8-2019

Effectively leveraging technology in mediation – Suggestions for a way forward in Asia

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EFFECTIVELY LEVERAGING TECHNOLOGY IN MEDIATION – SUGGESTIONS FOR A WAY FORWARD IN ASIA

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When conflicts are not resolved in today's connected world, disputes inevitably arise, leading to loss of business and credibility. Demand for dispute resolution, both domestic and cross-border, is on the rise, and mediation is a popular way to resolve disputes quickly and cost-effectively. However, despite the growth in the use of technology in various aspects of our lives, mediation in Asia has been slow to embrace technology. This paper starts with a brief introduction to Online Dispute Resolution ("ODR") and its history. It then seeks to explore how technology can be effectively leveraged in the mediation context, with a focus on the prospects in Asia. Looking to models from around the world, this paper considers the various types of online mediation and their potential benefits and possible pitfalls. Finally, this paper also seeks to address the question of how mediators can and should adapt their practice for the online context.

I.   INTRODUCTION TO ODR

Online Dispute Resolution ("ODR") has today become a collective term for a wide-ranging set of tools, technologies, and platforms to help disputants manage or resolve their disputes wholly or partially online.[1] These tools focus mainly on the management of information flow and communications between the two or more disputants, the mediator and the mediation service provider. They may range from simple email or telephone communications to sophisticated platforms that allow for real-time chats, cloud storage, exchange of documents, and video conferencing.

Some ODR systems also leverage artificial intelligence[2] to modify the role played by the human neutral (the mediator) by providing informational tools to assist the human

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[1]   Ethan Katsh & Colin Rule, "What We Know and Need to Know about Online Dispute Resolution" (2015–2016) 67 South Carolina Law Review 329 at 329, referring to Arthur M Monty Ahalt, "What You Should Know About Online Dispute Resolution" *Prac Litigator* (Mar 2009), online: <https://www.virtualcourthouse.com/index.cfm/feature/1_7/what-you-should-know-about-online-dispute-resolution.cfm>.

[2]   See Davide Carneiro *et al*, "Online dispute resolution: An artificial intelligence perspective" (2014) 41(2) Artificial Intelligence Review 211.

neutral. Examples of such systems include Split-Up, which is used in Australia by judges, registrars, mediators and lawyers to advise on division of property following divorce. The system considers 94 relevant factors representing the contributions of the husband relative to the wife, the level of wealth of the marriage, and the future needs of the husband relative to the wife, and using a combination of neural networks and rule-based reasoning, offers a percentage split of the assets.[3] Singapore start-up Lex Quanta has created a similar simulator that predicts the outcomes of division of assets in divorce cases by computing factors such as the total amount of assets involved and how each party contributed to the relationship, through an algorithm.[4] In some instances, artificial intelligence could displace the human neutral by performing some of the neutral's functions. Examples include Cybersettle, a system that allows parties to submit confidential offers and demands, which are never disclosed to the opposing party, and uses an algorithm for comparing the offers and demands to determine if a mutually acceptable settlement may be achieved; and Smartsettle, which has a complex software platform that can mathematically optimize resolutions across many negotiating points.[5]

A key advantage of ODR systems is the removal of barriers like cost, time and information asymmetry.[6] Given the online nature of ODR systems, they allow parties to access them wherever they may be (as long as they have internet access), across multiple time zones, and without having to physically travel to a set location. ODR is also generally regarded as less costly and less time consuming than conventional litigation, particularly where it builds in alternative dispute resolution mechanisms like negotiation and mediation.[7]

ODR, specifically its institutionalisation, has had a longer history than most people are aware. The earliest proponents of ODR were the world's large e-commerce houses, mainly in the United States and China,[8] who adopted ODR to streamline their operations by bringing their dispute management processes online. eBay and PayPal, for example, use automated templates to collect data on disputes, and their dispute resolution software then processes the data and manages the dispute via algorithms.

ODR has also been used in more diverse contexts. Various global organisations and institutions have been working on ODR since the beginning of this decade and the following are some examples that best represent the institutionalization, recognition, and mainstreaming of ODR.

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[3]　John Zeleznikow & James R Nolan, "Using soft computing to build real world intelligent decision support systems in uncertain domains" (2001) 31(2) Decision Support Systems 263.

[4]　Fabian Koh, "NUS law and economics student, along with three peers, creates case outcome simulator" *The Straits Times* (7 January 2018), online: < https://www.straitstimes.com/singapore/nus-law-and-economics-student-along-with-three-peers-creates-case-outcome-simulator>.

[5]　Ethan Katsh & Colin Rule, "What We Know and Need to Know about Online Dispute Resolution" (2015–2016) 67 South Carolina Law Review 329 at 331-332.

[6]　Orna Rabinovich-Einy, "Balancing the Scales: The Ford-Firestone Case, the Internet, and the Future Dispute Resolution Landscape" (2006) 6 Yale Journal of Law & Technology 29.

[7]　Bc. Monika Moiariková, *Using artificial intelligence in online dispute resolution* (Masaryk University Faculty of Informatics, Brno, 2018), at 6–7, online: <https://is.muni.cz/th/athho/dp.pdf>.

[8]　These include eBay and Alibaba.

One of the earliest known examples of institutional use of ODR was at the Internet Corporation for Assigned Names and Numbers ("ICANN"), a global public-private organisation that has responsibility for key Internet related functions and manages and coordinates Internet resources for the public benefit, and has long implemented ODR for the purposes of handling Internet domain name disputes. A complainant can make a domain name complaint online by email or a web-based form. An arbitrator will hear from both parties as they make their case and issue a binding decision.[9]

International organisations like the United Nations Commission on International Trade Law ("UNCITRAL") and the European Union ("EU") have also focused their attention on ODR in recent times. UNCITRAL, an organisation that works on the global harmonisation of commercial law in order to promote trade between countries, has a working group on ODR that has developed the UNCITRAL Technical Notes on ODR for e-commerce related disputes.[10] The EU has come up with two sets of dispute resolution regulations,[11] and a central ODR platform specifically targeted at resolving cross-border online disputes.[12]

The courts and traditional face-to-face mediation service providers have also started deploying ODR solutions. The courts are some of the more enthusiastic pioneering users of ODR systems.[13] This is due to a desire to improve access to justice against the backdrop of an ever-increasing case backlog, tight budgets and manpower availability caused in part by slow resolution of cases.[14] The public that the court systems serve is also looking for faster and less painful ways to resolve their disputes, especially low-value disputes, which can be disproportionately costly to resolve in the traditional way.[15] The Global Pound

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[9]   Esther van den Heuvel, *Online Dispute Resolution as a Solution to Cross-Border E-Disputes: An Introduction to ODR*, at 31, online: <http://www.oecd.org/internet/consumer/1878940.pdf>.

[10] UNCITRAL, *UNCITRAL Technical Notes on Online Dispute Resolution* (New York: UN, 2017), online: <http://www.uncitral.org/pdf/english/texts/odr/V1700382_English_Technical_ Notes_on_ODR.pdf>.

[11] See EC, *Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR)*, OJ, L 165/1; and *Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Directive on consumer ADR)*, OJ, L 165/63.

[12] "Online Dispute Resolution" *European Commission website*, online: <https://ec.europa.eu/ consumers/odr/main/?event=main.trader.register>.

[13] See examples of court annexed ODR schemes in Nicolas W Vermeys & Karim Benyeklef, "ODR and the Courts" in Mohamed S Abdel Wahab, Ethan Katsh & Daniel Rainey, eds, *Online Dispute Resolution: Theory and Practice* (Eleven International Publishing, 2012) at 295.

[14] See generally Dorcas Quek Anderson, "The convergence of ADR and ODR within the courts; The impact on access to justice" (2019) 38(1) Civil Justice Quarterly 126.

[15] The Action Committee on Civil and Family Justice in Canada commented in its report that "court processes – language, location, operating times, administrative systems, paper and filing requirements, etc. – typically make sense and work for lawyers, judges and court staff. They often do not make sense or do not work for litigants" and concluded that the civil and family justice system is too complex, slow, and expensive to produce "just outcomes that are proportional to the problems brought to it or reflective of the needs of the people it is meant to serve." Canada, Action Committee on Access to Justice in Civil and Family Matters, *Access to Civil and Family Justice: A Roadmap for Change* (Report) (Ottawa: ACAJCFM, October 2013), online:

Conference survey conducted over 2016 and 2017 found that efficiency was the key priority of 65% of parties in their choice of dispute resolution processes for commercial disputes.[16]

In Asia, there are a growing number of examples of ODR implementation. The Community Justice and Tribunals System ("CJTS") in Singapore provides disputants with an option to conduct mediation online via the help of a court mediator through an e-Mediation function.[17] This function allows parties to mediate and resolve their dispute online at a time suitable to all during office hours. Following settlement, an online consent order can be applied for via the CJTS or parties may select to enter into a private settlement agreement. In China, Hangzhou's Internet Court conducts online hearings for internet-related cases through a customised internet platform, where mediation can also be conducted online.[18] More Internet Courts have since been opened in Beijing and Guangzhou.[19]

In British Columbia Canada, the Civil Resolution Tribunal ("CRT"), which covers small claims (under CAD 25,000) relating to debts, damages, recovery of personal property and certain types of condominium disputes, was set up in 2016.[20] The online tribunal operates in several stages.[21] First, the facility helps users explore possible solutions. Then, parties will be required to use an online negotiation platform to attempt to reach settlement. If there is no success to reach settlement, a tribunal case manager will assist the parties to mediate their dispute whether online or over the telephone. If parties do not settle through mediation, there is then a third and final stage of adjudication. The adjudicator will contact

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<http://www.cfcj-fcjc.org/sites/default/files/docs/2013/AC_Report_English_Final.pdf>.
This sentiment has also been echoed in the UK as follows: "The civil courts are, by their procedure, their culture and the complexity of the law which they administer, places designed by lawyers for use by lawyers. Despite all the efforts made over the last fifteen years, the cost of legal representation in the civil courts, coupled with the risk of liability for a successful opponent's costs, still make the conduct through professional representation of small and medium-sized civil cases, other than for personal injuries on CFAs, disproportionately expensive and therefore unaffordable, measured against value at risk. Those who choose, or are forced, to litigate in person suffer crippling disadvantages by comparison with represented opponents which none of the present efforts to alleviate do more in reality than palliate. Many others simply choose not to litigate at all for the vindication of their civil rights." UK, Judiciary of England and Wales, *Civil Courts Structure: Interim Report*, by Lord Justice Briggs (Report) (UK: Judiciary of England and Wales, December 2015) at 51, online: <https://www.judiciary.uk/wp-content/uploads/2016/01/ccsr-interim-report-dec-15-final1.pdf >.

[16] Herbert Smith Freehills, PwC and the International Mediation Institute, "Global Pound Conference Series: Global Data Trends and Regional Difference" (25 May 2018) at 10, online: <https://www.globalpound.org>.

[17] State Courts Singapore, "Community Justice and Tribunals System" (last modified 30 May 2019), online: <https://www.statecourts.gov.sg/CJTS/index1>.

[18] "Internet courts in Beijing, Guangzhou to start operation this month" *Xinhua* (7 September 2018), online: <http://www.chinadaily.com.cn/a/201809/07/WS5b92761aa31033b 4f4654e6f.html>.

[19] *Ibid.*

[20] Shannon Salter, "Online Dispute Resolution and Justice Integration: British Columbia's Civil Resolution Tribunal" (2017) 34 Windsor Yearbook of Access to Justice 112 [*ODR and Justice Integration: British Columbia CRT*].

[21] See Civil Resolution Tribunal, "The CRT Process", online: <https://civilresolutionbc.ca/how-the-crt-works/tribunal-process>.

the parties via the online platform, over the phone, or, when necessary, through video-conferencing, and will make a decision that will be final and binding. Shannon Salter, the Chairperson of the CRT, described the CRT as:

> Canada's first online tribunal and, currently (as of 2017), the only ODR system in the world that is fully integrated into the justice system... A key design feature of the CRT is that, wherever possible, a user should only have to enter information once, and the system should carry this information forward to other stages of the CRT process.[22]

In terms of service providers, there are several examples in Asia that provide users the option of an ODR system such as the Thailand Arbitration Centre ("THAC") and Singapore Mediation Centre ("SMC"). TalkDD is Asia and Thailand's first ODR system that focuses on resolving disputes between customers and online retailers.[23] The system incorporates an online complaints service, online negotiation, and online mediation to facilitate the resolution of disputes. SMC's ODR platform provides a less costly alternative for users than traditional face-to-face mediation and incorporates electronic document filing and cloud storage, real-time messaging functions, a video conferencing platform and a calendaring tool to facilitate online mediation.[24]

Specifically tailored to cross-border disputes expected to arise from the Belt and Road Initiative ("BRI"), which centres on infrastructure development and investments in countries across Europe, Asia and Africa encompassing over 65 jurisdictions, is Hong Kong's eBRAM.hk. This is an ODR tool currently being developed by the Hong Kong Justice Department to provide arbitration and mediation services online for BRI countries.[25] Such a use of ODR is ideal given the multi-lingual environment in BRI countries, as real time translation or interpretation is one aspect of eBRAM.

These examples of ODR show how technological solutions have been embraced all around the world and in varied contexts, to enhance the effectiveness and reach of mediation.

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[22] *ODR and Justice Integration: British Columbia CRT, supra* note 20.
[23] See *TalkDD website*, online: <https://talkdd.com/?lang=en>.
[24] See *SMC Resolve Disputes website*, online: <https://smc.resolvedisputes.online>.
[25] "Secretary for Justice outlines new trends in handling cross-border commercial disputes" *Government of the Hong Kong Special Administrative Region Press Release* (16 May 2018), online: <https://www.info.gov.hk/gia/general/201805/16/P2018051600873.htm>.

II.   THE CHALLENGES AND PITFALLS THAT ODR PLATFORMS FACE

ODR platforms, while representing a significant improvement in access to justice and efficiency in operations are not without their challenges.[26] There are several potential challenges and pitfalls that mediators ought to know about.

The chief issue that ODR platforms need to address is confidentiality. In the case of a face-to-face mediation, the parties are all present in the same room and one can exclude other parties (other than disputants and their lawyers) by physically excluding them from the room. However, in the case of an ODR virtual meeting, someone else could be physically in the room with one or both of the parties during the mediation and hidden from the camera. Similarly, if the ODR system is not secure, a third party could be online and able to view the chat, email exchanges or videoconferencing discussions. Although one could argue that it may still be possible in face-to-face mediations to breach confidentiality, for example, with listening devices and the like, parties are normally deterred from such action by the reluctance to violate trust in an ongoing relationship. This reluctance may not be present in one-off transactions.[27] In order to secure confidentiality in the online context, disputants may also want protection against unauthorized access to their data, in the form of technical and physical security, as well as protection against unauthorized and unexpected use of data without their consent.[28]

Other challenges that ODR deployments may face, especially in some parts of Asia, are systemic ones including: (1) no, low or poor connectivity to the Internet; (2) written language illiteracy; (3) users' computer illiteracy or unwillingness to use the internet; and (4) users with visual or hearing disabilities.

Lack of broadband connectivity would definitely hamper the deployment of ODR especially in areas outside the cities. It could also interfere with the conduct of mediation because, for example, a mediator may not be aware if one party has been cut off from the conversation or may have to repeatedly go over the same ground if one or more parties intermittently drop off from the conversation.

Although it may be a matter of time before new telecommunications technologies respond to the current connectivity challenges with new solutions, the other challenges of illiteracy (language and technological), as well as disability, may still pose additional hurdles. Even in developed British Columbia, where the CRT has been deployed and where there

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[26]   See, *eg* Janet Rifkin, "Online Dispute Resolution: Theory and Practice of the Fourth Party" (2001) 19(1) Conflict Resolution Quarterly 117: "As the field of online dispute resolution develops and expands, it is critical that we monitor and further investigate not only the value of ODR but also its risks. What is at stake in a screen-to-screen mediation? What interests of the participants need to be protected, and how is this protection achieved? What kind of dispute is most suited for online negotiations? What kind of resources do the parties need to equally participate in online mediation? What should the standards of practice be for ODR practitioners?"

[27]   Orna Rabinovich-Einy, "Going Public: Diminishing Privacy in Dispute Resolution in the Internet Age" (2002) 7 Virginia Journal of Law and Technology 1 [*Diminishing Privacy in Dispute Resolution in the Internet Age*] at 30.

[28]   Suzanne Van Arsdale, "User Protections in Online Dispute Resolution" (2015) 21 Harvard Negotiation Law Rev 107.

is widespread adoption of the internet, approximately 3–5% of the population, for various reasons, do not use the Internet.[29] In Asia, where the internet penetration rate is 48.1% compared to the rest of the world where the average internet penetration rate is 54.5%,[30] we can expect even greater resistance to using ODR. This is a challenge that ODR mediators and service providers have to deal with through training and education. ODR mediators should also be aware that if one party is more technology literate than the other, care must be taken so that the use of ODR does not favour one party over the other.[31]

A final challenge for ODR is dealing with the absence of face-to-face communication, which is rich in non-verbal cues.[32] ODR, on the other hand, may pose difficulties in the creation of trust, building of rapport and exchanging information, which research shows are linked with nonverbal actions.[33] Written online communications may also lose the tone of the parties, causing difficulty in judging their emotional state and preventing parties from feeling a sense of shared goals.[34]

III.   HOW SHOULD THESE CHALLENGES BE FACED?

In order for ODR to succeed and continue on its upward growth path, mediators and ODR service providers, need to take steps to manage the challenges and make adjustments accordingly.

In terms of minimising the risk of loss of confidentiality in the sense of having non-authorised persons observing the mediation, mediators and service providers can seek a declaration from both parties as to who is present in the room (physically or virtually) with them and an agreement that no audio or video recordings would be taken of the proceedings. These declarations or agreements can be obtained during the online mediation as well as built into the agreement to mediate. In relation to concerns about the unauthorized access or use of confidential information obtained during the mediation process, it is incumbent on the providers of ODR platforms to ensure that they clearly explain to users the extent of measures taken to protect confidential information and how

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29   *ODR and Justice Integration: British Columbia CRT, supra* note 20 at 116, citing BC Stats survey, commissioned by the British Columbia Ministry of Justice, conducted in March 2015.
30   "Internet Usage in Asia" (2018), online: <https://www.internetworldstats.com/stats3.htm>.
31   Phua Jun Han, "Shall We Medi@?" in Joel Lee & Marcus Lim eds, *Contemporary Issues in Mediation*, vol 1 (Singapore: World Scientific, 2016) 109 at 110.
32   Noam Ebner, "Negotiating via (the New) Email" in Michael Benoliel ed *Negotiation Excellence: Successful Deal Making*, 2nd ed (Singapore: World Scientific, 2014) 407.
33   Joel B Eisen, "Are we ready for mediation in Cyberspace" (1998) 4 Brigham Young University Law Review 1305 at 1310; JW Goodman, "The Pros and Cons of Online Dispute Resolution: An Assessment of Cyber-Mediation Websites", online: (2003) Duke Law & Technology Review 4 <scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1073&context=dltr>; Noam Ebner and Jeff Thompson, "@ Face Value? Nonverbal Communication and Trust Development in Online Video Mediation" (2014) 1 International Journal of Online Dispute Resolution 103.
34   Louise Ellen Teitz, "Providing Legal Services for the Middle Class in Cyberspace: The Promise and Challenge of Online Dispute Resolution" (2001–2002) 70 Fordham Law Review 985 at 1002.

and when such information could be collected and stored. The consent of the users should be sought before confidential information may be accessed and used.

To cope with the challenge of lack of internet access or other systemic limitations, ODR platforms should allow for access to services via mail, telephone, or smartphone. Mediators should be aware of this and be able to handle inputs from a variety of sources. Similarly, parties with literacy challenges or disabilities may be especially hampered during online mediations, and service providers would need to take special steps to ensure that these parties are properly assisted by a lawyer or other professional. Mediators should also be aware that one or more of the parties may be technologically challenged and do their best to ensure a level playing field. Nevertheless, given the resources being put into growing the technological literacy of the population as a whole,[35] this concern will likely reduce in significance as time passes.

Finally, to better conduct mediations through the online medium, mediators need to be trained and equipped with skills specific to that context. This will enable them to not only facilitate communications in a smoother fashion but also take advantage of ODR to enhance the mediation process, for example, using different types of communication tools to facilitate the mediation process in different ways.

Mediators can use synchronous communication tools that are richer in non-verbal cues like video or tele-conferencing to promote rapport and trust building.[36] These would be ideal in pre-mediation communications as well as the larger part of joint sessions. More textual synchronous communication tools like instant messaging or chat rooms may be set up for participants to cover ground rules and set an agenda for proceeding.[37] They may also be used to conduct private sessions online such that the mediator need not waste the other party's time or risk that party feeling neglected if the private session takes too long. The mediator thus has more freedom to spend an appropriate amount of time with each party, since the length of the online caucus will, like their content, be confidential.[38] However, any joint sessions may best be conducted through other forms of online communication as mediators who have experimented with such text chat sessions have

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[35] One of the United Nations Sustainable Development Goals ("SDG4") is: "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship". Indicators for this goal focus on information and communications technology skills as well as a minimum level of proficiency in digital literacy skills. See Silvia Montoya, "Tracking Literacy in an Increasingly Digital World", *UNESCO Institute for Statistics Blog* (5 September 2017), online: <http://uis.unesco.org/en/blog/tracking-literacy-increasingly-digital-world-0>. Various public and private efforts to improve digital literacy have been collated by the Digital Inclusion Newslog, "Digital Inclusion – ITU Telecommunication Development Sector", online: <http://digitalinclusionnewslog.itu.int/tag/digital-literacy>.

[36] Nathan Bos *et al*, "Effects of four computer-mediated communications channels on trust development" in *Proceedings of SIGCHI Conference on Human Factors in Computing Systems* (New York: ACM Press, 2002) 1 at 135-140.

[37] Norman Solovay & Cynthia K Reed, *The Internet and Dispute Resolution: Untangling the Web* (New York: Law Journal Press, 2013) [*The Internet and Dispute Resolution*] at 2-28.

[38] *Ibid* at 2-25.

found that they are rushed, pressured to respond quickly, and less able to control the flow of information among disputants.[39]

Asynchronous communication like email can give parties the opportunity to think about their dispute and respond in a more productive and less reactive way.[40] The delays in asynchronous communication can also give the mediator time to strategize.[41] Accordingly, asynchronous communications would be suited for exchanging or submitting documents or to continue the mediation after the face-to-face sessions have come to an end, effectively having the mediator in caucus with each party.[42] Asynchronous communication tools can also be used in between multiple mediation sessions to document progress and keep the momentum of the mediation going.[43] Additionally, in emotionally charged matters like family disputes, some physical distance and time delay may be helpful to allow some cooling-off by the parties; this has led to online mediation being used in divorce cases.[44]

IV.   HOW CAN MEDIATORS BEST ADAPT THEMSELVES TO THE EMERGING WORLD OF ODR?

How can mediators adapt their practice for the online context?

Qualities that face-to-face mediators ought to possess such as respect for confidentiality, neutrality, conflicts of interest awareness, cultural skills, and sensitivity, will continue to be relevant to ODR practitioners. What mediators need to add to their arsenal is a familiarity with the ODR tools and how these tools may affect communication between the parties and with the mediator.

In addition, as with any face-to-face mediation, mediators need to undertake background work and establish the ground rules with regards to aspects such as pre-mediation communications, the handling of documents, joint discussions and private sessions.

Mediators could also leverage technology to prepare parties for mediation. For example, by having several two- to three-minute videos introducing the mediation process and what preparation is required. Further, mediators can use technology to build trust and

39 Ethan Katsh & Janet Rifkin, *Online Dispute Resolution: Resolving Conflicts in Cyberspace* (San Francisco: Jossey-Bass, 2001) at 141.
40 Llewellyn Joseph Gibbons *et al*, "Cyber-Mediation: Computer-Mediated Communications Medium Massaging the Message" (2002) 32 New Mexico Law Review 27 [*Cyber-Mediation*] at 43.
41 *Diminishing Privacy in Dispute Resolution in the Internet Age, supra* note 27 at 30.
42 See, *eg* Sabine Walsh, "Reflections on an e-mediation" *Kluwer Mediation Blog* (5 February 2012), online: <http://kluwermediationblog.com/2012/02/05/reflections-on-an-e-mediation>.
43 Paula Young, "Online Mediation: Its Uses and Limitations" *Missouri Lawyers Weekly* (November 2000), online: <http://www.mediate.com/pfriendly.cfm?id=630>; *The Internet and Dispute Resolution, supra* note 37 at 2-25.
44 Dafna Levi, "Till Death Do Us Part?!: Online Mediation as an Answer to Divorce Cases Involving Violence" (2015) 16 North Carolina Journal of Law & Technology 253; Rebecca Brennan, "Mismatch.com: Online Dispute Resolution and Divorce" (2011) 13 Cardozo Journal of Conflict Resolution 197.

rapport before the mediation through phone calls, video conferencing or other forms of virtual meetings. It has been suggested that mediators should establish online reputations and credibility through professional and seamlessly designed websites containing links to mediation resources and that the website should display high levels of social presence through pictures, photographs, videos and descriptive language.[45]

Service providers can support mediators by providing appropriate training and guidance on the use of ODR. The Centre for Dispute Resolution ("CEDR") is an example of a service provider that has prepared a guidance document titled "Advice for mediators on working with technology"[46] containing practical tips to mediators for different stages of the mediation process:[47]

1) Before the mediation:
   a) the mediator should use an appropriate professional email account which is secure and can handle large files;
   b) the mediator and the parties need to be clear when the mediation has begun and what communications are confidential;
   c) the mediator should speak to the parties beforehand and discuss the case with them privately, including providing information about how to use any technology that the mediator plans to use; and
   d) the mediator should be in charge of or in control of the technology system.

2) During the mediation:
   a) the mediator should be aware of the effect of technology for process and relationship;
   b) the mediator should agree with the parties in advance whether to use video conferencing throughout, not at all or at times;
   c) the mediator should confirm ground rules at the start of the session to emphasise confidentiality;
   d) the mediator should not leave parties for extended periods of time without setting them tasks relevant to the mediation to avoid disengagement;
   e) there needs to be a way for parties to provide their signature remotely; and
   f) the mediator needs to be prepared to use an alternative method rather than delay the mediation to wait for the technology issue to be resolved.

[45] Susan Nauss Exon, "Maximizing Technology to Establish Trust in an Online, Non-Visual Mediation Setting" (2011) 33 University of La Verne Law Review 27 [*Maximizing Technology to Establish Trust in Online Mediation*].
[46] CEDR, "Advice for mediators on working with technology" *CEDR*, online: <https://www.cedr.com/about_us/modeldocs/?id=70>.
[47] Also see *Maximizing Technology to Establish Trust in Online Mediation*, *supra* note 45.

3) After the mediation:
   a) communications after the mediation should have a clear purpose and be clearly identified to be under the auspices of mediation (or not);
   b) there needs to be a clear final statement by the mediator as to when mediation is completed; and
   c) the mediator should have an appropriate policy for deleting files.

However, as outlined above, there are some potential challenges and risks ODR poses that mediators need to consider. If there is a hiccup in the ODR software platform, mediators may need to think on their feet and temporarily resort to telephone, email or paper-based ways to handle claims. Mediators may also consider temporarily using other readily available internet-based applications such as Skype, Zoom and Google Docs as a backup although there may be confidentiality and security concerns with such free platforms.

Patience is part of any new technology project. It may take time, practice and experience before mediators can start using ODR platforms effectively and efficiently, but this investment is likely to pay off in the end.

V. GOVERNANCE FRAMEWORK FOR THE OVERSIGHT OF ODR DEPLOYMENTS

From the perspective of ODR service providers, a governance framework may be required when deploying ODR solutions. This framework would ideally include policies, standards and continuous monitoring to ensure compliance with these standards as well as ensure services are being delivered in a professional manner. Standards could cover areas such as mediator competency, process quality and ethics.

This framework or structure could be promulgated by an external body in order to benefit from the legitimacy that this body would bring to governance or oversight. In countries with developed mediation ecosystems such as the EU and Singapore, this body could be the European Commission or the Singapore International Mediation Institute, but working in tandem with service providers and other stakeholders such as the courts and end-users. However, in less developed mediation ecosystems, where there may not be an existing external body and challenges in creating one (including questions of legitimacy and funding), self-regulation may be necessary at least for a start and service providers could draw inspiration from available ODR protocols or regulations.[48]

Another possibility could be a global organisation such as UNCITRAL, the International Chamber of Commerce ("ICC") or the International Mediation Institute ("IMI") that would co-ordinate the gathering of inputs from various constituencies such as vendors and users of ODR systems to create a multi-stakeholder approach to generating a ODR governance model. This ODR governance model would then provide a frame of reference for regional and country-level governance models.

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[48] See also Colin Rule, "Online ADR Protocols", cited in *Cyber-Mediation*, *supra* note 40 at 72.

One of the key elements that the ODR governance model should encompass is the requirements for the running of ODR systems. In terms of the management of ODR platforms, it is imperative that: (1) the persons or organizations running the ODR platforms have the appropriate Information Technology ("IT") qualifications or understanding of IT; (2) the persons or organizations running the ODR platforms have taken into account cybersecurity hygiene requirements, which may be of particular importance for highly sensitive disputes; and (3) the ODR platforms have undergone stringent software testing and comply with relevant quality standards.

Why are these three requirements critical? An illustration from the UK provides an answer to this question. In January 2019, an IT failure affected courts across England for days, causing trials and hearings to be delayed, jurors being unable to enrol, witness statements being inaccessible, and legal practitioners being unable to access court Wi-Fi or the secure email service used by the courts.[49] Richard Atkins, chair of the bar was quoted as saying:

> Whilst Her Majesty's Courts and Tribunal Service is moving forward with its programme of online justice, these problems would suggest that more investment in the basics is needed first. We cannot have a justice system that comes to a shuddering halt the moment the IT does not work properly.[50]

Meanwhile, the Ministry of Justice could only apologise for the delays, express disappointment that their suppliers had not yet been able to resolve the network problems in full, and promise to continue to work with them to return services to normal.[51]

This illustration shows not only the significant impact that a failure of IT systems could have on public confidence and individual rights, but that such failures could have been avoided with appropriate IT knowledge and qualifications, and stringent software testing.

In the context of ODR systems, IT knowledge would enable the staff running the ODR platform to be able to quickly diagnose issues and suggest ways forward should the platform suddenly stop functioning e.g. in the instance of a software crash. If one or both parties are unable to log onto the platform despite multiple tries, much time would be needed to investigate the root cause of the inability to access the portal. Here is where IT skills would be of critical importance and necessity for diagnosis and prevent frustration for all parties concerned.

Cyber hygiene is another critical element because many ODR portals require or allow the uploading of case documents to be exchanged between parties. These case documents contain confidential information about the details of the dispute and also personal

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49   "Rush to fix computers in England's courts" *BBC News* (22 January 2019), online: <https://www.bbc.com/news/technology-46960177>; Jon Sharman & Lizzie Dearden, "UK's courts system 'on its knees' following major IT failure, lawyers' association says" *The Independent* (22 January 2019), online: <https://www.independent.co.uk/news/uk/home-news/courts-it-outage-computer-email-wifi-moj-budget-cuts-criminal-bar-association-a8740656.html> [*Jon Sharman & Lizzie Dearden*].

50   *Jon Sharman & Lizzie Dearden, ibid.*

51   *Ibid.*

information of the parties. If cyber hygiene is not practised, vulnerabilities are exposed and there could be a hack into the platform. These confidential files could be leaked. The same applies to confidential and private text or chat messages that are sent via the portal between one party and the mediator. Therefore, it would be of crucial importance that the ODR platform is well fortified.

Finally, as with any software, ODR platforms need to be tested thoroughly prior to being used for real-time mediations. Testing ODR software fundamentally involves running the software to ensure that at least the various basic functions meet the requirements of that function and respond correctly when the mediator or parties invoke or use that function. These basic functions include but are not limited to making appointments, multiparty video conferencing, exchanging of documents and drafting of documents like the mediated settlement agreement.

If the ODR software is not tested thoroughly, software bugs or errors may appear causing serious disruptions to the mediation and would undermine parties' confidence in the mediation process as well as, unfortunately, the mediator.

In addition to functionality of the ODR platform, the ODR governance model should also cover the following main quality characteristics: reliability, usability, efficiency, maintainability, portability and security.[52] During an informal survey conducted by the author of mediators at the 5th Asian Mediation Association conference, many mediators expressed the most concern about usability, which defines how easy it is to use a particular software function. Mediators stated a strong preference for tools that were intuitive and did not require a steep learning curve. Their preference was to allow mediators to focus on the mediating rather than spend too much time learning how to use the ODR system. It would be worthwhile gathering more views from other stakeholders in the mediation industry to inform the ODR governance model.

In July 2018, UNCITRAL announced the completion of its work on the Singapore Convention on Mediation and the United Nations General Assembly ("UNGA") passed a resolution on the Convention on 20th December 2018.[53] The convention has recently been

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[52]   The International Council for Online Dispute Resolution ("ICODR") believes that quality ODR programs must be: accessible, accountable, competent, confidential, equal, fair/impartial/neutral, legal, secure and transparent. See "ICODR Standards" *ICODR website*, online: <https://icodr.org/index.php/standards>. Commentators have also discussed the concepts of accessibility, accountability, competence, confidentiality, empowerment, equality, fairness, honesty, impartiality/neutrality, informed participation, innovation, integration, protection from harm, security, transparency, and trust in the context of ethical principles relevant to ODR. See, *eg* Daniel Rainey, "Third Party Ethics in the Age of the Fourth Party" (2014) 1 International Journal of Online Dispute Resolution 37; Noam Ebner & John Zeleznikow, "No Sheriff in Town: Governance for the ODR field" (2016) 32 Negotiation Journal 297.

[53]   Adrian Lim, "United Nations passes resolution for new treaty on mediation named after Singapore" *The Straits Times* (21 December 2018), online: <https://www.straitstimes.com/politics/united-nations-passes-resolution-for-new-treaty-on-mediation-named-after-singapore>.

signed in Singapore.[54] This is the first United Nations Convention to be named after the island state and will cement Singapore's position globally in the thought leadership map for ADR.[55] The Singapore Convention on Mediation will provide for enforcement of settlement agreements resulting from mediation in the context of international commercial disputes. It seems only natural given Singapore's leadership in this space that Singapore can also lead the way on driving a governance framework for ODR systems. It is the authors' hope that this paper will contribute towards this endeavour.

VI.   WHAT THE FUTURE MAY LOOK LIKE

With the advent of the Internet and the galloping strides it has made, it has become clear that technology has come to the field of dispute resolution to stay. At the rate that technology is changing, one day we will likely find that artificial intelligence ("AI"), blockchains, holography, avatars and robots will become mainstream in ODR, in conjunction with the deeper use of cloud storage and big data.

In fact, AI and blockchains do not appear too far off in the horizon where ODR platforms are concerned. AI algorithms can already be used to automatically generate suggested options for the mediator to consider or be used by the parties to resolve their dispute.[56] AI algorithms could as well churn out mediator recommendations, assist with the appointment of mediators and draft mediated settlement agreements based on responses to simple questions posed to the parties.[57]

This is in addition to the administrative side of ODR platforms where AI could play a part in case management facilitation and automation, giving mediators more time to do what they do best: mediate. At present in the Singapore context, Court and SMC mediations dates are set by court and SMC administrative staff respectively. However, from the author's own experience, mediators for online mediation sessions are usually expected to schedule their own sessions via the online portal. This places additional administrative burden on the mediator as it is not easy to find suitable times that suits all parties simultaneously. An AI-enabled ODR platform with intelligent scheduling could help find common timeslots as well as handle other administrative tasks.

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54 Cara Wong, "46 countries sign international mediation treaty named after Singapore" *The Straits Times* (7 August 2019), online: <https://www.straitstimes.com/singapore/key-facts-about-the-singapore-convention-on-mediation>.

55 Seow Bei Yi, "UN treaty on mediation to be named after Singapore" *The Straits Times* (23 July 2018), online: <https://www.straitstimes.com/singapore/un-treaty-on-mediation-to-be-named-after-singapore>.

56 See, *eg* John Hyde, "Mediator claims online dispute first to be settled by algorithm" *The Law Society Gazette* (25 February 2019), online: <http://uatcommunities.lawsociety.org.uk/news/mediator-claims-online-dispute-first-to-be-settled-by-algorithm/5066998.article>.

57 See Davide Carneiro *et al*, "Online dispute resolution: An artificial intelligence perspective" (2014) 41 Artificial Intelligence Review 211.

In addition to being used in cryptocurrencies, blockchains and smart contracts[58] can be used in many new applications, which are capable of disrupting business practices across many sectors including dispute resolution.

As an example, blockchains and smart contracts can potentially be used in the self-enforcement of mediated settlement agreements ("MSAs"). If rendered in the form of smart contracts, mediated settlement agreements would become self-executable, thus making their enforcement more effective and efficient. Such a use of blockchains and smart contracts in mediation could also have the potential to promote the use of cross-border mediation and provide greater impetus for countries to sign and ratify the Singapore Convention on Mediation.

Another trend is that of public-sourced justice platforms (author's own terminology), where mediators, jurors or arbitrators are sourced from the community at large, in order to be able to render group or community justice that anyone who has lodged a dispute and has deposited a fee. An example of such a platform is Kleros, which not only uses smart contracts for the enforcement of MSAs as described above, it is also a blockchain-based, crowdsourced dispute resolution platform. It links disputants with suitably qualified "jurors" who are enlisted to consider the evidence submitted to them in order to adjudicate the dispute. According to the Kleros website, it works as a "decentralized third party to arbitrate disputes in every kind of contract" and it is able to leverage "the technologies of crowdsourcing, blockchain and game theory to develop a justice system that produces true decisions in a secure and inexpensive way".[59] PeopleClaim, an online mediation platform, also works on the same principle of crowdsourcing. Anyone can file a claim or apply to become an online mediator, with mediators being awarded if their proposed solution is selected by disputants for settlement.[60]

The author believes that the governance, quality control and mapping of current processes to these platforms will need to be worked through and need to be monitored as technology is not entirely foolproof.

In light of the significant changes expected on the horizon due to the advent of the Internet, ADR practitioners including mediators, and dispute resolution service providers need to keep abreast of technological changes in order to harness their benefits.

VII.   CONCLUSION

ODR can help to ameliorate access by all to justice via several means, notably removing or reducing the need for disputants to travel, thus saving time and money and helping with language challenges with the aid of real-time interpretation or translation. ODR can allow for both synchronous and asynchronous communications, giving flexibility to disputants and to the mediator or other ODR practitioner.

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[58]   A smart contract is a programmable contract that resides in the blockchain.
[59]   See Kleros website, online: <https://kleros.io>.
[60]   See PeopleClaim website, online: <https://www.peopleclaim.com>.

ODR is also becoming popular with the courts in some jurisdictions as it decreases reliance on the courts for simpler conflicts and by making dispute resolution considerably easier and cheaper. This reduces conventional barriers to justice by increasing capacities and participation by all strata of society.

The push for greater use of mediation in the cross-border commercial context will encourage the growth of ODR. With the EU Directive on Mediation and the work of UNCITRAL on the Singapore Mediation Convention leading the way in establishing frameworks for cross-border mediation, we can expect that perhaps a demand for a more efficient way of conducting cross-border mediations may drive an interest in ODR.

However, for ODR to succeed in Asia, mediators and service providers (both governmental and private) need to be aware of some of the possible pitfalls when using ODR platforms and be equipped to manage them. A proper governance framework covering the deployment of ODR platforms will go a long way to ensuring the continued success of ODR in Asia.