INTRODUCTION TO ODR PARAMETERS

The National Center for Technology and Dispute Resolution (NCTDR), birthplace of online dispute resolution (ODR), articulated a first set of Online Dispute Resolution Standards for Practice for the application of technology to dispute resolution in 2009, and much has changed since then. NCTDR founded the International Council for Online Dispute Resolution (ICODR) to foster the development of ODR Standards and works in collaboration with it and other entities to foster ethical ODR. Below we outline a brief history of ODR and provide a framework for the scope of ODR, articulating the value and importance of ethical standards for the application of technology at any point in a dispute handling process.

FRAMING THE PARAMETERS OF ONLINE DISPUTE RESOLUTION

This document presents a framework for considering the nature of Online Dispute Resolution (ODR) for the purpose of addressing the risks and ethical challenges of incorporating technology into dispute handling. With the recent burst in use of videoconferencing in dispute resolution during the global pandemic, growing interest in the application of artificial intelligence, and the development of sophisticated technologically supported platforms, the National Center for Technology and Dispute Resolution believes it is...
an optimal time to outline the state of play of what constitutes ODR. We hope this will stimulate further engagement about its parameters and how to enhance its ethical usage.

Twenty-five years ago, online dispute resolution was envisioned as a natural outgrowth of the Internet going public. With access to new communication channels, it was projected that disputes would emerge in cyberspace. And while this has borne out, it could not have been imagined then the vast breadth and depth of technology’s impact on disputing. There has been an explosion of disputes generated online to the tune of over one billion, from e-commerce to cyberbullying. Technology-assisted dispute resolution has also expanded beyond addressing online disputes to applications in courts and face-to-face Alternative Dispute Resolution (ADR) fora as well as becoming rooted in other sectors. Applications of technology to both online and offline dispute resolution has led to a blurring of a distinction between the two, raising questions about where ODR begins and ends. The use of technology in dispute handling expanded slowly but steadily until the COVID-19 pandemic forced widespread global usage of videoconferencing. This exponentially increased the number exposed to its benefits (e.g., increasing access and efficiency) and potential risks (e.g., regarding data security and artificial intelligence-driven bias).

The use of the Fourth Party has seamlessly entered our daily lives even for those unaware of its role in dispute management. One example is the ubiquitous use of reputational comments and ranking used by both online vendors and brick and mortar businesses. This dispute prevention strategy – designed to encourage buyers and sellers to behave in a trustworthy manner – is central to business practices in 2022 and was born out of early online

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dispute prevention and resolution experimentation.\textsuperscript{10} Other dispute prevention technological tools have emerged, such as usage of blockchain as a mechanism to prevent disputes over the originality and time stamps of contracts. This is another example of the expanding types of dispute prevention mechanisms that can fall within the realm of ODR. The deployment of technology to assist with dispute management and resolution processes has increased significantly as well, including a growing infusion into the courts. Practitioners can access software for collaborative writing, videoconferencing, algorithmic solution generation and ODR platforms housing entire dispute resolution processes including case management, document exchange, multiple communication avenues and decision management.

While the range and use of technology in dispute handling has increased dramatically over the past twenty-five years, we still do not yet capitalize on all the benefits ODR could offer or fully understand its risks and the potential damage it can cause that directly relate to ethical dispute resolution practices. Although there is a growing body of literature articulating the benefits and numerous concerns,\textsuperscript{11} further research is needed in particular on how technology inadequately addresses, at best, and magnifies, at worst, inequalities in society and dispute handling systems. Examples of the many noteworthy concerns include inequal access globally to Internet infrastructure and technological devices, artificial intelligence replication of human bias, technologically enhanced repeat player bias and lack of transparency and accountability.

A transformation is required to reconceptualize courts and ADR, considering the reality of technology’s infusion throughout every sector of society as well as trans-nationally and cross-jurisdictionally. Dispute resolution is no longer tied to a courthouse or physical space. New horizons are not only being envisioned but created, and some even by technology itself. Artificial intelligence (AI) is harnessed to assist in various phases of dispute resolution, including scheduling, document maintenance, data analytics and solution options generation,


\textsuperscript{11} See the Online Dispute Resolution Bibliography housed at The National Center for Technology and Dispute Resolution, https://odr.info/publications/.
and we predict that machine learning, bots serving as representatives in negotiations, and AI for decision rendering, support, and prediction will become increasingly common.

As noted, the pandemic raised the profile of ODR in court and ADR, particularly as videoconferencing has been widely relied upon to access conflict resolution fora. This has expanded the adherents to the idea that technology has a beneficial role to play in increasing access to justice. Data revealing that significantly fewer people miss court hearings along with recent findings that technology can reduce bias in outcomes in some circumstances and more quickly clear court dockets will likely provide further impetus for courts to consider the increased use of technology. ADR practitioners by the tens of thousands, even those skeptical about using videoconferencing for handling conflicts, began utilizing it for their practice and there is new growth in trainings on ODR usage. These are positive signs for the enhancement of dispute resolution, making it more responsive to expectations of participants already experiencing the convenience and accessibility that technology offers in their daily lives.

The explosion in videoconferencing usage, in particular, has fostered the discussion about what the parameters of ODR are. Does holding a mediation session or a court hearing over videoconferencing constitute ODR? Is an e-case management system used for document exchange and archiving in and of itself ODR? In what ways can infusion of technology into courts provide an opportunity to re-imagine and transform what 21st Century justice systems can be? Debates about what constitutes ODR are a sign of its successful entrance into the vocabulary, tools and mechanisms of many fields, and also in the eyes of the State. A growing number of national governments, state agencies, as well as other public and private entities are legislating for and developing public policy on ODR; and the definitions of ODR vary according to sectors, jurisdictions, and the goals and purview of the drafters.

Our interest is in the challenging task of describing parameters of what is referred to as ODR, knowing that this can have significant ramifications. An articulation of ODR’s

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parameters can illustrate its reach and potential; impact curriculum for training and education; and form the basis of regulatory mechanisms. There are good arguments being made across the variety of views about what constitutes ODR. Therefore, below we seek to map the expanse of these views. We provide the broadest description of what is viewed as ODR, acknowledging that there are views among some scholars and practitioners that it is more circumscribed. The intent here is to acknowledge the full continuum of what many argue is ODR. What we consider to be most important, however, is that, according to whichever definition is utilized, ODR is developed and employed scrupulously. Harnessing technology within any dispute resolution process requires attention to ethical and practical ramifications. This requires instruments of regulation and accountability as discussed further below.

ODR FRAMEWORK

The roles played by technology and how it is utilized within dispute handling processes are central to a discussion about what the parameters of ODR are or should be. An essential element to be considered is the level of reliance on technology and on human actors in dispute handling. We developed an ODR Framework to illustrate these differing levels according to the amount of dependency on technology and humans (see Figure 1).\(^{15}\) A very broad definition of ODR such as it being “inclusive of any process or intervention used to handle disputes that employ electronic communications and other information and communication technologies”\(^{16}\) can encompass the entire ODR Framework, whereas more restrictive definitions of ODR can place limits on the parameters of technology’s usage somewhere within the ODR Framework, thus shrinking the boundaries of what is considered ODR. Therefore, we hope this ODR Framework can be useful as discussions continue to ensue and decisions are made by various entities on ODR system design, software development and ODR ethics, practice and regulation. To be clear, this ODR Framework is meant to be descriptive of the present context and not proscriptive of what ought to be.

\(^{15}\) The Levels are differentiated by the amount of reliance on technology and humans, not on the type of technology used which can cross Levels.

\(^{16}\) National Center for Technology and Dispute Resolution. Ethical Principles for Online Dispute Resolution, http://odr.info/ethics-and-odr/.
The ODR Framework illustrated in Figure 1 begins by stating that dispute handling processes with no reliance on technology are not ODR and it extends to those that exclusively utilize it with no human intervention. Note that technology’s impact on dispute handling can include: who can or must rely on it, its role(s) (e.g., solution generation and brainstorming, diagnosis, decision-making, security, administrative functions, etc.), the phase(s) during which it is employed (e.g., prevention, management, resolution, follow-up), and the level and type of human involvement and control. These may be similar or different across the Levels and type of dispute handling process. Importantly, the expectations for making these determinations in system design and usage may differ across dispute types, sectors, jurisdictions and cultures.

While the divisions of the Levels in the Framework can help to articulate the different types of reliance on humans and technology, we recognize the relationship between humans and technologies within an actual dispute resolution process could manifest with more fluidity, with participants experiencing phases of a process that may take them up or down the Levels. However, despite the real-life experiences of fluidity and multi-directionality of ODR-in-practice, we believe it is beneficial to highlight distinctions between the Levels to assist in identifying the opportunities, risks and responsibilities that come with increasing human reliance upon technology, and in some cases, significantly decreasing reliance on humans. This is key to ethical considerations for ODR usage and regulation as discussed later.

Undoubtedly, technological innovations and research on its impact on dispute handling will require revision of the ODR Framework presented in Figure 1.\(^\text{17}\)

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\(^{17}\) For purposes of illustrating the complex interrelationships in the landscape of ODR from various points of view, in each Level we have highlighted some key examples. No doubt there are other combinations possible, additional criteria that others may include, and we recognize that there will be new facets emerging as technology continues to evolve along with its applications to dispute prevention and handling.
Figure 1. An ODR Framework
Used with permission from Chris Draper and Leah Wang

Level 0: Dispute Handling with No Technology
Any dispute handling process that is executed without any assistance from technology (e.g., no electronic document sharing, shared calendars). When a Level 0 system includes a mediator, arbitrator, judge, or some other neutral party, it would be considered mediation, arbitration, a court proceeding, etc. When a Level 0 system does not include a neutral party, it would be considered a negotiation. Note: Two disputing parties are shown for illustrative purposes only; it is also relevant to scenarios with multiple parties negotiating.

Level 1: Technology Assisted Dispute Handling
Any dispute handling process that includes technology assistance (e.g., case management, real-time video conferencing, or asynchronous tools like document sharing and collaborative writing). Technologies used in a Level 1 system will not take actions without direction from a human participant. These technologies in a Level 1 third party process (such as mediation or arbitration) will typically be provided or controlled by the third party and will not connect to any platform that may be used by any of the participants. For example, any documents shared in a video conferencing platform would not automatically transfer into any of the parties’ storage systems in the cloud. In a Level 1 negotiation, these technologies will typically be jointly controlled by the parties. For example, if video conferencing were used in Level 1 mediation, the third party would start the session, invite the parties in, and manage access to the system. In a Level 1 negotiation, no third party human is responsible for the management of the technology.

Level 2: Partially Automated Dispute Handling
In Level 2, independently directed technology platforms may employ process automations or directly communicate with each other to perform specific tasks supporting a dispute handling process (e.g., process automations could include automated incident submission or automated acknowledgement). For example, in Level 2, the parties could each choose to use different document management systems to communicate with a third party or each other. A Level 2 third party process could include grievance handling systems where a user submitting an issue via a form prompts the technology to create a case, conduct an intake, notify all parties, and assign a mediator; it could also provide an AI-generated analysis for decision making by the disputing parties or a third party. Level 2 negotiation could include systems that use natural language processing to read a party submission, perform a sentiment analysis, and offer the receiving party insights that may influence that party’s next action.

Level 3: Human Managed Technological Dispute Handling
In Level 3, fully integrated technology systems automate many elements of the ODR process, yet human third party oversight is required to ensure compliance with the process; (e.g., technology provides adherence to all procedural and ethical obligations; offers choice or direction to the parties for utilizing the technology). Level 3 would be considered “human in the loop” systems that cannot be completed without actions being taken by the third party or negotiators. Level 3 negotiation systems would restrict the actions that could be taken by a party (e.g., tools that facilitate the sharing of monetary proposals), yet not restricting party choices during negotiation.

Level 4: Technology Directed Dispute Handling
In Level 4, fully integrated technology systems do not require input from a human third party, yet a human third party may influence the ODR process (e.g., through system design or help desk assisting with a technical or process problem). Level 4 would be considered “human out of the loop” systems that may rely on anything from human-designed to AI-based algorithms to drive any decision-making process in a manner that prevents influence by any human third party, negotiator, or human administrator. An example could be a workplace assurance policy that requires an AI-driven arbitration. In this case, if an individual is injured at work, the Level 5 ODR system would determine if a payout is warranted and how much. The system could scan the structured data and the individual’s claim history, medical records, and social media feeds; evaluate them in terms of consistency, legitimacy, and the compensation value of the claimed injuries; and provide a decision that all parties previously agreed could not be appealed to any human.

Level 5: Fully Automated Dispute Handling
Level 5 fully integrated technology systems do not allow a human third party to influence the process. Level 5 would be considered “human out of the loop” systems that may rely on anything from human-designed to AI-based algorithms to drive any decision-making process in a manner that prevents influence by any human third party, negotiator, or human administrator. An example could be a workplace assurance policy that requires an AI-driven arbitration. In this case, if an individual is injured at work, the Level 5 ODR system would determine if a payout is warranted and how much. The system could scan the structured data and the individual’s claim history, medical records, and social media feeds; evaluate them in terms of consistency, legitimacy, and the compensation value of the claimed injuries; and provide a decision that all parties previously agreed could not be appealed to any human.
ETHICS

ODR has begun to be regulated in some sectors by governmental entities and professional organizations\(^\text{18}\) and we predict significant growth in regulation efforts. When ODR regulation is developed and implemented within silos, this can lead to specificity about the parameters of ODR that serve the purposes of the regulating bodies. While we recognize this can ensure accountability and support the goals of specific agencies and stakeholders, we caution that reification of old silos and disciplinary and professional boundaries risk losing sight of the fact that technology is a disruptor, breaking down conventions and providing an opportunity to draw new boundaries based on new realities. Thus, forms of regulation and accountability that do not account for the ways that technology is impacting dispute handling that are cross-jurisdiction, interdisciplinary, multi-sectoral, and international, will risk losing opportunities to harness most effectively its positive potential and reduce likelihood of unethical and harmful practices.

We urge that the regulation space for dispute handling move beyond historic divisions of “court”, “ADR” and the business sector, for example. This will require innovative thinking in writing legislation and regulations and in implementing public policy, as well as in collaborating across professional boundaries. How can we harness this new mapping of interrelatedness, this new fluidity? What mechanisms can help us ensure the creation and usage of ethical ODR software, system design, training and practice? ODR ethics has a growing body of scholarship and practical mechanisms such as Ethical Principles for ODR\(^\text{19}\) and ODR guidance\(^\text{20}\) designed for self-regulation and ODR Standards\(^\text{21}\) crafted to promote accountability through a variety of mechanisms – some yet to be designed.

\(^{18}\) Numerous examples exist of initiatives undertaken to develop ODR standards and guidance for self or external regulation and include efforts by the ADR Institute of Canada, the American Bar Association, Asia-Pacific Economic Cooperation (APEC), the Council of the European Union, the European Parliament, The Federative Republic of Brazil, the International Council for Online Dispute Resolution, the Internet Corporation for Assigned Names and Numbers, National Center for State Courts (USA), the National Center for Technology and Dispute Resolution, The Republic of Colombia, The Republic of India, and the United Nations Commission on International Trade Law.


\(^{20}\) See ODR Standards, Principles, & Guidelines archive housed at the National Center for Technology and Dispute Resolution, http://odr.info/standards/.

\(^{21}\) See for example, the International Council for Online Dispute Resolution. *ICODR Standards*, https://icodr.org/standards/.
Ethical guidance and standards for regulation and accountability require attention to the entire continuum of what may be considered ODR; responsive to the realities of jurisdictional constraints and sector-specific contexts, being culturally relevant, and, as appropriate, also being open to alteration as technology rapidly changes. As we note these very challenging requirements for guidance and accountability mechanisms, we hope to stimulate creativity and encourage that we all set high expectations for their development and implementation and, inevitably, their future revisions.

The creation and implementation of mechanisms of accountability for ODR processes, platforms and practitioners requires articulating the scope for deployment of technology within a process – including the roles and responsibilities of artificial intelligence. All the more reason that a robust and richly textured discussion continues about what constitutes ODR. We assume that ODR’s parameters will continue to evolve as technology does – disrupting boundaries and what is taken for granted and expanding both risks and generative possibilities for preventing and addressing conflict. We are optimistic that decision-making bodies that consider this can help tackle the ongoing concerns about technology that at best, it can fail to adequately address inequalities in dispute handling systems and at worst, can magnify them; thus, serving an important role in ensuring ODR contributes to increasing access to justice.