Conflict Engagement and ICT: Evolution and Revolution[*]

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The term we've come to associate with the use of information and communication technology (ICT) in alternative dispute resolution (ADR) is online dispute resolution – ODR. The way we have tended to talk about the relationship between ODR and ADR is one of opposites – on the one hand there is ODR, and on the other hand there is ADR. In a recent edition of this journal there is a point–counterpoint by Colin Rule and Carrie Menkel-Meadow on the topic, "Is ODR ADR?" In their conclusions, Menkel-Meadow argued, "I remain intrigued by what ODR might be able to do in some cases, but I remain a bigger fan of old-fashioned in-person ADR…,"[1] and even Colin Rule, a proponent of 'ODR as ADR', ended by saying "I believe that the future of ADR is ODR"[2] – the future, not the present.

I suggest that our discussions about technology and conflict engagement as an ODR/ADR dichotomy are not helpful, and are in fact misleading. It is much more accurate and conceptually useful to think of the relationship between ODR and ADR as existing along an evolutionary/revolutionary spectrum. Up to this time, our use of technology in ADR has been growing and has been evolutionary, not revolutionary. In addition, it seems that our thinking about ODR has been coloured by the growth of e-commerce and the need to find ways to deal with the flood of disputes caused by the enormous number of interactions on e-commerce platforms.

I think our use of ICT has been evolutionary because in order to be revolutionary, the consensus among those who deal in definitions is that revolutionary activity causes 'complete, dramatic, fundamental change' – 'thorough replacement' of one system with another. We have not revolutionized ADR with the increased use of technology, but we have made some startling evolutionary changes.

A year or so ago I was having a conversation with a graduate student at one of the universities where I teach. She had been asked to pick up from the airport a well-known mediator who was to be a guest speaker at a conference being held at the university. During the drive to the campus she told him she was taking my class in Online Dispute Resolution. His reaction was immediate: "Oh, that stuff

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[*]   Adapted from the Keynote Address at the 2017 Texas Association of Mediators Conference, February 24, 2017. The direct subject of the address was the relationship of ODR to mediation, but the comments about that relationship can be generalized to the broad spectrum of work done under the umbrella of conflict engagement.

1   C. Menkel-Meadow, 'Is ODR ADR?', *IJODR*, Vol. 3, No. 1, 2016, p. 7.

2   C. Rule, 'Is ODR ADR? A Response to Carrie Menkel-Meadow', *IJODR*, Vol. 3, No. 1, 2016, p. 11.

will never work." His presentation was entitled, "Dealing With Parties Who Have Intractable Positions." I suggested that his presentation should be great because he obviously had some direct experience with intractable positions.

The ODR/ADR dichotomy may have been given voice by e-commerce practitioners who know 'it' will work (indeed *must* work), and 'traditional' practitioners who see ICT as a threat to the 'human' nature of ADR, but, as a recent Nobel Laureate once observed, "the times they are a'changing."

It has for a very long time seemed to me that ICT and mediation were a natural fit. I first was involved in what could loosely be called an ODR experience back in the mid-1980s when I helped organize a mediation with parties in North Africa, the United Kingdom and the United States – using telephones and fax machines. From then on, my experience has been that as a third party I engage in three activities on a regular basis: managing communication with the parties, helping the parties deal with information about their dispute, and managing group dynamics at the table. Three of the central features of ICT are that it gives us more communication channels, it helps us deal with information in ways that were heretofore not possible, and it helps us redefine groups and group dynamics. If three of the most important things we do as third parties match exactly three of the major features of ICT, how can one *not* have an impact on the other?

My colleagues and I who have been working for the past couple of decades to understand and mindfully insert ICT into various forms of conflict engagement have often felt like voices in the wilderness when it comes to ODR and ADR. There were times when an ODR panel consisting of Ethan Katsh, Colin Rule and I actually outnumbered the audience at conferences in the United States. There have been bright spots from unexpected quarters. Richard Barnes initiated the use of ODR tools for contract negotiations at the Federal Mediation and Conciliation Service (FMCS), and Bill Usery, one of the true giants in the world of labour mediation, when he formed the Usery Center in Atlanta, brought in an ODR specialist, Michael Wolf, to make technology's 'incursion' into traditional practice part of their work. But mostly, up until very recently, reactions outside of e-commerce have been more along the lines of "it'll never work."

It now seems that technology and its impact on all forms of conflict engagement are becoming topics of urgent conversation in the ADR community and the legal community. The recommendations regarding the use of ODR in access to justice in the United Kingdom and elsewhere are well known, and there is now a working group in the United States involving the American Bar Association, the Association for Conflict Resolution and the American Arbitration Association looking at updating their Model Rules for Mediators to take into consideration changes based on the use of ICT. The International Mediation Institute (IMI) is preparing a certification in E-Mediation, and at the time this editorial is being written at least one state bar association in the United States (Florida) has ordered that 10% of the continuing legal education credits mandated by that state must be focused on the impact of technology on practice.[3]

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3   V. Li, 'Mandate the Update', *ABA Journal*, February 2017, p. 24.

What has changed to move discussions of ODR from "it'll never work" to "I need to know about that"? One change is the extent to which ICT has become an integral part of the social fabric of our lives generally. We are, some would argue, in a period of communication and social change at least as significant as the one brought on by the invention of the printing press.

According to the Pew Research group, in 2005, 5% of the US population used social media. In 2017, that figure will reach 70%. Social media use is still stratified by age, but that's breaking down. The highest use is among those 18-29 years old: 80% are regular social media users. Among the 30-49 age group 70% engage in regular social media use. Among the 50-64 age group 50% engage in regular social media use.[4] The numbers in all the groups are on the rise, perhaps faster in the oldest group.

Apart from social media, general Internet use is also staggering. 87% of US adults regularly use the Internet: 73% use the Internet daily, and 21% of US adults say they are online "almost constantly."[5] Perhaps the most startling statistic to me is that by 2013, one in three new marriages involved individuals who met and formed relationships online.[6] That figure is probably higher now.

Basically, we are communicating with more people, more often, through more channels than ever before. The existence of those channels and the level of use we give them almost inevitably means that we are creating disputes at a record level, and we are creating channels for handling those disputes at an equally record level. To paraphrase an observation Ethan Katsh made some time ago, the ability of the Internet to resolve conflict pales in comparison to its ability to create conflict.

So, as I have said in other venues, if our parties can buy houses online, contact a doctor or psychiatrist on a mobile phone, talk to the grandkids across the country by web video, and find someone to marry online, they are going to want to know why they can't deal with conflict engagement professionals online.

One of the problems we have when talking about conflict engagement and ICT, and one of the reasons the "it'll never work" attitude has been prevalent, is that many are stuck with some misleading ideas about what ODR is, based on the origin of the term.

Outside the vanguard of technology-friendly practitioners, those who are aware of the work being done with technology and conflict engagement probably have seen the term ODR and think of it in a particular context. Those who have been active in the discussion of and development of ODR know the history well. The acronym ODR is a legacy from the time when the Internet was just beginning to make a significant difference in the way we conduct our social lives, and it derives directly from the 1992 NSF decision to allow commerce on the Internet.

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4   Pew Research Center, 'Social Media Fact Sheet', 12 January 2017, available at: <www.pewinternet.org/fact-sheet/social-media/>.
5   Pew Research Center, 'Fact Tank', 8 December 2015, available at: <www.pewresearch.org/fact-tank/2015/12/08/one-fifth-of-americans-report-going-online-almost-constantly/>.
6   S. Jayson, 'More Than a Third of New Marriages Start Online', *USA Today*, 3 June 2013, available at: <https://www.usatoday.com/story/news/nation/2013/06/03/online-dating-marriage/2377961/>.

In the mid-1990s, Ethan Katsh, Janet Rifkin, Colin Rule and others began working on dispute resolution systems for e-commerce based on a very direct and powerful observation: with e-commerce we were creating conflict that was unlike the conflict we had been creating in traditional commercial actions. Conflict was being created online, by parties who often could not engage in traditional litigation or ADR, where venue and boundaries were almost meaningless, and where the only reasonable 'place' to resolve conflict was the online venue in which it was created. And, in addition, we were creating huge numbers of online conflicts. The solution that has been pursued by everyone in the e-commerce universe has been to create what are essentially private justice systems involving online dispute resolution schemes.

In this environment, the term ODR was created, and it came to be associated with the type of technology-assisted dispute resolution that happens entirely online, with heavy reliance on automated systems, algorithms, and, increasingly, artificial intelligence (AI). You simply cannot afford to hire enough flesh-and-blood mediators to handle the volume of disputes created by e-commerce every year, so you have to rely on computer programs to serve as direct actors – active 'Fourth Parties' – in the dispute resolution process. In e-commerce, dispute resolution processes have merged with customer service processes in what I call a 'funnel' system. In most e-commerce schemes the assumption is that many of the 'disputes' that come to the system can be handled by providing information, or by offering a series of choices in a decision tree that eliminates many if not most of the disputes before a customer service representative or mediator is necessary.

The upshot of all this is that the early efforts to address the conflict we create online were made for e-commerce under the umbrella term ODR, and that has led to a tendency to think of ODR as the wholesale overtaking of the mediation process by computer programs, pushing aside mediators, stripping off nonverbal communication, and, to some, perverting the course of alternative justice.

There was other work beginning in the 1990s to integrate ICT into conflict engagement, outside of the e-commerce environment, but in the early days that work was localized, did not receive the attention that the work in e-commerce achieved, and did not, I would argue, figure heavily in the 'public' perception of what it was to engage in ODR.

For example, in 1997, I began to work with the National Mediation Board (NMB) to integrate ICT into all of its mission areas (Representation, Mediation and Arbitration), and at about the same time the US Federal Mediation and Conciliation Service (FMCS) developed a suite of in-house ICT tools to handle multiparty, complex labour management negotiations. From 2004 to 2010, the NMB and the University of Massachusetts partnered in two National Science Foundation research grants to investigate the impact of online tools on traditional mediation. In the United Kingdom, the Mediation Room was an early attempt to develop an ODR platform based on a standard model of mediation. Sanjana Hattotuwa's early groundbreaking transformational work in Sri Lanka is well known. Other non-e-commerce work was underway, but our past has been, and still is, dominated by the high-volume dispute environment of e-commerce and other similar contexts.

In light of this, I would slightly reframe the definition of ODR. ODR is *not* just the development of automated systems for disputes handled entirely online. ODR, in the broader sense, is simply the intelligent application of information and communication technology to any conflict engagement process. I say 'intelligent' application, but in many cases it's probably the 'unwitting' application of ICT – we have integrated technology into what we do professionally because we have integrated the same technology into our everyday lives.

When I say that the use of ICT has been evolutionary I mean that ADR practitioners have found ways to use ICT to do the things we always did, but with the assistance of various technologies.

I started my comments to the Texas mediators by saying that all of us now use ICT in our practices. If we do nothing more than use mobile phones and e-mail to communicate with parties, we are using ICT. Almost all of the third parties I know who use ICT, even those who use sophisticated platforms to handle communication and information sharing far beyond phones and e-mail, regularly do so as an adjunct to face-to-face, traditional mediation or facilitation – so the idea of ODR as a fully self-contained online mode of work is, currently, really a feature of e-commerce, not mainstream ADR.

On the most basic level, we have taken the normal functions that we have to fulfil as third parties as we walk through the steps of our standard mediation models and used online technology to help us fulfil those functions. For example, it is common to use survey and scheduling platforms to help handle intake, get agreements to mediate in place and gather all of the information needed to convene meetings of the parties. Mediators regularly use web video systems to discuss and share documents in real time with parties in dispersed locations. Third parties use online mind maps to conduct online brainstorming, and use various document handling platforms to engage in single text editing of draft agreements, etc. None of this is revolutionary – it's doing the same old thing using ICT to make it more convenient for the parties and the third parties.

In other areas of third party work and service delivery, one also sees the development of evolutionary technology. In the law, literally dozens of apps are springing up to make the law and lawyers more accessible – everything from 'Quick Legal – Ask A Lawyer' that lets one ask questions directly to a lawyer from a mobile phone, to the mobile 'Oh Crap App' that gives one guidance and connects to lawyers when those blue lights on the police car come on behind you in traffic.[7]

I'm a member of the committee of the Virginia Supreme Court's Access to Justice Commission dealing with how to open up the system to *pro se* litigants – those who usually can't afford a lawyer and try to navigate the legal system on their own. That committee is dedicated to using technology to increase access to justice, but their primary approach is to automate access to forms, not to use technology to turn the system on its head, as some legal revolutionaries would like to do.

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7   'Ask A Lawyer' can be found at: <https://play.google.com/store/apps/details?id=com.quicklegal.app&hl=en>. 'Oh Crap App' can be found at: <http://oh-crap-app.com/>.

In medicine, web video sessions are becoming common, electronic medical records are becoming standard, and apps that put basic medical information at your command through mobile phones are easily available. In psychology, 'PTSD Coach' offers mobile access and 'iCouch' is an online door to an array of psychological assistance. James Cartreine and his colleagues at Harvard Medical School are working on online apps for treating depression, and they have deployed an ODR system to handle disputes on the Space Station – that moves us closer to what an early MIT computer scientist, J.C.R. Licklider, wanted to call the Internet – The Intergalactic Network.[8]

Technology is, literally, everywhere. We appear to be hooked on it, and it appears to be deeply affecting the way we live. But the use of ICT in ODR has, so far, more often than not pushed us to evolve our dispute resolution habits, not revolutionize our habits. And, as Barry Wellman and his co-author argued, we are not hooked on technology – we are hooked on people, and ICT is just another, arguably sometimes better, way to connect with people.[9]

Our evolutionary use of ICT has some implications for the ethics of our practice. The Model Rules for Mediators, adopted back in 2005, when 5% of us used social media, do not speak at all to the influence of ICT on the ethics or modes of practice across the board in conflict engagement.

This is an issue not just in ADR and non-judicial forms of ODR, but it is beginning to be discussed by those involved in the traditional justice system. I just attended an American Bar Association conference in which one panel was dedicated to discussing what it meant to be 'competent' in the use of ICT in the practice of law. The ABA's Model Rule 1.1 says "a lawyer shall provide competent representation to a client." A comment related to the rule extends that requirement by adding, "…including the benefits and risks associated with relevant technology."

So, our evolutionary use of ICT has created some issues with which we must deal. Are we likely to see revolutionary changes? I think so.

At some point we will see 'driverless mediation'. The Ford Motor Company has just teamed with a tech start-up to work on getting a production line driverless car on the market by 2021. The ODR equivalent of 'driverless mediation' already exists in e-commerce at about the level that smart cruise control exists in autos. 90% of e-commerce disputes are 'resolved' by Fourth Party algorithms created to provide information and offer paths to resolution without the 'interference' of a human third party. It is already the case that online apps encourage parties to engage in direct negotiation by leading them through rational decision-making steps without a third party.

In the not-so-distant future, artificial intelligence (AI) programs will enable true driverless mediation – not just leading the parties through a series of steps,

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8   'PTSD Coach' can be found at: <https://www.ptsd.va.gov/public/materials/apps/ptsdcoach.asp> – 'iCouch' can be found at <https://pro.icouch.me/>.
9   L. Rainie & B. Wellman, *Networked: The New Social Operating System*, Cambridge, MIT Press, 2012, p. 6.

but actually operating as a virtual Third/Fourth Party. That, at least in my mind, borders on the revolutionary

Another revolution is here or nearly here. Using big data and sophisticated analytical tools, we can look at a staggering amount of information and make some sense of it in ways that human beings operating alone cannot manage. For example, in public policy facilitation it is possible to generate literally millions of comments and messages from interested members of the public. Even the most experienced and dedicated facilitation team can be overwhelmed by the raw amount of data available in public comments. ICT can sift and evaluate masses of information and present it to facilitation teams in a way that makes it possible to understand the conflict dynamic in much more nuanced and useful ways.

Finally, I think we are on the verge of redefining the nature of the 'Justice System'. My colleagues on the Access to Justice Commission, and pretty much everyone else, tend to think of A2J as access to the courts. For many reasons I won't go into here, that is a dysfunctional way to think about a dysfunctional system. Particularly for those who are in poverty or who have financial resources that do not allow extended litigation, the courts are a place where things happen TO you, not FOR you. In places like the United Kingdom and British Columbia, and even in some small projects here in the United States, the notion of A2J that includes easy access to ADR systems, and which are actually available to the 'normal' citizen who is effectively locked out of the court system, may revolutionize our notion of A2J. It is almost universally assumed that opening up the justice system, however it is defined, will rely heavily on ADR systems that handle cases before they go to litigation, and that access to those ADR systems will rely on ODR, particularly using mobile technology.

It seems to me that we are at a moment of opportunity vis-à-vis ICT and conflict engagement. E-commerce led the way in using technology for dispute resolution. We have, in an evolutionary way, brought ICT into a broad range of traditional practices. Our challenge now is to take the next step – to engage in a revolutionary manner.

Standards, Qualifications, and Certification for E-Mediators

Ana Maria Gonçalves & Daniel Rainey[*]

Abstract

This article explores the question 'how does one judge whether a mediator working online is competent?' The authors compare the basic standards used to certify mediators working offline to a set of e-mediation standards developed by the International Mediation Institute, and suggest that training modules addressing the specific skills and competencies needed to be a successful online mediator be incorporated into basic mediator training.

Keywords: Online Dispute Resolution, e-Mediation, ethics, standards of practice, qualifications, certification, International Mediation Institute, Association for Conflict Resolution, American Bar Association, American Arbitration Association, National Center for Technology and Dispute Resolution, International Council for Online Dispute Resolution, National Center for State Courts.

The standards of practice, qualifications, and certifications for mediators and e-mediators is important because the basic ethics and standards of practice for mediators form a 'mainstream' set of guidelines for attitudes and behaviours that

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widen out into use in all forms of conflict engagement.[1] Creating trust with the parties in conflict is basic to mediation, and it is basic to work in facilitation, conciliation, peacebuilding, and other forms of conflict engagement. Likewise, ensuring party self-determination is central to mediation and is a concern of practitioners in other forms of conflict engagement. It is not the case that standards and qualifications for mediators can be adopted seamlessly for other types of practice, but it is the case that standards and qualifications for mediators can inform the development of standards and qualifications in other types of practice.

What makes a competent mediator? How do the parties in conflict know that the third party they have chosen to work with them is skilled and able to assist without doing harm? This question is hard enough to answer when the question is being asked of mediators who work primarily face to face. Requirements vary from jurisdiction to jurisdiction and from country to country, but a de facto standard seems to exist on the basis of the 40-hour basic training outlined by courts as a way to certify mediators accepting court-referred cases. Some distinctions are usually made among civil cases, family mediation cases, and the like, but the 40-hour basic training is commonly used as a starting point.[2]

So, if a mediator completes the 40-hour course and engages in the usually required co-mediation or mentoring, does that guarantee competence? If the mediator has conducted a thousand mediations, does that signify competence? Judging competence in any field that features human interaction in complex situations is at best fraught with problems. Judging competence in mediation, which is managing human communication in conflict situations, is particularly fraught because, unlike the law or medicine or other professions, there is no central authority that certifies, trains, and monitors performance. If this problem exists for mediation, it is potentially magnified for e-mediation.

For e-mediation there is another complicating factor. There are guidelines for training mediators scattered around the world, and there are de facto standards for what basic mediation training should include. But not one of the many training programs in mediation, anywhere in the world, to the knowledge of the authors, features a segment on the use of technology in mediation. There are courses in universities that focus on online dispute resolution (ODR) but those courses are not, to the authors' knowledge, integrated into basic mediation training for practitioners seeking certification from any of the court systems that have established basic training criteria.

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1   The authors will proceed with the assumption that every mediator working today uses some information and communication technology (ICT) in her or his practice because ICT is such a central feature of contemporary life. Even if the practitioner uses only a smartphone, laptop, or desktop, her or she is engaged in a form of online dispute resolution and is, by default, an e-mediator.

2   *See, e.g.*, the Commonwealth of Virginia in the United States, where one of the authors lives and practices, has a set of mediator qualifications that are illustrative of 'normal' basic mediator certification requirements. A copy of the requirements can be found at: www.courts.state.va.us/courtadmin/aoc/djs/programs/drs/mediation/training/tom.pdf.

Institution	Scope of Claims	Normative Order	Definition of ODR	Technical Platform	Accessibility	Innovation	Transparency	Neutral Selection Process	Accountability of Provider	Compliance	Database Security	Ethics
UNCITRAL												
ABA												
EU												
ICANN												
OZ ADR Council												
ACR												
IMI												
NCTDR												
NCSC												

There are a number of organizations engaged in work related to e-mediation and ODR standards of practice, qualifications and certification. The Association for Conflict Resolution (ACR) will soon publish a set of comments on the Model Rules for Mediators that were adopted by the ACR, the American Bar Association (ABA) and the American Arbitration Association (AAA) in 2007.[3] The National Center for Technology and Dispute Resolution (NCTDR) has published a set of ethical principles guiding development and practice in ODR.[4] The National Center for State Courts (NCSC) is engaged in the process of developing guidance for court systems to use as they advertise for alternative dispute resolution (ADR) and court technology.[5] The International Council for Online Dispute Resolution (ICODR) has recently been formed and will have as one of its mandates the creation of standards for various types of ODR work.[6]

A survey of organizations that have offered some guidance regarding ODR reveals that, although there are a number of published guidelines for ODR, each has gaps.[7] One of ICODR's goals is to provide guidance consistent with the work that has already been done and to offer a set of guidelines that address all of the major issues surrounding ODR.

The International Mediation Institute (IMI) has published a set of e-mediation skills and e-mediation certification standards. At the 2018 International ODR Forum in Auckland, New Zealand, the new e-mediation standards were presented to the forum attendees.

Created in 2008, IMI is the only organization in the world to adopt an international vision and mission for mediation. IMI is a non-profit organization registered in The Hague, supported practically and financially by corporate users and by a group of international ADR service providers. IMI aims to address the needs

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3   The Model Rules and comments are currently available at: https://docs.google.com/a/
     danielrainey.us/viewer?a=v&pid=sites&srcid=
     ZGFuaWVscmFpbmV5LnVzfHJhaW5leS1wdWJsaWNhdGlvbi1maWxlLWNhYmluZXR8Z3g6MT
     ZhYTAyNjQ1NTliYWE4OA.
4   Available at: http://odr.info/ethics-and-odr/.
5   NCSC has published many articles related to technology and the courts, available at: https://
     www.ncsc.org/Topics/Technology/Technology-in-the-Courts/Resource-Guide.aspx.
6   ICODR's home page is available at: http://icodr.org/.
7   The initial survey was done by Orna Rabinovitz-Einy and Rachel Ran as a contribution to IMI
     ODR Task Force, with additions by the authors. The EU Regulation concerns only disputes aris-
     ing from domestic online transactions within the EU.

of all stakeholders, starting with users, that is, disputants. This requires also understanding the interests of the other players in the dispute resolution field – mediators, conciliators, law firms and others who advise users, adjudicators, such as judges and arbitrators, service-providing organizations, trainers and educators, and policy-makers.

IMI believes that quality is critical if mediation is to continue to grow and be used by disputants. Mediation is not a recognized independent profession in any country of the world, meaning virtually anybody can call herself or himself a 'mediator.' IMI has set out to change that through the transparent establishment of high competency standards that enable users to know that when they select a mediator, they are procuring the services of a quality professional who has the skills to assist them in resolving their dispute.

IMI's quality standards are established and maintained by IMI's Independent Standards Commission (ISC), a body of users including highly experienced mediators, leading judges, providers, trainers and educators from 27 countries, with more than 70 members. The standards are applied in practice by service provider organizations that are approved by the ISC to run 'Qualifying Assessment Programs' (QAPs). QAPs then assess and qualify experienced and competent mediators for IMI certification. There are currently over 500 IMI-certified mediators in 45 countries. All members of the ISC and all QAPs are listed on the IMI website at www.IMImediation.org.

In 2014, the ISC started to work on ODR standards, using a robust process defined previously and refined while working on other key critical topics such as inter-cultural competencies, investor-state mediation, and mediation advocacy. At the 13th Annual International Online Dispute Resolution Forum, hosted by Stanford Law School, an ODR Task Force was created, gathering more than 30 thought-leaders and ODR professionals from more than 8 countries and co-chaired by Daniel Rainey and Ana Maria Maia Gonçalves. The ODR Task Force first agreed on the following terms of reference:

> To define online dispute resolution (ODR) and to assess and make recommendations on how to develop high-level standards for the provision of ODR services, having regard to:
> a   the current development of mediation and other ADR tools in this field
> b   the importance of ODR as a mechanism for all forms of dispute resolution
> c   the emergence of legislation impacting upon ODR.
> In particular, to study and make recommendations in relation to the following key areas, which have a long-term impact on the ODR sector:
>
> 1   Examine the need and extent to which ODR practice should be self-regulated through an independent international credentialing scheme and how such self-regulation can be most effectively implemented, including:
>   1.1. COMPETENCY

1.1.1. competency criteria (knowledge, skills and experience) that individual ODR practitioners should possess to practice in ODR;

1.1.2. best practice and competency criteria (knowledge, skills and experience) for those advising or representing parties engaged in ODR;

1.2. STANDARDS

1.2.1. standards that need to be met by ODR service providers, ISPs, hosts, platforms and software to fully address the needs and protect the interests of users [1];

1.2.2. standards of trainings and codes of professional conduct.

1.3. COMPLIANCE

1.3.1. how compliance with such criteria can be effectively and economically assessed and monitored on a self-regulatory basis; and

1.3.2. the need to develop a Code of Conduct and Disciplinary Process for ODR.

2   With regard to the growing use of ODR in cross-border dispute resolution and existing and planned government regulation in this field, identify the infrastructure needed to develop ODR standards on both national and international levels; assess the relevance of inter-operability, data import/export/migration and language translation.

3   Propose other measures or initiatives to support the development of quality ODR.

Based on this preliminary work, the ODR Task Force organized itself into seven subgroups:

1   Define ODR
2   Tools
3   ODR Practitioners (standard competencies)
4   Advising and Representing Parties
5   ODR Service Providers
6   Trainings and Code of Professional Conduct
7   Assessment

Based on the recommendations from subgroup 3, the ODR Task Force agreed that its original scope of work about ODR Practitioners, as outlined above in point 1.1.1. of its terms of reference, was very broad and, to be true to IMI's mission, decided to focus on three key deliverables:

1   E-mediation Competencies
2   E-mediation Skills
3   General Requirements for E-mediation QAPs

The ODR Task Force agreed on the following definition of e-mediation: "The application of any ICT to the process of mediation online or via any other technology" and decided to focus accordingly on precisely defining what skills and competencies an e-mediator shall have so that she or he could be successful in

creating trust in the online environment with the different stakeholders of the e-mediation. On the basis of existing literature, the concept of trust appeared to be central to the success of e-mediation. There is until now no scientific study that focuses on the impact of the diverse online technologies on mediation. Nonetheless, one paper published in 2008 highlights the influence of affective and cognitive trust and of media richness on two behaviours that are critical in mediation and negotiation, defection and deception. As defined in this article, media richness is "the ability of a communication medium to transmit different types of information from sender to receiver".[8] Defection occurs "when cooperation has been agreed to, yet, because of uncertainty in the environment or willingness to take advantage of others, an individual chooses not to cooperate".[9] For its part, deception is the "willful attempt to mislead others through information that is known to be untrue".[10] Trust, which is widely recognized as a critical prerequisite to cooperation, is "one's expectations, assumptions, or beliefs about the likelihood that another's future actions will be beneficial, favourable, or at least not detrimental to one's interests".[11] It can be divided into two components: cognitive-based trust, "indicated by beliefs in an other's ability, reliability, and comprehension of the situation",[12] and affective-based trust, which "reflects the emotional bonds between members and is indicated by one's confidence that others' will act in my best interest because of the bond we have between us".[13] The study reveals that defection and deception are more likely to occur the leaner the communication medium used by a group. It is probably common sense to anyone who has used an online communication system that affective-based and cognitive-based trusts are weaker for individuals in groups using a leaner medium. But the most critical findings of the study were that affective-based and cognitive-based trust both mediated the relationship between media richness and defection. Said differently, a leaner communication medium negatively impacted affective-based and cognitive-based trust, which in turn influenced deception or defection. It can be inferred that e-mediators would probably benefit from focusing on developing trust online even more than offline. Other research showed that trustworthiness was the result of the combination of three variables:

– credibility and reliability, which are based on the professional and technical abilities of the practitioner;
– intimacy, which depends on the capability to develop a safe and deep rapport; and

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8   K.W. Rockmann & G.B. Northcraft, 'To Be or Not to Be Trusted: The Influence of Media Richness on Defection and Deception', *Organizational Behavior and Human Decision Processes,* Vol. 102, No. 2, 2008, p. 107.
9   *Ibid.*
10   *Ibid.*
11   *Ibid.*
12   *Ibid.*
13   *Ibid.*

– self-orientation, which refers to the practitioner's focus – primarily on self or on the other. Self-orientation diminishes trust, while 'other' orientation increases trust.

Guided by these findings, the ODR Task Force thus recommended that the critical competencies and skills of the e-mediator should be:

– self-confidence about technology and mediation abilities (both techniques and process);
– high social emotional intelligence to develop intimacy – to foster an 'other' (vs. self) orientation with all parties despite low media richness;
– situational awareness – attention to the context and adaptability to all circumstances, managing technical pitfalls with effectiveness and mindfulness;
– ethical behaviour adapted to the online constraints and opportunities.

In a nutshell, the e-mediator should be an 'online role model' for trust-building. The full standards produced by ODR Task Force are listed in Appendices 1 and 2 to this article. At the time of this publication, the ODR Task Force is working on the full publication of the QAP program application, on the definition of the QAP assessment mode, on the launch of IMI e-mediator certification and the creation of a panel of e-mediators on the IMI website.

To date, the creation of standards, qualifications, ethics, standards of practice and competence guidelines for ODR has taken the same general path that standards and the like have taken for offline dispute resolution. Various interested organizations have developed documents and guidelines for specific practice areas, with little or no coordination. We can hope that the creation of ICODR, and the work done by IMI, will begin a process of establishing norms that can be, if not universal, at least widely accepted.

In the end, it would be beneficial for everyone if ODR advocates and practitioners around the world could begin to answer the question that we posed to begin these notes: what should be expected from ODR programs, and what exactly is a competent e-mediator?

Appendix 1. E-Mediation (EM) Core Competency Knowledge Elements

Situational Awareness
1 Knowing when the online environment may not be a suitable way to conduct the mediation process;
2 Determining when Online Dispute Resolution (ODR) approaches are likely to add value to the process;
3 Staying abreast of developments in ICT, ODR schemes, various ODR platforms and general issues related to ODR;
4 Knowledge about the impact of ICT on the practice of mediation.

Basic Knowledge

5. Understanding the principles of text-, video-, and audio-based communication (or a combination) and ability to identify the most appropriate one for a mediation or for phases of the mediation process;

6. Understanding of the role of a mediator, and how the mediator's approach and practice are adaptable or not to the online environment;

7. Knowledge and adherence to ethical standards;

8. Knowledge of the dynamics of online negotiation;

9. Knowledge of relevant laws affecting mediation practice in the online environment (if any): enforceability of online mediation agreements (where relevant), confidentiality and privilege;

10. Knowledge of the various laws affecting the structure and enforceability of online mediation agreements, particularly across jurisdictions.

Platform/Technology

11. Ability to select the appropriate ICT platform that meets the needs of the parties;

12. Knowledge about which features of the ICT platform to use in a mediation (functions, security, access, complexity, others);

13. Knowledge (as applicable) in technology (hardware and software) (i) devices needed to perform the mediation using ICT; (ii) telecommunications technology; (iii) information technology; (iv) required electronic records;

14. Knowledge about possible technology issues and breakdown.

Process/Impact

15. Understanding of the emotional, social and cognitive advantages and disadvantages of using ICT in a conflict resolution process and the ability to measure and manage the impact and effects on third parties;

16. Ability to move between different communication channels on the basis of the nature of the relationship and task at hand (*e.g.* use of email to coordinate a call, use the phone before going to a face-to-face meeting and then shift back to phone before writing again a final email);

17. Understanding of biases related to ICT use and impact on parties and third parties' performance in mediation;

18. Knowing how to use relevant procedures and techniques for facilitating online communication including (i) management of asynchronous communication and (ii) balancing limitations of each ICT towards the needs of each party;

19. Familiarity with the impact of the online environment in techniques such as listening, questioning, paraphrasing, summarizing and concurrent caucusing.

Communication With Parties

20. Understanding and explaining to the parties policies, procedures and protocols relevant to conduct the mediation using ICT. Including but not limited to:

20-1-Ethical and legal issues: (i) consent, privacy, confidentiality, security and (ii) limitations of technology;

20-2-Documentation: (i) scheduling and follow-up; (ii) accountability/ responsibility and (iii) enforceability;

21. Understanding of technological challenges and ability to identify them for each participant, including but not limited to literacy, acceptance and compatibility;

22. Knowing how to use techniques for adequately supporting technologically challenged participants and address possible imbalances between parties;

23. Knowledge of cultural bias related to the use of technologies in mediation practice.

Appendix 2. E-Mediation Core Competency Practical Skills

1. General Skills in Mediation (IMI Certification)

Those skills include but are not limited to ethical obligations, neutrality, awareness of potential biases (conscious and unconscious) and confidentiality.

2. Skills Related to Technology:

2.1. Basic computer skills and basic mobile computing skills;

2.2. Working with ICT platform set-up, operation, and trouble-shooting;

2.3. Ability to manage efficiently any technology challenges;

2.4. Ability to use the technical equipment and environment (*e.g.* lighting, sounds, distractions) in order to deliver a high-quality experience to participants of the respective e-Mediation;

2.5. Ability to convey clear and effective messages in verbal and non-verbal communication synchronously and asynchronously;

2.6. Ability to use the ICT platform in such a way that the platform does not take away the focus from the content of the conversation with/among the parties;

2.7. Ability to show confidence and critical self-awareness in working with technology to address parties' issues;

2.8. Ability to simultaneously address people who are in different countries and regions and different time zones – understanding the impact that this can have on the dynamics of the communication;

2.9. Understanding implications for privacy in storing digital information and communicating with parties and others online;

2.10. Ability to combine asynchronous communication and videoconferencing in order to manage caucuses;

2.11. Ability to use specific options of the ICT platform such as (i) meeting planning, (ii) screen sharing, (iii) online caucus, (iv) giving mouse controls, (v) muting and unmuting, (vi) multiple webcams and (vii) multiple modes of communication simultaneously.

3. Skills Related to the e-Mediation Process

3.1. Assessing suitability of the dispute/disputants to e-Mediation;

3.2. Determining which approaches are likely to add value to e-Mediation;

3.3. Determining and explaining to the parties the impact of the use of ICT in terms of process and potential impact on the outcome of mediation;

3.4. Dealing with the different levels of readiness of the parties to accept the implication of using ICT in the mediation process, evaluating and securing equal access to ICTs for all parties involved;

3.5. Determining special costs or fees associated with the use of ICT in e-Mediation;

3.6. Preparing for e-Mediation

1. Considering parties' knowledge of mediation process and impact of ICT;
2. Understanding the level of technical knowledge of the parties and their capacity to communicate effectively using ICT platforms;
3. Guiding parties and all participants through the ICT (the process and information management);
4. Identifying possible outcomes, risks and consequences associated with e-Mediation;
5. Identifying and explaining to the parties (in common language) the potential risks in relation to privacy and confidentiality while using online or computer-based platforms or applications;
6. Identifying and communicating common technical issues, problems or questions that may arise during an e-Mediation process and providing parties with possible protocols to address them;
7. Identifying reasonable industry standards for security and privacy protection of a determined online or computer-based platform and refraining from using or recommending the ones that do not meet those standards;
8. Creating a protocol agreement that defines the parties' understanding of the process, the use of any ICT, the potential risks to their information and the responsibilities of an e-Mediator (including responsibilities related to confidentiality and ability to provide protection to data transmitted online);
9. Choosing the online platform that is going to be used during the e-Mediation;
10. Getting agreement regarding who will be present during the different audio and/or video sessions of the e-Mediation;
11. Getting agreement regarding who will have access to any information stored online as part of the mediation process and define how that access is going to take place;
12. Creating an atmosphere where the use of ICT by the e-Mediator outside of the mediation does not create the perception of a conflict of interest by the parties;
13. Identifying and getting agreement on the procedure to follow in case of technology breakdown;
14. Disclosing the appropriate information so the e-Mediation can be conducted without any conflict of interests; ensuring transparency with regard to the e-mediator, the institution, the fourth party and the online procedure;
15. Identifying the parties' understanding of the sources of the dispute, their interests, rights and options, and the other party or parties' interests, rights and options.

3.7. During e-Mediation

1. Effectively using technology and outside assistance if needed;
2. Conducting a high-quality process within the online environment;
3. Deciding on the best online process that meets the needs of the parties despite personal preferences or bias in favour or against the use of ICT;
4. Monitoring of the parties' perceptions and attitudes towards the e-Mediation and adjusting the process respectfully;
5. Being aware of the different features of the ICT platform, their corresponding advantages and constraints to be able to discern which feature to use in which context;
6. Understanding and dealing with technology impact in power imbalances (*e.g.* typing capabilities of the parties, imbalance due to computer power and Internet speed, others);
7. Monitoring to ensure that parties deal with the online process on equal ground and competence;
8. Being self-aware to avoid becoming biased by party's performance using ICT;
9. Taking advantage of the change of communication type provided by online dispute resolution mechanisms to help the parties take the most out of the situation (*e.g.* create space for brainstorming, time to reflect);
10. Understanding how to adapt text-/audio-/video-based communication to the kind of issue parties are discussing;
11. Applying emotion management techniques;
12. Understanding how to use active listening online that also includes attentive and active reading;
13. Using ICT to facilitate negotiations in an efficient way;
14. Ensuring that impartiality is maintained;
15. Exhibiting lack of bias related to considerations of geographical location or cultural orientation of e-Mediator or use of facilities;
16. Ensuring that the e-Mediator's conduct is always professional and appropriate (respecting the protocol agreement regarding the access to parties, responsiveness to parties' requests, taming tempers);
17. Managing the continuation and the termination of the e-Mediation (addressing parties' hanging up, technical failure, automated processes, etc.);
18. Understanding how to translate face-to-face mediation techniques into the online environment.

3.8. Reaching agreement

1. Ensuring parties have given their informed consent;
2. Ensuring that agreement addresses issues, interests and rights as identified throughout the process.

3.9. Post-mediation process

1. Encouraging parties to provide feedback on their experience in e-Mediation;
2. Conducting follow-up when needed.

The Pull of Unbiased AI Mediators

Chris Draper[*]

Abstract

There is significant concern in the access to justice community that expanding current count-based online dispute resolution (ODR) efforts will further exacerbate the systemic inequities present in the American justice system. This well-founded fear stems from the fact that current ODR tools typically calibrate artificial intelligence (AI) algorithms with past outcomes so that any future cases are consistently analysed and filtered in a manner that produces similar results. As courts consider ODR tools for more complicated cases that often require mediation, there is significant disagreement on whether it is possible to create an AI mediator and how that could be achieved. This article argues that an effective AI mediator could be created if its design focuses not on the outcomes achieved by the mediation but on the manner of the communication prompts used by the AI mediator.

1   Introduction

The response to automation in traditionally white-collar industries ranges from excitement to fear.[1] Online Dispute Resolution (ODR) is one of these primarily white-collar applications where the onslaught of automation is causing a wide range of visceral reactions. To some, implementing ODR solutions that "turn every cellphone into a point of access to justice" is the only way we can meaningfully serve Americans who cannot afford a lawyer when they need one.[2] For others, ODR tools are accelerating efforts to remove all remaining shreds of humanity from our inequitable society.

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[1]   *See*, 'Automation and Anxiety', *The Economist*, 23 June 2016, www.economist.com/special-report/2016/06/23/automation-and-anxiety (last accessed 7 July 2019).

[2]   A. Morris, 'Could 80 Percent of Cases Be Resolved through Online Dispute Resolution?' *Legal Rebels Podcast*, 17 October 2018, www.abajournal.com/legalrebels/article/rebels_podcast_episode_033 (last accessed 7 July 2019).

Alternative dispute resolution (ADR) covers a wide range of dispute resolution techniques designed to streamline justice by avoiding traditional courts. ODR takes efficiency a step farther by streamlining traditionally human-dependent processes. For example, traditional ADR expects mediation to bring all parties to one location where information can be physically shuttled between different physical locations. ODR mediation can be carried out asynchronously with electronic communication between parties from all over the world securely facilitated through a platform like Trokt. While there is limited controversy when ODR automates the physical message delivery happening in traditional ADR, artificial intelligence (AI) is being looked to for automating procedural and facilitative processes that could significantly impact ODR outcomes.

The most controversial conceptual application of automation is an *AI mediator*. There is a body of evidence that indicates AI is fundamentally unable to be truly creative[3] or to make decisions that will be acceptable to humans without continually optimizing human input.[4] These fundamental issues with AI are often cited as reasons why an AI mediator is not viable. Yet these arguments implicitly assume that mediation requires creative skill.

2   What If It Does Not?

There are disputes where the presence of a specific individual can fundamentally alter the outcome of the dispute or any agreement that could be reached. Yet there does appear to be a science to mediation that could be repeatably designed. If true, then a thoughtful development and application of ODR technologies, contextualized by the actual risks and biases observed in unautomated ADR workflows, could provide a future that is squarely in the middle of these two extreme visions – even when it comes to an AI mediator.

3   What Is ODR?

ODR is fundamentally an ADR process that is at least partially completed online. Dispute resolution processes include fact-finding, negotiation or settlement during mediation, arbitration or med-arb using video, voice or written collaboration software, to name just a few. At its most basic, ODR includes asynchronous contract negotiation over email, or real-time collaboration using text-based messaging programmes. At its more refined, ODR includes case management software that is integrated into court processes, or collaboration spaces that allow brainstorming to feed into document drafting until an agreed contract is signed.

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3   S. Belsky, 'How to Thwart the Robots: Unabashed Creativity', *Fast Company*, 23 January 2019, www.fastcompany.com/90294821/how-to-thwart-the-robots-unabashed-creativity (last accessed 7 July 2019)

4   N. Scheiber, 'High-Skilled White-Collar Work? Machines Can Do That, Too', *New York Times*, 7 July 2018, www.nytimes.com/2018/07/07/business/economy/algorithm-fashion-jobs.html (last accessed 7 July 2019).

Regardless of the ODR platform's sophistication, it will typically take one of two operational forms: filtering or facilitating.

Most discussion around ODR often focuses on court-based systems integrating tools from companies like Tyler Technologies or Matterhorn to solve simple, low-value disputes.[5] If an individual receives a parking ticket, these tools allow someone to log in, complete the necessary documents and pay all relevant fines online. On the more complex end, these tools may allow for the solving of small claims by facilitating real-time or asynchronous text-based communication between the parties, allow the claimant to accept a lesser value in exchange for a quick resolution, and all agreements and payments will be competed online. In all these types of cases, the number of potential outcomes is limited. Whether it be a traffic ticket or a small-claim dispute, the claimant will get all its money, some of its money, none of its money or go to court. These 'filtering' ODR systems are designed to filter the parties into one of these outcomes as quickly as possible. Filtering ODR systems are represented by the top part of Figure 1, where an unclassified problem is filtered down to the 'correct' outcome.

Figure 1   Filtering versus Facilitating ODR Systems
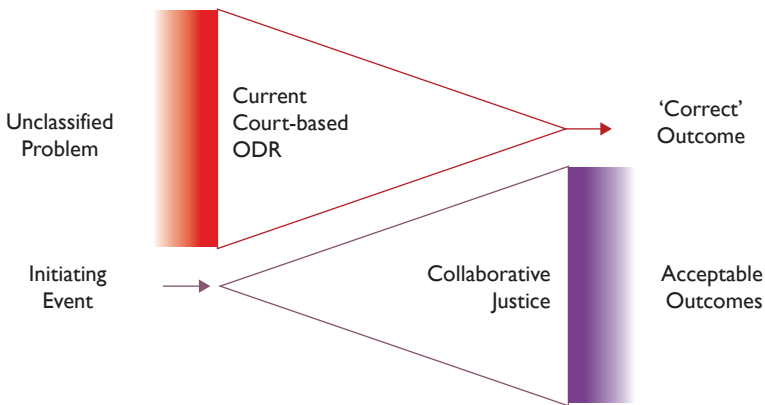
The less visible branch of ODR is 'facilitating' tools that fall into the realm of collaborative justice. These tools are designed to ensure that any outcome that is acceptable to all involved parties can be simply, safely and securely codified. The most widely recognized ODR tool in this space is Trokt, which is designed to remove the human errors that occur between the time a dispute arises until a settlement agreement is filed. Yet Trokt is not the market leader. The US district courts terminated 98,786 tort trial cases between 2002 and 2003, with only

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5   J.J. Prescott, 'Improving Access to Justice in State Courts with Platform Technology', *Vanderbilt Law Review*, Vol. 70, No. 6, 1993, https://s3.amazonaws.com/vu-wp0/wp-content/uploads/sites/89/2017/11/28175541/Improving-Access-to-Justice-in-State-Courts-with-Platform-Technology.pdf (last accessed 7 July 2019).

1,647 of these cases resulting in either a jury or bench trial.[6] The remaining 98.3% of tort cases that did not go to trial were resolved with some mixture of the most widely used facilitating ODR tools: tracked-changed Word documents going back and forth via email that are discussed over the phone or in a videoconference. Despite the widespread understanding that these types of tools are not secure and are inappropriate for relaying sensitive digital data,[7] tens of thousands of complex settlements are negotiated online every year using these rudimentary ODR tools.

The case management and negotiation tools developed by Tyler and Matterhorn have recently defined what many consider court-based ODR. Yet the fundamental definition of ODR means our justice system has adopted and accepted the use of ODR tools for decades. The emerging concerns about ODR regard how these tools are becoming automated.

4 Acceleration through Automation

Current court-based ODR tools such as those provided by Tyler and Matterhorn that rely on 'filtering' a dispute into its appropriate resolution bin achieve efficiency by increasing the speed at which a case is filtered. Increasing filtering speed means users must:
– agree to use the system more quickly,
– acknowledge they understand the process more quickly,
– be appropriately filtered into an agreeable bin more quickly,
– agree to the terms of the resolution accessible in the bin where they are filtered more quickly, and
– complete the actions required by the agreement more quickly.

These steps can be achieved more quickly by:
– Simplifying descriptive or instructional language,
– Classifying the dispute with AI, and
– Reducing the effort of agreeing to and paying for the resolution.

These same filtering concepts are routinely applied to the commonly used 'facilitating' tools of Word, email and text-based messaging during eDiscovery. Most common eDiscovery tools are using Natural Language Processing (NLP) AI methods to find words, phrases or concepts within documents being searched and select what documents or data points the eDiscovery tool 'believes' are appropriate for human review as part of the discovery effort. These same types of AI tools are already appearing in email and word processing tools to help users select words that adjust how the reader will interpret things like repetitive content or intended tone.

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6   *See*, 'Tort, Contract and Real Property Trials', *Bureau of Justice Statistics*, www.bjs.gov/index.cfm?ty=tp&tid=451 (last accessed 7 July 2019).
7   C.H. Draper & A.H. Raymond, 'Building a Risk Model for Data Incidents: A Guide to Assist Businesses in Making Ethical Data Decisions', *Business Horizons*, 2019, ISSN: 0007-6813, https://doi.org/10.1016/j.bushor.2019.04.005 (last accessed 7 July 2019).

Not only is the use of these types of AI techniques for both 'filtering' and 'facilitating' ODR tools common, but it enables users to rapidly find consistency within large or often unstructured datasets. This consistency is found by using Machine Learning (ML) algorithms that compare large amounts of Big Data (BD) against Business Intelligence (BI) metrics that set the priorities for comparison. If these priorities for comparison are met, whether the AI process is relevant to NLP, Vision, Autonomous Vehicles, Robotics or other common applications, the system takes the action that it is instructed to take when faced with this consistency.[8]

*Figure 2   Artificial Intelligence, Dependent Tools and Technologies*[9]
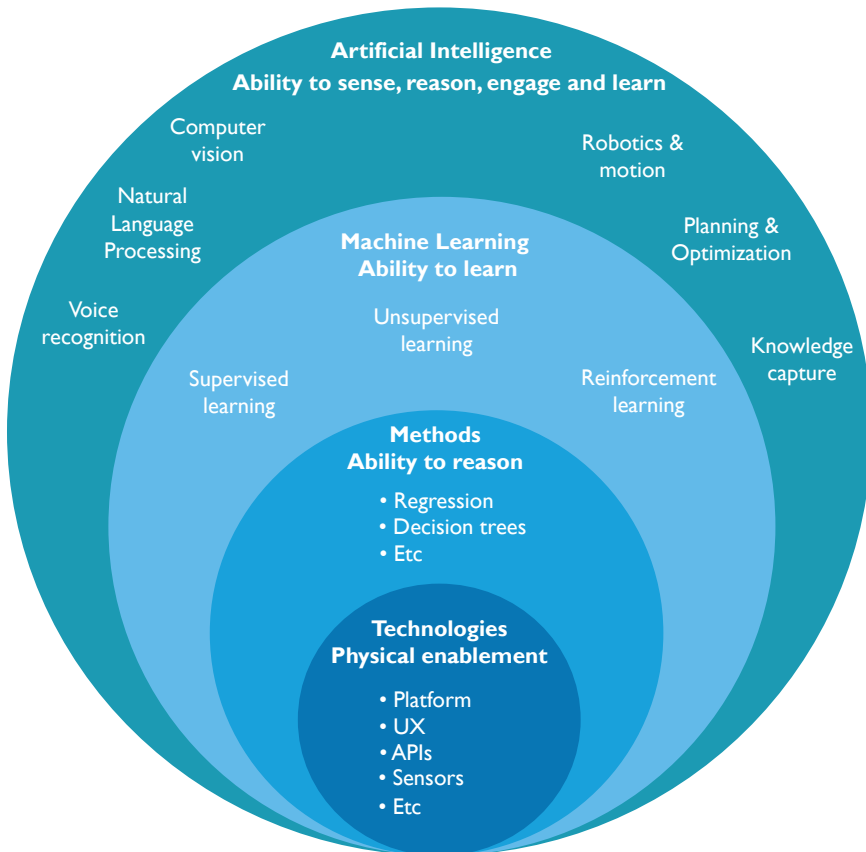
8   S. van Duin & N. Bakhshi, 'Artificial Intelligence Defined', *Deloitte*, March 2017, www2.deloitte.com/se/sv/pages/technology/articles/part1-artificial-intelligence-defined.html (last accessed 7 July 2019).

9   S. van Duin & N. Bakhshi, 'Artificial Intelligence Defined', *Deloitte*, March 2017, www2.deloitte.com/se/sv/pages/technology/articles/part1-artificial-intelligence-defined.html (last accessed 7 July 2019).

For example, an autonomous vehicle application of AI is often seeking unobstructed road and guiding the vehicle to maximize its allowed speed along that unobstructed road. Alternatively, a Vision application of AI may be operating at a retail store to identify how many items are on a shelf before and after a customer enters a store and to alert security if the number of items remaining is not consistent with the number of items bought. Or a Robotics application of AI may be testing the ripeness of grapes by tracking the response to compression forces and picking those that conform to customer interpretations of preferred taste. All these applications depend on ML to process the data the software is gathering against the data with which the ML routines are calibrated, with AI considered to have the ability to make the 'correct' decision with this processed data.

The fundamental limitations of AI are no different from those we experience as humans. First, the quality of any AI application is directly dependent on its ability to access large amounts of relevant data. When data is limited, we must make assumptions about what we cannot see. Second, the quality of any AI decision is directly dependent on its ability to accurately equate what it sees with reality. When environments change, there is an inertia to our expectation of human reactions. This is easy to see in the facial recognition challenges like those presented in Figure 3.

Figure 3   Example of the Interpretation Challenges Given Limited Data
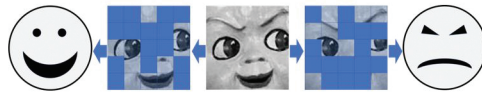
In Figure 3, we see that different limited data views result in wildly different interpretations of the underlying reality. Yet even with the full picture, the underlying emotional reality may remain unclear. This lack of clarity and the method of reducing it is not unique to facial recognition, where the interpretation of meaning in facial expressions is continually studied using large human surveys.[10] These large surveys often calibrate a 'Weak' or 'Narrow' AI system that will use this data as the basis for making its decisions. These Weak or Narrow AI systems differ from 'Strong' AI systems that independently refine their analysis of the data, the most important difference being that *Strong AI systems do not currently exist*.

It is extremely important to understand two things when interpreting AI systems:

1   AI does not uncover truth; it more rapidly refines what it sees, and
2   The weaknesses of AI systems are equivalent to those in an expert witness.

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10   S. Fecht, 'How to Smile without Looking Like a Creep, According to Scientists', *Popular Science*, 28 June 2017, www.popsci.com/how-to-smile (last accessed 7 July 2019).

These truths about AI systems are important to understand when interpreting, assessing and mitigating the risks around their use in access to justice applications.

5 What Aspects of ODR Worry the Access to Justice Community?

In the dispute resolution and access to justice communities, court-based ODR processes raise a number of concerns and fears. These concerns and fears about court-based ODR technology in general and AI-assisted technology more generally included eight major concerns that were expressed at the National Legal Aid & Defender Association (NLADA) Tech Section meeting held during the 2019 Equal Justice Conference in Louisville, Kentucky.[11] These eight issues that participants at the Tech Section believe must be accounted for in court-based ODR tools can be summarized and grouped as follows:

Group A: Uniform Intent

1. Stakeholder participation. Automating significant portions of the court system using ODR tools could produce wide-ranging and potentially unintended consequences, including the dominance of systemic biases. For this reason, it is important that the broadest collection of impacted stakeholders be involved in the planning and implementation of any changes.

Group B: Safely Accessible

2. Equitable Accessibility. Internet access is neither of consistent quality nor equitably distributed throughout the United States. For this reason, the bandwidth and autosaving qualities of any cloud-based system should be understood and appropriate for the communities intended to access any ODR tool.

3. Physical Security. The ability to provide access to the courts from nearly any location using ODR tools means an individual could be completing a legally binding action in physical proximity to someone causing him or her duress. For this reason, scenarios that involve actions taken under duress that may not be possible without the presence of an ODR tool should be accounted for when determining the enforceability of any ODR-enabled agreement.

Group C: Meaningful Clarity

4. Accurate Translations. The American judicial system must be accessible to individuals who are unable to fully understand the English language. For this reason, the implementation of any ODR system should not deny equitable access to individuals based on the languages they can understand.

5. Oversimplification of plain language. Many concepts, procedures or choices in the American justice system are complex enough that their implications cannot be condensed into simple summaries or binary choices. For this reason, informational or expert systems that accompany ODR systems, or the choices users are forced to make as part of an ODR system, should be careful to avoid oversimplifi-

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11   C.H. Draper, 'Personal Notes from the NLADA Tech Section Meeting', *2019 Equal Justice Conference* in Louisville, KY, 9 May 2019.

cations that allow individuals to be adversely impacted by negative consequences that they did not expect or understand.

6. Meaningful Allocation. There is now a societal comfort with accepting terms and conditions couched in long, intellectually impenetrable language when using software platforms that results in the average user being completely unaware of their rights or responsibilities with respect to their use of those platforms. For this reason, any ODR tool should ensure that any meaningful, legal obligations associated with a process that is agreed to using the ODR tool are not bundled or buried in a manner that produces uninformed acceptance.

Group D: Information Security

7. Operational Privacy. Societal comfort with facilitative ODR tools makes most practitioners unaware that the operational risks associated with an approved user mismanaging data are conservatively estimated as eight times more likely to cause a release of confidential data than any malicious system intrusion.[12] For this reason, any court-based ODR tool should assess the operational risks associated with using the platform against the value of any data that a user could accidentally release.

8. Anonymous Calibration. The source and quality of the data required to calibrate an AI tool will fundamentally impact both the decisions made by the tool and the ability to rebuild private qualities defining the user whose data was anonymized for inclusion in the calibrating dataset. For this reason, the data selection, storage and calibration processes associated with an ODR tool should account for worst-case, real world impacts when assessing appropriateness.

Examining these concerns may bring many to one rather surprising conclusion: very few are related specifically to the ODR technology itself. For example, operational changes in court systems that are perceived as minor, like altering the reporting structure of administrative staff, can often result in significant impacts because not all stakeholders are included in the planning process. In the case of equitable access, the location, hours of operation and available transportation to a traditional courthouse may not provide an appropriate level of access or safety for many who need to participate in programmes located at the courthouse. In the case of meaningful clarity, ineffective or oversimplified written communication may even produce more significantly negative impacts when delivered in paper form because searchability and comparability are more limited relative to electronic documents that can be immediately linked to a wider array of more extensive resources. Or in the case of information security, the release risks that are often feared with digital data have no meaningful ability to even be tracked when a well-intentioned individual inappropriately shares paper-based materials where the transmission of digital data does have a reasonable ability to be meaningfully controlled.

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12   C.H. Draper & A.H. Raymond, 'Building a Risk Model for Data Incidents: A Guide to Assist Businesses in Making Ethical Data Decisions', *Business Horizons*, 2019, ISSN: 0007-6813, https://doi.org/10.1016/j.bushor.2019.04.005 (last accessed 7 July 2019).

For those items that are related to the technologies behind the ODR tools, "reliance on algorithms and data, present new challenges to fairness and open the door to new sources of danger for disputants and the judicial system".[13] For court-based ODR systems that rely on filtering towards predefined options, the technological risks are both clear and nearly unavoidable: the biases and inequities present in the data of past actions that are used to calibrate the future decisions of AI-based ODR tools will more perfectly replicate past biases and inequities more quickly.

ODR processes that rely upon facilitation, however, can either be equivalently harmed or uniquely enabled by AI. When disputes are resolved by allowing the parties to voluntarily arrive at a legally acceptable outcome that is agreeable to all parties, even if the final terms of the agreement were not initially contemplated as a potential outcome, there is greater access to more efficient, enforceable justice. ODR systems could achieve these types of outcomes when they are built to mimic effective mediation, with AI enabling an idealized mediator.
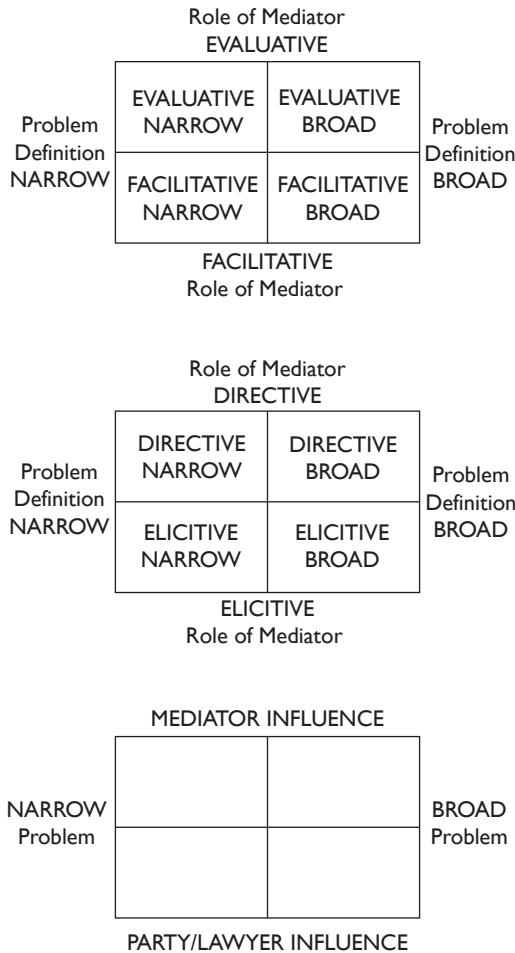
6   What Is Mediation?

Mediation can be generally defined as a process where an impartial facilitator assists disputing parties to develop a mutually agreeable resolution. It is broadly accepted that the disputing parties are the only ones who can start or end a mediation, and a facilitating mediator must not have any interest in either side reaching any specific outcome. How the mediator assists the parties is a bit murkier.

Every mediation is a multiparty negotiation where the mediator is actively involved in the crafting of each party's proposals. The nature of this involvement will typically vary over the course of a mediation, with many of the recent methods for classifying a meditator's role influenced by the work by Leonard Riskin. Figure 4 shows three versions of Riskin Grids discussed in his evaluation of their intended use and effectiveness, with each defining the mediator's role as a combination of its facilitative scope and influence.[14] This definition of mediator actions as represented by Riskin Grids has often resulted in conversations about automation that focus on the procedural or evaluative aspects of a mediation. In this regard, AI has already proved to be more effective than a human mediator.

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13 O. Rabinovch-Einy & E. Katsh, 'The New Courts', *American University Law Review*, Vol. 67, p. 165, www.aulawreview.org/au_law_review/wp-content/uploads/2017/12/03-RabinovichEinyKatsh.to_.Printer.pdf (last accessed 7 July 2019).

14 L. Riskin, 'Decisionmaking in Mediation: The New Old Grid and the New New Grid System', *Notre Dame Law Review*, Vol. 79, No. 1, Article 1, 1 December 2003, https://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=1416&context=ndlr (last accessed 7 July 2019).

Figure 4   *Various Versions of Riskin Grids*

Role of Mediator
EVALUATIVE

	EVALUATIVE NARROW	EVALUATIVE BROAD	
Problem Definition NARROW	FACILITATIVE NARROW	FACILITATIVE BROAD	Problem Definition BROAD

FACILITATIVE
Role of Mediator

Role of Mediator
DIRECTIVE

	DIRECTIVE NARROW	DIRECTIVE BROAD	
Problem Definition NARROW	ELICITIVE NARROW	ELICITIVE BROAD	Problem Definition BROAD

ELICITIVE
Role of Mediator

MEDIATOR INFLUENCE

NARROW Problem		BROAD Problem

PARTY/LAWYER INFLUENCE

For example, if the parties wish to constrain the mediator's focus to a narrow aspect of a complex topic, an AI system could perfectly exclude all data deemed out of scope by the parties without any residual bias. Alternatively, if the parties are seeking an evaluation of how a particular aspect of the negotiation would likely be resolved on the basis of its similarity to all other known disputes, AI can make a more accurate assessment more efficiently than any human. These uses of AI are already proven tools for filtering a dispute and are exactly the kind of AI applications that run the risk of more quickly replicating past biased resolutions if used to define the choices available to the parties during a mediation.

In terms of the Old Riskin Grid, an idealized mediator is typically considered one who operates in the Facilitative-Broad quadrant.[15] These mediators allow the parties to arrive at their own solutions, no matter how unconventional the outcome. In this quadrant, the mediator facilitates an environment that reduces emotion and expands creativity. In these mediations, the mediator can read the room, feel where things are going and enable breakthroughs. Many mediators who succeed in this quadrant are known for their empathy, charisma and likability, which are observable personality traits that empower some to assess mediator quality by "looking at the person's background, formal mediation training, and biases".[16] This focus on interpretable human qualities allows many to see mediation as more art than science.

Yet modern research indicates that most effective mediators are successful because of their consistent use of Pull Style communication.[17] Using metrics that define the presence of Pull Style communication, feedback accessible through ODR platforms and NLP AI tools, an automated mediator that conforms to ethical norms is no longer science fiction.

7 Automating Mediation

Accepting the latest research on effective negotiation strategy indicates that an unbiased AI mediator that enables the parties to more rapidly arrive at any outcome that is agreeable to all parties maximizes Pull Style communication.[18] Maximizing Pull Style communication can be distilled into the following three major components:

– Building upon areas of agreement,
– Seeking information, and
– Facilitating inclusion.

When impasses occur, research indicates that consistently successful mediators routinely employ Pull Style communication strategies of:

– Clarifying aspects of the conflict that could be interpreted in a different manner,
– Asking questions that seek out whether the needs of one party could be built on the needs of another, or
– Engaging each party so they are equitably contributing.

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15   L. Riskin, 'Understanding Mediators' Orientation, Strategies, and Techniques: A Grid for the Perplexed', *Harvard Negotiation Law Review*, Vol. 1, No. 7, Spring 1996, https://scholarship.law.ufl.edu/cgi/viewcontent.cgi?article=1684&context=facultypub (last accessed 7 July 2019).

16   C. Currie, 'Mediating Off the Grid', *Mediate.Com*, November 2004, www.mediate.com/articles/currieC4.cfm?nl=64 (last accessed 7 July 2019).

17   A. Abramowitz, 'How Cooperative Negotiators Settle without Upending the Table', *Design Intelligence*, 20 October 2006, www.di.net/articles/how_cooperative_negotiators_settle/ (last accessed 7 July 2019).

18   A. Abramowitz, *Architects Essentials of Negotiation*, 2nd ed., London, Wiley, 16 March 2009, ISBN-10: 9780470426883.

Each of these actions can be achieved with NLP AI tools. For example, the following displays an example negotiation in Trokt where an NLP processor finds three related items (A, B and C) that conflict both with each other (B conflicts with C) and with an agreed element (B and C conflict with A).

Figure 5   *Example of Negotiation in Trokt Where an NLP Processor Finds Disagreement*[19]
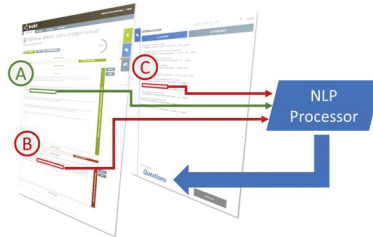
When the NLP processor identifies these disagreements within related elements, it could be trained to propose discussion questions such as the following:
– [Clarifying] 'Can you more fully explain what comment C means?'
– [Clarifying] 'Do you see a relationship between B and C?'
– [Building] 'Is there a way that B could be incorporated into A?'
– [Building] 'If C were added into B, could it be incorporated into A?'
– [Engaging] 'Team 1, could you clarify…'
– [Engaging] 'Team 2, could you propose…'

Using an NLP processor trained to look for related items that contain enough uncertainty or inconsistencies to indicate conflicting positions would produce an AI mediator that is able to continually question the parties without bias. Unlike systems that may observe A, B or C in the above example and offer alternative suggestions given the context of similar negotiations, focusing on Pull Style questions confined to the facts in the negotiation will avoid the AI mediator from perpetuating the systemic bias inherent in filtering-based tools. Further, while the NLP processor could be built to prioritize questions around related items with the most significant uncertainty or inconsistencies first, it is more likely that the NLP processor would find minor inconsistencies that could be overlooked by a human mediator that is developing patterns of interpretation within the negotiation that are unconsciously biased by past experience.

This design approach will enable true facilitative mediation, which can be augmented by checks to ensure neither party agrees to anything that is counter to law, yet directly avoid the systemic bias inherent in historically calibrated filtering ODR platforms.

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19   C.H. Draper, 'Trokt AI Design Specification', Internal Meidh Technologies Document, 16 January 2018.
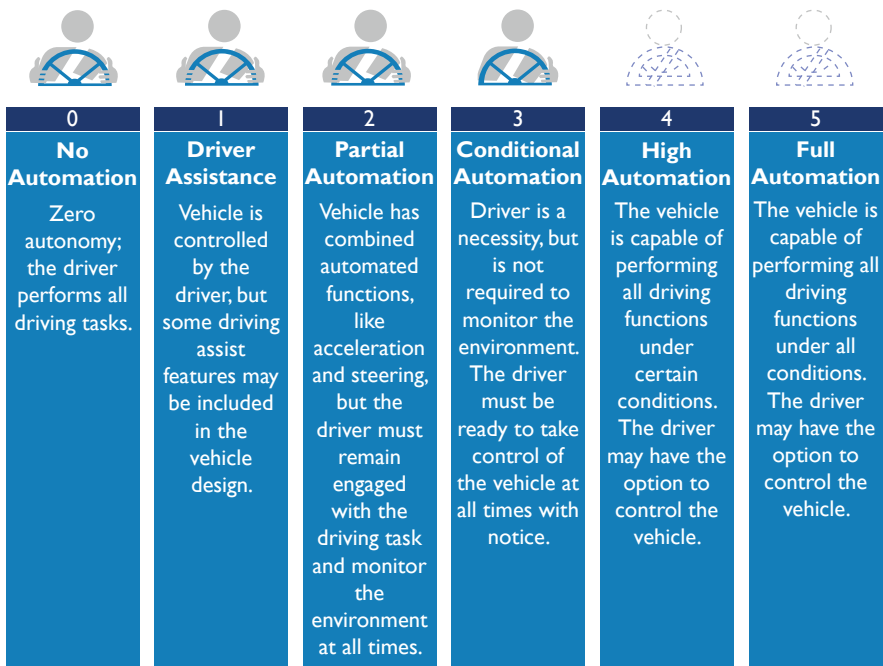
Current NLP tools and negotiation communication research indicate that there is a clear, objective path for creating a fully autonomous NLP AI mediator built on Pull Style communication algorithms. However, it is also clear that hesitation within the access to justice and dispute resolution communities will likely require the first AI mediator to gain iterative acceptance. Assuming the need for iterative acceptance, designers may find value mimicking successful autonomous vehicle development pathways when developing a rollout strategy that avoids access to catastrophic failures. Like autonomous vehicles, the role of an AI mediator is to set the boundaries within which users will operate. Like autonomous vehicles, human participants must be effectively engaged to ensure success. And like autonomous vehicles, an unplanned diversion outside of safe operating conditions could result in a catastrophic consequence for the designer or the wider community.

The National Highway Traffic Safety Administration (NHTSA) has identified its roadmap to fully autonomous vehicles based on the Society of Automotive Engineers (SAE) automation levels 0-5.[20] These levels can be translated into ADR practices as follows:

- Zero (0). No automation, which equates to technology-free ADR in the dispute resolution space.
- One (1). Driver assistance, which equates to using AI tools for email or document drafting that suggest more appropriate language.
- Three (3). Conditional automation, which equates to an autonomous NLP AI tool that requires human verification before any output is approved.
- Five (5). Full automation, where an NLP AI will likely employ some form of Strong AI that can operate without oversight.

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20 NHTSA, 'Automated Vehicle Safety', www.nhtsa.gov/technology-innovation/automated-vehicles-safety (last accessed 7 July 2019).

Figure 6 *Society of Automotive Engineers (SAE) Automation Levels*[21]

0	1	2	3	4	5
No Automation	**Driver Assistance**	**Partial Automation**	**Conditional Automation**	**High Automation**	**Full Automation**
Zero autonomy; the driver performs all driving tasks.	Vehicle is controlled by the driver, but some driving assist features may be included in the vehicle design.	Vehicle has combined automated functions, like acceleration and steering, but the driver must remain engaged with the driving task and monitor the environment at all times.	Driver is a necessity, but is not required to monitor the environment. The driver must be ready to take control of the vehicle at all times with notice.	The vehicle is capable of performing all driving functions under certain conditions. The driver may have the option to control the vehicle.	The vehicle is capable of performing all driving functions under all conditions. The driver may have the option to control the vehicle.

Mediators who are managing remote communication by sending documents back and forth via email or collaborating internally on an AI-assisted, cloud-based collaboration platform would therefore be currently operating somewhere between a Level 1 or a Level 2. Assuming all steps are equal, this indicates that the ODR world is likely already 30-50% of the way towards full automation. Yet with all technological innovations, it is more likely that the final three steps will come upon us like a dam breaking, meaning fully autonomous NLP AI tools will be ready to be operated sooner than many in the ADR, ODR and access to justice industries may be ready to expect. To ensure facilitative ODR does more than accelerate the adoption of inequitable precedents; now is the time to implement a set of mediation standards that reach past the current filtering problems that typically define court-based ODR.

8   Conclusions

The courtroom automation efforts that are implementing ODR tools that depend on efficient filtering have woken up the access to justice and dispute resolution communities to the opportunities and dangers of AI. Systems that use past out-

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21   *Ibid.*

comes to calibrate an AI system's future decision processes will accelerate the adoption of the systemic inequities that are rife within the current judicial system. Yet a design focus on Pull Style communication strategies and techniques offers a pathway for developing efficient, effective and unbiased AI mediator tools that can be used to assist, share or eliminate human mediator workload. Given how quickly the industry is expected to move from its current level of automation to full mediator automation, now is the time for transparent discussions on how we expect these tools to behave. If our communities are committed to understanding the modern ghost in the machine, we can remake tools that are currently on a path towards accelerating inequity so they can help rewrite the old concepts of law and order into solutions that meet the needs of our communities.