

Comments and Content from Virtual International Online Dispute Resolution Forum

1-2 March 2021, Hosted by the National Center for Technology and Dispute Resolution (NCTDR)

David Allen Larson, Noam Ebner, Jan Martinez, Amy Schmitz, Frank Fowlie, Larry Bridgesmith, Julie Sobowale, Clare Fowler, Michael Wolf, Chris Draper & Zbynek Loebel

Abstract

For the past 20 years, NCTDR has hosted a series of ODR Forums in locations around the world. For 2021, the Forum was held virtually, with live presentation over a web video platform, and recorded presentations available to participants. A full recording of the sessions can be found through <http://odr.info/2021-virtual-odr-forum-now-live/>. The following items are narrative notes from some of the presentations:

- David Allen Larson – ODR Accessibility*
- Noam Ebner – Human Touch*
- Jan Martinez & Amy Schmitz – ODR and Innovation*
- Frank Fowlie – Online Sport Dispute Resolution*
- Larry Bridgesmith – AI Introductory Notes*
- Julie Sobowale – AI and Systemic Bias*
- Clare Fowler – DEODRISE*
- Michael Wolf – ODR 2.0 System Design*
- Chris Draper – Algorithmic ODR*
- Zbynek Loebel – Open ODR*

ODR Accessibility for Persons with Disabilities (PWD): We Must Do Better

*David Allen Larson*¹

I began by suggesting ideas to keep in mind throughout my presentation. I asked attendees to consider that: we now have an opportunity to reimagine justice, the access to justice divide is larger than the digital divide, e-commerce is not the same as public law and accessibility is a universal issue. Additionally, carefully consider the technology you will create or adopt for your online dispute resolution (ODR) system. I referred to the International Council for Online Dispute Resolution Standards as an example of where users can find helpful guidance.

¹ David Allen Larson is Professor of Law Mitchell Hamline School of Law and Senior Fellow, Dispute Resolution Institute; Chair Elect American Bar Association Section of Dispute Resolution; System Designer New York State Unified Court System.

David Allen Larson et al

I identified four subjects that I would discuss: that technology is not a panacea, we should avoid conceptually segregating persons with disabilities, an update on domestic and international digital disability legislation, and best practices for digital accessibility. I noted that there is no consensus regarding the definition of ODR and provided several different examples, including definitions from Resolution Systems Institute and the National Center for State Courts.

People cannot always physically appear in court for reasons that include shame, fear, no vacation time, transportation issues, childcare challenges, physical intimidation by the other party and disabilities. ODR can improve access to justice but we must be mindful.

Currently practitioners often begin ODR processes by introducing and explaining the technology that will be used. One problem is that the dispute resolvers are now introducing themselves as experts, as the person with all the answers. Although the concern is subtle, it is very real. The parties now perceive the dispute resolver as the leader, the person to whom they should defer. It may be difficult to now see that person as merely a facilitator. One solution would be to have a person different than the dispute resolver explain and introduce the technology.

As we all know, COVID-19 has accelerated the adoption of technology. Some services may never again be offered face to face. The danger is that vulnerable populations, including persons with disabilities (PWD), are being excluded from our 'new normal' digital world. There is great pressure to provide services online as quickly as possible, but we must ensure the processes are designed to be accessible for PWD. Do not think it will be easy or efficient to go back and make technology accessible later.

The Centers for Disease Control reports that one in four Americans have a disability that impacts major life activities, so tens of millions of people could be negatively affected by online activity that is not accessible. Testing by the Information Technology and Innovation Foundation in 2018 and 2020 found that approximately 40% of state government websites had problems that could prevent access for PWD. The Global Initiative for Inclusive ICTs (G3ict) scanned hundreds of e-commerce, news and information, and government websites and found 70% inaccessible to visually impaired users. I identified the 29 countries that the G3ict surveyed regarding technology and access to justice for persons with disabilities. The G3ict reported, for example, that although 60% of courts have budget allocations for digitization, less than 10% specifically allocate funding for ICT accessibility and digital inclusion of PWD.

There is more than one reason to create disability-accessible web content. First, it is just good business. You will reach a larger audience and have more customers. Second, the lives of PWD will be improved. Third, lawsuits or bad press can be avoided.

Universal usability/accessibility will not only bring PWD into the audience and customer base, however. Videos with captions will help anyone in a noisy environment, for instance. People with limited bandwidth will appreciate a well-designed, uncluttered website.

Accessibility is a human right according to the United Nations Convention on the Rights of Persons with Disabilities (CRPD). Article 9 requires states to promote

access for PWD to new information and communications technologies and systems, including the internet. Article 13 ensures access to justice for PWD.

Legal liability is a genuine concern. I explained how the Americans with Disabilities Act (ADA) defines individuals with a disability and how courts have concluded that Title III, the Public Accommodations and Commercial Facilities section, applies to businesses that have both a physical location and a website. There remains some confusion about businesses that only have a website. I explained my view that the better rule is that those businesses should also be covered by Title III. Eleven years ago, the Department of Justice began considering whether to promulgate rules to adopt the Web Content Accessibility Guidelines (WCAG) as the website accessibility standard in the United States. Those rules were never issued, however, and we still have no official guidance. We only have court decisions stating that the ADA was intended to give public accommodations maximum 'flexibility' in meeting the statute's requirements. This vague standard has created confusion and resulted in increased litigation.

I provided statistics illustrating the rate at which litigation has increased. ADA Title III plaintiffs can recover attorney fees but no monetary damages. A few states like California and New York have state legislation that allows for limited damages plus attorney fees. As a result, most of the cases have been brought in California and New York. Because the most substantial potential monetary award is for attorney fees, the cases presently are settling quickly so that defendants can keep attorney fees low.

The Online Accessibility Act H.R. 8478 was introduced in the House of Representatives 1 October to amend the ADA and add a new Title for consumer facing websites and apps. I explained why this proposed legislation was more of an effort to protect defendants from liability than to improve accessibility for PWD. The proposed legislation created several barriers and obstacles to bringing a successful lawsuit. Although the legislation permitted complaints to be filed with the Attorney General, no complaints could be filed until 90 days after a written notice to the prospective defendant, for example. Additionally, plaintiffs would be required to plead with particularity each element of their claim which I believe creates a much higher standard and an equal protection problem when one compares the lower pleading requirements articulated in *Ashcroft v. Iqbal*. I was happy to report that this bill failed to pass during the 116th Congress which ended 3 January 2021.

I discussed the Ontarians with Disabilities Act. Ontario has been a clear leader ensuring digital accessibility for PWD. Ontario required compliance with the Web Content Accessibility Guidelines 2.0 Level AA as far back as 1 January 2012 for the government of Ontario and the Legislative Assembly. I described ways in which the Ontarian legislation still can be improved, but also noted that the province has done more than other jurisdictions. I also discussed the European Accessibility Act (Directive 2019/882). The Act is disappointing in several respects, not the least of which is that it does not require compliance until 28 June 2025.

I offered a list of best practices that include adopting a disability standard such as the Web Content Accessibility Guidelines, appointing a digital accessibility coordinator, including accessibility in all technology contracts, including accessibility in all requests for proposals (RFP), and continually updating and training staff. Addi-

David Allen Larson et al

tionally, websites should be tested for accessibility, PWD should be used as testers, external website accessibility organizations (such as WAVE, Accessibleweb, Usablenet, WebAIM, AudioEye and accessiBe) should be consulted if questions arise, an accessibility link should be on every ODR page, and accessibility should be a part of job descriptions and evaluations.

The Human Touch in Online (and Traditional) Mediation and Negotiation

Noam Ebner²

With the development of communication technology in the late 20th and early 21st century, the fields of negotiation and mediation were challenged. Can processes be conducted at a distance via technology? Both of these fields went through cycles of resistance and acceptance of technology in general, and of conducting processes at a distance via technology in particular.

The negotiation field tended to resist technology at first, resisting each technology for several years after its introduction, followed by its acceptance and concurrent resistance to the next technology in line. This played out, cyclically, regarding email, videoconferencing, and text messaging; it will likely continue as new communication technologies develop.

The mediation field, on the other hand, rejected technology in a more sweeping manner. There were some mediators who did accept the notion of conducting processes at a distance via technology, and the field of online dispute resolution ODR emerged in the mid-1990s.³ For the main part, however, the bulk of practitioners rejected use of technology, insisting that processes required a physical meeting in a room. Even mainstreaming efforts by large dispute resolution organizations in the mid- 20-teens had only marginal effect. Mediation processes remained offline and mediation rooms remained tech-bereft.⁴

While various reasons were put forth, the most commonly voiced resistance to conducting processes online was that negotiation and mediation are *essentially human* processes and that online, something of the ‘human touch’ – an ineffable catch-all for the sense of human connection that these processes rely on – is lost and simply cannot manifest in the online environment.⁵

And then, COVID-19 struck. With lockdowns and distancing imposed, all professional activity transitioned online, including negotiation and mediation activi-

2 Noam Ebner is Professor of Negotiation and Conflict Resolution, Creighton University.

3 Katsh, E. (2021). ‘Online Dispute Resolution (ODR): A Look at History’. In Rainey, D., Katsh, E., and Abdel Wahab, M. (Eds.), *Online Dispute Resolution: Theory and Practice* (2nd ed.). The Hague: Eleven International Publishing.

4 Carrel, A., & Ebner, N. (2019). ‘Mind the Gap: Bringing Technology to the Mediation Table’, *Journal of Dispute Resolution*, 2, 1-45.

5 For expansion on the human touch, its perceived and real value to practitioners, its manifestations online, and the domains approach to exploring it, as well as other issues discussed in this article, see Ebner, N. (2021). ‘The Human Touch in ODR: Trust, Empathy and Social Intuition in Online Negotiation and Mediation’. In Rainey, D., Katsh, E., and Abdel Wahab, M. (Eds.), *Online Dispute Resolution: Theory and Practice* (2nd ed.). The Hague: Eleven International Publishing.

ty. Any resistance that had existed in the past was swept aside by practicalities. Mediators, negotiators and their organizations shifted their practices to Zoom. International processes, of course, were all conducted online. No issue or case was considered too big or too important to be resolved in an online process.⁶ In maintaining their practices, businesses and activities throughout this period they discovered that, generally speaking, mediation and negotiation can be conducted online, successfully.⁷

1 *The Human Touch*

It has always been hard to know quite what people mean, when they say that ‘the human touch is missing’. Similarly, conversations on how the human touch has been surprisingly *present* in online interactions leave the term as vague as other terms used to describe secrets sources of success such as ‘mediation magic’ or ‘negotiator intuition’. The human touch, it seems, is in the eyes of the describer. It is often pinned down to other terms such as warmth, presence, emotions, closeness, energy, togetherness, understanding, working together and more. While these do not provide a definition of the human touch that one can grasp cognitively, perhaps they begin to paint a picture that can be viewed emotionally. And, perhaps, the human touch is like the proverbial elephant, in that it challenges definition, but you definitely know it when you see it.

Perhaps one way to collect many of these terms (and others that have been used to describe one corner or another of the human touch) is that they all relate to the here-and-now experience of participants in a mediation or negotiation process. They do not relate to the strategic, planning or calculating aspects of these processes, but rather to the interactional experience in the moment.

The experience gained in the COVID-19 period has cleared up one thing about the human touch: while many anticipated it to vanish online, it did not. It may have changed, it may have become more elusive, but it did not abruptly vanish.

Widespread recognition of this fact, coupled with the field’s increasing experience with online processes, opens up new possibilities for exploring the human touch. If it is more elusive online, how can practitioners imbue their processes with it? How does working with it online differ from working with it in a physical room? What adjustments should practitioners make to their methods? What new opportunities does the online environment present for working with the human touch? These questions, previously pent-up behind a dam of ‘It can’t work,’ now offer fascinating new areas of exploration for researchers and practitioners alike.

6 For example, the Brexit negotiations between the UK and the EU were conducted online. See Ebner, N. (June 2020). ‘Videodiplomacy in the Brexit Talks and Beyond’. Available at: <https://ukandeu.ac.uk/videodiplomacy-in-the-brex-it-talks-and-beyond/>.

7 Ebner (2021) (particularly, see section 1 of this chapter).

2 A Framework for Human Touch Exploration: Domains

If human touch associations have the interactional here and now as their focal point, a helpful starting point for exploring the human touch and its online manifestation is to focus on elements of mediation and negotiation processes that are similarly centered. There are a number of such domains – elements, or clusters of elements – that provide low-hanging fruit on which to practice human-touch exploration and practical experimentation in negotiation and mediation processes. Three of them are the domains of interpersonal trust, empathy, and social intuition.

2.1 Interpersonal Trust

Interpersonal trust, as defined in the context of negotiation, is “...an expectation that one’s cooperation will be reciprocated, in a situation where one stands to lose if the other chooses not to cooperate.”⁸ Mediators and negotiators rely on interpersonal trust often and significantly in conducting significant processes. Interpersonal trust combines strategic, preset and quantifiable elements with others that develop interactionally as a process unfolds.⁹ In processes conducted online, any communication medium poses its own array of challenges to formation, maintenance, and growth of interpersonal trust.¹⁰ Understanding interactional trust dynamics in the online environment would allow negotiators and mediators to recognize threats to the human touch and opportunities for bringing it to bear in the process.

2.2 Empathy

Empathy is a multifaceted human-touch domain in negotiation and mediation. One of its components is perspective taking: one’s ability to understand what things look like from the other’s point of view. Another is empathic concern: one’s ability to accurately identify what another person is feeling, while being able to separate this from their own emotions. Both of these tendencies or capacities are triggered and utilized interactionally, on the spot, as a process unfolds. Both are key to successful negotiation and mediation.¹¹ And, both are challenged in the environment provided by online communication. Online, negotiators and mediators find it more difficult to accurately discern, and accurately frame and convey, others’ emotional state or way of seeing things.¹² Developing the human touch to its full-

8 Ebner, N. (2007). ‘Trust-building in E-negotiation’. In Brennan, L. and Johnson, V. (Eds.), *Computer-Mediated Relationships and Trust: Managerial and Organizational Effects*. Hershey, PA: Information Science Publ., p. 141.

9 For expansion on these separate routes to trust, or pillars of trust, see Lewicki, R.J. (2006). ‘Trust, Trust Development and Trust Repair’. In Deutsch, M., Coleman, E.C., and Marcus, E.C. (Eds.), *The Handbook of Conflict Resolution*. San Francisco, CA: Jossey-Bass, p. 110.

10 See Ebner (2021). Section 3.6 of this chapter details eight specific challenges to trust and explaining how they play out differently across varied media. Ebner would be the first to suggest that there are more than eight such challenges.

11 For expansion on the nature and components of empathy and its functions in dispute resolution, see Newell, L.A. (2019). ‘Rebooting Empathy for the Digital Generation Lawyer’. *Ohio State Journal on Dispute Resolution*, 34(1), 1-96.

12 See Ebner (2021) (particularly, see section 3 of this chapter).

est in online negotiation and mediation requires practitioners to understand how online communication tends to diminish their empathic skills and tendencies even as it heightens parties' need for empathy development.

2.3 Social Intuition

In navigating a process, negotiators and mediators rely on a broad array of interactional elements. Arguably, these affect the process' course and determine its outcome just as much as any degree of cognitive processing. Many of these elements are doubly covert: practitioners may not notice them in the moment, and they are often not dealt with in the literature on negotiation and mediation. As an example, while negotiators might consider 'Does my counterpart trust or suspect me?' and find guidance for working with trust in the literature, other key negotiation questions, such as 'Does my counterpart like me? Does she enjoy our time together?' do not. Similarly, mediators might not ask themselves 'Do parties feel comfortable in the office with me, or not?', nor does the literature provide them with specific guidance on this issue.

These covert issues, which Andrea Schneider and I have grouped under the framework of *Social Intuition*,¹³ are all affected by flow in intangible interpersonal channels. Nigh-invisible at the best of times, they are significantly challenged by some online communication platforms and steamrolled by others. For example, conducting processes via email seems to deny parties most or all of the other's non-verbal communication; conducting processes via videoconferencing affects the perception of eye contact and eliminates elements of physical proximity and touch.

To successfully bring the human touch to online processes, practitioners must learn to resurrect online some of these eliminated channels and augment others that have been diminished. They need to learn anew to recognize their own patterns and predilections with regard to these channels, including how they may change in online interactions. They need to understand their counterpart's patterns, preferences, and behaviors with regard to these intuitive channels, and be able to take action through them in order to bridge and form connections with the other.¹⁴

Adopting a 'domains' approach to human-touch exploration in negotiation and mediation allows researchers and practitioners to easily identify areas in which human-touch elements are constantly and visibly at play. These three only serve as examples of a much longer list, which would include emotions (or, subdomains of specific emotions), decision-making, empowerment, recognition, persuasion, creativity, rapport, and more.

3 *Human Touch Investigation Will Improve Mediation (Online and in the Room)*

The online environment, it turns out, does not break negotiation or mediation. While old news to some, this came as a great relief to many thousands of negotia-

13 Schneider, A.K. & Ebner, N. (2017). 'Social Intuition'. In Honeyman, C. & Schneider, A.K. (Eds.), *The Negotiator's Desk Reference (Vol.1)*. St Paul, MN: DRI Press.

14 See Ebner (2021) (particularly, see section 5 of this chapter).

tors and mediators. Now that these thousands have reached this recognition through experiencing online processes, the field has forever transformed. With it, the way we treat the all-important human-touch issue must similarly transform. No longer should it be an excuse to brush aside the potential in online engagement and convening. Rather, we must now explore questions critical to mediation – of-fine and in the room:

- Are negotiation and mediation really as dependent on the human touch as previously assumed?
- Are negotiators and mediators more skilled at employing the human touch, in the mediation room or online, than they had expected to be?
- Did the online environment turn out to be more conducive to the human touch than some had expected it to be?
- How did negotiators and mediators translate traditional manifestations of the human touch to online interaction?
- What *new* methods of supporting and providing human touch might present themselves in the online environment?
- How can we improve our human-touch abilities online, perhaps even surpassing our in-the-room abilities?
- What has working with the human touch online taught us about the human touch in general, and how can we utilize this new information in order to improve our in-the-room uses of the human touch?

4 *Tipping Points in the Mirror Are Closer Than They Appear*

Written in the age of debates around what will be the new normal of day-to-day life, professional activity, and negotiation and dispute resolution practice, I do not intend, in this essay, to take a stance on any of the issues. Instead, I put forth a simple assessment of transformational readiness.

As fields of practice, negotiation and dispute resolution have advanced a decade, perhaps two, with regard to technological adoption, over the COVID-19 era.¹⁵ The vast majority of practitioners are now at least minimally experienced with practicing via technology, and many have gone far beyond that. Importantly, the

15 While these numbers are broad estimations, they are not random. Early on in the pandemic period, in May 2020, a McKinsey Digital report surveying business practices around the world stated that “Indeed, recent data show that we have vaulted five years forward in consumer and business digital adoption in a matter of around eight weeks.” See Baig, A., Hall, B., Jenkins, P., Lamarre, E., and McCarthy, B. ‘The COVID-19 Recovery Will Be Digital: A Plan for the First 90 Days’. Available at: www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-covid-19-recovery-will-be-digital-a-plan-for-the-first-90-days. A survey conducted several months later, in October, suggested that some aspects of digitalization had leapt forward by as much as seven years in the rate at which businesses were developing digital or digitally enhanced products and services. See McKinsey and Co. (2021). ‘How COVID-19 has Pushed Companies Over the Technology Tipping-Point and Transformed Business Forever Available’. Available at: www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever With regard to mediation in particular, writing in April 2021 while keeping in mind the degree to which the mediation field entered the pandemic with a 20th-century mindset and toolbox (see Carrel & Ebner, 2019), I suggest that estimating the field has undergone 10-20 years of digital advancement is, if anything, conservative.

vast majority of academics and educators have gone through a similar process in their different roles as faculty, teachers, trainers and simulation managers. Their new sense of comfort with technology is manifest in their curricula in the late COVID-19 era, as well as in the rising number of those who have joined the ranks of authors and speakers on the topic. Other (real or perceived) gatekeepers such as judges and attorneys have gone through their own digital transformations, and environments such as corporate cultures and organizational attitudes have all bent towards technological openness, if not enthusiasm.¹⁶

The combined outcome of all this is that the fields of negotiation and mediation have passed the technological tipping point, and stand prepared to fully enter the 21st century. Furthermore, they are ready to do so with the maturity and sophistication necessary to maintain human connection across technological bridges. As technology continues to develop, negotiators and mediators will no longer see it as posing a cold threat to warm processes. Rather, they will increasingly utilize it to transcend boundaries previously imposed by geography, time and habit, and bring people together through deeply human processes.

ODR and Innovation in the United States

*Janet Martinez and Amy J. Schmitz*¹⁷

Innovation and entrepreneurship have yielded remarkable advances in ODR in the United States. E-commerce companies provide varied and large numbers of avenues to remedies. Exponential growth in judicial ODR has added a virtual door to the courthouse in many jurisdictions, and has thereby advanced access to justice as well as efficiency. We are seeing institutionalization of ODR in the United States in terms of American Bar Association (ABA) and NCTDR leadership, and universities taking on the challenge of teaching ODR to students, as well as training mediators who are moving online.

COVID-19 has generated both large numbers of new disputes, and space for dispute resolution professionals to consider how they can fashion means for re-

16 For further discussion on the COVID-19 online transition as a watershed event in terms of technological adoption in the field of mediation, see Ebner, N., & Rainey, D. (2021). 'ODR and Mediation'. In Rainey, D., Katsh, E., and Abdel Wahab, M. (Eds.), *Online Dispute Resolution: Theory and Practice* (2nd ed.). Eleven International Publishing (particularly, see section 3 of this chapter).

17 Janet Martinez is Senior Lecturer in Law and Director of the Gould Negotiation and Mediation Program at Stanford Law School. Her current research focuses on dispute system design and on-line dispute resolution (Dispute System Design with Amsler and Smith, Stanford University Press, 2020). Amy J. Schmitz is the Elwood L. Thomas Missouri Endowed Professor of Law at the University of Missouri School of Law and the Center for Dispute Resolution. She has been heavily involved in ODR teaching and research for a long time and is a Fellow of the National Center for Technology and Dispute Resolution, as well as the Co-Chair of the ABA Technology Committee of the Dispute Resolution Section and the ODR Task Force. Professor Schmitz has published over 78 interviews as host of *The Arbitration Conversation*, and is joining the revered *RESOLVING DISPUTES* casebook. Professor Schmitz has published over 55 articles in law journals and books, and a book, *The New Handshake: Online Dispute Resolution and the Future of Consumer Protection*, with Colin Rule.

solving and preventing disputes without travel or in-person meetings that could be unsafe due to COVID-19.

This has quickened the pace of alternative or appropriate dispute resolution's (ADR's) move towards online dispute resolution (ODR). ODR includes automated decision-making, as well as online negotiation, mediation, arbitration, community courts and variations thereof. Indeed, even the definition of ODR is in flux as new technologies develop and lines between ADR and ODR are blurred.

Technology has opened new virtual doors to the courthouse for those that cannot afford the time and costs of in-person processes. ODR seems to especially fill this need with respect to small claims, traffic, landlord-tenant and similar smaller dollar or less complex disputes. Problem diagnosis built into ODR programmes reduces the number of disputes from escalating into lawsuits, and online negotiation and mediation lead to consensual and quicker resolutions.

Another new development in U.S. ODR has been the institutional interest in research and development of best practices. The Pew Charitable Trusts is researching use of emerging technologies in dispute resolution. The American Bar Association has established an ODR Task Force aimed at making the market more transparent to instil trust in its users. The ODR Task Force is organized around three main 'Working Groups': (1) guidance with respect to best practices, and institutions' involvement in establishing and regulating such practices; (2) guidance with respect to special issues relating to Court ODR; and (3) guidance with respect to special issues relating to private ODR.

While law schools have long offered courses in negotiation and dispute resolution to complement traditional civil procedure and trial practice classes, ADR is expanding to include ODR. A number of law schools now include modules as well as full courses in law and technology, system design, AI regulation and ODR practice.

Dispute resolution systems can be usefully analysed in terms of their goals, stakeholders, context and culture, structures and processes, resources and accountability. These elements can be applied to an array of ODR systems. EBay manages over 60 million disputes a year in e-commerce. Courts and tribunals across the country handle litigation over civil and criminal matters with a priority aim of offering access to justice; of these, civil claims, small claims and family law have led in the development of court ODR options. Nextdoor is a social media platform that enables geographically adjacent neighbours to communicate over issues relevant to their living environment. Kleros is one of the leading firms to offer resolution of smart contract disputes, all contained within the blockchain.

In sum, it is an exciting time for ODR in the United States. New developments continually come to the fore, as interest (both positive and negative) in ODR ignites research that will hopefully spark user-centric design and best practices. Innovation can breed both positive and negative externalities, but many are working to design ODR systems to expand, not contract, access to justice.

Online Sport Dispute Resolution: The Use of ODR with the Athletics Canada Commissioner's Office

*Frank Fowlie*¹⁸

This paper is a summary of presentation submitted for the 2021 Virtual Online Dispute Resolution Forum, hosted by the National Centre for Technology and Dispute Resolution (NCTDR).

The paper will examine the use of simple and accessible Online Dispute Resolution in the realm of sport. Athletics Canada (AC) is the National Sport Organization (NSO) for track and field, road racing (marathons) and cross-country sport in Canada. AC is Canada's representative organization with World Athletics, the International Federation governing track and field events. World Athletics was formerly known as the 'International Association of Athletics Federations' or IAAF.

AC is responsible for promoting the sport across all provincial branches, sport governance, applying international standards for competitions, and selecting and supporting Canada's National Team at various events, such as the Olympic Games, Paralympic Games, World Championships, Commonwealth Games, etc.¹⁹ AC is a large participant-based organization with 25,000 members across Canada. It provides services in both Official Languages (English and French). Most of its participants are digital natives and are tech savvy.

AC is the first NSO in Canada to have a dedicated in-house Alternative Dispute Resolution office. The Commissioner's Office was established in 2015, enshrined in the organization's by-laws.

There are presently three appointed Commissioners, which is the number foreseen in the Terms of Reference (TORs). One is referred to as the Acting Commissioner, and the other two as Alternate Commissioners. These are 'on call' positions

18 Dr. Frank Fowlie is the Commissioner with Athletics Canada and is the Complaints and Appeals Officer with Wrestling Canada Lutte. Frank is a member of the Board of Directors with the Canadian Sport Institute, Pacific. He served as the Independent Mediator with the Organization for the Prohibition of Chemical Weapons (2015-2016) and as the Ombudsman at the International Organization for Migration (IOM) (2012-2015). He was the inaugural Ombudsman at the Internet Corporation for Assigned Names and Numbers. ICANN is the agency which administers the global domain name system which serves as the backbone for the Internet (2004-2011). Frank is a mediator with the Green Climate Fund based in Korea. Frank also served as a Capacity Building Consultant with the World Bank in Pakistan, specifically working with the Ombudsman of the Province of Balochistan (2015). Frank was on the Mediation Roster with the Court of Arbitration for Sport (2013-2019) and served six years as a Director of the Sport Dispute Resolution Centre of Canada (2009-2015). Frank served as the Chef de Mission for the Individual Olympic Athletes from East Timor at the 2000 Sydney Olympic Games. Frank holds a Doctor of Conflict Resolution (DCR) from La Trobe University, Melbourne, and is a Fellow with the Centre for Information Technology and Dispute Resolution at the University of Massachusetts – Amherst. Frank holds the designation of Chartered Mediator. Frank was awarded the Canadian Peacekeeping Service Medal for his work with the UN in East Timor. In 2010, Frank was awarded the Lifetime Achievement Award from the University of Regina Alumni Association. Frank began his career as a member of the Royal Canadian Mounted Police.

19 <https://athletics.ca/>.

David Allen Larson et al

within the NSO and have no other roles within the organization. The present Commissioners are:

- The Honourable Justice Hugh Fraser is a retired judge. Hugh competed in two athletics events at the 1976 Olympic Games. He is an arbitrator with the Court of Arbitration for Sport (CAS) and was formerly an arbitrator with the Sport Dispute Resolution Centre of Canada (SDRCC).
- Ms. Michele Krech is an Ontario lawyer who is completing a Ph.D. in Law at New York University (NYU). She is a former athletics competitor, and clerked at the International Court of Justice.
- Dr. Frank Fowlie is an alternative dispute resolution practitioner who has had several roles in sport, including being a mediator with the CAS and Chef de Mission for East Timor at the Sydney Olympic Games.

The TORs list the following qualifications for Commissioners:

- Language fluency (multiple languages are an asset);
- Gender and ethnic diversity;
- Adjudication and dispute resolution experience;
- Understanding of the Canadian sport system;
- Freedom from actual or reasonably perceived conflicts of interest that may impugn the Commissioner's role; and
- Comfort in complex situations, ability to consider multiple perspectives and contexts, strong decision-making record (in sport or other areas), respected by peers, strong ability to communicate for understanding by laypersons and appreciation of timely decision-making.²⁰

The Commissioners' roles are to hear athlete appeals, and to manage and adjudicate Code of Conduct complaints:

Athletics Canada's Commissioner's Office was established to make informed decisions in the following areas of Athletics Canada operations – support programme selection, representative team selection, eligibility, Athlete Agreements, and complaints of violations of Athletics Canada's Code of Conduct to Prevent and Address Maltreatment in Sport (AC Code). Athletics Canada's Board of Directors vests the Commissioner's Office to be the autonomous authority in these areas and to resolve disputes within Athletics Canada efficiently, effectively and fairly.²¹

The Sport Alternative Dispute Resolution consists of several layers. The Commissioners Office is a 'first instance' office. The matters before the Commissioners are first instance review appeals and conduct complaints. The Office does not act as an appeal body for decisions made by branch or club members.

20 <https://athletics.ca/wp-content/uploads/2021/03/Athletics-Canada-Commissioner-Office-2021-Feb-18.pdf>, p. 2.

21 *Ibid.*, p. 1.

The SDRCC is the second level of review.²² The SDRCC is constituted by Canada's *Physical Activity and Sport Act*:

The mission of the Centre is to provide to the sport community (a) a national alternative dispute resolution service for sport disputes; and (b) expertise and assistance regarding alternative dispute resolution.²³

The SDRCC acts as the appeal body for decisions made by NSOs, including the Commissioner's Office. It provides both arbitration and mediation services. The SDRCC is well known for its leadership in ODR. It provides centralized ODR for its tribunals and mediation services. Appeals of SDRCC decisions are heard in Canadian courts.

The third level of review in the sport system is the Court of Arbitration for Sport (CAS).²⁴ CAS is based in Lausanne, Switzerland. It performs a number of roles such as anti-doping appeals for the World Anti-Doping Agency and its national partners, Fédération Internationale de Football Association (FIFA) dispute resolutions, and an Ad Hoc Division at each Olympic Games. CAS operates as a traditional court and does not provide ODR services. It is unlikely that Commissioner's review matters would be heard at CAS.

AC and Canada generally provide a healthy ODR environment. There is a large client group of 25,000 participants, plus a cadre of parents. The participants are digital natives and are highly computer literate. Canada is a vast nation, covering 4.5 time zones. Canada has a smart phone penetration rate of 85%.²⁵ AC is mature in its web and social media presence in both official languages. The NSO supports the Commissioners with a web presence, and online complaint taking facilities.²⁶ Thus, the Commissioner's Office is well positioned for the adoption and use of ODR.

AC has provided the Commissioner's and the participants with a webpage that supplies information about the appeals process, and acts as a repository of the appeals jurisprudence.²⁷ The TORs identify three specific appeal roles:

- Athlete appeals of support programme selections related to Canadian Athletics Performance Pathway (CAPP) and or Athletics Canada's Athlete Assistance (AAP) programmes;
- Athlete appeals of representative team selection decisions;
- Athlete appeals of eligibility decisions;²⁸

22 www.crdsc-sdrcc.ca/eng/home.

23 *Physical Activity and Sport Act*, Section 10.

24 www.tas-cas.org/en/index.html.

25 www.statista.com/statistics/462386/mobile-device-penetration-canada/#:~:text=Penetration%20of%20mobile%20devices%20in%20Canada%202009-2019&text=In%202019%2C%2091%20percent%20of,points%20more%20than%20in%202009.

26 <https://athletics.ca/safesport/>.

27 <https://athletics.ca/national-team/services/appeal-decisions/>.

28 <https://athletics.ca/wp-content/uploads/2021/03/Athletics-Canada-Commissioner-Office-2021-Feb-18.pdf>, p. 2.

However, the majority of the appeals heard by the Commissioners deal with financial support (athletes can appeal either selection for support, or the level of financial support) and selection to Team Canada.

Appeals are initiated online, and by payment of a \$ 250 appeal fee which is paid online using PayPal or Bank payment. This fee is refunded if the appeal is successful or found to be merited. Commissioners communicate by email with the athletes and the NSO to gather evidence and positions for a hearing. The Commissioners manage their own email programmes and have an athletics.ca email address. Commissioners may conduct appeal hearings by documents only, by video conference or phone, or in person. Generally, the two former means are used – due to the vastness of Canada it is difficult and costly to hold in-person hearings.

The second major role for the Commissioners is to manage and adjudicate Code of Conduct complaints. AC manages a Safe Sport web page²⁹ which provides information on Safe Sport, Harassment, the complaints process, etc. The page includes an online complaint form. Once completed, the form is directed to the Acting Commissioner, who reviews and assigns the file as appropriate.

Presently, the Canadian Sport System is in a period of flux, with a national Universal Code of Conduct To Prevent And Address Maltreatment In Sport (UCCMS)³⁰ expected this year. The UCCMS will apply to all NSOs. Consideration is being given to the establishment of a single national agency which will look at maltreatment issues. This may impact the role of the Commissioners in handling certain Code of Conduct issues.

The AC Code of Conduct deals with issues such as:

- Harassment
- Bullying
- Hazing
- Sexual maltreatment (present and historic)
- Hazing, etc.

Commissioners can use a wide range of solutions for conduct issues from apologies or reprimands to expulsion from the sport for life. They also use a wide range of dispute resolution techniques from fact finding to mediation to investigations and adjudications.

Commissioners also have a specific role with respect to dealing with participants who have criminal records which present a risk to vulnerable participants such as children, youth and others. Commissioners will expel a participant found to have a criminal record for:

- Child pornography offences
- Sexual offences
- Offence of physical or psychological violence
- Offence of assault
- Offence involving possession or trafficking of illegal drugs³¹

29 <https://athletics.ca/safesport/>.

30 <https://sirc.ca/safe-sport/uccms/>.

31 <https://athletics.ca/wp-content/uploads/2021/03/Athletics-Canada-Commissioner-Office-2021-Feb-18.pdf>, p. 11.

The Code of Conduct complaints system uses ODR techniques. Participants may make Code of Conduct complaints by using the online form, or by email. No fee is charged to file a Code of Conduct complaint. Apart from using internet technologies for complaint filing, dialogues between the commissioners and the parties take place principally by email, and is augmented by video conferencing, Zoom, etc.

If a Commissioner decides that an investigation is required, they may appoint an independent investigator. Investigations are often done by Skype, Zoom, email or phone; they are rarely conducted in person, again due to the vastness of the country and costs.

If a hearing is required to make a determination in a Code of Conduct matter, they will be held using technology such as Skype or Zoom. Conduct findings are posted on the Safe Sport page.

Since its inception in 2015 the Commissioner's Office has heard 30 appeals. Summer Olympic Games years (2016, 2020, 2024) are the busiest due to team selection appeals. The postponement of the 2020 Tokyo Olympic Games to 2021 because of the Covid Pandemic necessarily means that 2021 will see a larger volume of appeals.

The Commissioners have managed and adjudicated three major Code of Conduct cases concerning sexual maltreatment of athletes. As a result of these cases, four coaches have been expelled from AC for life; one has been removed from the Athletics Hall of Fame and one has been charged by police with nine sexually based offences.

Intro Notes on Artificial/Augmented Intelligence

*Larry Bridgesmith*³²

Naturally, there is a lot of hype around the introduction of new technology. Artificial intelligence (a/k/a Autonomous Intelligent Systems) has certainly engendered much unhelpful promises and warnings. AIS is neither *The Terminator* nor child's play. For it to be optimally beneficial requires a trust level governance model to contain its potential for harm and expand its potential for good. That's not news. What may be news is that government is not the only model to apply to the problem. Standards setting bodies and consensual agreements can also serve to ameliorate the potential harm of AI. The point is, that we can all serve a role in educating the populace about AI, its pluses and minuses and what we can do about them.

32 Larry Bridgesmith is, among other things, a practising lawyer, professor of law at Vanderbilt Law School and co-founder of its Program on Law & Innovation, a Fellow of the International Association of Mediators, co-founder of LegalAlignment LLC, AccelerateInsite LLC and Lifefilz Inc., co-founder of the International Institute of Legal Project Management and Chair of the Tennessee Supreme Court Alternative Dispute Resolution Commission.

Artificial Intelligence and Systemic Bias

Julie Sobowale³³

There is a growing public narrative that says artificial intelligence (AI) and online dispute resolution (ODR) platforms perpetuate the systemic bias against the Black population and other historically disadvantaged groups. This negative perception is true. My presentation will cover specific stories where AI and ODR platforms were proven to exacerbate existing issues of systemic bias in our justice system. In order to have wider adoption for ODR, technologists must confront this narrative and create platforms that prevent systemic bias. People who are building AI into their ODR platform have the ethical, moral and legal obligation to account for systemic bias existing in AI and ODR systems. This presentation covers real-world examples of how AI in ODR platform cause real harm to disadvantaged groups.

Before going into further detail, I want to highlight the two leading books about systemic bias and technology. Safiya Umoja Noble's *Algorithms of Oppression: How Search Engines Reinforce Racism* examines how popular search tools like Google and social media reinforce dangerous stereotypes against people of colour, particularly African-American women. Virginia Eubank's book *Automatic Inequality: How High-Tech Tools Profile, Police and Punish the Poor* takes a socioeconomic look at the devastating effects that technological systems can have against the most vulnerable.

The narrative already exists in mainstream media that AI is harmful to disadvantaged groups. *Negative stories began to appear about COMPAS, Northpointe's AI programme that predicts the likelihood of recidivism for criminal offenders.* In 2016, ProPublica, a publication known for investigative journalism, published a report stating how Black offenders were twice as likely as White offenders to be labelled as more likely to reoffend.³⁴ However, ProPublica's report showed Black offenders were less likely to reoffend than their White counterparts. This blatant systemic bias in the programme was reported in numerous publications including *Wired*³⁵ and *The Atlantic*.³⁶

These articles show the real impact of systemic discrimination being incorporated into technology and real-life consequences facing historically disadvantaged groups. These negative views against AI have direct impact on ODR adoption in the legal justice system. If people who participate in the justice system distrust online systems, how can ODR be widely adopted? Why would tech developers and others

33 Julie Sobowale is a legal tech journalist and lawyer in Canada.

34 Angwin, J., Larson, J., Mattu, S., and Kirchner, L. 'Machine Bias', *ProPublica*, 23 May 2016, available at: www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing (last accessed 3 April 2021).

35 Tashea, J., 'Courts Are Using AI to Sentence Criminals. That Must Stop Now,' *Wired*, 17 April 2017, available at: www.wired.com/2017/04/courts-using-ai-sentence-criminals-must-stop-now/ (last accessed 3 April 2021).

36 Thompson, D., 'Should We Be Afraid of AI in the Criminal-Justice System?', *The Atlantic*, 20 June 2019, available at: www.theatlantic.com/ideas/archive/2019/06/should-we-be-afraid-of-ai-in-the-criminal-justice-system/592084/ (last accessed 3 April 2021).

invest in a system that has detrimental effects against people of colour and other disadvantaged groups? If we want to move forward with ODR, we must resolve the issues of systemic bias in AI and other technology systems.

Let's dive deeper into how people perceive ODR and technology. This year the National Legal Aid and Defender Association (NLADA) issued its report, "Efficiency is Fine, but Equity is Better: The Civil Legal Aid Community and their Views of Online Dispute Resolution," which examined different perspectives about ODR adoption.³⁷ The NLADA conducted focus groups consisting of legal aid advocates, court administration, technologists and client community members to discuss the merits of incorporating ODR.

The feedback was surprisingly negative. Nearly every conversation in the focus groups began with discussion on distrusting any ODR platform.³⁸ The two major issues that lead to distrust from participants were "ODR was being 'sold' as a benefit to their client population in a way that they found dubious; and ODR was being used primarily for cases involving low-income individuals."³⁹

ODR platforms typically are designed for high-volume, low-cost disputes in order to scale services and get access to enough data to make the platform successful. However, what may seem like low-stakes disputes could actually be very crucial to low-income individuals. As Cathy, one advocate, put it:

[P]eople who are writing about ODR are saying that, you know, low-value cases are the low-hanging fruit in ODR. But for a consumer defendant being sued on a \$ 2500 debt, if they bring home less than \$ 1000 a month, that's not low, that's not a low-value case for the consumer defendant. So I think we need to, we need to think about the subjective value of cases to the litigants.⁴⁰

ODR systems could be viewed as inherently biased against low-income individuals. As another advocate pointed out:

You know, what I'm more concerned about is how systems might drive our cases towards online tools to give less investment in the human component of them. They're not doing that when Target and General Motors have a lawsuit. They're not doing that when 3M or, you know, Ford Motor Company have millions of dollars at stake and litigation. They're doing it with the cases that are already getting the least amount of resource investment to deliver on the constitutional promise of equal justice for all.⁴¹

37 National Legal Aid and Defender Association, 'Efficiency is Fine, but Equity is Better: The Civil Legal Aid Community and their Views of Online Dispute Resolution', available at: www.nlada.org/sites/default/files/NLADA%20Pew%20ODR%20Report%20Final%20Draft%20Ensuring%20Equity%20in%20Efficiency_0.pdf (last accessed 3 April 2021).

38 *Ibid.*, p. 31.

39 *Ibid.*, p. 33.

40 *Ibid.*, p. 38.

41 *Ibid.*, p. 34.

David Allen Larson et al

What goal are we trying to reach when implementing ODR systems? Court administration in the report pointed out that they have hundreds of cases on the docket and without enough judges, solely relying on the traditional court system is not sufficient. Is the goal to have the most efficient system possible? What is efficiency in the legal justice system and what is a just solution? As the legal aid and community advocates point out, justice for low-income individuals can look very different than simply having a quick resolution. Low-income individuals have little access to legal resources. Any ODR system that does not take into account the differing goals between the courts and the complainants could end up leaving individuals feeling worse than going to a physical courtroom. Agency, autonomy and access to resources are identified as areas that have to be fully developed before an ODR system is implemented.

One other important aspect of ODR is accommodating alternative cultural perspectives. Advocates who work with Native American communities pointed out how judges would need to work with tribal leaders in order to implement an ODR system. ODR developers need to work with stakeholders regarding these legitimate concerns and incorporate their feedback in creating a platform that does not perpetuate systemic bias.

This narrative against ODR goes beyond distrust. Advocacy groups have successfully challenged AI systems in court, resulting in those systems being abandoned. In 2020, The Center For Democracy and Technology released its report, "Challenging the Use of Algorithm-Driven Decision-Making in Benefits Determinations Affecting People with Disabilities." The report highlighted how AI systems meant to create an efficient way to determine who was eligible for disability benefits ended up discriminating against people with disabilities.

Because the AI system was developed by state governments, this outcome may not be a surprise. State governments have the incentive to keep disability benefits low as less payments results in cost savings. This inherent conflict of interest did not seem to come into play when the AI system was developed by the Idaho state government.

In 2011, Idaho implemented an AI system that would determine how much a person would receive in disability benefits. People began to notice their benefits were decreasing and several contacted the American Civil Liberties Union (ACLU) for help. As a result, the ACLU successfully sued the Idaho government in a class action lawsuit, where the court found the use of the algorithm and algorithm itself to be unconstitutional.⁴²

Several issues came up during trial. The government was forced to share the algorithm, and the state data revealed the formula used in an outdated Excel spreadsheet was incorrectly calculating benefits. The court found the data sample size was too small and did not represent the population. Because the programme

42 Center for Democracy and Technology, 'Challenging the Use of Algorithm-Driven Decision-Making in Benefits Determinations Affecting People with Disabilities', October 2020, available at: <https://cdt.org/wp-content/uploads/2020/10/2020-10-21-Challenging-the-Use-of-Algorithm-driven-Decision-making-in-Benefits-Determinations-Affecting-People-with-Disabilities.pdf> (last accessed 3 April 2021), p. 7.

required state staff to manually collect and enter data, the system had a ‘high likelihood of human error’.⁴³ The Excel spreadsheet had to be manually updated, which it had not been, so state agencies were relying on outdated data.

The report highlighted four key areas that were used as successful arguments against AI systems:

- Insufficient notice.
- Errors so unreliable as to make the ultimate determinations arbitrary, in violation of due process rights.
- Use of algorithm-driven decision-making can violate people’s right to a fair hearing.
- Inaccessible algorithms can violate people’s right to ascertainable standards in a decision affecting their government-issued benefits.⁴⁴

ODR developers should avoid these pitfalls. Government agencies will not want to invest in platforms that open them up to liability.

Later on, the report goes into detail on what state governments, attorneys and community advocates should look for when dealing with algorithms. I would suggest ODR developers pay close attention to the following three recommendations:

- Ensure that algorithm-driven decisions align with the government’s policy objectives and legal obligations. Algorithmic tools embed values and policy priorities within their design, and cannot be handled like a simple technology purchase.
- Accept that algorithmic tools may not be appropriate for all decision-making, or may only be fit for purpose when supplemented by human decision-making.
- Remember that you are entrusted with building a system that respects and serves those who are entitled to benefits. Bend technology to meet your obligations instead of the other way around.⁴⁵

These recommendations are geared towards state governments but I would say they are the blueprint to use when creating an ODR platform. By tackling these issues in product development, ODR platforms can be implemented without harming disadvantaged groups. Also, by adhering to these principles, ODR can have a better reputation among justice stakeholders and avoid violating an individual’s constitutional rights.

In order to have effective ODR systems, we must account for the possibility of developing AI systems that perpetuate systemic bias in our society. If we ignore this, the technology will not be widely adopted or be found to be unconstitutional. ODR system developers have a responsibility to create programmes that prevent systemic bias. They must be clear on what they are trying to build and what are the intended outcomes. Only by accounting for systemic bias can we build systems that the public can trust.

43 *Ibid.*

44 *Ibid.*, p. 10.

45 *Ibid.*, p. 22.

David Allen Larson et al

Designing Online Dispute Resolution Information Systems Effectively: Deodrise

Clare Fowler⁴⁶

Most Ombuds would say they did not sign up to be an online ombuds.

I did not sign up because I was impressed with block chain and e-commerce and AI ADR algorithms. I signed up because I love connecting with clients, hearing their stories and feeling like I have helped. We all have that moment where two people walk into a room hating each other, but after a couple of hours of mediating, the fairy dust appears as they forgive and begin to heal. It is that magical moment that draws me to mediation and Ombuds and facilitation.

And then I wanted more. I wanted to spend more time with my kids and other parts of my job, and less time in the car. I wanted to work with more clients that were spread across the country, or the globe, and not have to deal with travelling. So, like many of us, I dipped my toe into Skype, Webex, GoToMeeting, MS Teams and now Zoom.

When we initially began working in online dispute resolution and case management, we tried a lot of things that we decided not to do again.

- Using Alexa for relationship disputes
- A mobile app for resolving company complaints
- Charging per person for case management (instead of charging per case, as we do now)
- Too many features (aka too confusing)
- Lengthy intake (parties became overwhelmed, or intake felt invasive)
- Getting the credit card before ever speaking to the client (no rapport)
- Getting the credit card when everything was over (no reason to pay an online system)
- Designing one perfect system (every office is arranged so differently. AI, intake and case management systems need to be flexible.)
- Using only one perfect platform or process (need to be familiar with different processes for different types of clients and cases, and different platforms for when one does not work)
- Telling clients ‘trust us, we have it all figured out’ (clients want transparency, and sometimes to have a hand in designing the process.)
- Not allowing clients to interact/feel involved (Clients want to interact.)

46 Dr. Clare Fowler received her Doctorate on designing dispute resolution systems for small businesses from Pepperdine University Graduate School of Education/Organizational Leadership and her Master's of Dispute Resolution from the Straus Institute for Dispute Resolution at the Pepperdine University School of Law. Dr. Fowler serves as Managing Editor at Mediate.com and as Director of Caseload Manager. She also worked at Pepperdine Dispute Resolution Department and UO CRES as the Career Advisor, and teaches at the University of Oregon School of Law. Clare mediates and trains, focusing on workplace disputes. Dr. Fowler's dissertation was a phenomenological study of workplace disputes. Her current book is a guidebook for HR directors dealing with high conflict employees.

- Cumbersome sign-on discriminates (the simpler the intake, the more accessible it is)

In summary, we learned that online processes have to be responsive and inclusive – the same skills that we learned make successful mediators.

Online we can still have that fairy dust magical moment in mediation if we design a process that is:

- Simple
- Safe
- Smart

Here is what I have learned about these three requirements.

1 *Simple*

- 1 Your website. This is the first interaction your client has with you, so keep it clean and welcoming. A direct path from their landing page to scheduling a meeting with you. You should have multiple links taking clients to a contact or scheduling page.
- 2 Scheduling. The scheduling process needs to be simple, or a client will move on to someone else. I like Calendly, SimplyBook.me, and Cogsworth. WordPress also has some nice calendar integration tools.
- 3 Intake. This might be a separate form on your website, or combined with your scheduling platform. Keep this form simple. Clients have not established enough rapport with you yet to be transparent about their concerns. What is the least amount of information you need to contact them? Name, email, phone and perhaps a brief description of the issue. This minimizes email (often unsecure). Shorter fields also minimize the chance that a client will share something with you that should be reserved for a private conversation.
- 4 Calendar invite: Again, keep this process as simple as possible. Have your calendar, Zoom or your scheduling software send out an invite for you with the details. Just review the invite first (many of these are modifiable), to make sure it conveys the tone you are looking for. Make sure to include date, time, how to connect and how to contact you if things go topsy-turvy. These invites are often wordy with multiple links and can be confusing for clients – which is not a great step for establishing rapport!
- 5 Meeting: One click. That is the goal here – nice and simple. Clients are already upset – the last thing you want is to add to that frustration. Tell clients any important details beforehand: will the audio and video be on when they join? Will there be a waiting room? Will they be alone with you, will this be a joint meeting, will they be able to speak with you privately? You can answer many of these questions through an FAQ site on your website, and just send clients a link to that page.
- 6 Documents: This should also be a simple click. Before you sign up with a service, try going through it as a client. Is it obvious where to initial and sign, and are the clients able to save a copy of the file?

David Allen Larson et al

2 Safety

There are multiple pieces of the mediation process that have to be protected. You need to find an answer to all of them, but try to find a system that satisfies many of these steps. The more integrated a system, the better, because when you are transferring your data from one system to another it is the most vulnerable to attack. (Just like a prison transfer, right? I've obviously been watching too many action movies since I've been home.)

- 1 Scheduling: Use a trusted system that encrypts information when it is being transferred.
- 2 Intake: Are you asking them to share confidential information? Where is this information being stored? Is it on a company server – is that subpoenaable? Is it being sent to you in an email? If possible, see if instead you can receive an alert that an intake has been filled in, instead of the details of the case and any pii (personally identifying information).
- 3 Calendar invite: Be careful when sending an invite not to send the details from your invite, especially if you are using a company server. This leaves a trail that can expose your client. This also can make the client feel that you are not taking their security seriously. Can someone from IT review these emails and see the details of the case? How do they know you have not bcc'd someone? Is there a copy of the sent email stored in your local drive?
- 4 Meeting: Ensure that you have end-to-end encryption, disable chat and record, and enable protection for getting in the meeting (password, registration and/or waiting room).
- 5 Case management: Does your CM software offer multi-factor authentication (such as a push code, a call or a text)? Also ask: where are the data being stored, how long are the data kept on the backup servers, what do you do if information is deleted, what is the requirement if the data are breached? Many mediation and arbitration offices want secure backups that are archived for at least seven years; whereas most Ombuds offices will need to know that the data will be scrubbed from backups and any archives. However, demographic and case trend data can usually be retained for an Ombuds office, as long as the demographic data do not allow a reasonable user to identify the visitor.
- 6 Documents: If you need to send your document as an attachment, password protect the file (you can do this in Word, Excel, Adobe, etc.). If you need the clients to sign the document, how are you going to send it to them and have them send it back? I recommend using a secure service such as DocuSign, Adobe Sign, PandaDoc, etc. When possible, I also use Zoom Remote Control to have clients sign documents on the spot, and then I send that document as a File in Chat. File transfer must be enabled in Zoom before the meeting begins. But this is a simple way to ensure that the document is signed, no one else has viewed it and that we all have a signed copy.

Additional thoughts about data security: it is important to approach every process knowing that someone will attempt to hack you. It is the reality of working online now, and we are potentially causing harm to our clients if we do not take responsibility to protect them. There are many simple steps that you can take – design strong passwords, set up multi-factor authentication, add a password to your lap-

top and important files, use secure software, use a safe internet connection and use encrypted meeting platforms.

To keep your clients safe, protect their data during intake, where you store it, while you are meeting and whenever you transfer it to another platform. The CCPA (California Privacy Act passed in January 2020) actually says that you have a responsibility if you transfer data to someone (an accountant, website designer, etc.) to verify their safety rules or you could be held accountable.

3 *Smart*

How to mess up ODR? Do not use smart software. Smart software should be flexible – add-in features that you want, get rid of everything that you do not. It should be a time saver. It should be able to identify trends in your practice/centre/office/court/state. It should also be able to integrate securely with other systems to provide scheduling, videoconferencing, intake forms/surveys, reporting and e-commerce (if applicable).

Software should be smart enough to support you and not be a time-suck. That is why we call it a platform and not a canyon.

4 *Conclusion*

Mediation is a noble profession. We are with people at their worst, and help them to become their best. As technology changes, it is our duty to ensure that we are still protecting our clients. We need to keep the process simple and streamlined for them and also let them know that we are safeguarding their most important thoughts. They should feel safe from their first interaction with us to the final signing of the document. The last thing any of us want are horror stories of exposing client information, breaching their data because we did not take steps to protect them and having people begin to shy away from mediation. By keeping the mantra of being simple, safe and smart, we can guide our venture into ODR into a place that we are proud of.

ODR 2.0 System Design Reimagined: Remarks

*Michael Wolf*⁴⁷

1 Short Story

Not long ago, a significant labour dispute mushroomed into complex, large-scale litigation. The employer was a multibillion-dollar entity. The union was a multimillion-dollar entity. Both understood that failure to achieve a negotiated solution would surely result in significant legal costs as well as risk of substantial loss, years of likely appeals regardless of who might initially prevail and long-term damage that could outlast the remainder of their careers. Both parties had the resources to pursue that route, but both parties also seemed to understand that resolving the legal disputes had little chance of solving the persistent problems that gave rise to the legal disputes. They clearly saw that, after a multi-year battle, victory would likely to be defined by whether the other party suffered a net loss greater than their own. So, the parties requested appropriate dispute resolution (ADR) assistance and offered to cover the ADR provider's travel costs ... from Washington DC to Alaska.

It was a beautiful time of year for an expenses-paid visit to the Land of the Midnight Sun, but an 8000-mile round trip journey and a two-week absence from family and office did not fit well with the ADR providers' other responsibilities at that moment. So, the parties accepted the ADR providers' offer to host an online collaboration tool to link the ADR providers' Washington DC office with negotiators located in Alaska and two other states. During the course of two weeks, the negotiators and the ADR providers used the online collaboration tool and POTS ('Plain Old Telephone Service') to engage in synchronous joint and separate audio-video sessions, securely transmit files back and forth, identify and clarify barriers to success ('issues'), understand what other one cared about most ('interests'), collaboratively build electronic charts used to generate and organize possible solutions ('options') and engage in screen sharing to draft and edit negotiated language ('solutions'). The negotiators reached several dozen written agreements and fully

47 Michael J. Wolf prepared these remarks for publication in a 2021 edition of the International Journal of Online Dispute Resolution based on a recorded presentation he delivered at the 2021 Virtual ODR Forum sponsored by the National Center for Technology and Dispute Resolution. All observations contained in these remarks and the associated recording are solely attributable to the author in his personal capacity and are not attributable in any way to the U.S. government or the agency for which the author works. Context is important to understand Mr. Wolf's remarks and recommendations. He became a trained mediator in 1972, a decade before he started practising labor and employment law. Almost 30 years ago he gave up party advocacy for process advocacy, first as a full-time mediator and commissioner at the Federal Mediation and Conciliation Service (FMCS), and then as counsel for dispute resolution technology at the National Mediation Board. Most of the time since 2010, he has been at the Federal Labor Relations Authority (FLRA), first as its senior dispute resolution specialist and then as its ADR program director and ULP settlement official. In these roles, Mr. Wolf has spent many years mediating high-stakes matters and developing workplace ADR systems for private and public sector organizations. At FMCS, he spent several years leading a team that designed, developed and implemented ODR systems. At the FLRA, almost all of his mediation work has been ODR in high-stakes litigation between federal agencies and labor unions.

resolved all issues that gave rise to the pending litigation. The moving party withdrew the complaint.

2 Focus

The following remarks are about ODR system design considerations in high-stakes litigation. High-stakes litigation concerns sensitive, complex, high-profile, high-risk, high-value cases. ODR in high-stakes litigation is a space where I have spent a fair amount of my career.

In this space, disputes are not simply the result of failed transactions. Long-term business relationships matter. A lot. The history of pre-conflict engagement matters. Design and implementation of *conflict management systems* matter, which is related to but different than design and implementation of *dispute resolution systems*.

When using ODR tools and systems in high-stakes litigation, design considerations are different than what might be typically thought of as ODR. These remarks will describe ODR as used in high-stakes litigation ('ODR 2.0'), distinguish it from traditional views of ODR ('ODR 1.0'), examine ODR and ADR as used in high-stakes litigation, explore implications on dispute system design ('DSD') in high-stakes litigation and take a brief look at different ways that value can be measured in ODR 1.0 versus ODR 2.0. Unless we design ODR 2.0 systems with value criteria in mind, those who we ask to fund such systems will be unable to understand the value of such systems, resulting in lack of resource commitment necessary to grow ODR 2.0.

3 ODR 1.0

ODR 1.0 evolved as an online technology-enabled process designed to resolve disputes that most often arise from online engagement like online consumer disputes and disagreements over the use of internet addresses. Of course, any such generalization has plenty of exceptions. But this vision of ODR has evolved since the 1990s in the absence of strong integration with the pre-existing ADR community.

ADR, by the way, has been a recognized area of practice in the United States for more than 100 years, primarily in workplace matters. Starting in the 1970s, and gaining steam by the 1980s, the general public started learning the difference between mediation and meditation.

But back to ODR. Since the early days of ODR in the United States in the mid-to late 1990s, ODR has mostly focused on low-dollar, online, business-to-consumer disputes, or relatively small claims in court, or high-volume e-commerce transactions, or other disputes that occur online. Most often, these disputes appear to be between people with no more of an ongoing relationship than a rear-end car accident. These are important and legitimate areas for application of technology to dispute resolution, but they are not the entire universe of ODR's potential. Nevertheless, if this scope remains the exclusive definition of ODR, it will shape everything that follows, limit possibilities and even risk alienating potential champions of ODR.

4 ODR 2.0

The distinctions between ODR 1.0 and ODR in high-stakes litigation – ODR 2.0 – are best understood in the context of negotiation and ADR.

Negotiation is the way people strategically engage each other about matters of mutual concern. Almost all of us negotiate about something on a daily basis. Negotiation in the context of high-stakes litigation takes it to another level.

ADR is a diverse set of process tools that external third parties use to help negotiators achieve more successful results. Notice that this definition of ADR and any application of ODR based thereon requires participation by an external third party. A more traditional application of this acronym defines ADR as an alternative to litigation and thus ‘alternative dispute resolution’. I prefer to turn the tables and proselytize that ADR is ‘*appropriate* dispute resolution’ to which litigation normally should be the alternative of last choice.

In this framework of negotiation and ADR, ODR 2.0 is the collection of interactive technology-related tools, processes and methods that third-party ADR practitioners and negotiators use to help the negotiators achieve more successful results in high-stakes conflict. ODR 2.0 typically does so by minimizing barriers that confound traditional ADR, such as time, place, cost and process. ODR 2.0 always utilizes an external third party, whereas ODR 1.0 typically utilizes a ‘fourth party’ – technology – typically without a third-party human to manage the communication and processing of information that is at the heart of negotiation.

5 *On the Shoulders of Great Thinkers*

We are so fortunate to sit on the shoulders of great thinkers about ODR system design – from the 1970s and 1980s when Jay Nunamaker was at University of Arizona to the 21st-century observations offered by Rabinovich and Katsh and the many contributors in between. Traditional dispute resolution system design and conflict management system design has also influenced the shape of ODR 2.0 system design, including the work of the late Professor and Associate Dean of Harvard Law School Frank Sander starting in the 1970s, Ury, Brett and Goldberg in the late 1980s, and Constantino and Merchant in the 1990s. Twenty-first-century influencers include the integrated conflict management system design work prepared by the Society of Professionals in Dispute Resolution (which the Hewlett Foundation enticed to merge into the current Association for Conflict Resolution), Martha McClellan’s pragmatic dispute resolution programme design guide for federal ADR programme managers, and Cornell ILR School’s Professor and Dean Emeritus David Lipsky.

6 *System Design for Dispute Resolution vs. Conflict Management*

One ever-present challenge will be for system designers to understand and appropriately distinguish dispute resolution from conflict management and develop ODR tools based on each paradigm. For some, this might be a bigger challenge than developing better ODR tools.

Dispute resolution behaviours generally revolve around reactive interventions, while conflict management behaviours can be more proactive and preventive. Some of the most effective conflict management systems are grounded on the be-

lief that well-managed conflict need not erupt into destructive disputes if negotiators proactively treat conflict as a potentially constructive opportunity to achieve important goals. Conflict management processes and associated ODR tools can be designed accordingly. This can enable ODR 2.0 negotiators and third parties to manage long-term relationships and inherent conflict in a way that more effectively maximizes value, minimizes risk, lowers barriers to success and has the potential to obviate the need for dispute resolution.

The topic of design characteristics for conflict management systems (in contrast to dispute resolution systems) is beyond the limited scope of these remarks. Suffice it to say that such design work can be quite different from ODR 2.0 system design even if we exclude any discussion about technology.

7 ODR 2.0 System Design: Distinguishing Characteristics

From the standpoint of conflict parties and third parties in high-stakes litigation, the dispute resolution process in ODR 2.0 cases remains human-centred rather than technology-centred, even though technology has been added to the mix.

The system design characteristics of ODR 2.0 also seem to create more opportunities to invite participation from the traditional DR practitioner community.

Integrative bargaining principles and methods adapt well to ODR 2.0 system design, whereas position-based exchange of proposals is more likely to be integrated into the design of ODR 1.0 systems.

Another characteristic distinguishing ODR 2.0 system design from ODR 1.0 is that in high-stakes litigation, no ‘one-size-fits-all’. Almost *every* case is a potential one-off. As a result, ODR 2.0 system design often includes elements of CASE design.

‘Justice’ is an appropriate and important characteristic discussed by ODR 1.0 system designers and instructors. In high-stakes litigation between institutional parties, justice can be a very abstract concept. Certainly, the underlying conflict management system or dispute resolution system should not be designed to create an unfair advantage – intentionally or even inadvertently – for one party at the expense of another or otherwise intentionally promote *injustice*. But institutional parties almost never arrive in a dispute resolution forum on equal footing. Nor will they be on equal footing when they leave, so artificially manipulating their relationship while they are with us, in the name of justice, would be questionable at best, and arguably could be inconsistent with our obligation to do no harm.

As pointed out earlier, ODR 2.0 systems normally are designed to utilize an external third party in addition to technology, whereas ODR 1.0 systems typically are designed to utilize technology as a ‘fourth party’ instead of a third party to manage communication and processing of information that is at the heart of negotiation. We typically think of an external dispute resolution practitioner as a neutral, but especially in high-stakes litigation, system designers should think about the external practitioner in broader terms. That person might be a neutral, skilled dispute resolution practitioner, but that person could be a process advocate and not necessarily neutral. As a result, transparency and party choice are necessary characteristics in many well-designed ODR 2.0 systems. The DR practitioner in ODR 2.0 matters should have ODR system competency specific to the technology

being used. Depending on the case, technology competence might include design, configuration, security, training and supporting participants, storage, deleting and recovering data, etc. Such competency generally is not required in ODR 1.0 systems.

In high-stakes litigation, dispute resolution system designers should be mindful of ethical considerations and cultural considerations. They also should be mindful of diversity implications among dispute resolution practitioners and dispute stakeholders, including but not limited to gender and race. System designers in ODR 2.0 cases should take a fresh look at data privacy, security and transparency implications. This can make system design complex, potentially time-intensive and costly. With a lot at stake, and the potential cost of failure also quite high, it can still be worthwhile to expend such resources on ODR 2.0 system design and implementation.

8 *Contrasting Design Characteristics*

ODR 1.0 systems often are designed with few options available to stakeholders and representatives who participate in the ODR 1.0 process. In contrast, best practice for ODR in high-stakes litigation might be to begin by offering stakeholders and/or representatives with a needs assessment to help them explore options, followed by stakeholder or representative participation in implementation decisions about ODR scope, focus and process.

ODR 1.0 engagements typically are designed to address distinct, tangible, self-contained events. The ODR 1.0 event happens and then it is over. The goal is to successfully resolve the triggering matter and end the dispute when the ODR engagement ends. ODR 1.0 systems seem to be rarely designed to help participants address ongoing relationship issues. In contrast, the scope of ODR engagement in high-stakes litigation often requires a process designed for more than one event – sometimes many events – that occur during an extended period of time. Also, ODR 2.0 systems often include methods to address elements of disputes that adversely affect ongoing institutional relationships which transcend such single events. Online platforms used to host ODR 2.0 matters generally should be flexible enough to securely retain working documents and communication records in connection with multiple synchronous and/or asynchronous sessions.

Winning in an ODR 1.0 case often might mean achieving a stakeholder's pre-determined position. This concept of winning can even include the goal of making the other party lose something important. In fact, making the other party lose might be a primary focus in some ODR 1.0 cases. The concept of what it means to win in ODR designed for high-stakes litigation more often includes satisfying key stakeholder interests concerning pragmatic business and relationship issues. In fact, the triggering legal questions in ODR 2.0 matters might fade to oblivion. The goal might become to prevent and/or manage, in addition to or instead of resolve, the triggering dispute. Stakeholders might even discover new and more important goals along the way. ODR 2.0 systems must be designed to enable parties to chart such a course. Successful ODR 2.0 designers take these characteristics into consideration when assessing and recommending design characteristics.

9 *ADR Protocol in ODR 2.0 Matters*

The economics of ODR 1.0 cases generally weigh in favour of designing systems that do not include the cost of a live, highly skilled dispute resolution practitioner. That might help explain why ODR 1.0 has evolved largely in parallel with but not in concert with traditional ADR practitioners. In contrast, economic value and other interests at stake in ODR 2.0 matters more often warrant the cost of live, highly skilled practitioners in hopes of creating more value from the dispute resolution process. Traditional ADR practitioners who expand their practice into ODR 2.0 matters must be prepared not only to expand their skill set but also adapt their protocols. ODR 2.0 systems should be designed with traditional ADR practitioner protocols in mind.

For example, instead of inviting participants to visit the ADR practitioner's physical office for a series of joint and separate sessions, ODR 2.0 systems should enable practitioners to create and host persistent online workspaces in which to host separate and joint sessions and enable each party to securely use online resources between formal sessions. The ODR 2.0 system should be designed to enable the ADR practitioner to adjust the functions and content of these online workspaces in each case. Instead of inviting participants to the physical location of an ADR engagement, ODR 2.0 systems should be designed to enable practitioners to invite participants to the virtual workspace in which they will engage. Instead of securing the physical conference room door behind the last entrant, ODR 2.0 systems should enable practitioners to secure the virtual workspace after the last entrant has entered. Instead of circulating physical documents, one best practice might be for ODR 2.0 practitioners to display sensitive documents onscreen in a way that minimizes the risk of unauthorized screenshots and minimizes the risk of unauthorized participant access to a secure repository of electronic documents.

Another best practice is for ADR practitioners in ODR 2.0 matters to *always* have a Plan B, sometimes a Plan C for when the 'O' part of ODR does not work. Experienced ODR practitioners know that it is not a matter of *if* but instead *when* the technology does not work as expected. System designers should plan accordingly so practitioners can seamlessly implement such protocols.

10 *Resulting Behavioural Differences*

In ODR 1.0, pre-mediation is often a formality limited to orientation, administration and technology matters. Often, this aspect of ODR 1.0 is handled by displaying text onscreen through forms, webpage content and short instructional videos without an active human component.

In high-stakes litigation, successful experienced dispute resolution practitioners often initiate extensive engagement with participants concerning procedural, technological and substantive matters long before the first formal session. What some might view as 'pre-mediation' others treat as necessary and intrinsic to the mediation process in high-stakes litigation.⁴⁸ ODR 2.0 system developers should consider incorporating such best practices into their designs.

48 Practitioner and trainer Zena Zumeta (<http://zenazumetamediation.com/>) has been a reliable source of efficacy research data on this practice.

Successful dispute resolution system developers understand the need to design systems that support dispute resolution practitioners' pre-existing behaviours. The best system developers also understand the need to design systems that help shape practitioner behaviour to incorporate best practices such as pre-mediation engagement with participants. In addition to what has already been mentioned in this section, other pre-mediation engagement in ODR 2.0 matters can include surveying participants for online skills and comfort zone issues plus identifying the online technology tools and processes they already use. Effective practitioners also consult with participants about whether to use ODR, what platform(s) to consider, when and how ODR might be used, what the practitioner must provide, resources participants might need to muster, unspoken participant concerns, etc. ODR system developers can design systems that encourage and support appropriate behaviours and that help inexperienced ADR practitioners make informed choices about whether and how to use technology to incorporate such behaviours into their practice.

Dispute resolution practitioners who are familiar with ODR 1.0 should be prepared for system developers to design other elements that trigger behavioural differences in ODR 2.0. For example, unlike many ODR 1.0 systems, successful ODR practices in high-stakes litigation must account for blended yet distinct process elements that are non-linear. In addition, ODR 2.0 systems should enable a combination of in-person and online sessions that, on a moment's notice, might be synchronous or asynchronous. The system design focus should remain on the people and their key interests rather than the technology. And unlike most ODR 1.0 systems, participants probably will play a role in managing security, not just the platform host.

In case it has not yet become apparent, a key design distinction between ODR 1.0 and ODR 2.0 systems is that ADR practitioners are designed *into* ODR 2.0 rather than designed *out of* the process like most ODR 1.0 systems. That does not make one system better than the other, simply very different.

Best practice in high-stakes litigation is that a case-specific ODR platform is selected, sometimes uniquely configured and thoroughly tested before inviting participants to enter. Any necessary IT support is scheduled in advance. The best ODR tools and processes are intuitive, feel familiar, require few instructions and no training, practice, or time to acclimate. Unfortunately, not every ODR tool or process is the best, which triggers preparatory behaviours.

If the ADR practitioner was not part of the ODR system development and design process, s/he must become thoroughly familiar with the ODR tool(s) as well as participant abilities and potential challenges using the technology. It becomes the ADR practitioner's responsibility to ensure that the ODR system works in a readily learnable, transparent and reliable manner.

11 Most Challenging Design Element

In addition to the design elements an ODR 1.0 system developer must account for, an ODR 2.0 system developer must account for what might be the most challenging element of all: the third-party ADR practitioner.

Ideally, every ADR practitioner who asserts competence to use online technology in high-stakes litigation has a high level of dispute resolution process expertise and multi-platform ODR expertise. The practitioner also should have professional communication skills and be relatable, respected and have applicable subject matter knowledge (not necessarily subject matter *expertise*).

Multi-platform ODR expertise is not a self-evident phrase. It means more than just the ability to participate on typical collaboration platforms like Zoom, WebEx, BlueJeans, Skype, MS Teams, Google Meets, RingCentral Glip, etc. Expertise means the expert ability to select, configure, adjust, troubleshoot (in real time) and host a high-stakes litigation dispute resolution session using the most appropriate platform. Expertise also means knowing when and how to use other persistent online workspaces, synchronous or asynchronous tools or systems, visual and double-blind bidding systems, electronic charting like FacilitatePro, survey tools like SurveyMonkey, mind mapping, joint document editing tools and various culturally appropriate ODR systems. Most importantly, expertise means knowing when NOT to use these or *any* ODR tool.

A necessary ODR 2.0 design consideration is the level of competence of the ADR practitioner who will be using the ODR system. Unfortunately, system developers cannot reasonably assume that every DR practitioner satisfies ideal standards of competence. This has far-reaching implications for ODR 2.0 system design. It also should have significant implications for those who train and offer credentials to ADR practitioners.

12 Barriers to Designing ODR 2.0

Apology has been found to be immensely important when resolving certain types of conflicts, such as medical malpractice cases and other matters involving intense emotional content. Effective apology is not simply saying 'I'm sorry'. It generally involves acknowledgement of the behaviour in question, ceasing that behaviour, conveying true regret for engaging in the behaviour and making a heartfelt commitment to not repeat the behaviour.

How does a negotiator effectively convey an apology in ODR-enabled dispute resolution of high-stakes litigation and how do ADR practitioners help them do so? What if any ODR tools are more likely than others to be effective conveying a meaningful apology? Answers to such questions can be crucial to the design, selection and use of ODR in certain types of high-stakes litigation.

Effectively expressing a meaningful apology is not the only barrier that might limit the use of ODR in high-stakes litigation. Other potential barriers include differential access by people of moderate means; weaknesses in online information security; lack of reliability and trustworthiness of ODR tools and systems; differential comfort and ability using online technology; lack of integration and interoperability; potentially disparate advantages inherent when (not) using technology; unable to keep up with the pace of change; conflict of laws and jurisdictional disputes; and enforcement.

Many barriers are not insurmountable, but ODR 2.0 system designers should be mindful of these elements when developing new tools and processes.

David Allen Larson et al

13 *Measuring ODR 2.0 Value*

Dispute system developers are faced with the challenge of incorporating data collection and analysis methods that support the ways ODR value is measured. In ODR 1.0, value often appears to be derived from automation, volume of settled cases, transactional cost savings, speed, customer retention, etc. In high-stakes litigation, ODR value is generally measured using different criteria, often unique to the matter at hand. For example, in some cases, value might be measured by the ability of the technology-enabled process to help participants accomplish what might otherwise have resulted in failure, or simply the ability to engage remotely, or the ability to overcome barriers that participants would have faced using traditional ADR (time, place, cost, process). When the value of ODR in high-stakes litigation is measured differently than in ODR 1.0, system developers of ODR 2.0 should incorporate different data collection and assessment mechanisms.

14 *Touch the Surface*

These remarks barely touch the surface of ODR system design in high-stakes litigation. As a practitioner first and everything else second, I doubt I have structured these remarks in the same way as someone who is an academic first or a researcher first. Hopefully, you can take something from these remarks, pair it with what you learn from academics and researchers, and create value by expanding your vision of ODR, learning from successes and mistakes, and creating a future that is not limited by our past.

Algorithmic ODR: Design Concepts and Strategies

*Chris Draper*⁴⁹

Presented as part of the NCTDR Panel entitled: Algorithmic ODR: Ensuring Fairness and Accountability

- Linda Seely, Director, ABA Section of Dispute Resolution
- Chris Draper, Managing Director, Trokt
- Larry Bridgesmith, Co-founder, Program on Law & Innovation, Vanderbilt Law School

49 Chris Draper, Ph.D., P.E., helps humans make fewer errors when using technology. This expertise was gained through a career of analysing and reducing the operational risk of how humans interface with technology systems. Chris has been at the intersection of technology and dispute resolution for nearly a decade as the Managing Director of Trokt in Des Moines, Iowa, and as a Venture Partner supporting VU Venture Partners FrontierTech team in San Francisco, California. Chris provides technical support to the Department of Education, local Bar Associations and the National Center for State Courts focus and working groups; is Co-Chair of the American Bar Association's Section of Dispute Resolution Technology Committee; is Chair of the Working Group One on the ABA ODR Task Force; is a Visiting Scholar on Blockchain Governance for the Indiana University Ostrom Workshop; and is a Fellow with the National Center for Technology in Dispute Resolution.L

When discussing implementations of online dispute resolution (ODR) that depend upon technology strategies like artificial intelligence (AI) we must acknowledge that:

Yes, we've got this black box [embedded in the system that] no one wants to open up or tell us how it operates, or in some ways we [fundamentally] just can't open it or explain it.

This acknowledgement means a lot of our discussions must be around how we deal with this black box. The goal of this presentation is to introduce different ways to look at the systems that we are designing, the processes we are dealing with and the inputs that are going into these black boxes. Knowing that these black boxes will not go away, we must start considering different ways to think about the challenges and the solutions associated with the tools and systems into which they are built.

The most valuable first step in considering these systems is to relatively frame the scope and magnitude of potential downsides introduced by these black box tools. The inequitable outcomes we are attempting to avoid when incorporating algorithmic or AI components arise when the black box gathers data streams that may or may not be known to all stakeholders, processes those data streams using techniques that cannot always be repeatedly defined and arrives at conclusions using logic that cannot always be repeatedly observed.

Intriguingly, this may sound strikingly similar to processes that depend upon a human brain. However, our human black box processes are still the best available arbiter of reasonableness when assessing these technological black boxes. This means that mitigating downside risk for ODR systems that use these types of black box technologies should first examine what type of human oversight is required based upon the system's level reliable predictability. These oversight strategies are typically termed In-the-Loop, On-the-Loop and Out-of-the-Loop.



These strategies are defined as:

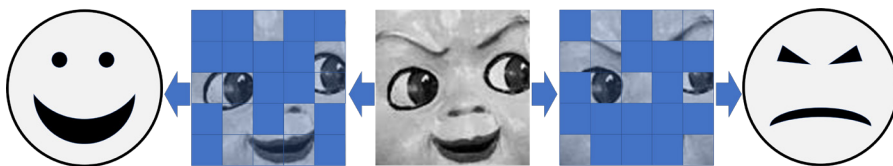
- In-the-Loop is one where a process cannot be completed without a human taking an action; for example, a ChatBot that requires a human to select and send an in-depth response after the user has been filtered down to a particular path;
- On-the-Loop is one where a human can prevent an automated process from happening; for example, Tesla 'autopilot' requires the human to prevent unsafe situations; and

David Allen Larson et al

- Out-of-the-Loop is one where the human is unable to exert any additional control in an operating process; for example, some Russian commercial rockets have autonomous destruct systems that will prevent the vehicle from violating safety boundaries without any human involvement.

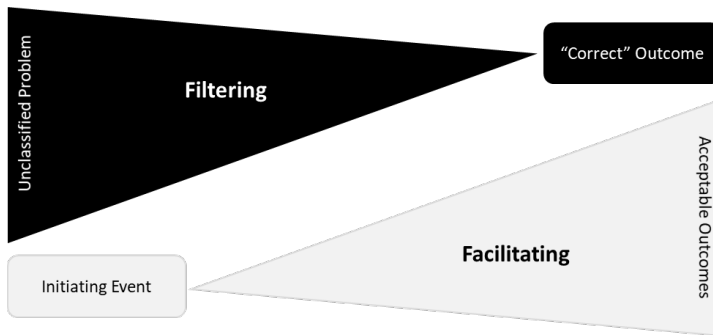
These strategies for mitigating the risks posed by systems using a black box element are typically thought of as protecting from a system that does not know enough to get to a correct answer. It is theorized that if we keep expanding data sets and their sources, these tools will naturally become fair and just. Yet we must be clear that the creator will never be fully removed from its creation. The design choices made when creating the black box will always influence its outputs. Protecting from system bias using a strategy that depends upon human intuition, which is essentially a bias that produces outcomes we accept, must be acknowledged as an unavoidable system risk.

This risk becomes evident when dealing with AI system. It is vitally important to accept the fact that AI systems do not uncover hidden truth. They more rapidly refine representations of what we see. For example, AI will never know what a dinosaur actually looks like. Identical to palaeontologists, AI systems gather data fragments, assemble them into the most reasonable configurations and help those using the assembled data to understand it more quickly. AI can help accelerate the rate at which humans interpret how dinosaur bones fit, yet this is not because it actually knows a hidden truth. Our challenge is in managing systems where there is no reasonable ability to consistently understand the truth even if it were fully uncovered. This can be observed in the simplified example below. In it, 15 out of 25 blocks are covering an image in two different ways. When looking at one scenario, it is possible to interpret the image as a happy face, where an alternative scenario makes it possible to interpret as an angry face. However, even if the underlying truth were fully known, the actual underlying emotion remains difficult to determine.



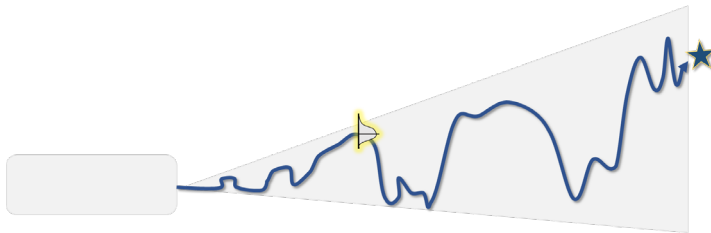
1 *Process over Product*

The fact that AI tools may produce predictions that do not reflect the underlying reality and may be limited in the breadth or complexity of the problems they can reliably solve must be accounted for when choosing to use them in any ODR system. Since AI amplifies and accelerates human processes, we must be clear that the process we are applying it to can be appropriately supported by this type of tool. For example, when looking at the overarching ODR technology strategies as the e-commerce-derived filtering tools versus facilitative facilitation tools, AI must be applied in a way that accounts for this system-level design strategy.



Filtering tools are focused on rapidly identifying an unclassified problem for direction to one in a limited number of correct outcomes. Tools like these can use AI to accelerate the rate at which we correctly associated an unclassified problem with the appropriate outcome. These tools are often trained by past outcomes to essentially feed themselves as they move forward. If the consequence of an error when using these systems is low, this type of a system could be useful for accelerating current processes. However, if the consequences of an error or a historic bias in the data that is training the system on how to learn are significant, filtering systems will accelerate inequity.

Facilitation systems are fundamentally different in that they should enable any user to start from a known initiating event and arrive at any outcome that is acceptable to all the stakeholders. AI cannot be applied in the same manner for these systems because, unlike in a filtering system where the number and type of outcomes is constrained, a fully unbiased facilitating system will use AI to optimize those processes that best provide full freedom to arrive at any agreeable outcome.



In order to facilitate the essentially random walk that should be possible when using these systems, it must be clear what process may be accelerated and amplified in an appropriate manner by AI. It has been previously proposed that modelling facilitating systems using the 'mediation algorithm' is one strategy for completing this task. When defining the mediation algorithm based on the work of Ava Abramowitz as:

- 1 Seek understanding,
- 2 Build upon agreement, and
- 3 Ensure inclusion.

David Allen Larson et al

AI could be effectively used in these scenarios to accelerate and amplify the monitoring of communications and prompt for:

- 1 Clarification of positions when there appears to be disagreement,
- 2 Confirmation and expansion when an agreement has been reached on certain items, and
- 3 Involvement or feedback when participation rates are imbalanced.

When applied in this manner, instead of AI being used to refine a tool towards outcomes that become increasingly more likely, AI refinement would improve the ability of the tool to travel the maximum extent desired by the participants towards a collectively agreed outcome. In this way, the same technology that would accelerate injustice if used in a facilitating system in a filtering manner can minimize its access to producing unjust outcomes by ensuring that the appropriate process is accelerated and amplified instead of the precision of the outcomes generated.

Since we cannot open up and peer inside a truly AI black box similar to how we cannot open up and watch how a human brain makes decisions, it is vital that the task being assigned to the tools appropriately matches the narrowness of its ability to be observed as repeatedly performing its intended functions correctly.

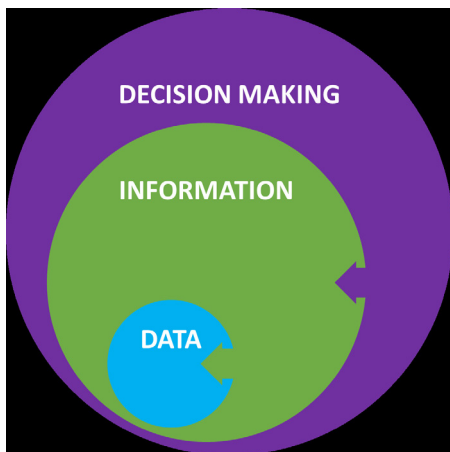
2 *Broadening Perspectives*

Once the limits of the technology are defined and it is appropriately applied to a process that can be ethically accelerated or amplified, training such a tool in an unbiased manner requires thoughtful consideration to how the training data are compiled. Current efforts on the building of equitable data sets are often focusing on Data Pools or Trusts.

Tools like AI are built to make decisions when given patterns, just like humans. In exactly the same way that humans will perceive something as more likely the more often it is observed to behave in a particular manner, decision-making in any system is both built upon the information it draws upon and influences that information due to the decisions made, while the data the information draws upon are also influenced by the information developed. Because of the iterative influence that data have upon the information that leads to the decisions made by the black boxes used in any ODR system, getting to the largest, equitably inclusive data sets as quickly as possible is perceived as vital for improving system quality. Data Pools, like the Global Data Synchronization Network used by commercial entities to share product data, or Data Trusts, like the concepts underpinning digital dividends, are strategies for building data sets that are large enough to prove appropriate pattern recognition for the specific use case needed. Like the AI tools themselves, clearly identifying the purpose of the data set is vitally important for ensuring its effectiveness. If the data set is large, yet not inclusive of data that are appropriate for the problem being solved, the process using that data will remain flawed.

For example, crowdsourcing opinions on the quality of a vehicle from a room of used car salesmen willing to sell the car to you will not result in better information the larger you make that room. Yet drastically expanding a room of used car salesmen bidding against each other will rapidly improve price quality as the room expands. As with the tools and processes, the exact same data sources can produce

strikingly different values when used in slightly different ways within even the same problem.



Open ODR

Zbynek Loeb⁵⁰

It is now certain that online courts will start operating in more and more countries; the process has started and in the first countries online courts has been introduced. Online courts can significantly improve the lives of people through their access to dispute resolution. Online courts can also reduce the costs of the courts and the parties involved and help courts to provide a resolution to the dispute in a timely fashion. At the same time, online justice poses new serious challenges, which need to be addressed from the beginning of justice transformation, *i.e.* from now.

The *independence of judges* in the future will require a decentralized control of dispute resolution data. Even at present, central control of data in online dispute resolution (ODR) tends to lead to decisions being non-transparent and issued by robots (*e.g.* in case of customer disputes resolved by large internet companies). Also in at least one country (China) court decisions are being directly monitored and influenced by centrally controlled robojudges before they are issued. This threatens to undermine the principle of the independence of judges/arbitrators/mediators/panellists.

At the same time, the future of online justice will need wide cross-border sharing of large amounts of anonymized dispute resolution (judicial in the broad sense

50 Zbynek Loeb is an internet lawyer with a special expertise in ODR. He has initiated the concept of Open ODR (www.openodr.org). He has been recently managing several ODR projects in the Czech Republic, including the design of the first Czech online court, ODR module for online distribution of critical materials in the time of the pandemic or a design of a new ODR service for the Czech municipalities for resolving traffic fines. Zbynek is an NCTDR fellow.

of this term) data in order to implement all the benefits of the forthcoming data-driven judicial processes while at the same time fully preserving the right for a fair trial and improving access of people to justice, with a particular focus on access to justice for vulnerable persons.

At the moment, online courts and private ODR platforms all over the world *do not* adequately accommodate *vulnerable persons*. This results in the current distrust of vulnerable persons to online justice, even in countries which has introduced otherwise successful online courts. If this issue is not addressed now, ODR will further deteriorate access to justice rather than improve it. It would clearly be a failure of great opportunity. New forward-looking ODR systems need to start from addressing the needs of vulnerable persons rather than postponing this issue to the future.

Vulnerable people in our understanding include not only people from low-income groups or people with disabilities but also people who transact online only if they really have to and who do not trust to transact online (often higher or middle-aged persons with low or secondary education).

Online dispute resolution systems which will win the trust of vulnerable people will most probably become trustworthy for other persons as well, through the necessary simplicity, explainability and at the same time diversity by design to accommodate the varying needs of vulnerable persons. Through prioritizing vulnerable persons, Open ODR has an ambition to initiate new sectors providing new types of services for the mass market.

1 Concept

Open ODR will be a decentralized open environment for online resolution of disputes. It will contain three principle layers: (i) *access layer* for accessing platforms/systems for any type of disputes by the parties; (ii) *integration layer* for developing, adapting and interconnecting ODR platforms and services of various public and private dispute resolution providers, including state courts; and (iii) *AI layer* which will provide data-driven services based on machine learning (Services) to the Open ODR users.

Open ODR layers will be realized through the following interconnected outcomes:

- i Flexible open digital environment called *ODR Machine* capable of generating multiple ODR platforms for a wide range of ODR providers, types of disputes and legal procedures;
- ii Open digital environment for generating new type of personal tools called Personal Communication Tools (PCTs) for accessing ODR platforms; and
- iii Services connecting platforms and apps generated by ODR Machine and PCTs.

ODR Machine and PCTs will enable open diversity of design of online tools which however will be able to interoperate and smoothly exchange data among themselves and with other systems.

Data from Services will be stored in ODR platforms and apps which will implement the integration layer (ODR Machine) and/or in storage and communication tools of the parties (PCTs) which will implement the access layer.

Users of Open ODR will be individuals and entities which generate ODR data through their dispute resolution interactions (data generators). Services will con-

sist in the provision of core data sets (e.g. reputation indexes of vendors incorporating data about resolution of dissatisfactions of that vendor consulted by consumers before they decide to purchase a product/service) or data models (e.g. model for direct negotiation between a consumer and vendor about disputed issues). Each user-data generator will select from available Services those which they consider important for their activities or decisions.

Individual platforms and systems/tools using Open ODR will be independent and will have a form of open or closed platforms/systems based on published open schemes, specifications and protocols. Other systems not based on Open ODR will be able to use the public open schemes and protocols included in Open ODR for smooth interaction with Open ODR-based systems. There may be incentives for users to develop additional modules or complementary functionalities, e.g. through online marketplace(s).

Services will be automatically updated and enhanced ('trained') by the *Open ODR environment* based on voluntary sharing of data among the community of data generators. Data generators will share their data with the Open ODR environment rather than directly with other data generators. Open ODR environment will interconnect systems and tools implementing the access and integration layers through data sharing with the Open ODR environment.

Open ODR will not have a central place of administration or control. There will be no obligatory central registration of platforms using Open ODR; there will be no central place where all the information about all platforms and systems using Open ODR will be held. This goal is achievable by combining emerging technologies (e.g. the DID;⁵¹ or Semantic Container;⁵² or Tim Burner's Lee Solid⁵³ or other technologies currently under preparation) with published open schemes, specifications, data sharing protocols and published transparent organization rules.

2 Ethical Foundation

Open ODR will be based on *ethical principles*. The goal of Open ODR is to improve access of people to justice, particularly vulnerable people. Ethical principles will be key for all the three layers of Open ODR. Such principles will need to be widely researched, discussed and continuously enhanced.

Ethical principles of Open ODR will be contained in the published Ethical Codex. All platforms, systems and tools implementing Open ODR will need to accept and comply with the Ethical Codex.

Open ODR will also implement concrete best practice measures to facilitate multi-linguality, flexible adaptations and localizations and implement features to assist handicapped persons.

Compliance with ethical terms and organization rules of Open ODR will be realized through system design, cybersecurity measures and minimum built-in and self-declared organization rules in public interest. If the community establishes

51 DID means Decentralized Identifiers; the concept of the DIDs has been developed by W3C: www.w3.org/TR/2020/WD-did-core-20200421/.

52 www.OwnYourData.eu/semcon.

53 <https://inrupt.com/solid/>.

self-governance body or bodies, there might also be random checks by the self-governance body or bodies.

In addition, anybody will be able to complain about non-compliance of a platform/system with the Open ODR terms to a new self-regulatory body; the self-regulatory body will also resolve any suspected non-compliance identified by the automatic random checks by the Open ODR environment.

3 *Data Exchange and Self-governance*

The new self-regulatory body might need to have a role in *updating* and *maintaining* the data sharing protocols, open schemes and specifications. Reasons for its establishment, its functions, resources and composition will need to be researched. Inspiration and lessons learned might be taken from open-source economic models or the current organization of internet (ICANN, etc.).

There are two principle approaches to modelling the self-regulatory body or bodies of Open ODR and all of them relate to the model of data sharing, which is the key concept behind Open ODR:

(i) Decentralized model of self-governance

In this model, every system, using Open ODR environment, including PCTs, will share anonymized data only with systems with which there is an agreement on data sharing (*invitation* and *consent*); *i.e.* there is no automatic data sharing among all the systems using Open ODR; there will not even be such theoretical option included in the design of Open ODR.

There is no centralized maintenance or compliance monitoring. Maintenance and self-governance is organized by individual systems or groups of systems based on individual agreements.

Open ODR initiative might establish an online marketplace where tested systems and applications will be available for interested persons. Open ODR initiative may start a voluntary certification scheme with random checks of certified systems. There may be more such online markets and certification schemes.

(ii) Partially centralized model of self-governance

Open ODR may define minimum options for central data sharing among all the systems and applications using Open ODR. Such central automatic data sharing will nevertheless apply only if a user whose anonymized data are to be automatically shared provides its consent with data sharing. Then there will need to be a central self-governance body for maintenance of the minimum automatic data sharing among all the Open ODR systems.

In addition, there might be a minimum set of compliance rules which will be monitored and randomly checked by the central self-governance body.

The costs of such self-governance bodies will need to be covered from various sources.

4 *How It Will Work*

Data generators will share their generated data but only in anonymized (de-personalized) form with the Open ODR environment which will be predefined and structured based on published open schemes and specifications.

Data generators – ODR providers – will share statistical data or data sets/subsets regarding the disputes they will be resolving and the types of parties involved. Data generators – the parties – will share their statistics as well and also possibly additional subjective data related to their ‘feelings’ – this is to be researched. Even these subjective data will be anonymized (de-personalized) before sharing with the Open ODR environment, without the possibility to connect them to a particular person.

Open ODR environment will provide Services to the data generators in exchange for such data sharing. The structure of data/data sets/subsets shared by data generators with the Open ODR environment may or may not be different than the structure of data/data sets/subsets shared as part of the Services. The content of the Services will be based on all the data shared by the data generators – *i.e.* through the Services, data generators will benefit from general data from the Open ODR environment, enhanced by the respective community or communities of data generators.

Regarding the parties, they will set up their own preferences and in addition note/collect also their emotions and other *subjective data* elements related to the resolution of their dissatisfactions. Even these data and data sets/subsets should have standard structures, with room for flexibility though. This issue needs to be researched. Subjective data influence people’s actions and indirectly will also be shared with the Open ODR environment in the form of data sets/subsets derived from such people’s actions, after their anonymization.

ODR providers will publish some of the general data sets generated by the Open ODR environment together with some of their own data to present to the public how the ODR provider performs. We need to research which such data sets indicating the quality of performance of ODR providers should be.

Some of the data sets generated from the Open ODR environment might also be published by the Open ODR community in order to indicate current trends. We need to research what such data sets should be.

Services will be available for free for data generators who agree to share their anonymized data with other data generators also for free within the Open ODR environment. For other data generators, Services will be provided for a market price.

Data generators will be able to share some or all of *their own* data, but *not* data received as part of the Services also with third parties including data aggregators, on *terms data generators will control* through specific online *invitations* which any party will need to receive to get access to the data to be shared by the data generator. This feature will be provided by the access layer.

Through the access layer, people and entities will be able to easily set up with whomever they want to communicate, in their own language. This information will be ‘visible’ in a standard format defined by the access layer implemented in online tools of individual users or websites of ODR providers where it can be read by sys-

David Allen Larson et al

tems of third parties; existing people-focused systems like browsers, mobile apps or antivirus tools will also be able to work with such information.

Open ODR will facilitate designing and implementing complementary modules, language localizations and services which will be sold or made available for free according to their producers.

5 *Measures to Prevent the Risk of Transforming Open ODR into a 'Matrix'-like System*

System of Open ODR will be designed to ensure that decentralization of data control and maximum openness and flexibility of the design of ODR interface cannot be misused into creating the opposite – *i.e.* increased centralized control of judicial data and processes. Proposed measures are the following:

- All schemes and specifications of Open ODR including Services will be published and available for free to anybody to develop the same or similar systems/online environments;
- Machine learning models and other data-based services will be distributed: they will be created based on data from multiple data generators, and will be owned and run by multiple entities in the system; core models and services will be available for free to all the data generators who will share their anonymized data;
- Data sharing between the Open ODR environment and data generators will be voluntary, based on open published data sharing protocols and:
 - Data generators will share with the Open ODR environment only their anonymized (de-personalized) data, not their personal data;
 - Data generators will be able to share with third parties (including data aggregators) only their own anonymized (de-personalized) data and **not** the general data from the Open ODR environment;
 - Open ODR environment will implement technical measures to prevent potential 'gaming' of the system by some data generators through requesting inadequate excessive amounts of general anonymized data through Services; such measures need to be researched;
- Open ODR will be protected by best practice cybersecurity measures against misuse;
- Open ODR systems will be constantly monitored by their operators and, if established, there might be a transparent self-regulatory body which will also provide random checking and similar measures;
- The self-regulatory body (if established) will not have any access to the data shared within the Open ODR; the self-regulatory body will be transparent and subject to public oversight.

6 *Scope of the Services*

We propose that Services include (i) reputation index(es); (ii) negotiation module(s) (both mentioned in the description of the concept of Open ODR above); (iii) test modules to verify/monitor compliance of an ODR provider with ethical principles of Open ODR; (iv) data sets to provide feedback to management of ODR pro-

viders regarding their ODR services;⁵⁴ and (v) comparison of selected data between all the ODR providers (e.g. average length of proceedings). Services may be inter-linked with each other. As an example, swift implementation of agreed resolution of an issue between a consumer and service provider will result in improved reputation index of that provider.

The AI layer will use game theory to construct Services-related incentives for entities to compete in features empowering people (e.g. resolution of dissatisfactions and privacy).

Services will use standard open data sharing protocols which need to be researched and developed.

7 Example of a Use Case

An individual user, based on her/his data, including her/his subjective data, will get a recommendation/index. The Services will provide an objective view which will enhance the subjective (limited) recommendation/data of the user. In this way, the user will be able to decide taking into consideration both her/his data and also general objective view resulting from data sharing from other users. After the user decides and makes an action, her/his action will generate new anonymized (de-personalized) data which will be shared with the Open ODR environment.

In this way, *i.e.* indirectly, the Open ODR environment will also capture subjective data of the individual users, while protecting them fully for the respective users – data subjects.

The Services will automatically update some of the data sets of the users (e.g. the reputation indexes), while other Services will require instant interaction between access and integration layers or more precisely between systems and tools implementing each of the access and integration layers, as explained under the Technology section below. For example, negotiation of a concrete issue will trigger a Service which will provide a recommendation to a party what her/his next offer in a concrete situation might be in order to get to a settlement.

As mentioned above, the focus of Open ODR will be on vulnerable people. The Services need to be exciting especially for vulnerable people in order to initiate wide user adoption by vulnerable people as well as by other users. Growing **user adoption** will generate industry adoption driven by activated new users from so far neglected user groups because Open ODR should lead to increased willingness of vulnerable persons to transact online through their increased trust.

Focus on vulnerable people means that Open ODR will need to adopt the following design principles:

- i *diversity by design* in order to accommodate broadly varying needs of vulnerable persons; diversity by design will be achieved by designing and implementing maximum possible open flexibility based on open standards and schemes of Open ODR; and
- ii *wide participation of vulnerable people* in designing Open ODR; this will be achieved by a number of user pilots from the start of the design process; Open ODR is in its core a *frugal innovation*.

54 Using existing standard ODR data structures and creating new ones.

8 Technology

Technology for Open ODR means technology for developers of Open ODR. Such technology must follow the same principles as Open ODR, which means that we need to search for the following technology:

- decentralized (with no central control), open source, published open specifications;
- very flexible, enabling decentralized maintenance and development;
- built on the principle of data controlled by data generators, principally people;
- focusing on massive sharing of data among data generators based on their mutual (i) invitation; and (ii) effective informed consent;
- such data sharing being independent on data sharing with data integrators including the current largest internet players;
- enabling to develop services for people and other data generators based on such data sharing, *i.e.* services which can be affordable by the mass market;
- focusing on cross-domain systems and services, *i.e.* connecting data from different areas and sectors if desired by data generators; and
- enabling to build in adequate security safeguards against potential misuse.

Existing technology should be tested for the purposes of securing control of access to data by data generators. The potential use of the existing alternatives mentioned above, including DID, Semantic Container, Solid and others needs to be researched.⁵⁵

Also we need to research possible usage of other existing technologies for other aspects of the PCTs.⁵⁶

Open ODR technology will implement concrete cybersecurity best practices.

Open ODR will follow a low-code approach. An application developer will build an application by selecting from existing modules, connecting them to create graphical structures called constellations. Constellations will be represented and edited visually following a low-code approach, abstracting them from specific programming languages. Constellations represent a new approach designed for the purposes of Open ODR which potentially has applications beyond the ODR field. Constellations will enable designers of ODR platforms to automatically recognize similar structures and coding in systems from different fields, and to reuse them with minimal effort.

55 Questions include the following:

- Can the concept be used for Open ODR as described above?
- Is it possible to structure the concept in a standard way so that it would be possible to ‘open’ access of a third party only to some parts of each data set?
- Is there already a standard ‘labelling’ of data sets from different sectors for the purposes of the concept (*e.g.* for privacy, healthcare or ODR) which would enable systems to invite and access the correct part of the data set only? If not, can this be further explored in connection with the concept?

56 *E.g.* Microsoft cloud technology and their Identity hub, *i.e.* MS Identity Experience Framework in Azure Active Directory.

9 *Cross-Domain*

Open ODR will be one of the pioneers in the cross-domain implementation of decentralized open online environments in which data are controlled by data generators, primarily people, with regulatory oversight and effective public enforcement. Such new online environments will need to interact and support each other. This must be taken into account during the architecture and design stages. These cross-domain opportunities need to be researched.

10 *Main Innovation*

- 1 The difference between Open ODR and large data aggregators like Google is crucial: who controls the data. In Open ODR, data are controlled by the whole community of those who generate the data as opposed to a central entity which aggregates data. This is key to ensure maintaining all the rights of fair trial and independence of judges/panellists in future online justice.
- 2 Open ODR will implement ethical standards of justice in a concrete application of AI and data-driven processes in order to improve access of people to justice, including for vulnerable people.
- 3 Open ODR will include a new type of online tools for people (personal communication tools or PCTs) for access to empowering data-driven services making use of *collective* sharing of data among people in a secure online environment with transparent governance. The services will start with resolution of dissatisfactions (Open ODR) and will expand into other areas (*e.g.* healthcare, etc.).
- 4 Open ODR will implement cross-domain structures of such decentralized open online environments.
- 5 Open ODR will prepare standard 'labelling' of ODR processes and their component parts which will enable easier interaction and compatibility of any ODR platform, whether based on Open ODR or not.

11 *How to Do It*

Design and development of Open ODR requires the following principal tasks:

- Public discussion of ethical principles and how they will be transformed into Open ODR architecture;
- Preparation and public discussion of the architecture of the three layers of Open ODR;
- Preparation and public discussion of the initial open schemes and specifications of Open ODR;
- Development of the first PCT-type tool and its first live pilots;
- Development of direct negotiation module of ODR Machine which will support the market introduction of PCTs;
- Developing online training modules for judiciary and roll out of such training;
- Full development of ODR Machine;
- First pilot projects of ODR Machine;
- Research, public discussion and establishment of the new regulatory entity; and
- Many other research, development, dissemination and other tasks.

David Allen Larson et al

Open ODR is a long-term goal which will require several years and establishment of active community of interested experts.

12 *What We Already Have*

- Initial discussions on the ethical principles of Open ODR;
- Initial reference material on the architecture and contents of the access layer;
- Initial reference material on the architecture and contents of the integration layer;
- Initial discussions of the AI layer;
- Initial reference material on the concept of constellations; and
- Initial discussion of the online training modules for users of Open ODR including judges, the parties, court admins, etc.

About Open ODR Organization (www.openodr.org⁵⁷):

Open ODR Organization is an informal think tank of people and institutions interested in implementing Open ODR. Open ODR Organization will coordinate discussions of draft documents, encourage creating working groups and support applications for grants or other ways to obtain funding for developing Open ODR. Open ODR also plans public research projects focusing on mapping current desires of people regarding resolution of their issues and dissatisfactions online.

Supporting experts: Zbynek Loebl (PRK); Davide Rua Carneiro (Polytechnic of Porto, School of Management and Technology); Patrick T. Smith (Twente University); Brigitte Krenn, Tristan Miller (both Austrian Research Institute for AI (OFAI)); Michal Araszkiwicz (Jagellon University); Radim Polcak, Madalina Bianca Moraru, Jakub Harasta, Pavel Loutocky (all Institute of Law and Technology, Masaryk University);

Supporting institutions: Polytechnic of Porto, School of Management and Technology; Twente University; Institute of Law and Technology, Masaryk University;

57 Website is currently under construction; you can email to Zbynek Loebl: zbynek.loebl@prkpartners.com.