⁵ It is advisable that parties choose arbitrators with the right technology expertise to manage the arbitral proceedings to limit costs and take advantage of the benefits and flexibility offered by arbitration.¹⁶ This in turn enhances provision of expeditious justice through efficient arbitral proceedings. The

¹⁰ Muigua K., *Settling Disputes Through Arbitration in Kenya*, op. cit.

¹¹ Muigua, K., *Resolving Conflicts Through Mediation in Kenya*, 2nd Edn Glenwood Publishing Nairobi, 2017, p. 12.

¹² Gary Benton, Chris Compton & Les Schiefelbein, "Cost is the Top Tech Litigation Problem, Survey Shows Arbitration Strongly Preferred for Specialized Expertise." Available at <https://svamc.org/wp-content/uploads/SVAMC-2017-Survey-Report.pdf> [Accessed November 28, 2018].

¹³ Ibid; See also Martinez, R., "Recognition and Enforcement of International Arbitral Awards Under the United Nations Convention of 1958: The "Refusal" Provisions," *The International Lawyer* (1990): 487-518.

¹⁴ Ibid; Blackman, S.H. and McNeill, R.M., "Alternative Dispute Resolution in Commercial Intellectual Property Disputes," *American University Law Review* 47, no. 6 (1998): 5; Gu, W., "Confidentiality Revisited: Blessing Or Curse In International," *UCLAL REV* 949 (2000): 1085.

¹⁵ Ibid, "Cost is the Top Tech Litigation Problem, Survey Shows Arbitration Strongly Preferred for Specialized Expertise," op cit; Gu, W., "Confidentiality Revisited: Blessing Or Curse In International," *UCLAL REV* 949 (2000): 1085.

¹⁶ Ibid; Sussman, E. and Wilkinson, J., "Benefits of arbitration for commercial disputes." Retrieved June 20 (2012): 2014.

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challenges facing litigation as a means of access to justice in international business and commercial transactions can be summarised as follows:

Two reasons traditionally given for the emergence of international commercial arbitration as a private dispute resolution system are: (a) the privacy of the arbitration process; and (b) that it allows each party to avoid being forced to submit to the foreign courts of the other. ..there is concern over potential disadvantage due to the perceived national bias by the courts and lawyers, lack of familiarity with the jurisdictions language and procedures, and layers of appellate review causing further delay and uncertainty in the ultimate resolution of the dispute....the perceived neutrality of the arbitration forum as distinct from the influences of a state's national courts is one of the primary motivations for recourse to arbitration.¹⁷

Notably, one of the challenges associated with the use of litigation in both domestic and transnational disputes is the escalation of costs due to the long periods of time usually taken to deal with these disputes. Such costs range from court fees, legal fees and other miscellaneous costs that may ultimately hinder access to justice for the parties involved.¹⁸ However, the issue of escalating costs may not be unique to litigation as the costs involved in international arbitration have also continually increased to sometimes prohibitive amounts.¹⁹ This threatens one of the bestselling points of using international arbitration-cost effectiveness. This may be attributed to the different jurisdictional issues and the need for a neutral venue and juridical seat as well as the growing complexity of international arbitration proceedings. This is well captured by the International Chamber of Commerce (ICC) in the following words:

.....if the overall cost of the arbitral proceedings is to be minimized, special emphasis needs to be placed on steps aimed at reducing the costs connected with the parties' presentation of their cases. Such costs are often caused by unnecessarily long and complicated proceedings with unfocused requests for disclosure of documents and unnecessary witness and expert evidence. Costs can

¹⁷ Lynch, K. and Lynch, K.L., *The forces of economic globalization: Challenges to the regime of international commercial arbitration*, op. cit., pp.11-12; See also Leahy, E.R. and Bianchi, C.J., "The Changing Face of International Arbitration," *Journal of International Arbitration*, vol.17, no. 4 (2000): 19-61.

¹⁸ See generally, Gotanda, J.Y., "Awarding Costs and Attorneys' Fees in International Commercial Arbitrations," *Michigan Journal of International Law* 21, no. 1 (1999): 1-50.

¹⁹ Halket, T.D., "The Use of Technology in Arbitration: Ensuring the Future Is Available to Both Parties," *John's L. Rev.* 81 (2007): 269, at p.269.

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also be unnecessarily increased when counsel from different legal backgrounds use procedures familiar to them in a manner that leads to needless duplication. The increasing and, on occasion, unnecessary complication of the proceedings seems to be the main explanation for the long duration and high cost of many international arbitrations. The longer the proceedings, the more expensive they will be.²⁰

The next section explores the various ways in which information technology can be harnessed to enable the parties save on the total costs of the arbitral proceedings.

3.0 Harnessing Technology for Cost Effective Arbitral Proceedings

One of the factors that have contributed to an increasingly globalised economy has been the innovations in information technology and computer networks.²¹ Closely associated with this is the realisation that, 'in the context of the Internet, where parties located in different corners of the world can contract with each other at the click of a mouse, litigation of online disputes is often inconvenient, impractical, time-consuming and prohibitive.²²

The developments in technology have changed the way in which people communicate and interact with one another.²³ This has inevitably impacted the ways in which disputes are managed and resolved.²⁴ Various technological platforms such as email, video/audio conferencing, online platforms, electronic signatures and e-filing have already manoeuvred their way into the realm of arbitration.²⁵ The greatest concern is

²⁰ International Chamber of Commerce, *Techniques for Controlling Time and Costs in Arbitration: Report from the ICC Commission on Arbitration*, ICC Publication 843, 2007, p.1. Available at <http://gipi.org/wp-content/uploads/icc-controlling-time-and-cost.pdf>

²¹ Lynch, K. and Lynch, K.L., *The forces of economic globalization: Challenges to the regime of international commercial arbitration*. Kluwer Law International, 2003, op. cit., p. 1.

²² Shah, A., "Using ADR to Resolve Online Disputes," *Richmond Journal of Law & Technology* 10, no. 3 (2004): 25 at p.25.

²³ Blake S., Heather JB, & Stuart S., *A Practical Approach to Alternative Dispute Resolution*. 2nd Edn Oxford University Press, 2016, pp. 67.

²⁴ Ibid.

²⁵ Soares, Francisco Uribarri, "New Technologies and Arbitration," *Indian J. Arb. L.* 7 (2018): 102-103; See also International Chamber of Commerce, *Techniques for Controlling Time and Costs in Arbitration: Report from the ICC Commission on Arbitration*, ICC Publication 843, 2007; Negi, C., "Concept of Video Conferencing in ADR: An Overview--Access to Justice." (2015). Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2662344 [Accessed on 10/12/2018]; Ekwenze, S.A., "Video Conferencing in Arbitration: An Overview." (2012). Available at <https://coou.edu.ng/resources/video-conferencing->

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whether these technological platforms have attained fully mainstream application in arbitration, and their impact in the conduct of arbitral proceedings.²⁶

Technology has both positive and negative consequences that have the potential to impact and disrupt arbitral proceedings in a myriad of ways.²⁷ This necessitates a discussion on the present technologies being used in arbitration and the potential future technologies whose usage may have an impact in arbitration.²⁸ Thus, this paper entails comprehensive discussion on achieving expeditious justice through harnessing technology for cost effective arbitral proceedings. It mainly ventures into the advantages and risks associated with the use of technology in arbitral proceedings. Consequently, it uses this analysis to make a case for the enhanced regulatory framework and information security for effective usage of technology in arbitral proceedings.

Digital technologies play a fundamental and an increasingly central role in arbitration.²⁹ Technology is particularly used in e-briefs to purposefully eliminate the need for hard-copy submissions, presentation technology and technology consultants for managing documents during the hearing, and in persuasive presentations.³⁰ The following are some examples of the usage of technology in arbitration:

[in-arbitration.pdf](#) [Accessed on 10/12/2018]; "Use of Telephonic and Video Conferencing Technology in Remote Court Appearances," *A Supplemental Report to a State Justice Institute (SJI) Funded Project*, June 20, 2016. Available at <https://www.ncsc.org/~media/Microsites/Files/Civil%20Justice/UseTelephonicVideoTechnology.ashx> [Accessed on 10/12/2018].

²⁶ Ibid.

²⁷ Ibid; See also Kaufmann-Kohler, G. and Schultz, T., "The use of Information Technology in arbitration," *Jusletter* 5. Dezember (2005).

²⁸ Panjwani, P., The Present and Near Future of New Technologies in Arbitration: If not US, Who? If not Now, When? April 27, 2018, Available at <http://arbitrationblog.kluwerarbitration.com/2018/04/27/the-present-and-near-future-of-new-technologies-in-arbitration-if-not-us-who-if-not-now-when/> [Accessed November 28, 2018].

²⁹ International Chamber of Commerce, Three Takeaways on how Digital Technologies are Transforming Arbitration, (Paris August 30, 2017) Available at, <https://iccwbo.org/media-wall/news-speeches/three-takeaways-digital-technologies-transforming-arbitration/>

³⁰ Whitley Tiller et al, The Effective Use of Technology in the Arbitral Hearing Room, Available at <https://globalarbitrationreview.com/chapter/1147795/the-effective-use-of-technology-in-the-arbitral-hearing-room> [Accessed November 28, 2018].

3.1 E-briefs

An e-brief is an interactive version of the submissions.³¹ A party or a counsel in arbitration does not have to wait until the arbitral proceedings' hearing phase to persuasively apply technology.³² A first step in conducting a paper-free hearing is to begin using available technology solutions from the initial pleading.³³ Rather than searching through hundreds of PDF files or boxes of paper, an e-brief enables the tribunal to click on hyperlinks from the cites in the brief to all the referenced exhibits, legal authorities, witness statements and expert reports in an easily accessible digital format.³⁴ The e-brief has become more popular especially with the following challenges affecting the paper based system (in courts): Paper files are cumbersome to organize, difficult to retrieve quickly, and are subject to the access limitations of normal business hours; Paper files are usually only available to one person at a time, limiting the ability of a panel of judges or their clerks to access or work on files at home; and Paper files require multiple copies to file, distribute, maintain and store, all of which must be done manually with a risk that files will be lost or misfiled.³⁵

E-briefs provide the perfect affordable solution for tribunal members to easily review all submissions from the statement of claim through post-hearing briefs in a joined-up manner.³⁶ In a nutshell, these submissions provide the arbitrator an opportunity to examine the submissions and evidence in a more holistic fashion thus enabling him to come up with a prudent award.³⁷

3.2 Electronic Submissions

Notably, whether it is an electronic arbitration or not, it is possible for arbitrators to settle the dispute without any hearings unless the parties have decided otherwise. Once

³¹ Whitley Tiller et al, *The Effective Use of Technology in the Arbitral Hearing Room*, op.cit.

³² Ibid.

³³ Ibid.

³⁴ Ibid; See also Jagusch, S., *Guide to Advocacy*, (Law Business Research Ltd., Nov 3, 2017).

³⁵ Crist, M.P., "The E-Brief: Legal Writing for an Online World," *New Mexico Law Review* 33, no. 1 (2003): 49, at p.52.

³⁶ Whitley Tiller et al, *The Effective Use of Technology in the Arbitral Hearing Room*, op. cit; See also Crist, M.P., "The E-Brief: Legal Writing for an Online World," op. cit.

³⁷ Ibid.

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the parties have determined the seat of arbitration, all proceedings and hearings could be held electronically and the arbitrators need only state the seat of arbitration in the award itself, as the parties determined, and sign the award.³⁸

Electronic submissions such as submissions via the email, yahoo and WhatsApp are cheaper and take a shorter time as compared to sending hard copies.³⁹ It facilitates delivery of documents to members at different jurisdictions within a shorter time and at quick and cheaply.⁴⁰ For instance, in arbitration cases with several exhibits and large bundles of briefs can be easily and quickly sent to the whole tribunal, whose members may be located indifferent jurisdictions, and also to the other counsel.⁴¹ This saves time and the costs of printing. A good example of active use of electronic submissions is the WIPO Electronic Case Facility (ECAF), which enables parties, the arbitral tribunal and the Center to file, store, and retrieve case-related submissions electronically.⁴² It is secure and allows for access from anywhere in the world using the Center's website. It takes the form of a case management system, a central database accessible via the Internet that allows participants in a case to submit documents online and to access a case overview, contact information, time tracking, docket listing, a finance overview, and a message board.⁴³

3.3 Artificial Intelligence

Artificial intelligence (AI) is defined as a field of computer science that includes machine learning, natural language processing, speech processing, expert systems, robotics, and machine vision.⁴⁴ Notably, there exist a number of artificial intelligent

³⁸ YÜKSEL, A.E.B., "Online International Arbitration," *Ankara Law Review* 4, no. 1 (2007): 83-93, at p.89.

³⁹ Whitley Tiller et al, *The Effective Use of Technology in the Arbitral Hearing Room*, op. cit

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Kaufmann-Kohler, G. and Schultz, T., "The use of Information Technology in arbitration," *Jusletter* 5. Dezember (2005), p.53.

⁴³ Ibid, p.53.

⁴⁴ Stothard, P., Plaistowe, M. and Dowling, C., "Jargon buster: legal technology" Navigating the hype, in *Norton Rose Fulbright Publication*, October 2017, p.27. Available at <http://www.nortonrosefulbright.com/files/20170925-international-arbitration-report-issue-9-157156.pdf> [Accessed on 13/12/2018].

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models, a detailed discussion of which goes beyond the scope of this paper.⁴⁵ The paper however highlights some of the ways in which such models can be explored in achieving cost effective arbitration proceedings. Artificial Intelligence (AI) aids in the automation of institutional arbitrations and case management by software.⁴⁶ AI can also aid in the prediction of costs, duration, and, perhaps more ambitiously, the merits of an arbitration.⁴⁷ For instance, in an effort to enhance quick resolution of disputes, arbitral institutions could, at the request of the parties or their agents, propose settlement ranges based on arbitrations of similar size and complexity.⁴⁸ This could push the parties toward settlement.⁴⁹

AI can also aid in the augment human cognitive abilities and automate time-consuming labour.⁵⁰ A number of AI-powered products and services already exist to help lawyers parse through submissions, identify better legal authorities, review documents and agreements (e.g. predictive coding), estimate costs, and predict outcomes.⁵¹ A number of start-ups are focusing on disrupting the legal industry, with some already offering case management and forecasting services to the international arbitration community.⁵²

⁴⁵ See Andrade, F., Novais, P., Carneiro, D. and Neves, J., "Conflict resolution in virtual locations," In *Information Communication Technology Law, Protection and Access Rights: Global Approaches and Issues*, pp. 33-50, IGI Global, 2010.

⁴⁶ Lucas Bento, *International Arbitration and Artificial Intelligence: Time to Tango?* KLUWER ARB. BLOG (February 23, 2018), Available at <http://arbitrationblog.kluwerarbitration.com/2018/02/23/international-arbitration-artificial-intelligencetime-tango/https://globalarbitrationreview.com/chapter/1147795/the-effective-use-of-technology-in-the-arbitral-hearing-room> [Accessed November 28, 2018].

⁴⁷ Ibid.

⁴⁸ Lucas Bento, *International Arbitration and Artificial Intelligence: Time to Tango?* op. cit; Bellucci, E., Lodder, A.R. and Zeleznikow, J., "Integrating artificial intelligence, argumentation and game theory to develop an online dispute resolution environment," In *null*, pp. 749-754. IEEE, 2004.

⁴⁹ Ibid; Lodder, A. and Thiessen, E., "The role of artificial intelligence in online dispute resolution," In *Workshop on Online Dispute Resolution at the International Conference on Artificial Intelligence and Law, Edinburgh, UK*. 2003.

⁵⁰ Ibid; See also Carneiro, D.R., Novais, P., Andrade, F.C.P. and Neves, J., "Retrieving Information in online dispute resolution platforms: a hybrid method," In *Proceedings of the Thirteenth International Conference on Artificial Intelligence and Law*, pp. 224-228, ACM, 2011.

⁵¹ Ibid; Katz, D.M., "Quantitative Legal Prediction-or-How I Learned to Stop Worrying and Start Preparing for the Data-Driven Future of the Legal Services Industry," *Emory Law Journal* 62, no. 4 (2013): 909.

⁵² Ibid; International Bar Association, "Times are a-changin': disruptive innovation and the legal profession." (2016): 7-11.

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AI could also help with the appointment of arbitrators, the preparation of the award, and the simulation of judicial review.⁵³ Case management could be automated, or significantly streamlined with the aid of software, giving arbitrators more time to arbitrate.⁵⁴ Some practitioners have advocated for the use of AI in arbitration to help in the management of massive amounts of documentation.⁵⁵ Besides, albeit with reservations, it can be used to analyse arbitration or court decisions in order to statistically derive probabilities about how your own case is going to be decided, in what has also been termed as ‘predictive justice’.⁵⁶ Although there are various legal and ethical issues that may arise with the use of AI and technology in general⁵⁷, they are not within the scope of this paper.

3.4 Video Conferencing

Arbitral proceedings’ hearings can also take place through a video platform.⁵⁸ For instance, instead of having a venue of arbitration located in Nairobi that forces the arbitrators to travel to Nairobi, everybody stays in his or her office and uses the online platform to conduct the hearing.⁵⁹ For example, in the case of an international arbitration, parties can strive to ensure that tele-conferencing is used in the case of

⁵³ Lucas Bento, *International Arbitration and Artificial Intelligence: Time to Tango?* op. cit; Nappert, S, “The Impact of Technology on Arbitral Decision Making - The Practitioner's Perspective,” 2016. Available at https://www.researchgate.net/publication/303749723_The_Impact_of_Technology_on_Arbitral_Decision_Making_-_The_Practitioner's_Perspective

⁵⁴ Ibid; Chernick, R. and Neal, B.R., “Expediting Arbitration,” available at https://www.americanbar.org/content/dam/aba/publications/dispute_resolution_magazine/March_2012_Chernick_R_eeves_March_7.authcheckdam.pdf

⁵⁵ Hogan Lovells, “The future of arbitration: New technologies are making a big impact — and AI robots may take on “human” roles,” *Hogan Lovells Publications*, 21 February 2018. Available at <https://www.hoganlovells.com/en/publications/the-future-of-arbitration-ai-robots-may-take-on-human-roles> [Accessed on 13/12/2018].

⁵⁶ Ibid.

⁵⁷ See Kemp, R., “Legal Aspects of Artificial Intelligence (v2.0),” 26 September 2018, available at <http://www.kempitlaw.com/wp-content/uploads/2018/09/Legal-Aspects-of-AI-Kemp-IT-Law-v2.0-Sep-2018.pdf> [Accessed on 13/12/2018].

⁵⁸ Soares, Francisco Uribarri, "New Technologies and Arbitration," *Indian J. Arb. L.* 7 (2018): 97.

⁵⁹ Ibid.

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witnesses of fact and expert witnesses from abroad. This will save the parties the costs as well as time.⁶⁰

In summary, the use of videoconferencing in international commercial arbitration has been recommended because the use of the infrastructure will be:

more cost effective; the inconveniences of travelling will be eliminated; effect of any political factor in any country will not interfere with arbitration process; restriction of entry of any of the parties, arbitrators and witnesses will be eliminated; there will not be any diplomatic break – down or interference; there will not be need for transfer of funds to the venue of the arbitration proceeding for the administrative duties and convenience of arbitrators and witnesses; there will not be need for suitable rooms for hearing; shortage of hotel rooms for parties and arbitrators/witnesses will not arise; there will not be need for transportation facilities and hold – ups; need for support facilities, for instance shorthand writers and interpreters and so on, may not be there; the net cost will be very much less than the aggregate cost of rooms, air fare for all parties, arbitrators and witnesses; there will not be any need for justifiable, but paralyzing fear of flight due to terrorist attack and SARS; there may not be need for fear of natural disaster(s) where it normally occurs like earthquake, TSUNAMI, volcano etc; phobia for unfamiliar forum will be eliminated; there will be effective use of time by every person involved as only negligible time of each person may be used for arbitration by video conferencing; the recording and storage of proceedings will be faster and easier; and dissemination of information will be faster.⁶¹

3.5 Presentation Technology and Technology Consultants

Technology consultants create an electronic bundle of all exhibits for use in real time on the screen in the hearing room using software such as TrialDirector or OnCue.⁶² The application of these programs yields quick access to supporting information and allows for the repetition of key points, which increases retention.⁶³ Besides making the presentation interactive, it gives tremendous flexibility to the manner in which the case

⁶⁰ International Chamber of Commerce, “Benefits of IT in arbitration outweigh risks, says new ICC report,” Paris, 12/04/2017. Available at <https://iccwbo.org/media-wall/news-speeches/benefits-arbitration-outweigh-risks-says-new-icc-report/> [Accessed on 13/12/2018].

⁶¹ Ekwenze, S.A., "Video Conferencing in Arbitration: An Overview." (2012), p.6. Available at <https://coou.edu.ng/resources/video-conferencing-in-arbitration.pdf>

⁶² Whitley Tiller et al, The Effective Use of Technology in the Arbitral Hearing Room, op. cit.

⁶³ Ibid.

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is presented.⁶⁴ This ensures that all involved are indeed following the same, relevant document.⁶⁵ This saves an incredible amount of time and maximises efficiency.⁶⁶

A common misconception is that these types of services are too costly and reserved for use only in very large cases.⁶⁷ This argument is not true as the use of technology brings efficiency and cost reduction in the conduct of arbitral proceedings.⁶⁸

3.6 Email Communication

The consent in arbitration can be given by and through the email correspondences.⁶⁹ Email communications are beneficial in several ways which includes delivery/service of documents is possible after offices close at 5.00 p.m, beating traffic jams, Email communication saves the cost of printing, copying, envelopes and postage/courier, one can send or receive emails from anywhere in the world, such that it does not matter when one travels; easy to forward communication to arbitrator, client, parties, etc ; searchable database; ease of digital filing and retrieval and quoting documents verbatim is easy – just copy and paste!⁷⁰

3.7 Advantages of the Use of Technology in International Commercial Arbitration

Use of technology in arbitration increase efficiency, reduce costs and permit the expansion of arbitration into new market segments.⁷¹ Advances in communication technology enable arbitrators and parties to transmit all sorts of documents instantly, from simple letters to audio and visual files.⁷² Digital technologies have as much

⁶⁴ Whitley Tiller et al, *The Effective Use of Technology in the Arbitral Hearing Room*, op. cit.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid; International Chamber of Commerce, *Techniques for Controlling Time and Costs in Arbitration: Report from the ICC Commission on Arbitration*, ICC Publication 843, 2007.

⁶⁹ Panjwani, P., *The Present and Near Future of New Technologies in Arbitration: If not US, Who? If not Now, When?* April 27, 2018, Available at <http://arbitrationblog.kluwerarbitration.com/2018/04/27/the-present-and-near-future-of-new-technologies-in-arbitration-if-not-us-who-if-not-now-when/> [Accessed November 28, 2018].

⁷⁰ Ngotho, P., "Expediting Ad Hoc Arbitrations through Emails: the Experience of a Kenyan Arbitrator," (2015) 1 *Alternative Dispute Resolution*, pp 133-134.

⁷¹ Ljiljana, B., "International commercial arbitration in cyberspace: recent developments," *Nw. J. Int'l L. & Bus.* 22 (2001): 319, P. 345.

⁷² Ljiljana, B., "International commercial arbitration in cyberspace: recent developments," op. cit.

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potential to transform arbitration as they have transformed other areas of life.⁷³ It is now up to practitioners and other stakeholders to define best practices and create a workable environment that enables this potential to be fully leveraged for the benefit of all.⁷⁴ However, while all there are many benefits that can potentially accrue from the use of technology, the main focus of this paper as the end result is the cost and time saving ability of effective utilisation of technology in international commercial arbitration proceedings.

3.8 Risks Associated with the Use of Technology in Arbitral Proceedings

The International Chamber of Commerce rightly cautions that practitioners should not always believe that any use of IT will always save time and costs or ensure the arbitration is conducted efficiently. If managed poorly, the use of IT can increase time and costs, or even result in the unfair treatment of a party.⁷⁵ Despite numerous advantages conferred by the use of technology in the arbitral proceedings, there are several drawbacks associated with it.⁷⁶ First, there is a concern that machines lack emotional sensitivity or perception which are considered to be a prerequisite for the efficient conduct of one's duties as an arbitrator, and are also inextricably linked to information, motivation, processing, memory and judgment.⁷⁷ Besides, some

⁷³ ⁷³ Ljiljana, B., "International commercial arbitration in cyberspace: recent developments," op. cit.

⁷⁴ International Chamber of Commerce, Three Takeaways on how Digital Technologies are Transforming Arbitration, (Paris August 30, 2017) Available at, <https://iccwbo.org/media-wall/news-speeches/three-takeaways-digital-technologies-transforming-arbitration/> [Accessed November 28, 2018].

⁷⁵ International Chamber of Commerce, "Benefits of IT in arbitration outweigh risks, says new ICC report," Paris, 12/04/2017; See also the counter argument on the use of technology in international commercial arbitration in Serbest, F., "The Use of Information Technology in International Commercial Arbitration," June 2012. Available at https://www.researchgate.net/publication/259823045_The_Use_of_Information_Technology_in_International_Commercial_Arbitration [Accessed on 14/12/2018].

⁷⁶ Soares, Francisco Uribarri, "New Technologies and Arbitration," op cit.; See also Halket, T.D., "The Use of Technology in Arbitration: Ensuring the Future Is Available to Both Parties," *St. John's Law Review* 81, no. 1 (2012): 13.

⁷⁷ Ibid; Soares, Francisco Uribarri, "Machine arbitrators: science-fiction or imminent reality?" December 2018, Special Report: International Dispute Resolution, *Financier Worldwide Magazine*. Available at <https://www.financierworldwide.com/machine-arbitrators-science-fiction-or-imminent-reality/> [Accessed on 14/12/2018]; Ryan, E., "The Discourse Beneath: Emotional Epistemology in Legal Deliberation and Negotiation," *10 Harvard Negotiation Law Review*, 231-285 (2005) (2005).

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jurisdictions may not enforce codified decisions rendered by a machine arbitrator due to the lack of reasoning attached to such decisions.⁷⁸

Second, the use of technology in arbitral proceedings has impacted greatly on the element of confidentiality. The confidential nature of arbitration is one of its major advantages.⁷⁹ The issue of confidentiality has evolved from interpersonal confidentiality to technological confidentiality.⁸⁰ For instance, enabling access to precedents and the external assistance required to operate technologies during the conduct of arbitration, including reporters and translators, create confidentiality concerns.⁸¹ Since commercial arbitration awards and procedural orders are generally private thus confidential the subsection of the issues of the dispute to the third parties threatens this principle even though these parties can be subjected to confidentiality agreements.⁸²

Third, there are several issues surrounding email communication some which affect confidentiality of the arbitral proceedings, such as the potential risks of hacking.⁸³ Most email providers also have size limits for possible attachments, another hurdle to email

⁷⁸ Soares, Francisco Uribarri, "New Technologies and Arbitration," op cit.; International Centre for Settlement of International Disputes, *ICSID Convention, Regulations and Rules* (as Amended and Effective April 10, 2006), Article 48(3). Available at

<http://icsidfiles.worldbank.org/icsid/icsid/staticfiles/basicdoc/part4-chap04.htm>; Knull III, W.H. and Rubins, N.D., "Betting the Farm on International Arbitration: Is It Time to Offer an Appeal Option?" *Am. Rev. Int'l Arb.* 11 (2000): 531; Carbonneau, T.E., "At the Crossroads of Legitimacy and Arbitral Autonomy," *bepress Legal Series* (2006): 1139; Gleason, E.E., "International Arbitral Appeals: What Are We So Afraid Of?" *Pepperdine Dispute Resolution Law Journal*, 7, no. 2 (2007): 5; Carbonneau, T.E., "Rendering Arbitral Awards with Reasons: The Elaboration of Common Law of International Transactions," *Columbia Journal of Transnational Law*, 23 (1985): 579; Lalive, P., "On the reasoning of international arbitral awards," *Journal of International Dispute Settlement*, 1, no. 1 (2010): 55-65.

⁷⁹ Noussia, K., *Confidentiality in International Commercial Arbitration: A Comparative Analysis of the Position under English, US, German and French Law*, (Springer-Verlag Berlin Heidelberg 2010); Brown, A.C., "Presumption Meets Reality: An Exploration of the Confidentiality Obligation in International Commercial Arbitration," *American University International Law Review*, 16, no. 4 (2001): 969-1025.

⁸⁰ Britz, J. J., "Technology as a threat to privacy: ethical challenges to the information profession." (2010). Available at <http://web.simmons.edu/~chen/nit/NIT%2796/96-025-Britz.html> [Accessed on 14/12/2018]; Trakman, L.E., "Confidentiality in International Commercial Arbitration," *Arbitration International* 18, no. 1 (2002): 1-18.

⁸¹ Norton Rose Fulbright, *International Arbitration Report*, Issue 9, October, 2017. Available at <http://www.nortonrosefulbright.com/files/20170925-international-arbitration-report-issue-9-157156.pdf> [Accessed on 14/12/2018].

⁸² Soares, Francisco Uribarri, "New Technologies and Arbitration," op cit.

⁸³ Ngogho, P., "Expediting Ad Hoc Arbitrations through Emails: the Experience of a Kenyan Arbitrator," op. cit.

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communication in arbitration.⁸⁴ This particularly interferes with the proper communication among the members of the tribunal or from the tribunal to the parties and vice versa.

Fourth, despite the proliferation of technology in developing countries, a significant number of the smaller law firms in particular may risk facing more costs, as they might lack the necessary financial and technical resources to utilize new technologies.⁸⁵ While this may greatly affect their ability to take up the challenge of using technology while participating in international commercial arbitration, either as a firm or as individual advocates, it has been suggested that they can overcome the challenge by coming up with alliances between smaller law firms and outsourcing to specialized companies.⁸⁶ This way, they may be the much needed option for their equally disadvantaged clients.

In addition, international commercial arbitration practitioners should be aware of potential security hacks, of which law firms are often targets.⁸⁷

4.0 Legal Framework on Harnessing Technology for Cost Effective Arbitral Proceedings

The international commercial arbitration legal framework as it exists may not have been designed to expressly forbid nor allow the appointment of computers as arbitrators.⁸⁸ Although advancements in technology are occurring at an ever more rapid pace, the incorporation of technology in international commercial arbitration

⁸⁴ Ngotho, P., “Expediting Ad Hoc Arbitrations through Emails: the Experience of a Kenyan Arbitrator,” op. cit.; See also Outlook, “Maximum email size limit for Gmail, Outlook.com, etc,” July 19, 2013. Available at <https://www.outlook-apps.com/maximum-email-size/> [Accessed on 14/12/2018].

⁸⁵ Arbitration Institute of the Stockholm Chamber of Commerce, “Innovation in Arbitration, p.5. Available at https://sccinstitute.com/media/37112/innovation-in-arbitration_the-report.pdf [Accessed on 14/12/2018]

⁸⁶ Ibid, p.5.

⁸⁷ Panjwani, P., “The Present and Near Future of New Technologies in Arbitration: If not US, Who? If not Now, When?” April 27, 2018, Available at <http://arbitrationblog.kluwerarbitration.com/2018/04/27/the-present-and-near-future-of-new-technologies-in-arbitration-if-not-us-who-if-not-now-when/>

⁸⁸ José Maria de la Jara et al., *Machine Arbitrator: Are We Ready?*, KLUWER ARB. BLOG (May. 4, 2017), Available at <http://arbitrationblog.kluwerarbitration.com/2017/05/04/machine-arbitrator-are-we-ready/>.

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proceedings remains extremely slow or even non-existent in most countries.⁸⁹ In order for information technology to be successfully integrated into the system of international commercial arbitration in the future, its parameters should be clearly defined and its use should be regulated. While there may be development of customised information technology legal framework for the use of the same in international commercial arbitration, amendment of the existing arbitration rules, domestic legislation, and international agreements may also be another route towards making this work. Such changes in domestic arbitration laws would be strongly recommended to provide certainty to the international arbitration community (arbitral institutions, counsel, and parties) that the use of such technology as AI and others, for settlement of disputes by arbitration is legal.⁹⁰ This therefore necessitates the examination of the legal framework on the use of technology in arbitration.

4.1 Current Legal Framework on Use of Technology in Arbitral Proceedings

In this advent of technology, the major concern is whether the underlying arbitral frameworks permit the use of technologies by all players and parties to arbitral proceedings.⁹¹ The current legal and policy framework on arbitration does not categorically rule out the use of new technology in arbitral proceedings. This is because both the decision to arbitrate and the manner in which the arbitration is conducted are contractually based, which confers on the parties and the arbitrator significant operational freedom.⁹² Indeed, some jurisdictions have embraced and encouraged the use of technology in arbitration proceedings to not only increase efficiency but also save on time and costs.⁹³

⁸⁹ International Chamber of Commerce, Three Takeaways on how Digital Technologies are Transforming Arbitration, (Paris August 30, 2017) Available at, <https://iccwbo.org/media-wall/news-speeches/three-takeaways-digital-technologies-transforming-arbitration/>

⁹⁰ Snider, T., Dilevka, S. and Aknouche, C., “Artificial Intelligence and International Arbitration: Going Beyond E-mail,” April 2018. Available at <https://www.tamimi.com/law-update-articles/artificial-intelligence-and-international-arbitration-going-beyond-e-mail/>

⁹¹ Soares, Francisco Uribarri, "New Technologies and Arbitration," op cit.

⁹² Ibid.

⁹³ Essam Al Tamimi and Sara Koleilat-Aranjo, “United Arab Emirates: Commentary on the UAE's New Arbitration Law,” 8 August 2018. Available at

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Article 7 of the 1985 version of the *UNCITRAL Model Law on International Commercial Arbitration*⁹⁴ on the form of the arbitration agreement was modelled on the language used in article II (2) of the *Convention on the Recognition and Enforcement of Foreign Arbitral Awards*.⁹⁵ This provision was amended in the 2006 Model and among the fundamental amendment is the new article 7 (4) which provides that, “the requirement that an arbitration agreement be in writing is met by an electronic communication if the information contained therein is accessible so as to be useable for subsequent reference; “electronic communication” means any communication that the parties make by means of data messages; “data message” means information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy.”⁹⁶ This revision was intended to address evolving practice in international trade and technological developments aspects such as the use of technology in arbitration.⁹⁷

Article 19(1) of the *UNCITRAL Model Law on International Commercial Arbitration* states that “subject to the provisions of this Law, the parties are free to agree on the procedure to be followed by the arbitral tribunal in conducting proceedings”.⁹⁸

Apart from the abovementioned Model Law, various institutional rules such as the *Singapore International Arbitration Centre Rules*⁹⁹, the *London Court of International Arbitration Rules*, the *Hong Kong International Arbitration Centre Rules* and the *International Chamber of Commerce Rules*, afford the parties and the tribunal the opportunity to determine different procedural aspects of the hearing in international commercial arbitration. Therefore, it can be gathered that there is a significant degree of

<http://www.mondaq.com/x/726276/Arbitration+Dispute+Resolution/Commentary+On+The+UAES+New+Arbitration+Law> [Accessed on 14/12/2018]; See also International Chamber of Commerce, *Techniques for Controlling Time and Costs in Arbitration: Report from the ICC Commission on Arbitration*, ICC Publication 843, 2007, op. cit.

⁹⁴ UNCITRAL Model Law on International Commercial Arbitration UN Doc A/RES/40/17 annex I (As adopted by the United Nations Commission on International Trade Law on 21st June 1985).

⁹⁵ Convention on the Recognition and Enforcement of Foreign Arbitral Awards, New York Convention, (Adopted 10th June 1958, came into force 7th June 1959) 330 UNTS 38.

⁹⁶ Art 7 (4), UNCITRAL Model Law on International Commercial Arbitration, op. cit.

⁹⁷ Soares, Francisco Uribarri, "New Technologies and Arbitration," op. cit.

⁹⁸ UNCITRAL Model Law on International Commercial Arbitration, op. cit.

⁹⁹ *SIAC Rules (6th Edition, 1 August 2016)*, available at <http://www.siac.org.sg/index.php>

freedom awarded to arbitrators in establishing the facts of the case – and there is no specific mention or restriction on the means by which they may do so.¹⁰⁰

4.2 Need for Enhanced Regulatory Framework and Information Security

As technology evolves, the time to amend domestic laws might come sooner than expected.¹⁰¹ It is obvious that early regulatory frameworks on arbitration such as the New York Convention did not foresee unprecedented development of high technology as a means of communication.¹⁰² However, this position is changing and in some instances it has already changed, as evidenced by ICC's efforts to encourage the active uptake of technological advancements to help in saving time and costs.¹⁰³ It is also noteworthy that in line with the 2006 amendments on the UNCITRAL Model Law, countries have continually amended their domestic laws on arbitration to reflect these developments on the modern means of communication.

In addition to these developments, however, there is need to establish the regulatory framework on the information security in different countries around the world, including Kenya, considering that some of the procedural aspects of international commercial arbitration may be subjected to domestic laws especially during the recognition and enforcement stage of the resultant award.

5.0 Conclusion

Traditional arbitration is increasingly incorporating modern technology into its proceedings.¹⁰⁴ What cannot be denied is that with improved technology and

¹⁰⁰ Soares, Francisco Uribarri, "New Technologies and Arbitration," op cit.

¹⁰¹ José Maria de la Jara et al., *Machine Arbitrator: Are We Ready?*, KLUWER ARB. BLOG (May. 4, 2017), Available at

<http://arbitrationblog.kluwerarbitration.com/2017/05/04/machine-arbitrator-are-we-ready/>.

¹⁰² Ljiljana, B., "International commercial arbitration in cyberspace: recent developments," op. cit.

¹⁰³ International Chamber of Commerce, *Techniques for Controlling Time and Costs in Arbitration: Report from the ICC Commission on Arbitration*, ICC Publication 843, 2007.

¹⁰⁴ Derric Yeoh, *Is Online Dispute Resolution the Future of Alternative Dispute Resolution?*, KLUWER ARB. BLOG (Mar. 29, 2018), Available at

<http://arbitrationblog.kluwerarbitration.com/2018/03/29/online-dispute-resolution-futurealternative-dispute-resolution/> [Accessed November 28, 2018].

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automation, less complex disputes work will be claimed by online dispute resolution services.¹⁰⁵ It is therefore imperative that legal practitioners continue to improve themselves and keep abreast of the latest legal and technological developments to avoid falling by the way side in the wake of technology's relentless march.¹⁰⁶ There are several unprecedented opportunities associated with the use of technology such as use of email, video/audio conferencing, online platforms, electronic signatures and e-filing that helps to save time and costs in international commercial arbitration.

Achieving expeditious justice in arbitration is necessary. Harnessing technology for cost effective international commercial arbitration proceedings is a potent idea whose time has come.

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¹⁰⁵ Derric Yeoh, *Is Online Dispute Resolution the Future of Alternative Dispute Resolution?*, op. cit.

¹⁰⁶ Ibid.

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