

THE EFFECT OF ONLINE TECHNOLOGIES ON DISPUTE  
RESOLUTION SYSTEM DESIGN: ANTECEDENTS, CURRENT  
TRENDS AND FUTURE DIRECTIONS

by  
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*Online dispute resolution (ODR) technologies are now increasingly used by courts, administrative agencies, companies and alternative dispute resolution (ADR) organizations to handle cases in various legal domains. Two decades have passed since the first ODR systems were launched and their impact on access to justice and the delivery of justice has evolved to a great extent. This Article offers an overview and analysis of these developments. First, it discusses the pragmatic and ideological antecedents of ODR: developments in information technology and online activity, and the rise of the effective access to justice and alternative dispute resolution movements. Second, it proposes a typological framework for evaluating ODR systems in terms of dispute types, resolution methods, settings, technologies, providers, and process designs. It then uses the framework to systematically analyze the current landscape of ODR, offering specific examples of ODR systems that demonstrate the effects that technology has had on dispute resolution process design: procedural transposition, restructuring and novelty. The Article closes with a critical discussion of current trends and future directions of ODR, including transition from private to public ODR, hybrid process designs, crowd-sourced cyber-juries, connecting ODR with reputation systems, and data-driven ODR learning systems.*

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\* Post-Doctoral Research Fellow, Bar Ilan University Faculty of Law. For thoughtful comments and helpful conversations that greatly informed this Article, I wish to thank Deborah Hensler, Mark Kelman, Janet Martinez, Colin Rule, and Orna Rabinovich-Einy.

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## INTRODUCTION

Fifteen years have passed since the term Online Dispute Resolution (ODR) was coined as an umbrella term describing a wide array of online procedures and technological tools that disputants and neutrals use to resolve disputes.<sup>1</sup> Since then, the impact of ODR has grown far beyond

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<sup>1</sup> For an account of the history of ODR, see Ethan Katsh, *ODR: A Look at History—A Few Thoughts About the Present and Some Speculation About the Future*, in ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE 9, 10–12 (Mohamed S. Abdel Wahab et al. eds., 2012) (while the term ODR was coined only in 2001, the first articles on dispute resolution in cyberspace appeared already in 1996, and academic pilot ODR projects were in operation already in the mid 1990s). See generally ETHAN KATSH & JANET RIFKIN, ONLINE DISPUTE RESOLUTION: RESOLVING CONFLICTS IN CYBERSPACE (2001).

the cradle of e-commerce and virtual interactions. A wide variety of ODR technologies and process designs are now integrated in both private and public justice systems, used by a growing number of people the world-over. They foster the resolution of simple and complex disputes in a multitude of legal domains, profoundly impacting the way some judicial, administrative, and alternative dispute resolution processes are conducted. As the number of ODR implementations continues to grow and their institutionalization advances, many predict that ODR will transform not only the dispute resolution industry, but also the legal marketplace as a whole.<sup>2</sup>

In these challenging and opportune times, this article takes a critical look at the first two decades of ODR, and provides a useful disciplinary framework and systematic analysis of the impact ODR technologies have had on the field of dispute resolution. It is hoped that this systematic analysis of the antecedents, current landscape, and future directions of ODR will prove useful for dispute resolution system designers, service providers, practitioners, users, regulators, and academics in dealing with the inevitable changes and advancements ODR brings about.

The discussion is organized in the following Sections: Section I reviews the two primary antecedents of ODR: First, the increase in online activity (especially e-commerce) and the migration of services to the online arena, powered by advanced communication, computation, and artificial intelligence (AI) technologies. Second, the rise of the effective access to justice movement and associated recourse to methods of alternative dispute resolution (ADR). Section II proposes an analytical framework for discussing the landscape of ODR in terms of dispute types, dispute resolution methods, settings, technologies, providers, and, most interestingly, process designs. Using this latter variable as a typological framework, Section II goes on to discuss observable effects that ODR technologies have had on the field, using examples of current ODR systems. Section III analyzes trends in the current landscape of ODR, hypothesizes future effects of online technologies on the delivery of dispute resolution services, and poses open-ended questions worthy of further consideration.

## I. THE ANTECEDENTS OF ODR

The evolution of ODR was motivated by two primary pragmatic and ideological forces. The main catalyst of ODR was the rise in online activities and services, spearheaded by e-commerce and fueled by unprecedented advancements in online communication, computation, and AI technologies. The second motivator of ODR was the growing

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<sup>2</sup> See *infra* notes 39–40 and accompanying text.

impact of the “effective access to justice” movement, the “efficiency paradigm” in dispute resolution, and the associated recourse to methods of ADR. The multi-faceted process by which these forces jointly promoted the development of ODR systems can be briefly summarized as follows: 1) a new class of online disputes emerged, and existing fora appeared inappropriate or impractical for resolving them; 2) online technologies presented unprecedented opportunities to dynamically tailor the forum to the fuss; 3) the demands for improving access to justice and redress and lowering the cost of dispute resolution, could be met, in part, by offering services online; and 4) dispute resolution service providers, like other service providers, were eager to expand online.

### A. *Growth in Online Activities and Services*

Like many other industries affected by the growing centrality of the internet to professional, business and personal interactions, dispute resolution institutions are responsive to—and shaped by—the technological, economic and social changes that the digitalized world brings about.<sup>3</sup> The main catalyst of ODR in this respect has been the steep increase in the number of online users<sup>4</sup> and in the variety, volume and value of online activities and services, especially e-commerce.<sup>5</sup> Growth in activities is naturally coupled with growth in the number and total value of disputes they give rise to; for example, leading e-commerce website eBay reportedly handles over 60 million disputes annually.<sup>6</sup> It

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<sup>3</sup> See Orna Rabinovich-Einy, *Balancing the Scales: The Ford-Firestone Case, the Internet, and the Future Dispute Resolution Landscape*, 6 YALE J.L. & TECH. 1, 20–21 (2004); See also Alan Gaitenby, *The Fourth Party Rises: Evolving Environments of Online Dispute Resolution*, 38 U. TOL. L. REV. 371, 371 (2006) (referring to ODR tools as the “product of individual and collective consciousness empowered by a multitude of social, cultural and technical tools”).

<sup>4</sup> In the U.S., over 70% of households have home internet access and nearly 75% of the population uses the internet. *Digital Nation Data Explorer*, NAT’L TELECOMM. & INFO. ADMIN. (Oct. 27, 2016), <https://www.ntia.doc.gov/other-publication/2016/digital-nation-data-explorer>.

<sup>5</sup> See Ryan Noonan, *Digitally Deliverable Services Remain an Important Component of U.S. Trade*, U.S. DEP’T OF COMMERCE (May 28, 2015), <http://esa.doc.gov/economic-briefings/digitally-deliverable-services-remain-important-component-us-trade> (reporting that in 2014 “[t]he United States exported \$399.7 billion in digitally-deliverable services, an increase of 12 percent since 2011. This represented 56 percent of U.S. services exports and about 17 percent of total U.S. goods and services exports”); U.S. CENSUS BUREAU, *E-STATS 2014: MEASURING THE ELECTRONIC ECONOMY 1–2* (2016), <http://www.census.gov/content/dam/Census/library/publications/2016/econ/e14-estats.pdf> (Reporting a continued steady increase in the percentage of e-commerce out of total shipments, sales and revenues in the U.S. in 2013–2014. For example, in 2014, sales from e-commerce for U.S. retailers were \$298.6 billion (6.4% of total sales)).

<sup>6</sup> See Katsh, *A Look at History*, *supra* note 1, at 15; Bruce T. Cooper, *Online Dispute Resolution Comes of Age*, 20 PRAC. LITIGATOR 33, 35 (2009); Colin Rule & Chittu Nagarajan, *Leveraging the Wisdom of Crowds: The eBay Community Court and the Future of*

became evident that traditional offline judicial and ADR fora are not the most appropriate or practical mechanisms for resolving these uniquely characterized disputes. First, e-commerce cases often cross multiple jurisdictions, posing difficulties as to both the applicable law and enforcement of foreign judgments.<sup>7</sup> Second, online transactions are typically low-value transactions, especially compared to the cost of resolving them offline, and even more so when the dispute is cross-jurisdictional.<sup>8</sup> Third, given the large volume of e-commerce disputes, a specialized system that can handle them efficiently and effectively was required.<sup>9</sup> Finally, when the disputed event or relationship occurs online the online environment appears the most natural, and at times the only feasible, venue for resolving it.<sup>10</sup>

Thus, in order to provide a reliable and trustworthy transactional environment, the e-commerce industry sought to create a mechanism that can effectively handle the new uniquely characterized class of disputes. Their solution was to pioneer the first commercial ODR platforms.<sup>11</sup> Following the success of many of these private e-commerce ODR platforms, many advocate for the institution of regional or global ODR systems (or a network of regulated private ODR systems), as a prerequisite for the growth of international commerce and business.<sup>12</sup>

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*Online Dispute Resolution*, ACRESOLUTION MAG., Winter 2010, at 4, 5; all reporting an estimated 60 million annual disputes handled by eBay.

<sup>7</sup> See JULIA HÖRNLE, CROSS-BORDER INTERNET DISPUTE RESOLUTION 44–45 (2009) (discussing jurisdictional challenges in the context of dispute resolution). See generally Julia Hörnle, *The Jurisdictional Challenge of the Internet*, in LAW AND THE INTERNET 121 (Lilian Edwards & Charlotte Waelde eds., 2009).

<sup>8</sup> See, e.g., Vikki Rogers, *Managing Disputes in the Online Global Marketplace*, 19 DISP. RESOL. MAG., Spring 2013, at 20, 22 (“An autonomous institution administering B2B cross-border commercial arbitrations may manage 1,000 to 2,000 international commercial arbitration cases a year, cases in which an arbitrator makes a few hundred dollars an hour. This model is not transferable to resolve millions of disputes that average less than \$100 per dispute.”).

<sup>9</sup> For further analysis of online consumer disputes, see Colin Rule et al., *Online Small Claim Dispute Resolution Developments—Progress On a Soft Law for Cross-Border Consumer Sales and the Development of a Global Consumer Law Forum*, 43 UCC L.J. 419, 422–24 (2010). See generally Amy J. Schmitz, “Drive-Thru” Arbitration in the Digital Age: Empowering Consumers Through Binding ODR, 62 BAYLOR L. REV. 178, 185–86 (2010).

<sup>10</sup> COLIN RULE, ONLINE DISPUTE RESOLUTION FOR BUSINESS: B2B, E-COMMERCE, CONSUMER, EMPLOYMENT, INSURANCE, AND OTHER COMMERCIAL CONFLICTS 6–7 (2002).

<sup>11</sup> Academic pilot ODR programs were established by the mid-1990s; eBay’s first ODR pilot service was launched in February 2000 by a company called *Square Trade*. See KATSH & RIFKIN, *supra* note 1, at 45–57.

<sup>12</sup> See, e.g., Rule et al., *supra* note 9, at 426 (describing a proposal for a regional ODR system for the Organization of American States (OAS) and the pending consideration by the United Nations Commission on International Trade Law (UNCITRAL) of proposals for a global ODR system); Vikki Rogers, *Knitting the Security Blanket for New Market Opportunities—Establishing a Global Online Dispute*

As the number and variety of other online services increased, ODR systems were developed to address the specific types of disputes that arise out of them. Such disputes typically involve parties who never met in person and that may be geographically distant from each other. For example, Freelancer, an online freelancing and outsourcing marketplace, operates an ODR service for disputes that arise between some of the circa 20 million employers and service providers that use it.<sup>13</sup> Virtual worlds such as *Second Life*,<sup>14</sup> which reports over 900,000 active users a month,<sup>15</sup> also give rise to disputes<sup>16</sup> which can be resolved through online mediation.<sup>17</sup>

The evolution of ODR was further advanced by the related trend of delivering services online. The provision of online services is commonly perceived as the bon ton of efficient, accessible, and transparent commercial and governmental operation.<sup>18</sup> Many service industries launch virtual enterprises, some nearly fully migrating their services

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*Resolution System for Cross-Border Online Transactions for the Sale of Goods*, in ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE 95, 96–97 (Mohamed S. Abdel Wahab et al. eds., 2012) (describing the role of internet intermediaries in global e-commerce and the need for an ODR system for cross-border disputes to encourage cross-border e-commerce); Pablo Cortés & Fernando Esteban De La Rosa, *Building a Global Redress System for Low-Value Cross-Border Disputes*, 62 INT'L & COMP. L. Q. 407, 438–40 (2013) (arguing that the most effective consumer protection policy for low-value, e-commerce, cross-border transactions would be monitored ODR processes, and urging the designers of such systems to comply with EU consumer mandatory law).

<sup>13</sup> Freelancer offers its users an ODR service that combines automatic blind bidding with a human arbitrator for complex cases. As of April 9, 2017, Freelancer reported 23,500,785 registered users. See *Milestone Dispute Resolution Policy*, FREELANCER, [https://www.freelancer.com/page.php?p=info/dispute\\_policy](https://www.freelancer.com/page.php?p=info/dispute_policy) (last visited Apr. 9, 2017).

<sup>14</sup> See SECOND LIFE, <http://secondlife.com/> (last visited Mar. 30, 2017).

<sup>15</sup> See Matt Weinberger, *This Company Was 13 Years Early to Virtual Reality—and It's Getting Ready to Try Again*, BUSINESS INSIDER (Mar. 29, 2015), <http://www.businessinsider.com/second-life-is-still-around-and-getting-ready-to-conquer-virtual-reality-2015-3>.

<sup>16</sup> See Katsh *A Look at History*, *supra* note 1, at 12–14 (early academic coverage reviewing some of the earliest documented disputes in virtual worlds); see also Brian A. Pappas, *Online Court: Online Dispute Resolution and the Future of Small Claims*, 12 UCLA J.L. & TECH. 1, 3–4 (2008) (illustrating personal disputes in the real world stemming from excessive use of *Second Life*).

<sup>17</sup> See, e.g., Jason Krause, *Settling It on the Web: New Technology. Lower Costs Enable Growth of Online Dispute Resolution*, A.B.A. J. 42, 43 (2007) (describing how web mediation was used to resolve a virtual-world dispute which arose when a user posted a nude image where another user would be forced to look at it).

<sup>18</sup> NAT'L TELECOMM. & INFO. ADMIN., EXPLORING THE DIGITAL NATION: AMERICA'S EMERGING ONLINE EXPERIENCE (2013), [https://www.ntia.doc.gov/files/ntia/publications/exploring\\_the\\_digital\\_nation\\_-\\_americas\\_emerging\\_online\\_experience.pdf](https://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_-_americas_emerging_online_experience.pdf) (reporting that the increased accessibility and utility of the internet “leads users to go online regularly and rely on it in their daily lives”). See generally John C. Reitz, *E-Government*, 54 AM. J. COMP. L. 733 (2006) (describing various types of e-government initiatives); *supra* notes 4 and 5 and associated text.

online. Despite some initial pushback,<sup>19</sup> many dispute resolution service providers followed suit, responding to their clients' needs and expectations to use ODR tools in resolving disputes that arise both online and offline. The consistently growing number of independent and institutional, private and public, ODR service providers, as well as the variety, innovation and span of ODR services,<sup>20</sup> indicates that this trend is unlikely to subside.

The gradual migration of dispute resolution activities to the online space was greatly facilitated by the commercialization of innovative online communication, computation and AI technologies.<sup>21</sup> The relative low cost and accessibility of online chat-messaging, email, and conferencing tools have made online communication prevalent even among private independent dispute resolution professionals.<sup>22</sup> Institutional dispute resolution service providers are well-positioned to make use of more advanced technologies that support new modes of information presentation, collection, modeling and processing in order to streamline or automate many elements in the process.<sup>23</sup> For example, modeling and automation enable efficient processing of large case volumes and generation of resolution options, and sophisticated algorithms can assist parties in computing and maximizing individual and mutual gains. These technological advancements fueled the growth and scalability of ODR systems, as well as the richness of procedural designs that are presented in Section II.

### *B. The Rise of ADR and the Effective Access to Justice Movement*

Legal systems periodically reexamine the way disputes are resolved. In the 1970s, pragmatic and ideological forces began pushing this process beyond changes to established judicial institutions.<sup>24</sup> "Complementary" or "alternative" dispute resolution (ADR) processes

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<sup>19</sup> E.g., Joel B. Eisen, *Are We Ready for Mediation in Cyberspace?*, 1998 BYU L. REV. 1305, 1308 (1998).

<sup>20</sup> See *infra* Section II.

<sup>21</sup> See also Davide Carneiro et al., *Online Dispute Resolution: An Artificial Intelligence Perspective*, 41 ARTIFICIAL INTELLIGENCE REV. 211, 215–25 (2014) (arguing that artificial intelligence can improve ODR processes).

<sup>22</sup> Orna Rabinovich-Einy & Ethan Katsh, *Lessons from Online Dispute Resolution for Dispute System Design*, in ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE 39, 40–41 (Mohamed S. Abdel Wahab et al. eds., 2012).

<sup>23</sup> See *id.* at 43 (arguing that ODR will not be confined to all-online entities. Simple claims like fender-bender subrogation will benefit from ODR).

<sup>24</sup> See Deborah R. Hensler, *Our Courts, Ourselves: How the Alternative Dispute Resolution Movement is Re-Shaping Our Legal System*, 108 PENN. ST. L. REV. 165, 165–68 (2003).

became widely used and institutionalized.<sup>25</sup> ODR can be seen as a direct progression of this trend. Pragmatically, ADR mechanisms were a response to calls by the effective access to justice movement for quicker, cheaper, more accessible, readily available and procedurally-informal processes for resolving disputes.<sup>26</sup> Ideologically, the incorporation of ADR into the legal system reflected a new understanding of sociologists of law that the different ways in which disputes emerge, the variety of dispute types, the variability of factors that determine their processing, and the changing interests of disputants call for diverse dispute resolution methods and procedural rules that can meet the changing needs.<sup>27</sup>

By the 1980s, a range of ADR procedures—mostly mediation, arbitration and early-neutral-evaluation—were widely used in a variety of settings, shifting dispute resolution processes from courtrooms to other physical spaces, such as offices, community centers and factories.<sup>28</sup> ODR systems move dispute resolution processes even further, to the virtual

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<sup>25</sup> See Paul D. Carrington, *ADR and Future Adjudication: A Primer on Dispute Resolution*, 15 REV. LITIG. 485, 485–89 (1996). In civil law jurisdictions, ADR mechanisms developed much more slowly. See MICHAEL PALMER & SIMON ROBERTS, *DISPUTE PROCESS: ADR AND THE PRIMARY FORMS OF DECISION MAKING* 3–4 (1998). However, by mid-2008, the European Parliament adopted a directive on mediation in civil and commercial matters, which member states were required to implement in their national legislation. See Directive 2008/52/EC of the European Parliament and of the Council of 21 May 2008 on Certain Aspects of Mediation in Civil and Commercial Matters, 2008 O.J. (L 136) 3, 8. See generally JEROLD S. AUERBACH, *JUSTICE WITHOUT LAW?* (1983); Hensler, *supra* note 24 (providing background information about ADR trends).

<sup>26</sup> See PALMER & ROBERTS, *supra* note 25, at 26–27; 1 ACCESS TO JUSTICE: A WORLD SURVEY 6–7 (Mauro Cappelletti & Bryant Garth eds., 1978); Derek C. Bok, *A Flawed System of Law Practice and Training*, 33 J. LEGAL EDUC. 570, 574, (1983) (“The elaborateness of our laws and the complexity of our procedures absorb the energies of this giant [lawyers] bar, raise the cost of legal services, and help produce the other great problem of our legal system—the lack of access for the poor and middle class.” Bok thus advocates for “simplification. . . less costly ways of resolving disputes. . . [and] new institutions” that would improve access to justice. *Id.* at 580); Hensler, *supra* note 24, at 170–73 (reviewing the “community justice movement”). ADR was also a response to criticism of the traditional court system, particularly its inability to protect citizens’ rights. See Justice Warren E. Burger, *Agenda for 2000 A.D.—A Need for Systematic Anticipation*, 70 F.R.D. 83, 93–96 (1976).

<sup>27</sup> William L.F. Felstiner et al., *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming* . . . , 15 LAW & SOC’Y REV. 631, 633–37 (1981). See generally Robert H. Mnookin et al., *BARRIERS TO CONFLICT RESOLUTION* (1995) (identifying common barriers to dispute resolution).

<sup>28</sup> See James A. Wall & Timothy C. Dunne, *State of the Art—Mediation Research: A Current Review*, 28 NEGOT. J. 217, 220–21 (2012) (“[T]he application of mediation to various conflict arenas has expanded voluminously . . . . [M]ediation is utilized not only in the standard labor-management, commercial, international, and marital conflicts, but also in environmental as well as community, civil court, intraorganizational, peace-keeping, civil war, land claim, criminal, and child rights disputes.”). Mediators travel to centrally located venues to mediate, such as offices and community centers. *Id.* at 240.



space between the parties' computers (or other internet-connected devices). Promoting the vision of the effective access to justice movement, ODR is a means for increasing procedural efficiencies<sup>29</sup> as well as introducing new procedural qualities. For example, online communication was found to have a neutralizing effect on negative emotions or hierarchical power imbalances in the process,<sup>30</sup> and sophisticated software can introduce new qualities into dispute resolution processes, such as optimization of "win-win" solutions.<sup>31</sup> ODR is also seen as catering to the specific needs of certain classes of disputes and disputants, which are not appropriately addressed by other existing mechanisms.<sup>32</sup> Examples include low-value, e-commerce, or cross-border disputes; or the needs of physically- or time-constrained disputants.<sup>33</sup> Furthermore, the relatively flexible and dynamic nature of ODR systems presents an opportunity to take the flagship vision of ADR and effective access to justice—Sander's multi-door courthouse<sup>34</sup>—to its ultimate form:

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<sup>29</sup> There is wide agreement among scholars that ODR processes will increase the efficiency of dispute resolution systems. See, e.g., Orna Rabinovich-Einy, *Beyond Efficiency: The Transformation of Courts by Technology*, 12 UCLA J.L. & TECH., Spring 2008, at 1, 3–7 (describing the "efficiency paradigm" that has reigned in the discourse on the impact of technology on dispute resolution). However, some scholars are weary that these efficiencies may come at the cost of procedural quality. See Julia Hörnle, *Encouraging Online Dispute Resolution in the EU and Beyond—Keeping Costs Low or Standards High?*, in RESOLVING MASS DISPUTES: ADR AND SETTLEMENT OF MASS CLAIMS 293, 298–302 (Christopher Hodges & Astrid Stadler eds., 2013) (criticizing ODR initiatives that claim to provide very efficient, highly automated and, hence, cost-effective procedures but do so while moving away from due process).

<sup>30</sup> See, e.g., Martin A. Gramatikov & Laura Klaming, *Getting Divorced Online: Procedural and Outcome Justice in Online Divorce Mediation*, 14 J.L. & FAM. STUD. 97, 117–19 (2012). See generally Katalien Bollen & Martin Euwema, *E-supported Mediation: What Do We Learn from the Field?*, National Mediation Conference (Sept. 10–13, 2012), <http://www.mediationconference.com.au/wp-content/uploads/2012-conference-papers/E-supported%20mediation%20-%20Bollen%26Euwema.pdf>.

<sup>31</sup> See, e.g., Ernest Thiessen et al., *ODR and eNegotiation*, in ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE 329, 333 (Mohamed S. Abdel Wahab et al. eds., 2012) ("[O]ptimization algorithms that seek the best solution . . . create a representation of party preferences that can be used to generate packages (bundled positions on issues) that are helpful in the process . . . Optimization algorithms utilize detailed and highly accurate information from all parties, information that they would never provide each other and in some cases not entrust to a human mediator. With anything other than the very simplest of cases, this optimization is beyond the capabilities of any unassisted human.").

<sup>32</sup> See *supra* Section I(A).

<sup>33</sup> See, e.g., Rabinovich-Einy, *supra* note 3, at 21 (discussing ODR systems and arguing that "[m]echanisms will have to be modified so as to facilitate communication among people who are physically distant and who cannot afford extended interruptions of their personal and business lives"); Pappas, *supra* note 16, at 17–20 (discussing potential merits of online small claims courts).

<sup>34</sup> Frank E. A. Sander, *Varieties of Dispute Processing*, in THE POUND CONFERENCE:

tailoring each and every dispute resolution process to the individualized needs of the specific disputant.<sup>35</sup>

Like the historical progression of ADR, ODR grew mostly in the private sector, and it is slowly but steadily moving towards public institutionalization. Section II describes some ODR implementations by governmental agencies and courts,<sup>36</sup> and there exist several international and regional efforts to institute public cross-border ODR mechanisms.<sup>37</sup> Much like ADR at its time,<sup>38</sup> ODR bears the potential to effectuate profound changes in the landscape of dispute resolution, and in the concepts of justice and redress. Some go so far as predicting that, along with other disruptive legal technologies, ODR will effectuate a “shift in legal paradigm”<sup>39</sup> that will transform dispute resolution and the legal marketplace as a whole.<sup>40</sup>

To summarize, ODR can be described as an evolutionary progression

PERSPECTIVES ON JUSTICE IN THE FUTURE: PROCEEDINGS OF THE NATIONAL CONFERENCE ON THE CAUSES OF POPULAR DISSATISFACTION WITH THE ADMINISTRATION OF JUSTICE 65, 83–84 (Sander envisioned “a flexible and diverse panoply of dispute resolution processes, with particular types of cases being assigned to differing processes (or combination of processes) . . . where the grievant would . . . [be directed] to the process (or sequence of processes) most appropriate to his type of case”).

<sup>35</sup> See Pappas, *supra* note 16, at 6.

<sup>36</sup> See Katsh, *A Look at History*, *supra* note 1, at 15.

<sup>37</sup> The European Union has launched an ODR platform for consumer disputes. EUROPEAN COMM’N ONLINE DISPUTE RESOLUTION, <https://webgate.ec.europa.eu/odr> (last visited July 27, 2016). Creation of the ODR platform was the result of a previously designed legal framework for improving the coordination and accessibility of quality ADR processes, in part by making ODR options available. See Directive 2008/52/EC, *supra* note 25; see also Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation No 2006/2004 and Directive 2009/22/EC (Directive on Consumer ADR), 2013 O.J. (L 165) 63; EU Regulation 524/2013 of the European Parliament and of the Council of 21 May 2013, 2013 O.J. (L 165) 1 (accompanying the Directive on Consumer ADR). UNCITRAL is in the process of developing a model procedural law for using ODR that parties may contractually opt to use. See *Working Group III 2010–2016: Online Dispute Resolution*, UNCITRAL, [http://www.uncitral.org/uncitral/commission/working\\_groups/3Online\\_Dispute\\_Resolution.html](http://www.uncitral.org/uncitral/commission/working_groups/3Online_Dispute_Resolution.html). See also Rogers, *supra* note 8, at 20.

<sup>38</sup> Hensler, *supra* note 24, at 195–96 (“Looking backwards, we may well come to view the dispute resolution movement as contributing to—if not creating—a profound change in our view of the justice system.”).

<sup>39</sup> RICHARD SUSSKIND, *THE FUTURE OF LAW: FACING THE CHALLENGES OF INFORMATION TECHNOLOGY* 41 (Rev. Ed. 1998).

<sup>40</sup> See also RICHARD SUSSKIND, *TOMORROW’S LAWYERS: AN INTRODUCTION TO YOUR FUTURE* xiii (2013) (arguing that legal institutions and lawyers are bound “to change more radically over the next two decades than they have over the last two centuries”); RICHARD SUSSKIND, *THE END OF LAWYERS?: RETHINKING THE NATURE OF LEGAL SERVICES* 99–145 (2008) [hereinafter *THE END OF LAWYERS*] (identifying a non-exhaustive list of ten disruptive legal technologies, among which ODR is included); Rabinovich-Einy, *supra* note 3, at 21 (describing the effect of “internet society” on the dispute resolution landscape, suggesting that “Conflict resolution inevitably will be transformed . . .”).

on the trajectory set in motion by ADR and the effective access to justice movement. Like ADR at its inception, the appropriateness of ODR as an alternative to established dispute resolution mechanisms is subject to debate. However, in much the same way, practical considerations, market forces and evolving perceptions are expected to drive justice systems to adopt ODR. For example, in England and Wales, a recent structural review of the civil court system concluded that an online court should be established for claims up to £25,000 as a means for improving access to justice.<sup>41</sup>

The following Section reviews how ODR has thus far affected the design of dispute resolution processes. It demonstrates that ODR systems leverage technology to continue promoting the goals set by their antecedents. They introduce new procedural designs and qualities in order to improve the efficiency, accessibility, and appropriateness of dispute resolution services, and meet the unique needs of the growing volume and variety of online and offline disputes.

## II. THE CURRENT LANDSCAPE OF ODR

The landscape of ODR is comprised of a multitude of systems with very diverse characteristics. This Section outlines a multidimensional, typological framework for ODR systems, and uses it to describe the current landscape of ODR. The purpose of the framework is to facilitate a discussion on the key aspect that differentiates ODR from its offline predecessors: reliance on technology. Thus, the review groups ODR systems into three categories that encapsulate the effect technology has had on dispute resolution process design: transposing, restructuring or innovating it. This account is important because online technology is not neutral:<sup>42</sup> the way that a software tool is designed and programmed to operate reflects—and promotes—particular values and behaviors. Thus, variations in technological features can greatly impact both process and outcome.<sup>43</sup> For example, online mediation and arbitration processes managed by automatic software are very different from processes that are managed by a human arbitrator,<sup>44</sup> choosing to communicate via email

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<sup>41</sup> Lord Justice Briggs, *Civil Courts Structure Review: Interim Report*, JUDICIARY OF ENG. & WALES (Dec. 2015), <https://www.judiciary.gov.uk/wp-content/uploads/2016/01/ccsr-interim-report-dec-15-final1.pdf>.

<sup>42</sup> See LAWRENCE LESSIG, *CODE: AND OTHER LAWS OF CYBERSPACE* 3–8 (1999) (analyzing how law is embedded in the software code of virtual environments and how this code can be systematically used either to protect or erode our fundamental values).

<sup>43</sup> Rabinovich-Einy, *supra* note 22, at 50, 52.

<sup>44</sup> Ayelet Sela, *Can Computers Be Fair? How Automated and Human-Powered Online Dispute Resolution Affects Procedural Justice in Mediation and Arbitration*, 33 OHIO ST. J. DISP. RESOL. (Forthcoming, 2017).

rather than chat can significantly affect a mediation process, and online judicial proceedings conducted via video-conferencing are markedly different from ones executed via structured web-forms.<sup>45</sup>

The approach described here begets a focus on ODR systems, rather than tools.<sup>46</sup> ODR *tools* are online applications that substitute or support specific parts of the dispute resolution process by sourcing decomposed tasks to an IT-based application.<sup>47</sup> As such, they can be used also to complement offline dispute resolution processes. ODR *systems* are internet-based platforms that enable parties to a dispute to complete the entire resolution process, from filing through formulation of an outcome, in an online environment.<sup>48</sup>

### A *Multidimensional Typological Framework for ODR*

As the size and diversity of the ODR landscape grow, it becomes possible as well as necessary to develop an accepted typological framework and common terminology to account for the multiple variables that define and differentiate ODR systems. The proposed multidimensional framework enables a coherent description of any ODR system by pointing to specific values in each of its dimensions. As such, it is a useful tool for developing, designing, evaluating, and criticizing ODR systems.

Most system design and contextual variables in this framework, such as dispute type and origin, method, legal domain, setting, and service provider, have been comprehensively captured in the literature on “offline” dispute resolution.<sup>49</sup> What is missing from the discourse is an account of the effects of the key differentiator of ODR processes from their offline predecessors: technology.<sup>50</sup> Thus, in presenting this

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<sup>45</sup> Ayelet Sela, *Streamlining Justice: How Online Courts Can Resolve the Challenges of Pro Se Litigation*, 26 CORNELL J.L. & PUB. POL’Y 331 (2016).

<sup>46</sup> *Id.* at 40–41 (arguing that ODR tools include “specific dispute resolution applications that can be used to resolve both online and offline disputes . . . [as] a support system . . . [whereas] ODR *systems* include ODR tools . . . used in a coordinated way within a closed setting by a limited (but potentially very large) number of users . . .”).

<sup>47</sup> Examples of tasks that can be technologically outsourced include interrogating a witness via video conferencing, e-filing briefs and documents, communicating with parties via email, and using software programs to help determine prison terms or monetary damages.

<sup>48</sup> Arguably, a dispute resolution service can still be considered ODR if only a *minor technical element* in the process is not conducted online.

<sup>49</sup> See generally *Understanding Dispute Resolution Processes*, in THE HANDBOOK OF DISPUTE RESOLUTION 277 (Michael L. Moffitt & Robert C. Bordone eds., 2005); Frank E.A. Sander, *Alternative Methods of Dispute Resolution: An Overview*, 37 U. FLA. L. REV. 1, 3–11 (1985).

<sup>50</sup> While there appears to be no published typological analysis of the landscape of ODR in terms of the effect of technology on system design, other scholars have

framework and analyzing the ODR landscape, I focus on technology and its effect on the dispute resolution process, discussing only briefly dispute-related, procedural, and contextual variables.

Table 1 summarizes a non-exhaustive list of variables, most of which are best described on a continuum.

Table 1: Dimensions of The Spectrum of ODR Systems

Aspect	Dimension	Lower Bound	<————Examples————>		Upper Bound
Dispute	Domain	e-commerce, consumer protection, business, family law, personal injury, labor etc.			
	Type	<i>Single-Issue; Distributive</i>	monetary settlement	divorce agreement (alimony, custody, etc.)	<i>Multi-Issue; Integrative</i>
	Origin	<i>Online</i>	e-commerce; e-service, online communities	divorce, contracts, torts	<i>Offline</i>
Process	Method	<i>Interest-Based; Consensual</i>	negotiation; mediation	arbitration; adjudication	<i>Rights-Based; Binding</i>
	Media Richness	<i>Lean Media</i>	preset-text; free-	video-conference; multi-	<i>Rich Media</i>

touched upon these issues. See, e.g., Carneiro et al., *supra* note 21, at 215–18 (presenting a compilation of ODR service providers and resources, including references to dispute resolution methods, the centrality to the process of a human third-party or software, and specific tasks that AI powered ODR systems can perform); Orna Rabinovich-Einy & Ethan Katsh, *Technology and the Future of Dispute Systems Design*, 17 HARV. NEGOT. L. REV. 151, 169–94 (2012) (discussing potential effects of technology on dispute system design). See generally Arno R. Lodder, *The Third-party and Beyond. An Analysis of the Different Parties, in Particular the Fifth, Involved in Online Dispute Resolution* 15 INFO. & COMM. TECH. L. 143 (2006) (conceptualizing the roles of ODR technology and technology provider and their interaction with the parties).

		text; audio-conference	channel	
Synchronicity				
	Asynchronous	e-mail; message-board	instant messaging (chat), video-conference	Synchronous
Third-Party Agency	Software-Powered (Principal)	blind-bidding; problem-diagnosis; interest-matrix	a neutral communicating via online interface	Human-Powered (Instrumental)
Design	Traditional	same process in an online venue	restructured, innovative process	Streamlined; Redesigned
Context				
	Setting	Private; Contractual	marketplace; business	court, governmental agency
				Public; Mandatory
	Jurisdictional Forum	Domestic	national, domestic body	regional, international body
				Cross-Border
	Service Provider	Independent Professional	online mediator; online arbitrator	intermediary (e.g., marketplace); dispute aggregator (e.g., court)
				Institutional

To demonstrate the application of the framework, let us describe eBay’s Resolution Center<sup>51</sup> by pointing to specific values on each dimension: a private, institutional, intermediary domestic and international ODR service provider that resolves e-commerce, single-issue disputes that originate online using a software-powered, asynchronous, text-based negotiation-mediation process, followed, if needed, by human-powered arbitration.

1. Dispute Type, Origin and Domain

ODR systems now resolve an extremely wide array of disputes: single-issue and multi-issue, distributive and integrative, simple and complex, high-value and low value, originating online and offline, and covering many domains, including e-commerce, consumer protection, family, traffic-penalties, contracts, torts, labor, administrative appeals, insurance, business-commercial, and tax disputes.

2. Setting and Jurisdictional Forum

ODR systems are employed in both domestic and international fora, in private and public institutional settings. The setting affects not only process design and disputants’ experiences,<sup>52</sup> but also the means by

<sup>51</sup> See *infra* notes 139–154 and associated text for a description of eBay’s Resolution Center.

<sup>52</sup> Amy J. Cohen, *Dispute Systems Design, Neoliberalism, and the Problem of Scale*, 14

which jurisdiction is acquired (in private ODR systems, mostly contractually)<sup>53</sup> and resolutions are enforced (private ODR systems that guarantee enforceability, typically do so only with respect to monetary claims, by utilizing escrow mechanisms<sup>54</sup> or partnering with a payment service).<sup>55</sup> In recent years, the efforts to develop public domestic ODR systems (by courts and governmental agencies)<sup>56</sup> as well as to institute public cross-border ODR systems, are gaining momentum.<sup>57</sup>

### 3. ODR Technology and Service Providers

The term “ODR provider” is used interchangeably to describe both technology providers and service providers.<sup>58</sup> *Technology providers* develop ODR technologies and system designs in order to license, offer subscriptions, or sell them to ODR service providers. *Service providers* operate ODR systems; namely, they manage dispute resolution processes using a platform that a technology provider developed. Examples of ODR technology providers include *Modria*,<sup>59</sup> whose ODR systems are presently used primarily by institutional ODR service providers such as administrative agencies and large dispute resolution organizations, and *Mediate2Go*,<sup>60</sup> whose ODR system is intended for use by individual independent mediators. There are some ODR providers that both develop the technology and operate the service, as is the case with eBay’s Resolution Center.

ODR service providers can be divided into four principal categories. *Independent* providers are typically dispute resolution professionals who use a generic ODR platform to provide dispute resolution services, much like they would serve clients in an “offline” practice. *Intermediary* providers

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HARV. NEGOT. L. REV. 51, 75–77 (2009) (suggesting that dispute system design choices should be mindful of contextual and institutional variables that are likely to affect parties, particularly power imbalances in the process); Tom R. Tyler, *The Quality of Dispute Resolution Procedures and Outcomes: Measurement Problems and Possibilities*, 66 DENV. U. L. REV. 419, 427–30 (1989) (pointing to the sensitivity of disputants’ experiences with respect to contextual and institutional variables).

<sup>53</sup> Joachim Zekoll, *Online Dispute Resolution: Justice Without the State?* 1–2 (Max Planck Inst. for Euro. Legal History Research Paper Series No. 02, 2014), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2398976](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2398976).

<sup>54</sup> As is the case in the Freelancer ODR process. See FREELANCER, *supra* note 13.

<sup>55</sup> For example, eBay’s Resolution Center can guarantee enforceability through its online payment service, PayPal. See Rogers, *supra* note 8, at 21–22.

<sup>56</sup> Sela, *supra* note 45.

<sup>57</sup> See *supra* note 37 (discussing the EU cross-border ODR system for consumer disputes and the reports of the UNCITRAL ODR Working Group); see also Rule et al., *supra* note 9, at 426 (describing a proposal for a regional ODR system for the Organization of American States (OAS)).

<sup>58</sup> Carneiro et al., *supra* note 21, at 214.

<sup>59</sup> MODRIA, <http://www.modria.com> (last visited Mar. 31, 2017).

<sup>60</sup> MEDIATE2GO, <https://www.mediate2go.com> (last visited July 12, 2016).

operate ODR services in their capacity as intermediaries that connect parties for the sale of a good or a service (for example, online marketplaces); they offer the ODR process to resolve disputes that arise between users of their service. For example, eBay offers an ODR process for resolving disputes between buyers and sellers who transact on its platform, and Freelancer offers an ODR process for resolving disputes between employers and service providers that use its platform to contract for work. *Institutional* providers include both *dispute aggregators* and *institutional disputants*, and they can be either private or public entities. Examples of institutional dispute aggregators include Civil Resolution Tribunal, a public, court-operated ODR service provider,<sup>61</sup> and the private ODR system for manufacturer-supplier disputes operated by the International Center for Dispute Resolution.<sup>62</sup> There are relatively few examples of ODR systems operated by public institutional disputants, but as an example, there are ODR platforms for tax assessment appeals that are operated by the administrative agencies whose decisions are being appealed.<sup>63</sup> I expect that in the near future large private enterprises, such as utility or telecom companies, will offer private, institutional disputant-operated ODR systems to resolve payment and service disputes with their clients.

#### 4. *Dispute Resolution Method*

Virtually every dispute resolution method that is available offline is offered online also, at least in some form. The review in the next Section demonstrates that there are ODR systems that support negotiation, mediation, arbitration, early neutral evaluation, adjudication and jury processes.<sup>64</sup> Oftentimes, ODR systems follow a tiered design, typically beginning with consensual processes such as negotiation or mediation and escalating as needed to a binding phase, of arbitration or adjudication.<sup>65</sup> The ability to offer flexible tiered process designs at a relatively low cost is a key advantage of ODR.

#### 5. *ODR Technology: Richness, Synchronicity, Interface Design and Agency*

Following Katsh & Rifkin, ODR technologies are typically referred to as *The Fourth Party*.<sup>66</sup> The term underscores the fact that in ODR,

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<sup>61</sup> See *infra*, the text associated with notes 109-116 (discussing Civil Resolution Tribunal).

<sup>62</sup> See *ICDR Manufacturer/Supplier Online Dispute Resolution Protocol (MSODR)*, INT'L CTR. FOR DISPUTE RESOLUTION, <https://www.icdr.org/icdr/faces/icdrservices/msodr> (last visited July 6, 2016).

<sup>63</sup> See *infra* notes 102-103 (discussing Online Property Assessment Tax Appeals).

<sup>64</sup> Although no public justice system uses juries in ODR, jury-based dispute resolution is offered by private ODR service providers. See *infra* notes 125-137 and associated text.

<sup>65</sup> See, e.g., *infra* Section II.D.1. (discussing the process designs of eBay's Resolution Center or CRT).

<sup>66</sup> KATSH & RIFKIN, *supra* note 1, at 93-116.



technology is more than just software: it shapes how the dispute resolution process is delivered, the manner in which parties interact, and eventually what is (and what is not) possible and likely to occur.<sup>67</sup> Four aspects of technology that must be discussed in the context of ODR are: media richness, communication synchronicity,<sup>68</sup> interface design and software agency.<sup>69</sup> They are important because variations in these system design features have measureable effects on the dispute resolution process and outcome.<sup>70</sup>

The effects of the richness of the communication medium on the delivery of ODR services are supported by a vast body of research.<sup>71</sup> The review below reveals that the vast majority of current ODR systems rely on lean media (text-based communications); and fewer systems rely on rich media, such as audio and video-conferencing. Similarly, ODR systems vary by their level of communication synchronicity (chat or live video are synchronous, whereas email exchanges are asynchronous) and structural features of their interface design. As an example, asynchronous text-based ODR systems differ by whether they utilize free-text boxes, character-limited web-forms or multiple-choice questionnaires to support information exchange, idea generation, identification and application of rules, and resolution.

Variations in the role of technology in ODR are observed also with respect to the software's level of agency in the process. *Instrumental* ODR platforms serve as an online venue for the parties (including the neutral) to interact and resolve the case in what is a human-powered ODR

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<sup>67</sup> See *supra* notes 42–43 and associated text.

<sup>68</sup> Kathleen L. McGinn & Rachel Croson, *What Do Communication Media Mean for Negotiators? A Question of Social Awareness*, in THE HANDBOOK OF NEGOTIATION AND CULTURE 335–36 (Michele J. Gelfand & Jeanne M. Brett eds., 2004).

<sup>69</sup> Sela, *supra* note 44.

<sup>70</sup> McGinn & Croson, *supra* note 68, at 334–37 (proposing that there are three principal properties of communication media that produce measureable influences on social interaction, and hence, on dispute resolution: synchronicity, communication channels, and efficacy); Sela, *supra* note 44 (finding differences in procedural justice experiences in ODR processes perceived to be operated by human and software agents); Sela, *supra* note 45 (finding differences in procedural justice experiences in ODR processes conducted via text or video interface); Jelle van Veenen, *From :- ( to :- ) Using Online Communication to Improve Dispute Resolution* 17–23 (TISCO Working Paper Series on Civil Law and Conflict Resolution Sys. No. 02, 2010), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1618719](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1618719).

<sup>71</sup> See Richard L. Daft & Robert H. Lengel, *Information Richness: A New Approach to Managerial Behavior and Organizational Design*, 6 RES. ORGANIZATIONAL BEHAV. 191, 223 (1984) (defining media richness by four parameters that render it better suited for complex tasks: *Language Variety*—the ability to convey natural language rather than just numeric information; *Multiplicity of Cues*—the number of ways in which information could be communicated; *Personalization*—the ability to personalize the message; and *Rapid Feedback*—the ability to respond to the communicator in real, or near-real, time).

process. *Principal* ODR platforms play an autonomous role in the process as both the fourth and third parties, by automating core dispute resolution capacities and delivering the service without the involvement of a human neutral.<sup>72</sup> The review below demonstrates how the tremendous variety in ODR technologies results in creativity and endless diversity of system designs.

#### 6. *Dispute Resolution Process Design*

When new online technology is created for any process, the initial impulse is to create online mirror images of the “live” or offline process. After a period of adjustment, creativity and process evolution begin to take place, and things that were not possible without online technology begin to become part of the normal way of doing business.<sup>73</sup>

Dispute resolution scholars have long recognized the potential of ODR technologies to profoundly affect the field.<sup>74</sup> However, the specific impact of technology on dispute resolution process design remains a fairly unarticulated subject in the literature. I propose to conceptualize this effect by classifying it into three categories: (a) *transposition*—replicating traditional process designs for delivery via an online interface; (b) *restructuring*—structurally changing or streamlining traditional procedural elements to achieve efficiency and simplification; and (c) *Novelty*—innovating original process designs that have no offline predecessors.

#### B. *Transposed Process Designs*

ODR platforms in this category provide a traditional dispute resolution process via online communication technologies. The ODR process—be it mediation, arbitration or adjudication—differs from its offline predecessors only in that parties convene in an online space rather than in a physical location. Communication occurs by using an online medium to exchange text, audio or video messages, either synchronously, in real-time (such as in live chat or video-conference), or asynchronously (such as in e-mails, wikis or online discussion boards).

At its most basic form, this category includes ODR processes that are delivered by combining multiple off-the-shelf software products to support all procedural elements. Examples include online phone and

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<sup>72</sup> See Sela, *supra* note 44.

<sup>73</sup> Daniel Rainy & Ethan Katsh, *ODR and Government*, in *ONLINE DISPUTE RESOLUTION: THEORY AND PRACTICE* 237, 248 (Mohamed S. Abdel Wahab et al., eds. 2012).

<sup>74</sup> See e.g., Rabinovich-Einy & Katsh, *supra* note 22; Robert C. Bordone, *Electronic Online Dispute Resolution: A Systems Approach—Potential Problems, and a Proposal*, 3 HARV. NEGOT. L. REV. 175 (1998).

video-conferencing services such as *Skype*<sup>75</sup> or *WebEx*,<sup>76</sup> cloud-based document sharing and storage services such as *Dropbox*,<sup>77</sup> and web-based document editing and sharing software such as *GoogleDocs*.<sup>78</sup> The *U.S. National Mediation Board* (NMB) was an ODR pioneer when it began leveraging video-conferencing and secure online-workspace technologies for resolving disputes in the airline and railroad industries.<sup>79</sup> Similarly, a number of mediation organizations and firms rely on off-the-shelf technologies to offer their clients an online mediation service. Examples include *Online Mediation Works*,<sup>80</sup> and *The Mediation Line*,<sup>81</sup> which mediate by online video-conferencing.

In its more advanced form, employed primarily by independent providers and institutional dispute aggregators,<sup>82</sup> this category includes ODR systems that provide dispute resolution services over a dedicated holistic online platform, potentially combining it also with external online communication. For example, *net-arb.com*<sup>83</sup> and *SettleToday.com*<sup>84</sup> provide asynchronous text-based ODR services through dedicated platforms. Typically, they collect initial information from the filing party

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<sup>75</sup> SKYPE, <http://www.skype.com/> (last visited July 25, 2017).

<sup>76</sup> CISCO WEBEX, <http://www.webex.com> (last visited July 25, 2017).

<sup>77</sup> DROPBOX, <https://www.dropbox.com/> (last visited July 25, 2017).

<sup>78</sup> GOOGLE DOCS, <https://docs.google.com> (last visited July 25, 2017).

<sup>79</sup> At the onset, the MB used ODR primarily for mediation; nowadays, it uses “[o]nline Arbitration and Web-based video conferencing [which] allows multiple users, from multiple locations, to see each other, hear each other, and share documents in live online meetings. Using this system, the parties can jointly set agendas, display exhibits or edit contract language online.” *Online Dispute Resolution (ODR) Resources*, THE NAT’L MEDIATION BD., <http://www.nmb.gov/online/online-conferencing/> (last visited July 7, 2016).

<sup>80</sup> See ONLINE MEDIATION WORKS, <http://www.onlinemediationworks.com/> (last visited July 6, 2016).

<sup>81</sup> See THE MEDIATION LINE, <http://themediationonline.com/online-mediation/> (last visited July 6, 2016).

<sup>82</sup> The American Arbitration Association (AAA) was one of the first dispute aggregators to offer holistic online mediation and arbitration systems for claims under 10,000 USD. AAA’s in-house ODR services used to be offered on their website. *Online Mediation for Claims under \$10,000*, AM. ARBITRATION ASS’N, [https://services.adr.org/eroom/faces/welcome\\_and\\_steps.jspx](https://services.adr.org/eroom/faces/welcome_and_steps.jspx) (last visited Mar. 11, 2011). Both processes were text-based, but while arbitration used asynchronous communication, mediation was provided via synchronous chat. Currently, AAA uses an external technology provider to offer other online arbitration services. AAA *NYS Auto Insurance ADR Center Overview*, AM. ARBITRATION ASS’N, <https://nysinsurance.adr.org/> (last visited July 6, 2016) (AAA platform for No-Fault Insurance Claims). AAA’s international enterprise, The International Center for Dispute Resolution, still offers a specific ODR process for manufacturer-supplier disputes. See INT’L CTR. FOR DISPUTE RESOLUTION, *supra* note 62.

<sup>83</sup> See INTERNET-ARBITRATION, <http://www.net-arb.com/> (last visited Oct. 27, 2016).

<sup>84</sup> See SETTLE TODAY, <http://www.settletoday.com/> (last visited Oct. 28, 2013).

in a web form, obtain the counterpart's agreement to arbitrate or mediate via email, assign a neutral to the case and conduct the rest of the process, including issuing the final decision or arbitral award, via online video-conferencing, email,<sup>85</sup> or text-based web-forms.<sup>86</sup> Similarly, some e-commerce marketplaces, such as *Alibaba.com*,<sup>87</sup> provide traditional dispute resolution services over a dedicated platform. In Alibaba's trade dispute ODR process, buyers and sellers can negotiate claims and counter claims by exchanging messages in a dedicated website, and if need be submitting the case (including evidence) to online arbitration by *Alibaba*.<sup>88</sup>

Some ODR systems in this category use technological features to support traditional procedural functions. One example is the Mediation Room,<sup>89</sup> an ODR platform for independent ADR professionals operated by the Association for Conflict Resolution (ACR), powered by technology provider Modria. In addition to live video-conferencing and asynchronous textual communications (logged in a private message board), the platform makes caucusing possible by assigning different user privileges to message boards and file archives. Thus, users can discuss and share information privately with members of their party group (*e.g.*, attorney and client), with the mediator, or with all parties. The platform includes other features such as a tool for proposing agreements, amending them, and accepting them, as well as basic case docket

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<sup>85</sup> For example, net-ARB leads case filers through a simple web-form where they are asked to provide basic information about themselves, the dispute, and the other party. Once the other party agrees to arbitrate, a single arbitrator or a panel of three arbitrators who understands the subject matter of the dispute is assigned to the case. Testimony, evidence and the arbitration decision are all delivered by email. The platform is both an independent service provider and a dispute aggregator resolving dispute that arise in online marketplaces and services such as *elance.com* and *escrow.com*. See *We need a Brief Description of Your Case*, INTERNET-ARBITRATION, [https://www.net-arb.com/case\\_registration/index.php](https://www.net-arb.com/case_registration/index.php) (last visited July 6, 2016) (describing net-ARB's process).

<sup>86</sup> For example, *SettleToday.com* explains that "The first party, the initiator, enters their information on *settletoday.com*. Once this occurs, emails are automatically generated to the other parties (the respondents) asking them to join the process. Once they join, all parties give rebuttals to each other's input. Finally, the information is submitted to the mediator who will settle the case within 24 hours of case completion." *Frequently Asked Questions*, SETTLE TODAY, <http://www.settletoday.com/faq.php#question2> (last visited July 6, 2016).

<sup>87</sup> See ALIBABA, <http://www.alibaba.com/> (last visited July 25, 2017).

<sup>88</sup> Alibaba's Trade Dispute Rules stipulate in Article 8 that in order "[t]o facilitate the process and increase the efficiency of complaints handling, Alibaba.com has provided an online system for filing complaints ("Complaints Platform"). Parties to the dispute should submit complaints, counter-notices, supporting evidences, and etc. through the Complaints Platform." *Trade Dispute Rules*, ALIBABA <http://rule.alibaba.com/rule/detail/2055.htm> (last visited July 13, 2016).

<sup>89</sup> See *About*, THE MEDIATION ROOM, <https://www.themediationroom.com/aboutus> (last visited July 12, 2016).

management functions for mediators. A similar ODR platform is operated by the British Columbia Consumer Protection Agency,<sup>90</sup> a public dispute aggregator that operates an ODR platform that enables domestic consumers and businesses to mediate disputes. Finally, the recently launched Civil Resolution Tribunal in the Canadian District of British Columbia, which is described in further detail in the following Section for its restructured processes, is a judicial ODR platform that offers as a second tier process a holistic dedicated online platform for negotiation, facilitation and tribunal adjudication of strata disputes, small claims and traffic cases—including online management of all case filings, communication, evidence submission, and rendering of final agreement or decision.<sup>91</sup>

### C. *Restructured Process Designs*

ODR systems in this category offer new system designs that leverage online technologies to restructure dispute resolution processes without departing from traditional procedural conventions. Systems in this class typically employ robust form-based case-intake to simplify and streamline information collection and exchange, as well as facilitate effective processing of the collected information to advance resolution. Given their nature, such systems must be specifically tailored to the context, settings and dispute type for which they are designed; a laborious process design task that requires subject-matter expertise. Thus, unlike the previous category, ODR systems in this category are unable to generically support any dispute. Even though the range of disputes that each process design can handle is limited, thanks to their restructured tailored design, ODR systems in this category are positioned to deliver faster, more efficient and more accessible paths to resolution for the specific case-types they handle.

#### 1. *Form-Based Streamlining and Simplification*

Likely the longest running ODR system in this category is Money Claim Online<sup>92</sup> (MCOL). Her Majesty's Courts and Tribunals Service has been operating it in the United Kingdom since 2001, with overwhelming success.<sup>93</sup> MCOL allows individuals and organizations to issue online

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<sup>90</sup> See *Resolve your Dispute*, CONSUMER PROTECTION BC, <http://www.consumerprotectionbc.ca/odr> (Last visited July 13, 2016).

<sup>91</sup> See the text associated with notes 109–116 *infra*.

<sup>92</sup> See *Welcome to Money Claim Online*, HM COURTS & TRIBUNALS SERV., <https://www.moneyclaim.gov.uk> (last visited Apr. 16, 2012).

<sup>93</sup> Since its launch in 2001, the number of cases processed through MCOL has reached a steady state of 180,000 claims annually, averaging at £1665 in 2015. See Briggs, *supra*, note 41. In its first year of full operation (the period between April 2002 and March 2003), 21,513 cases were filed with MCOL. See Jannis Kallinikos,

specified money claims for sums of up to GBP £100,000.<sup>94</sup> MCOL's process design is a restructured, streamlined and simplified version of its offline equivalent.<sup>95</sup> Using a web-form, the court collects the claimant's and defendant's personal and contact information and the Particulars of Claim (POC) which explain what money (and interest) is owed and why (limited to 1080 characters).<sup>96</sup> Payment of court fees, which are lower compared to the offline money-claim procedure, is made by credit or debit card.<sup>97</sup> Respondents receive claims to their mailing address (serving is the only procedural component that cannot be completed online). Defendants typically respond by using a standardized response form, which they can submit either online (via email) or by snail mail.<sup>98</sup> If a case is defended, it is transferred from MCOL to a mediator or a local court; if the defendant admits or fails to respond, a judgment can be entered online. Payment is made directly to the claimant; if the defendant fails to pay, the claimant may file online for a warrant of execution.<sup>99</sup> In addition to its obvious benefits for litigants,<sup>100</sup> MCOL brought about positive institutional effects: "remov[ing] time consuming and repetitive administrative work from the court, reducing the cost of litigation and freeing up resources to do other work."<sup>101</sup>

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*Institutional Complexity and Functional Simplification: The Case of Money Claim Online in England and Wales*, in ICT AND INNOVATION IN THE PUBLIC SECTOR: EUROPEAN STUDIES IN THE MAKING OF E-GOVERNMENT (Francesco Contini & Giovan Francesco Lanzara eds.) 174, 179–180 (2009).

<sup>94</sup> See HM COURTS & TRIBUNALS SERV., MONEY CLAIM ONLINE (MCOL)—USER GUIDE FOR CLAIMANTS 4, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/520203/money-claim-online-user-guide.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/520203/money-claim-online-user-guide.pdf).

<sup>95</sup> MCOL's designers' purposeful selection of dispute type enabled its procedural and functional simplification: "Money claims, as distinct from other claims, often involve relatively straight forward procedures of dispute resolution . . . what was transposed onto an online service was a further streamlined process of money claims, cleansed, to a considerable degree, off of the judicial intricacies that usually underlie more complex money claims." Kallinikos, *supra* note 93, at 175.

<sup>96</sup> Longer arguments or additional information may be further served externally. See HM COURTS & TRIBUNALS SERV., *supra* note 94, at 9–11.

<sup>97</sup> See *Make a Court Claim for Money*, GOV.UK, <https://www.gov.uk/make-court-claim-for-money/court-fees> (last visited July 13, 2016).

<sup>98</sup> MCOL response forms include the following forms: Acknowledgment of Service, States Paid Defense, Full Defense, Counterclaim, Part Admission, and Full Admission. The respondent may also not send any response, or send payment directly to the claimant. See HM COURTS & TRIBUNALS SERV., *supra* note 94, at 14–15.

<sup>99</sup> Requests for other enforcement methods are not available online. *Id.* at 20.

<sup>100</sup> MCOL is accessible year-round, twenty-four hours a day. It takes about thirty minutes to file a claim and it is subject to lower court fees. See *Make a Court Claim for Money*, GOV.UK, <https://www.gov.uk/make-court-claim-for-money> (last updated Mar. 20, 2017).

<sup>101</sup> See MINISTRY OF JUSTICE, JUDICIARY AND COURT STATISTICS 2011 (2012), <http://www.justice.gov.uk/downloads/statistics/courts-and-sentencing/jcs-2011/judicial-court-stats-2011.pdf>.

A similar form-based procedural streamlining process design was implemented by several counties in the U.S.<sup>102</sup> and Canada<sup>103</sup> to administer *Online Property Assessment Tax Appeal* processes. Using a form-based interface, taxpayers (or their agents) provide details about the owner, the property subject to appeal, and the issues at stake;<sup>104</sup> they can also provide a free-text statement and upload files in support of their appeal. Appellants can communicate with the appeal review board or tax assessor on a message-board interface, until they issue a decision on the online platform. In addition to simplifying and streamlining the appeal process for appellants, the system has institutional case management benefits such as the ability to access only cases for which all procedural requirements were fulfilled.

## 2. Automated Problem-Diagnosis, Case Preparation and Self-Help

Decision-trees have long been used by third-party neutrals, lawyers, and disputants to identify interests, develop strategies and generate resolution options.<sup>105</sup> ODR applications simplify and streamline the use of decision-trees, and they can enhance them with computational abilities. The application of decision-trees in ODR systems streamlines many procedural elements, including educating disputants about the process and their options, helping them to identify relevant facts, empowering them to recognize their interests and develop strategies that advance them, and proposing resolution options based on the information collected.<sup>106</sup>

Likely the most common application of decision-tree technologies in ODR is problem diagnosis and facilitation of information collection and sharing. A notable pioneer in this field was the Dutch online mediation website *Juripax*.<sup>107</sup> The platform offered parties a tiered processes design,

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<sup>102</sup> See, e.g., OHIO BD. OF TAX APPEALS, <http://bta.ohio.gov/> (last visited July 13, 2016); PROPERTY APPRAISAL BY ALACHUA COUNTY, FLORIDA PROPERTY APPRAISER, <http://www.acpafl.org/ResCenter/index.html> (last visited July 13, 2016); FULTON COUNTY BOARD OF ASSESSORS APPEAL PROCESS, <https://fultoncounty.modria.com/> (last visited July 13, 2016); PROPERTY ASSESSMENT APPEALS BY THE ASSESSOR OF PROPERTY, DAVIDSON COUNTY, TENNESSEE, <https://padctn.modria.com/> (last visited July 13, 2016).

<sup>103</sup> See PROP. ASSESSMENT APPEAL BD., <http://www.assessmentappeal.bc.ca/SubmitAnAppeal/> (last visited July 13, 2016).

<sup>104</sup> Users are required to select from a closed list of issues such as fair market value, land data, combat discount, etc. and an “other” option with free text.

<sup>105</sup> See, e.g., David P. Hoffer, *Decision Analysis as a Mediator’s Tool*, 1 HARV. NEGOT. L. REV. 113, 134 (1996); Jeffrey M. Senger, *Decision Analysis in Negotiation*, 87 MARQ. L. REV. 723, 724 (2004).

<sup>106</sup> See John Zeleznikow, *Using Web-based Legal Decision Support Systems to Improve Access to Justice*, 11 INFO. & COMM. TECH. L. 15 (2002).

<sup>107</sup> In 2014, Juripax was acquired by Modria and it no longer offers its process designs independently. *Modria Acquires Juripax*, JURIPAX (Apr. 29, 2014), <http://>

commencing with decision-tree based case-intake and problem-diagnosis questionnaire followed by an online mediation process using *Juripax*'s asynchronous online text-based platform.<sup>108</sup> Using logical branching, the online questionnaire takes users through questions relevant to their case to collect information about the case and each party's interests, while also educating them about the process and what they can expect as well as preparing them for a collaborative process. The responses help the disputants and mediator to prepare for the mediation. By using such an automated, structured and standardized information collection process, the parties' confidential responses are comparatively displayed to the mediator, automatically marking issues of agreement and disagreement. This feature enables the mediator to easily identify uncontested issues and issues that require further exploration and discussion.

The *Civil Resolution Tribunal* (CRT)<sup>109</sup> in the Canadian district of British Columbia also uses online problem diagnosis as the first stage of a gradually escalating sequence of ODR processes. "Canada's first 'online' tribunal"<sup>110</sup> was instituted by law in May 2012<sup>111</sup> as part of the District's civil justice reform, and it began initial processing of cases in July 2016.<sup>112</sup> CRT is a court-connected ODR program for small-claims (up to 25,000 Canadian Dollars), strata property disputes and traffic disputes. It enables users to go through online problem diagnosis, party-to-party negotiation, facilitation (mediation) and if necessary, also adjudication based on the evidence and arguments submitted through the ODR system.<sup>113</sup> The lion's share of CRT's dispute resolution processes are intended to be conducted online based on the parties' submitted written materials; adding video or audio communication as necessary.<sup>114</sup> In rare situations, the facilitator or tribunal may hold face-to-face hearings. The

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www.juripax.com. However, Juripax's unique process design can still be viewed in a promotional video. See Juripax B.V., *Juripax Online Mediation Technology*, YOUTUBE (Feb. 14, 2012), <https://www.youtube.com/watch?v=2WE4R-4oCQY>.

<sup>108</sup> The parties and neutral could exchange messages on a message board that supports collaborative text editing.

<sup>109</sup> See CIVIL RESOLUTION TRIBUNAL, <https://www.civilresolutionbc.ca> (last visited July 20, 2016).

<sup>110</sup> B.C. MINISTRY OF JUSTICE, *White Paper on Justice Reform: Part Two: A Timely Balanced Justice System* 11 (February 2013), <http://www2.gov.bc.ca/assets/gov/law-crime-and-justice/about-bc-justice-system/justice-reform-initiatives/whitepapertwo.pdf>.

<sup>111</sup> Civil Resolution Tribunal Act, S.B.C. 2012, c 25 (Can.).

<sup>112</sup> CRT first launched for strata disputes. See *The CRT is Accepting Strata Claims for Early Intake*, CIVIL RESOLUTION TRIBUNAL (July 13, 2016), <http://www.civilresolutionbc.ca/the-crt-is-accepting-strata-claims-for-early-intake/> (last visited July 20, 2016).

<sup>113</sup> *How CRT Works*, CIVIL RESOLUTION TRIBUNAL, <https://www.civilresolutionbc.ca/steps/> (last visited Feb. 18, 2017).

<sup>114</sup> *Id.*; see also *Dispute Resolution Model for the Proposed Civil Resolution Tribunal*, B.C. MINISTRY OF JUSTICE, [http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs2012\\_2/520265/civil\\_tribunal\\_business\\_model\\_cdrt\\_03-05-12\\_final.pdf](http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs2012_2/520265/civil_tribunal_business_model_cdrt_03-05-12_final.pdf). (last visited April 8, 2017).



*Solution Explorer*,<sup>115</sup> CRT's online problem diagnosis and self-help system, educates parties about their rights and possible courses of actions, and facilitates their access to certain online self-service resolution options. Using a dynamic online questionnaire, the system allows the user to "explore" or diagnose the issues they face. Once the issues have been identified, the system presents the user with relevant legal information and actions they can take to remedy the situation before turning to the tribunal as a last resort (for example, templates of letters they can send to other parties). The users receive a written summary of the process and information they received which they can turn into an online claim if self-help actions fail or are waived. By enabling users to explore—and choose from—several self-help options, as well as to simultaneously examine several related claims, CRT's design facilitates exhaustion of resolution options and bundling of related claims. Thus, its procedural design is expected to support quicker and more comprehensive resolutions compared to its offline predecessor.<sup>116</sup>

### 3. *Automated Application of Procedural Rules*

The ability of software code to automatically impose and enforce rules is one of the most significant and meaningful changes that information technology introduces into the practice of law, and dispute resolution (and prevention) in particular.<sup>117</sup> It has a promising potential to guarantee equal treatment and comprehensive compliance and enforcement at a relatively low cost; at the same time, it is a source of concern because oftentimes there is no transparency with respect to the nature of the rules embedded in the code.<sup>118</sup>

In ODR processes, "embedded legal knowledge"<sup>119</sup> can be used to automatically apply a variety of procedural rules. For example, it can identify the proper venue, apply statutes of limitations, make available the ability to submit motions only when procedurally permissible, serve documents to all relevant parties, enforce submission deadlines and

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<sup>115</sup> *Getting Started*, CIVIL RESOLUTION TRIBUNAL, <https://www.civilresolutionbc.ca/self-help/> (last visited Feb. 18, 2017).

<sup>116</sup> *See id.*

<sup>117</sup> *See, e.g.*, SUSSKIND, THE END OF LAWYERS, *supra* note 40, at 99–145 (identifying embedded legal knowledge, alongside other technologies, as a disruptive legal technology that has the potential to transform the industry); LESSIG, *supra* note 42, at 141–45.

<sup>118</sup> LESSIG, *supra* note 42, at 6, 9, 224.

<sup>119</sup> In addition to Susskind's notion of hard-coded "embedded legal knowledge," one's treatment may be affected by local "cookies" that enable a web server to deposit a bit of code on a person's computer that identifies him/her and facilitates personalized treatment according to preset rules. SUSSKIND, THE END OF LAWYERS, *supra* note 40, at 141. For a discussion about the implication of cookies on internet users' rights and freedoms, see Lawrence Lessig, *Law Regulating Code Regulating Law*, 35 LOY. U. CHI. L.J. 1, 5 (2004).

formats, or impose procedural requirements for special status litigants and witnesses (*e.g.*, child witnesses).<sup>120</sup>

CPR Resolution Center<sup>121</sup> is an example of an ODR system that automatically applies selected procedural rules to cases it handles. The International Institute for Conflict Prevention & Resolution (CPR), an institutional dispute aggregator, launched it as an asynchronous, text-based B2B commercial arbitration platform.<sup>122</sup> Its streamlined form-based case-initiation stage collects information about the case and then allows users to select a desired procedural framework out of the options offered. The selected rules, such as submission timelines, are then automatically implemented to govern the ODR process that ensues. The platform is thus said to offer “the first end-to-end online arbitration process that fully complies with the requirements of the New York Convention. . . . customized, streamlined rules . . . govern this online process . . . with the same procedural protections and conflict checks that are found in CPR’s face-to-face administered processes.”<sup>123</sup> The form-based intake also enables streamlining the issuing of arbitration awards; an award “auto-builder” allows arbitrators to import into the document procedural and claim-related information that was provided in the process.<sup>124</sup>

#### 4. *Online Jury Processes*

While courts have yet to offer the option of participating in jury duty online, private ODR systems have experimented with online jury-like dispute resolution processes, typically by inviting online community members to serve as “jurors” (in effect a panel of arbitrators rather than common law jurors). This process design was pioneered in 2008 by eBay, when it established eBay’s Community Court.<sup>125</sup> The goal of the Community Court was to enforce the norms of eBay India’s community of buyers and sellers. To that end, it ran jury-trial-like processes to resolve disputes over negative feedback reviews posted on the e-commerce

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<sup>120</sup> SUSSKIND, *THE END OF LAWYERS*, *supra* note 40, at 142.

<sup>121</sup> *Welcome to the Resolution Center*, CPR RESOLUTION CENTER, <https://conf-cpr.modria.com/> (last visited Feb. 20, 2017).

<sup>122</sup> Their website states that CPR is “develop[ing] online processes and rules that can be customized to fit a range of B2B disputes and is developing B2B ODR pilots designed to move the dispute resolution process online to expedite resolution processes and reduce the costs of business disputes for multiple Fortune 500 companies.” *Online Dispute Resolution (ODR) Overview*, CPR INT’L INST. FOR CONFLICT PREVENTION & RESOLUTION, <http://www.cpradr.org/PracticeAreas/OnlineDisputeResolution.aspx> (last visited July 20, 2016).

<sup>123</sup> Beth Trent & Colin Rule, *Moving Arbitration Online: The Next Frontier*, N.Y. L.J. (Apr. 1, 2013) (referring to Convention on the Recognition and Enforcement of Foreign Arbitral Awards, June 10, 1958, 330 U.N.T.S. 38 (hereinafter: “The New York Convention”)).

<sup>124</sup> *Id.*

<sup>125</sup> *Updated: Launching the ‘Community Court’!*, EBAY.COM (Dec. 3, 2008), <http://www2.ebay.com/aw/in/200812031505112.html>.

platform. Buyers and sellers submitted their positions online, and a randomly selected panel of 21 jurors (comprised of eleven eBay buyers and ten eBay sellers)<sup>126</sup> voted whether the comment should be removed, and their decision was enforced by eBay.<sup>127</sup> In January 2011 the service changed its name to the eBay Community Review Forum,<sup>128</sup> and some procedural changes were enacted, among them reducing the size of the panel to seven jurors and shortening the maximum duration of case proceedings from 22 days to 12 days.<sup>129</sup> While the service was discontinued at the end of 2012,<sup>130</sup> other marketplaces continued offering ODR systems with a similar process design. For example, the Dutch classifieds advertising website Marktplaats.nl<sup>131</sup> uses a panel of eleven jurors to settle disputes over feedback reviews;<sup>132</sup> and Chinese e-commerce website taobao.com<sup>133</sup> lets online jury panels of 31 community members<sup>134</sup> resolve buyer-seller disputes over transactional issues.<sup>135</sup>

Independent ODR service providers that are not tied to a specific community have also experimented with online jury-like processes, although it is difficult to find a service that has prevailed over time. For example, Truveli<sup>136</sup> was a jury-based ODR service that ceased operations. It enabled claimants to describe the nature of their dispute in an online form, escrow funds or digital assets involved in the case and invite the other party to the process. The parties could be automatically assigned a

<sup>126</sup> This jury panel composition provides, at least allegedly, a slight pro-consumer bias.

<sup>127</sup> See Rule & Nagarajan, *supra* note 6; Jaap van den Herik & Daniel Dimov, *Towards Crowdsourced Online Dispute Resolution*, in LAW ACROSS NATIONS: GOVERNANCE, POLICY & STATUTES 244, 247 (Sylvia Kierkegaard & Patrick Kierkegaard eds., 2011).

<sup>128</sup> The change took effect in January 2011. See *Updated: Community Review Forum: Now live on Site*, EBAY.COM (Jan. 3, 2011), <http://www2.ebay.com/aw/in/201101031930242.html>.

<sup>129</sup> See *id.*

<sup>130</sup> See *Closure of Community Review Forum*, EBAY.COM (Jan. 23, 2012), <http://www2.ebay.com/aw/in/201201231505332.html> (eBay stated that changes made in eBay's feedback policy make the Review Forum redundant).

<sup>131</sup> See MARKTPLAATS, <http://www.marktplaats.nl/> (last visited July 20, 2016).

<sup>132</sup> See <https://gebruikersjury-marktplaats.modria.com/mp/jsp/ccHome.jsp> (last visited Mar. 16, 2014).

<sup>133</sup> See TAOBAO, <http://www.taobao.com> (last visited Dec. 30, 2013).

<sup>134</sup> See PAN.TAOBAO, <http://pan.taobao.com/> (last visited Dec. 30, 2013).

<sup>135</sup> See Kaylene Hong, *Chinese e-Commerce Giant Alibaba Is Letting Users Judge Disputes Between Merchants and Customers*, THENEXTWEB.COM (Dec. 29, 2013), <http://thenextweb.com/asia/2013/12/30/chinese-e-commerce-giant-alibaba-is-letting-users-judge-disputes-between-merchants-and-customers/#!q1JHv>. The article cites an Alibaba spokesperson's report that the panel ODR mechanism handled over 340,000 disputes in its first year of operation. *Id.*

<sup>136</sup> See *Truveli.org: Trial by Jury Comes to the Web*, PRWEB.COM (Apr. 14, 2011), <http://www.prweb.com/releases/2011/4/prweb8299764.htm>.

jury of five or select a panel after interviews. Parties delivered arguments, uploaded evidence and presented testimonies for the jurors' review; the panel then deliberated via an internal chat system. If a unanimous decision was achieved, a "judge" was appointed by Truveli to set the award. The decision was enforced using the escrowed funds.

Despite notable differences between online jury platforms and traditional common law court juries, the two process designs are likely to eventually affect each other: the common law jury framework can inject greater structure and institutional safeguards into online jury systems, and online jury platforms can modernize and enhance a traditional legal institution that has been resistant to change.<sup>137</sup>

#### *D. Novel Process Designs*

This category of ODR processes includes ODR systems that go beyond online communication and information collection, presentation, and management. Specifically, platforms in this category enhance the performance of third parties in the development of final agreements or substitute human neutrals altogether. Such systems are typically powered by sophisticated software that helps parties articulate their interests, needs, and future actions in order to generate resolution suggestions that are based on the information that parties shared. Some ODR systems combine these features with additional functionalities based on big-data analysis. While some of the ODR processes described below are not, in-and-of themselves, holistic ODR systems (most typically because they do not support all administrative case management features),<sup>138</sup> they are included in this review because they support the core function of formulating the decision and their most typical use would be in conjunction with other online communication platforms.

##### *1. Personalized and Big-Data-Powered Problem-Diagnosis*

Likely the most famous ODR system included in this disruptive category is eBay's Resolution Center,<sup>139</sup> which is considered by many

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<sup>137</sup> See Nancy S. Marder, *Cyberjuries: The Next New Thing?*, 14 INFO. & COMM. TECH. L. 165, 166 (2005); see also Neal Feigenson & Christina Spiesel, *The Juror and Courtroom of the Future, in THE FUTURE OF EVIDENCE: HOW SCIENCE & TECHNOLOGY WILL CHANGE THE PRACTICE OF LAW* 113 (Carol Henderson & Jules Epstein eds., 2011) ("Trials will increasingly depend on digitally mediated communication . . . not only witnesses but advocates and decision makers will be physically distant from one another but connected online.").

<sup>138</sup> See *supra* notes 46–48 and the text associated, distinguishing between ODR systems and tools.

<sup>139</sup> *Resolution Center*, EBAY, <http://resolutioncenter.ebay.com/> (last visited July 20, 2016). A similar and related service is offered by eBay's financial partner PayPal at *Resolution Center*, PAYPAL, [https://www.paypal.com/cgi-bin/webscr?cmd=\\_complaint-view](https://www.paypal.com/cgi-bin/webscr?cmd=_complaint-view) (last visited April 9, 2017).

“[t]he paradigmatic example of an ODR system.”<sup>140</sup> Faced with an annual caseload of over sixty million e-commerce, low-value disputes (averaging at about \$100 each),<sup>141</sup> eBay determined it would be economically challenging to employ human third-parties to resolve them all.<sup>142</sup> The innovative ODR system they designed now resolves over 90% of its caseload through an automated process, not requiring any human involvement.<sup>143</sup>

eBay’s Resolution Center follows a tiered process design which begins with problem-diagnosis and escalates according to subsequent phases in a gradual fashion:<sup>144</sup> technology-facilitated negotiation/mediation<sup>145</sup> between the parties and evaluation and arbitration by eBay and its partner payment-system PayPal, based on the available information. The procedurally innovative elements of eBay’s Resolution Center are its online problem diagnosis “wizard” and guided negotiation/mediation. What differentiates these modules from the systems described in the previous category is that eBay’s Resolution Center is designed as a learning system.<sup>146</sup> Accordingly, these processes can be dynamically personalized to the specific users in a given case, based on data that was not necessarily shared by the parties in the process. Two primary attributes enable eBay to offer such unprecedented

<sup>140</sup> Rabinovich-Einy & Katsh, *Lessons*, *supra* note 22, at 42.

<sup>141</sup> Colin Rule, former director of eBay’s dispute resolution program, indicated that the disputes “can be for as little as \$5, such as a magazine, or as much as \$50,000, such as a car, but the average is probably around \$100.” Colin Rule, *Making Peace on eBay: Resolving Disputes in the World’s Largest Marketplace*, ACRESOLUTION MAG. 8, 9 (Fall 2008).

<sup>142</sup> Rule noted that “[due to] the overwhelming volume of cases . . . even if I had built a staff of 1000 skilled online mediators, we would not be able to get through the torrent of cases. . . . It was self-evident that the process needed to be as automated as possible.” *Id.*

<sup>143</sup> See: Amy J. Schmitz & Colin Rule, *THE NEW HANDSHAKE: ONLINE DISPUTE RESOLUTION AND THE FUTURE OF CONSUMER PROTECTION* 53 (Forthcoming, 2017, copy on file with the author) (“eBay’s ODR was successful because. . . the automated resolution rate reached 90%. That meant that 90% of the 60 million disputes were resolved in software only. . .”).

<sup>144</sup> See also *id.* at 35 (“Each stage acted like a filter . . . minimiz[ing] the flow of cases that made it to the end.”).

<sup>145</sup> The point at which an ODR process based on structured information exchange provides sufficient facilitative capacities to cross the threshold of “instrumental negotiation” (negotiation facilitated by the online platform) into the realm of “principal mediation” (mediation conducted by an autonomous ODR System) is difficult to identify. In fact, such an ODR system and may warrant its own *sui generis* category. See Rabinovich-Einy & Katsh, *supra* note 22, at 55; Sela, *supra* note 44.

<sup>146</sup> For further discussion of the operation, application and limitation of machine learning algorithms in law, see Harry Surden, *Machine Learning and the Law*, 89 WASH. L. REV. 87, 88–91 (2014).

personalization and customization of both process and outcome. First, its large database of transactions and dispute resolution processes allowed eBay to gain “familiarity with the spectrum of disputes . . . [in order] to design dedicated systems tailored specifically to each dispute type.”<sup>147</sup> Essentially, through big-data analysis, eBay can recognize patterns in disputes that arise in its marketplace, enabling it to model the information that is necessary for resolving each dispute type and customize resolutions that parties are likely to accept.<sup>148</sup> Continued analyses facilitate the improvement of the problem diagnosis and direct negotiation mechanisms in iterative cycles.<sup>149</sup> Second, because all transaction related activities are performed on eBay’s own auction platform (with its financial partner PayPal), eBay’s Resolution Center has direct access to *facts* related to the dispute which are recorded on the transactional platform. Thus, it is able to make factual determinations independent of the information shared by the parties (*e.g.*, whether payment was made or when shipment was guaranteed) as well as identify where or how something went wrong.<sup>150</sup> Importantly, since eBay has its own financial system and considerable (business) leverage on repeat users,<sup>151</sup> Resolution Center outcomes are mostly successfully enforced.

From a system design perspective, the systematic analyses of disputes on eBay’s Resolution Center can inform the improvement of policies and conduct that govern the transactional stage, preventing similar disputes from arising altogether.<sup>152</sup> However, alongside its compelling benefits, a big-data approach to dispute resolution system design, especially when employed by commercially motivated designers such as eBay, presents worrisome opportunities for bias. eBay can use its “total visibility into each user’s usage patterns, history and account data[,]”<sup>153</sup> not only to “monitor the performance of . . . systems and improve them as marketplace conditions change[,]”<sup>154</sup> but also to treat users differentially, for example, by generating more or less favorable resolutions offers

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<sup>147</sup> Rule, *supra* note 141, at 10.

<sup>148</sup> *Id.* at 11.

<sup>149</sup> *Id.* at 10.

<sup>150</sup> *Id.*

<sup>151</sup> For example, “eBay decides what fees will be charged, how listings should be regulated, and when accounts should be limited or suspended. eBay’s decisions about which listings to promote . . . can result in huge swings in sales, and profits, for sellers.” *Id.* at 9.

<sup>152</sup> On the potential of technology to facilitate a “multi-dimensional learning paradigm” in dispute resolution, see Rabinovich-Einy, *supra* note 29, at 1; *see also* Rabinovich-Einy & Katsh, *supra* note 22, at 52 (arguing that text-based ODR processes enjoy “an important benefit in terms of quality control over the process, its fairness and effectiveness. . . improper conduct, poor performance and problematic process design can be quite easily uncovered.”).

<sup>153</sup> Rule, *supra* note 141, at 11.

<sup>154</sup> *Id.*

based on how valuable a specific user is as a revenue generator. In order to determine whether such bias exists in the system, it would be necessary to examine the decision rules embedded in the software or data on the relationship between users' transactional record and dispute resolution outcomes.

## 2. *Preference Identification, Decision Support, and Settlement Optimization*

ODR technologies can enhance the performance of disputants and neutrals by helping them to articulate preferences, calculate tradeoffs, and subsequently generate resolution offers that push the outcome to the economic efficiency frontier. By requiring users to assign quantifiable preferences to disputed issues and alternative resolutions, these systems can help disputants overcome the pitfalls of strategic behavior and decision making biases, as well as benefit from computational abilities far superior to those of an average person. However, in order to enjoy these benefits, users need to overcome the challenge of comparatively quantifying disputed issues, some of which may not be easily or intuitively quantifiable.<sup>155</sup>

For example, Smartsettle's<sup>156</sup> ODR system aims to maximize the utility product of dispute resolution processes by overcoming problems of information sharing and non-collaborative strategic behavior. Parties can work either directly or with a mediator to create a joint "framework" of all the issues that require resolution. Each party can view on a private screen (not visible to other parties) a graphic representation of their stated resolution preferences with respect to each issue. The parties then exchange proposals using Smartsettle's interface, indicating their level of satisfaction with each proposal. The parties' confidential preferences, exchanged resolution packages, and reported level of satisfaction with packages enable Smartsettle's algorithmic system to calculate alternative resolution proposals that reflect a high utility value for both parties, and are therefore likely to be mutually accepted. The parties rank their willingness to accept each offer in an iterative process, until a mutually acceptable "win-win" solution is found.<sup>157</sup> In a multi-issue dispute, where there can be numerous possible "resolution packages" and tradeoffs are hard to calculate, Smartsettle's innovative algorithmic approach reflects a process design that was previously impossible.

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<sup>155</sup> For these reasons, there are those who think that such a sophisticated ODR software would be "best employed by a qualified [human] neutral facilitator." Earnest M. Thiessen & Joseph P. McMahon Jr., *Beyond Win-Win in Cyberspace*, 15 OHIO ST. J. ON DISP. RESOL. 643, 645 (2000).

<sup>156</sup> See SMARTSETTLE, <http://www.smartsettle.com/> (last visited July 20, 2016).

<sup>157</sup> Smartsettle does not offer a detailed written process description on their website; however, the process is described in several promotional videos. See *A Collection of Smartsettle Videos*, SMARTSETTLE, <https://www.smartsettle.com/home/resources/videos/>; see also Thiessen & McMahon, *supra* note 155, at 645.

Another ODR system, Family Winner,<sup>158</sup> employs a similar process design, focusing on divorce and legal separation. The system uses game theory, heuristics, and a computational algorithm to turn users' assigned values for each of the items in dispute into resolution proposals. If no overall agreement can be easily reached, the system directs the parties through an item-by-item negotiation, starting with the items that were identified as the least controversial based on parties' stated preferences, until an overall mutual agreement is reached.

### 3. Automated Blind-Bidding Arbitration

Blind-bidding ODR systems make a compelling case for enhancing dispute resolution process-design with technology. By using a web-form and straightforward computational techniques, they are able to identify a zone of possible agreement (ZOPA) and generate a final outcome while keeping parties' offers confidential. Although there are some variations, the core process of all blind-bidding ODR systems is similar:

[T]he parties . . . submit their monetary offers and demands to an automatic system. Each party's offer or demand is not disclosed to the opposing side; rather, the computer software in various "rounds" compares each offer and demand. If one party's offer matches the opposing party's demand or is within a specified range, then the case is settled for the amount that is a match or for the average of the offer and demand where it falls within the specified range.<sup>159</sup>

Whether blind-bidding ODR systems should be classified as negotiation-support or arbitration is debatable,<sup>160</sup> but it is clear that they are fully automated software-based systems that do not use human interaction outside the parties. There are multiple examples of double blind-bidding ODR systems capable of solving single-issue monetary disputes by determining how much money should exchange hands to resolve the case. On Cybersettle,<sup>161</sup> parties interact by submitting to the

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<sup>158</sup> See John Zeleznikow & Emilia Bellucci, *Family\_Winner: Integrating Game Theory and Heuristics to Provide Negotiation Support*, Proceedings of the Sixteenth International Conference on Legal Knowledge Based Systems, IOS 21, 22–25 (2003), <http://jurix.nl/pdf/j03-03.pdf>.

<sup>159</sup> Anita Ramasastry & Benjamin G. Davis, *Addressing Disputes in Electronic Commerce: Final Recommendations and Report of the American Bar Association's Task Force on Electronic Commerce and Alternative Dispute Resolution*, ABA 17 (2002), <http://www.americanbar.org/content/dam/aba/migrated/dispute/documents/FinalReport102802.authcheckdam.pdf>.

<sup>160</sup> For example, Rule argues that blind bidding systems are in effect automated arbitration processes. See RULE, *supra* note 10, at 157. See also, KATSH & RIFKIN, *supra* note 1, at 61–63. In contrast, Smartsettle One markets its blind bidding process as a negotiation system. See *Smartsettle One+*, SMARTSETTLE, <http://www.smartsettle.com/home/products/smartsettle-one/> (last visited Feb. 24, 2017).

<sup>161</sup> CYBERSETTLE, <http://www.cybersettle.com> (last visited Feb. 24, 2017). In 2012 the company launched PayMd, and it is now focusing only on settlements in the



system three offers each. The software compares the parties' respective first, second, and third offers to determine whether there is a zone of possible agreement. If the parties' first offers fall within an agreed range, the system splits the difference according to its stated formula and the result serves as the final resolution. If no settlement was reached in the first round, the second and third offers are tested similarly. On Smartsettle One,<sup>162</sup> the blind-bidding process is structured slightly differently, using a "visual blind bidding" interface, in which "[a]ll proposals and suggestions are clearly visible for consideration. What is hidden is the acceptance [point] of the other party . . . . A deal is declared at the end of a session if both parties have accepted at least one of the same values."<sup>163</sup> The Fair Buy-Sell system operated by Fair Outcomes<sup>164</sup> uses a blind-bidding ODR process to resolve disputes over property ownership. The parties confidentially enter a monetary value for the property at which they would each be willing to either sell their share or buy the other party's share. The system grants the sale to the highest bidder but the sale price is set at the midpoint between the two values.<sup>165</sup> Blind-bidding systems are used also by institutional ODR providers. For example, Freelancer,<sup>166</sup> an online marketplace for clients and service providers, offers an ODR service which combines blind-bidding with human-run arbitration for complex cases.

While blind-bidding is sometimes perceived as a negligible ODR service applicable only to simple low-value monetary disputes, Cybersettle reported that through March 2013, they "have facilitated the settlement of \$2 billion in claim-based transactions for insurance companies, self-insured Fortune 500 corporations, and municipalities."<sup>167</sup> Among these cases was a \$12.5 million settlement of a products liability dispute,<sup>168</sup> and five thousand settlements or judgments of sidewalk, school, roadway, city

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medical bills industry. Robert Glatter, *PayMD: An Online Solution to Settling Your Medical Bills*, FORBES (Dec. 6, 2013), <https://www.forbes.com/sites/robertglatter/2013/12/06/paymd-an-online-solution-to-your-settling-your-medical-bills/#2564105f419a>.

<sup>162</sup> See *Smartsettle One+*, *supra* note 160.

<sup>163</sup> *Id.*

<sup>164</sup> *Fair Buy-Sell*, FAIR OUTCOMES, <http://www.fairoutcomes.com/fb.html> (last visited Mar. 19, 2017).

<sup>165</sup> *Id.*

<sup>166</sup> *About*, FREELANCER, <https://www.freelancer.com/about> (last visited Mar. 20, 2017); see also *Milestone Dispute Resolution Policy*, FREELANCER, [https://www.freelancer.com/page.php?p=info/dispute\\_policy](https://www.freelancer.com/page.php?p=info/dispute_policy) (last visited Mar. 19, 2017).

<sup>167</sup> *Case Closed—\$12.5 Million Largest 'Cyber-Settlement' Ever*, CYBERSETTLE (July 23, 2003), <http://www.cybersettle.com/news/32-news-phycare>. Since 2012, however, Cybersettle has focused on settling disputes over payment of medical bills. See *About Us*, CYBERSETTLE, <http://www.cybersettle.com/about-us> (last visited Aug. 17, 2013).

<sup>168</sup> The press release is available at Cybersettle, Inc. See *Case Closed—\$12.5 Million Largest 'Cyber-Settlement' Ever*, P.R. NEWSWIRE (July 20, 2003), <http://www.prnewswire.com/news-releases/case-closed—125-million-largest-cyber-settlement-ever-71367732.html>.

property, traffic device, motor vehicle, recreation, and personal injury cases reached by the New York City Office of the Comptroller over a period of five years.<sup>169</sup> The Adjusted Winner blind-bidding ODR systems by Fair Outcomes is offered also for resolving multi-issue disputes, including “conflicts ranging from divorce to international border disputes.”<sup>170</sup>

### III. ODR TRENDS, CHALLENGES AND FUTURE DIRECTIONS

Looking at the current landscape of ODR, we observe that the evolution of the field continues to be shaped by many principles of its antecedents. ODR technologies are being used primarily to simplify, increase the efficiency and improve the accessibility of traditional process designs, often attempting to tailor the forum to the dispute and to the preferences and capabilities of disputants. Nonetheless, only a small subset of current ODR systems involve changes to the *nature* of dispute resolution procedures. Thus, while ODR technologies certainly have transformed the way dispute resolution services are *delivered*, it is debatable whether, to date, they have had a disruptive effect on *process design*.<sup>171</sup> However, ODR systems and process design continue to evolve with the emergence of new technologies and new ways of using technology. Indeed, a careful look at the current landscape of ODR reveals applications that, over time, may give rise to novel and disruptive dispute resolution process designs. The following Sections review central trends in the current landscape of ODR and future directions for the field.

#### A. *Current Trends in the Landscape of ODR*

This Section reviews central trends in the current landscape of ODR and discusses their implications on dispute resolution, access to justice, and redress. Many of the trends are interrelated but for convenience, the

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<sup>169</sup> Referring to the years 2004-2009. John C. Liu, *City of New York Office of the Comptroller Claims Report Fiscal Years 2009 & 2010*, 91 (2011). In 2010 the city stopped using *Cybersettle*. *Id.* at 14. The reported average settlement amount for these 5000 claims was approximately \$9000, totaling over \$45 million. See *Cybersettle Saves New York City \$94 Million in Settlement Costs*, CYBERSETTLE, <http://www.cybersettle.com/news/24-news-title-3> The e-report referenced there, which is available at: [http://www.cybersettle.com/images/downloads/ NYC\\_BIS\\_2010.pdf](http://www.cybersettle.com/images/downloads/ NYC_BIS_2010.pdf).

<sup>170</sup> *Fair Division*, FAIR OUTCOMES, <http://www.fairoutcomes.com/fd.html> (last visited Oct. 23, 2013). According to their website, “In cases in which two parties must divide up multiple items of property or resolve multiple issues that are in dispute . . . It embodies a bidding process that guarantees each party at least 1/2 of what that party considers to be the total value of all of the items or issues in question and usually allows each party to receive between 2/3 and 3/4 of that value-facilitating a win-win outcome.” *Id.*

<sup>171</sup> Cf. SUSSKIND, *THE END OF LAWYERS*, *supra* note 40.

discussion is organized into themes.

*1. Process Design: Asynchronous, Text-Based, ADR*

An overwhelming majority of ODR systems employ ADR methods, rather than judicial ones. Technologically, text-based asynchronous process designs are by far the most common. These system design choices echo the influence of the antecedents of ODR, and are also likely the result of practical considerations. The relative procedural flexibility of ADR methods (compared to adjudication) makes it easier to launch online mediation, arbitration or other alternative dispute resolution systems and tailor them to the specific dispute market they target. Private ODR providers are typically faced with far fewer regulatory, institutional, budgetary, and cultural barriers than courts and governmental agencies, making it easier for them to launch online processes. Similarly, relying on asynchronous text-based processes improves the accessibility of ODR systems because it removes the need to convene all parties at a given time and minimizes infrastructural barriers. Even an intermittent low-bandwidth internet connection suffices for asynchronous text-based communication; while reliable video-conferencing, for example, would require a steady, continuous broad-band connection. The particularly growing reliance on web-forms and questionnaires significantly simplifies and streamlines the process, shortening time-to-resolution, reducing the cost of redress, and opening the way for additional benefits, such as efficient case management, self-improving learning ODR systems, and self-representation. These process-design attributes—which are successful at handling the typical large-volume, low-value online disputes caseload—also contribute to realizing the vision of effective access to justice and redress with respect to much broader classes of disputes (see the discussion in sub-Section 4 below).

*2. Design by Efficiency and Necessity Considerations*

ODR was heralded as a solution for certain classes of disputes that were not otherwise appropriately addressed, and as a means for introducing efficiency and new qualities into the practice of dispute resolution. A critical look at the current landscape of ODR reveals that it has been shaped primarily by efficiency, cost, and necessity considerations, whereas aspirations for qualitative enhancements to the nature of dispute resolution processes and other values, such as accountability, fairness, and equality, have had a lesser impact and are yet to be fully realized.<sup>172</sup>

This reality is arguably the result of the business cases that motivated the development of most ODR process designs. Institutional ODR service providers typically face large volumes of disputes and a heterogeneous

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<sup>172</sup> See also Rabinovich-Einy, *supra* note 29, at 5–6.

body of disputants of varying levels of procedural competence, technological self-efficacy, and sophistication. Accordingly, their ODR system designs tend to be guided by efficiency considerations, and their drive for procedural innovation stems from the challenge of catering to a variety of users. Reliance on self-guided intake processes, web-forms, and blind-bidding, such as in the cases of eBay's Resolution Center, Money Claim Online, Property Tax Assessment Boards, etc., is a manifestation of this trend. In contrast, independent service providers and technology providers that pioneer sophisticated process designs based on cutting edge technologies (*e.g.*, Smartsettle) appeal to a smaller subset of competent users who seek and successfully utilize qualitative procedural enhancements, such as tradeoff optimization. Since institutional ODR platforms manage significantly larger case volumes compared to independent "boutique" service providers, the effect of the former on the landscape of ODR appears greater.

### 3. *Process Restructuring: Case-Management and Self-Representation*

Process restructuring, streamlining, and automation, which characterize many current ODR systems, resonate the early motivation for using ODR: a means for improving efficiency and access to justice. Features that serve these goals include breaking the dispute resolution process into discrete steps, collecting information in templates (web-forms), and integrating enforceable timelines and reminders into the process. From the perspective of ODR service providers, they facilitate effective case management, for example, by allowing them to perform tasks on multiple cases that share common characteristics (such as time filed, issue in dispute, or party identity), identify administrative needs, and allocate resources. From the perspective of disputants, they empower and enable disputants to go through the process independently.

Indeed, the design of most current ODR systems seems to be guided by the assumption that the process will typically be completed by an unassisted, self-represented disputant using a personal internet-connected device.<sup>173</sup> In order to enable disputants to guide themselves through the process, they had to restructure and simplify process designs and to provide ample procedural explanations and support. Restructured web-forms, intake flows, help texts, support buttons, process explanations, and the ability to go through the process at one's own pace, time and again, all represent system design choices that empower disputants to seek and achieve redress on their own. These changes lower access barriers by helping to mitigate what otherwise may be perceived as insurmountable procedural complexity. In offline settings, outside of costly in-person consultation and representation, hardly any effective

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<sup>173</sup> A notable exception is the CPR Resolution Center, which was clearly designed to be used by domain-specific attorneys. See *Welcome to the Resolution Center*, CPR RESOLUTION CENTER, <https://conf-cpr.modria.com/> (last visited Feb. 20, 2017).

help-resources are readily available to hand-hold disputants through every step of the process, in real-time. This trend in ODR is consistent with the success of legal “do-it-yourself” websites such as LegalZoom<sup>174</sup> and Rocket Lawyer,<sup>175</sup> giving reason to believe that process simplification and restructuring, as well as online procedural support, can revolutionize the effectiveness of self-representation where it is common, mandated or desirable.<sup>176</sup>

#### 4. *From Private to Public, Domestic, and Cross-Border Consumer ODR*

Much like ADR mechanisms evolved and gained legitimacy in private settings prior to being institutionalized by public agencies and courts, successful ODR system designs that emerged in the online commerce and service industries are slowly being integrated into public settings. One such important development is the trend towards online courts, tribunals and judicial processes. The trend set in motion by MCOL and CRT continues to grow as public justice systems recognize the benefits of ODR processes as means for improving their operation and providing access to justice for self-represented litigants. This realization motivated the structural review recommendation of the Judiciary of England and Wales to institute an online court for claims up to £25,000 as a means for improving access to justice.<sup>177</sup> Similarly, a recent report on the prospects of ODR in courts in the United States concluded that “courts that have piloted ODR are providing encouraging preliminary confirmation of the anticipated benefits” including the opportunity “to expand services while simultaneously improving customer experience and satisfaction.”<sup>178</sup>

Another manifestation of the growth in public ODR initiatives has to do with the idea of consumer ODR, which evolved on private platforms such as eBay. Now, this idea is being adopted by domestic and

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<sup>174</sup> LEGALZOOM, <http://www.legalzoom.com/> (last visited July 27, 2016).

<sup>175</sup> ROCKETLAWYER, <http://www.rocketlawyer.com/> (last visited July 27, 2016).

<sup>176</sup> For example, the CRT website states that “your direct and active participation will help you reach a resolution with the other participant(s). We’re providing a new process with information and support to help you . . . plain language legal information and . . . a range of dispute resolution tools including negotiation, facilitation, and adjudication. You will be able to use the CRT when and where it is convenient for you . . .” *CRT Overview*, CIVIL RESOLUTION TRIBUNAL, <https://www.civilresolutionbc.ca/disputes/> (last visited July 20, 2016). See also Briggs, *supra* note 41.

<sup>177</sup> See Briggs, *supra* note 41, at 122; Owen Bowcott, Online Court Proposed to Resolve Claims of Up to £25,000, *THE GUARDIAN* (Feb. 15, 2015), <https://www.theguardian.com/law/2015/feb/16/online-court-proposed-to-resolve-claims-of-up-to-25000>.

<sup>178</sup> JOINT TECHNOLOGY COMMITTEE–COSCA, NCSC & NACM, ONLINE DISPUTE RESOLUTION AND THE COURTS (Version 1, Adopted 30 November 2016), 2, 15 <http://www.ncsc.org/~media/Files/PDF/About%20Us/Committees/JTC/ODR%20QR%20final%20V1%20-%20Nov.ashx>.

international public institutions as a means for handling consumer disputes. Examples include the BC Consumer Protection ODR process, which can be used for disputes that originate both online and offline;<sup>179</sup> and the consumer ODR hub platform that the European Union launched<sup>180</sup> for resolving disputes between residents and traders arising out of domestic and cross-border e-commerce.<sup>181</sup> While the EU system currently applies only to e-commerce disputes, in conjunction with the framework and principles set forth by the EU ADR Directive,<sup>182</sup> the system can reasonably evolve to handle all consumer disputes, regardless of whether they arose online or offline.<sup>183</sup>

Current private ODR mechanisms, which are managed by self-governing online communities (marketplaces), can be seen as a form of decentralized, contract-theory based justice system, consisting of small independent units which follow the evolving norms—through private ordering—of the commercial online environment.<sup>184</sup> The emergence of public ODR systems, along with other international and regional cross-border consumer ODR initiatives,<sup>185</sup> may open the way for a gradual maturation of the online justice system: transitioning from private ODR systems managed by online marketplaces to public ODR systems that aggregate and handle consumer disputes, regardless of the particular arena or jurisdiction in which they arose.<sup>186</sup>

<sup>179</sup> *Resolve your Dispute*, *supra* note 90.

<sup>180</sup> See EUROPEAN COMM'N ONLINE DISPUTE RESOLUTION, *supra* note 37.

<sup>181</sup> The ODR Regulation took effect in January 2016, requiring the EU Commission to establish a free, interactive website through which parties can initiate ADR processes to resolve consumer and transactional disputes. All member states were required to enable their national ADR services to receive the complaint electronically. Parties may then choose, but are not required, whether to attempt resolving the case in ODR or a face-to-face process. For further discussion, see Pablo Cortés, *The Brave New World of Consumer Redress in the European Union and the United Kingdom*, DISP. RESOL. MAG., Spring 2016, at 41, [http://www.americanbar.org/content/dam/aba/publications/dispute\\_resolution\\_magazine/spring2016/9\\_brave\\_new\\_world.authcheckdam.pdf](http://www.americanbar.org/content/dam/aba/publications/dispute_resolution_magazine/spring2016/9_brave_new_world.authcheckdam.pdf).

<sup>182</sup> See Directive 2008/52/EC, *supra* note 25.

<sup>183</sup> For further discussion of the ADR Directive, ODR Regulation and their effect on consumer protection and dispute resolution in the European Union, see Pablo Cortés, *A New Regulatory Framework for Extra-Judicial Consumer Redress: Where We Are and How to Move Forward*, 35 LEGAL STUD. 114, 115–116 (2015).

<sup>184</sup> See also Zekoll, *supra* note 53, at 1–2.

<sup>185</sup> See Rule et al., *supra* note 9, at 426 (describing a proposal for a regional ODR system for the Organization of American States (OAS)), and the reports of the UNCITRAL ODR Working Group, *Working Group III*, *supra* note 37.

<sup>186</sup> There are, of course, obstacles to the emergence of a public transnational online consumer justice system, most notably, the diverging consumer protection laws. See Zekoll, *supra* note 53, at 7. However, increasing economic and political demand for global or regional consumer ODR systems and the example set forth by the EU consumer dispute ODR platform and the online Unified Domain Name Dispute Resolution processes all suggest that such a development may come about

### B. Future Directions for ODR

Technology is gradually and continuously integrated in the practice of law, used in diverse ways to improve access to justice and deliver legal services.<sup>187</sup> Law and technology enthusiasts anticipate that the impact of information technology on the practice of law will grow stronger, bringing about “a revolution in law, after which many of the current features of contemporary legal systems . . . will be radically different.”<sup>188</sup> Predicting the exact future of ODR and its effects on dispute resolution and access to justice is a fairly speculative undertaking. Revolutionary, beneficial, and as full-of-potential as ODR systems may be, there are still many barriers and impediments to their widespread adoption and their bringing about a lasting, widespread, transformative change to the field. There are challenges of different kinds, including: financial (*e.g.*, shortage of adequate and appropriately targeted funding to support the development and operation of unbiased ODR systems that enjoy institutional legitimacy); regulatory (*e.g.*, lack of policy framework, standardization and procedural quality assurance); institutional (*e.g.*, resistance to change, difficulty choosing appropriate technologies and effectively implementing them); ethical (*e.g.*, doubts regarding the ability of software agents to render “real” justice and difficulties determining professional responsibility and accountability); and personal (*e.g.*, access to technology and digital self-efficacy hurdles).<sup>189</sup> Despite these challenges, which should be considered as caveats for any discussion about ODR, there are indications on the ground for several promising future developments, which are outlined in this Section.

#### 1. Hybrid Process Designs and Unbundling of Services

Restructuring of dispute resolution processes to achieve greater simplicity and efficiency, which is a typical characteristic of many current ODR systems, paves the way for offering hybrid dispute resolution processes: conducting some parts of the processes online and other parts offline. Hybrid processes can combine technology-enabled efficiency, accessibility, procedural support, and empowerment with traditional procedural safeguards and in-person treatment. Research has found that at least in some contexts, disputants report greater procedural justice experiences in hybrid online-offline dispute resolution processes than in

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after all. See *supra* note 12; *supra* note 39. *Uniform Domain-Name Dispute Resolution Policy*, ICANN, <http://www.icann.org/en/help/dndr/udrp> (last visited Feb. 24, 2017).

<sup>187</sup> See James E. Carbal et al., *Using Technology to Enhance Access to Justice*, 26 HARV. J.L. & TECH. 241, 278 (2012). See also *Online Legal Services*, ABA, [http://www.americanbar.org/groups/delivery\\_legal\\_services/reinventing\\_the\\_practice\\_of\\_law/topics/online\\_legal\\_services.html](http://www.americanbar.org/groups/delivery_legal_services/reinventing_the_practice_of_law/topics/online_legal_services.html) (last visited July 27, 2016).

<sup>188</sup> Susskind, *supra* note 40 at 41.

<sup>189</sup> See generally Carbal, *supra* note 187, at 305–24.

offline-only processes.<sup>190</sup> Hybrid system designs are particularly appealing in institutional settings, where cumulative experience and data about the way certain classes of disputes are resolved can be translated into effective online processes and subsequently inform allocations of offline resources—such as space and manpower—which can have a tremendous impact on accessibility and quality of service. A few private, independent service providers are experimenting with hybrid ODR-ADR process designs. For example, Wevorce<sup>191</sup> offers a hybrid divorce mediation process, beginning with an online automated intake process to collect information from the parties, identify issues in dispute, and develop strategies to address them, which is then followed by face-to-face mediation to address any unresolved issues. The tiered process of CRT<sup>192</sup>—which begins with online problem diagnosis and self-help, then proceeds as needed to direct negotiation and facilitation online, and may lead to offline ADR or adjudication—also points to this direction.

Process restructuring facilitates another related development, the unbundling of dispute resolution services: breaking down the different tasks associated with the process and seeking (or offering) a service only for a clearly defined portion of it. Consistent with the developments in online legal services, at least forty one states have either adopted ABA Model Rule 1.2(c)<sup>193</sup> (or a similar rule) permitting unbundled legal services.<sup>194</sup> There is every reason to believe that this trend will extend to

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<sup>190</sup> See Bollen & Euwema, *supra* note 30, at 1–2 (an empirical study comparing F2F mediation with a hybrid process combining online intake with F2F mediation in hierarchical labor settings, showing that the hybrid process had an equalizing effect on fairness and satisfaction perceptions of both parties).

<sup>191</sup> WEVORCE, <http://www.wevorce.com> (last visited July 27, 2016); see Amina Elahi, *Wevorce brings online tools, collaborative divorce model to Chicago*, CHICAGO TRIBUNE (May 18, 2015), <http://www.chicagotribune.com/bluesky/originals/ct-wevorce-divorce-chicago-launch-bsi-story.html>.

<sup>192</sup> See the text associated with notes 112–119, *supra*.

<sup>193</sup> MODEL RULES OF PROF'L CONDUCT R.1.2(c) (ABA 2016), titled "Scope of Representation" states that "[a] lawyer may limit the scope of the representation if the limitation is reasonable under the circumstances and the client gives informed consent." Some States have modified Rule 1.2(c) to limit unbundling to only noncriminal law matters. See also MODEL RULES OF PROF'L CONDUCT R.6.5(A) (ABA 2016), which enables non-profit and court-annexed programs to provide limited-scope short-term legal services.

<sup>194</sup> See *Unbundling Fact Sheet*, ABA, [http://www.americanbar.org/content/dam/aba/administrative/delivery\\_legal\\_services/ls\\_del\\_unbundling\\_fact\\_sheet.authcheckdam.pdf](http://www.americanbar.org/content/dam/aba/administrative/delivery_legal_services/ls_del_unbundling_fact_sheet.authcheckdam.pdf) (last visited July 27, 2016); see also STEPHANIE L. KIMBRO, LIMITED SCOPE LEGAL SERVICES: UNBUNDLING AND THE SELF-HELP CLIENT 4 (2012) ("Unbundling legal services, also termed limited-scope services, a la carte legal services, discrete task representation, or disaggregated legal services, is a form of delivering legal services in which the lawyer breaks down the tasks associated with a legal matter and provides representation to the client only pertaining to a clearly defined portion of the client's legal needs. The client accepts the responsibility for doing the footwork for the remainder of the legal matter until reaching the desired resolution.").



dispute resolution, granting disputants greater control (and responsibility) over the process and its costs.

## 2. *Crowd-Sourced ODR: Large-N “Cyber Juries”*

Starting in the late 1990s, several web services began offering “cyber-jury” forums, where people may sign up to be “jurors” and comment or vote on cases posted by others.<sup>195</sup> These forums are different from the online-jury model described in Section II(C) in terms of both the number of “juries” and the nature of the process. In fact, they provide a service that is more akin to online opinion polls or focus groups; and in their current form, they cannot be considered ODR Systems.<sup>196</sup> Nonetheless, they lay the foundation for the evolution of a new type of ODR process: dispute resolution by “large-N,” crowd-sourced aggregate decision-making.

One of the first large-N cyber-jury models was introduced by i-courthouse.<sup>197</sup> The service invites users (most typically, lawyers) to post cases and pay a fee in order to present a case to cyber-jurors and receive a written report that includes “juror verdicts, comments and questions, and a jury profile.”<sup>198</sup> Clients can use the reports to estimate the merits of their “real” case and plan ahead, as a form of focus group or a non-expert variation of Early Neutral Evaluation (ENE).<sup>199</sup> There are little to no procedural rules on i-courthouse and similar platforms, such as onlineverdict.<sup>200</sup> Anyone can become a juror (there is no mechanism to prevent juror bias or to control for participation by individuals with a predisposition toward a particular side), the number of jurors is not limited, and jurors are not bound to come to a decision as a group.<sup>201</sup>

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<sup>195</sup> See, e.g., ICOURTHOUSE, <http://www.i-courthouse.com> (last visited Jan. 29, 2013).

<sup>196</sup> Currently, all these services are missing at least one of the key defining element of ODR systems: some do not resolve disputes in practice; some do not deal with “real” disputes; and others do not necessarily support formulating the resolution online. See *supra* the definition of ODR systems in the text associated with notes 99–100.

<sup>197</sup> ICOURTHOUSE, *supra* note 195.

<sup>198</sup> *JurySmart*, ICOURTHOUSE, [http://www.i-courthouse.com/main.taf?area1\\_id=jurysmart&redir=0](http://www.i-courthouse.com/main.taf?area1_id=jurysmart&redir=0) (last visited April 12, 2017).

<sup>199</sup> “Early Neutral Evaluation (ENE) uses volunteer or paid lawyers to help parties assess the value of a case before trial and, in some cases, assist in fact development and discovery issues. . . . the practice involves shortened case presentations . . . to either a single lawyer . . . or a panel . . . who then evaluate the case. . . . This non-binding evaluation is often used to facilitate settlement negotiations by the parties and their lawyers.” CARRIE J. MENKEL-MEADOW ET AL., *DISPUTE RESOLUTION: BEYOND THE ADVERSARIAL MODEL* 568 (2nd ed. 2011).

<sup>200</sup> See ONLINEVERDICT, <https://www.onlineverdict.com/> (last visited July 20, 2016); see also *How It Works*, ONLINEVERDICT, <https://www.onlineverdict.com/attorneys/attorney-how-it-works/> (last visited Mar. 22, 2017).

<sup>201</sup> I-courthouse rules of procedure stipulate the following with respect to juries: “(a) Each party may invite persons to serve as jurors on a case. There is no limit on

Other cyber jury services, such as Virtual Jury<sup>202</sup> and eJury,<sup>203</sup> utilize similar strategies, but offer the option of imposing a tighter procedural framework. For example, on eJury the number of jurors is typically limited to fifty persons and case submissions are venue-specific, so that each case will be presented to a panel of jurors who are residents in the specific county relevant for the case.<sup>204</sup> These features cater to the needs of a mock trial.<sup>205</sup> One may also find non-legally oriented public polling websites such as *Side Taker*,<sup>206</sup> where users can post real disputes for the public to vote on. In this case, the voted decision lacks any authority and there is no mechanism in place to enforce it.

Currently, the main function of these large-N cyber-jury services is to aggregate opinions; not to effectuate collective and enforceable decision making. However, over time, adequate procedural rules and norms can develop, along with technological tools to support (or mandate) them, to govern these processes and guarantee their appropriateness. Such developments could enable using these services for the resolution of “real” disputes. Van den Henrik and Dimov suggest three criteria that will mark the maturation of such services into full-fledged crowd-sourced ODR: the mechanism is used for resolving disputes; the crowd needs to satisfy certain conditions to participate; and there is deliberation between members of the crowd.<sup>207</sup> Arguably, a fourth criterion should also be considered: a requirement to meet base-level due process or procedural justice standards, such as allowing disputants equal opportunity to effectively present their case.<sup>208</sup> Due process safeguards will help the

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the number of invitations that can be issued; (b) Persons invited to serve as juror on a case may forward the invitation to others.” *iCourthouse Rules of Procedure*, ICOURTHOUSE, [http://www.i-courthouse.com/main.taf?area1\\_id=about&area2\\_id=rulesofproc&redir=0](http://www.i-courthouse.com/main.taf?area1_id=about&area2_id=rulesofproc&redir=0) (last visited April, 12, 2016).

<sup>202</sup> *Welcome: About Virtual Jury*, VIRTUALJURY, <http://www.virtualjury.com/> (last visited July 27, 2016).

<sup>203</sup> *The Online Trial Experience*, EJURY, <http://www.ejury.com> (last visited July 27, 2016).

<sup>204</sup> *See Learn About eJury*, EJURY, [http://www.ejury.com/attys\\_learn\\_about.html](http://www.ejury.com/attys_learn_about.html) (last visited July 27, 2016).

<sup>205</sup> *See* Nancy S. Marder, *Cyberjuries: A New Role as Online Mock Juries*, 38 U. TOL. L. REV. 239, 249 (2006).

<sup>206</sup> *Argument? Let the World Decide Who's Right*, SIDETAKER, <http://www.sidetaker.com/> (last visited July 27, 2016).

<sup>207</sup> Jaap van den Herik & Daniel Dimov, *Towards Crowdsourced Online Dispute Resolution*, in LAW ACROSS NATIONS: GOVERNANCE, POLICY & STATUTES 244, 245 (Sylvia Kierkegaard & Patrick Kierkegaard, eds., 2011). Van den Herik & Dimov note that currently, on this type of website, “the procedures are often full with trivial and silly claims, and allow a single person to register multiple times . . . Also, the jurors are often introduced to the case by viewing the responses of the other jurors which lead to informational and reputational cybercascades . . . where people cease relying on their personal opinions . . . [and] decide on the basis of the signals conveyed by others.” *Id.* at 246.

<sup>208</sup> The term “procedural justice” encapsulates the idea of fairness in the

crowd make accurate and fair decisions that parties will be willing to accept as legitimate.<sup>209</sup> One can envision how, under such stricter procedural framework, the large-N cyber-jury model can be applied to create panels of expert cyber-juries to resolve domain specific disputes, to expand and democratize the concept of a “jury of one’s peers” by facilitating decision making by a larger (perhaps more representative) sample of peers, or to present a viable solution for new transnational online communities that seek to evolve their norms in a case law fashion through direct participation of their constituents.<sup>210</sup>

### 3. *Leveraging Online Reputation and Connectivity to Level the Playing Field*

Consumer complaint websites and online marketplace feedback mechanisms mark another future pathway for ODR process design: leveraging the online economy of reputation to level the playing field, regulate behavior, and enforce dispute resolution outcomes. In recent years, online reputation has become an impactful tool, fueled by the increased availability and accessibility of information online, the prevalence of social networks, and the constantly improving ability to collect, recognize, analyze, and represent information.

Online reputation systems, most commonly feedback mechanisms, were first instituted by online marketplaces as a means of promoting trust in the marketplace by overcoming the lack of external information (reputational cues) about potential transactional counterparts.<sup>211</sup> They collect, distribute, and aggregate feedback about participants’ past behavior in order to help others who interact online decide whom to trust, encourage trustworthy behavior, and deter activity of unskilled or dishonest participants.<sup>212</sup> Over time, it became evident that online reputation systems influence participants’ transactional choices, and they became a central mechanism for regulating behavior.<sup>213</sup>

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processes by which decisions are made. See JOHN THIBAUT & LAURENS WALKER, *PROCEDURAL JUSTICE: A PSYCHOLOGICAL ANALYSIS* 81–82 (1975); Jason A. Colquitt, *On the Dimensionality of Organizational Justice: A Construct Validation of a Measure*, 86 J. APPLIED PSYCHOL 386, 388–89 (2001).

<sup>209</sup> See E. ALLAN LIND & TOM R. TYLER, *THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE* (1988); THIBAUT & WALKER, *supra* note 208; Jean M. Landis & Lynne Goodstein, *When Is Justice Fair? An Integrated Approach to the Outcome Versus Procedure Debate*, 11 AM. BAR FOUND. RES. J. 675 (1986).

<sup>210</sup> See Rule & Nagarajan, *supra* note 6.

<sup>211</sup> Paul Resnick et al., *Reputation Systems*, 43 COMM. ACM 45, 45–46 (2000).

<sup>212</sup> *Id.*

<sup>213</sup> See, e.g., Paul Resnick et al., *The Value of Reputation on eBay: A Controlled Experiment*, 9 EXP. ECON 79, 80 (2006) (“Because people know that their behavior today will affect their ability to transact in the future, not only with their current partner but with unknown others as well, opportunistic behavior is deterred. Moreover, less reliable players are discouraged from joining the marketplace. . .

Reputation systems can introduce new features into ODR system design. First, they can help level the playing field between traditionally less-powerful disputants (*e.g.*, consumers or employees) and more-powerful disputants (*e.g.*, businesses or employers), augmenting the bargaining power and ability of the former to affect the latter.<sup>214</sup> Second, they present an interesting solution to one of the greatest challenges of ODR—enforcement: they create a behavior-regulating incentive that encourages appropriate behavior and compliance with outcomes.<sup>215</sup> A prerequisite to the incorporation of a reputation system into an ODR system design is that it must be coupled with a mechanism for preventing, detecting and dealing with its abuse.<sup>216</sup>

Current online consumer complaint systems draw on the online economy of reputation. Typically, they empower complainants to seek redress by helping them reach the respondents and using social media as a public shaming whip to incentivize respondents to resolve the complaint.<sup>217</sup> For example, Gripevine states that it aims to “provide a neutral, fair and level playing field where consumers and companies can come together to work out their differences and arrive at successful resolutions.”<sup>218</sup> Their process builds on online reputation and social networks to incentivize the responding company to resolve the claim, noting that “[i]f you had a bad experience with a company and couldn’t get them to make it right, you can add a little leverage by publishing your story.”<sup>219</sup> As their website explains:

Gripevine is a place where your story is visible to the community and where people come to learn about what businesses to trust . . .

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thereby. . . mak[ing] chiseling and cheating rare and losing propositions.”). Studies show that buyers rely on reputation systems when making online auction decisions. *See, e.g.*, Yi-Fen Chen, *Auction Fever: Exploring Informational Social Influences on Bidder Choices*, 14 CYBERPSYCH. & SOC. NETWORK 411 (2011); Mikhail I. Melnik & James Alm, *Does a Seller’s eCommerce Reputation Matter? Evidence from eBay Auctions*, 50 J. INDUST. ECON. 337 (2002); Thomas A. Ottaway et al., *The Impact of Auction Item Image and Buyer/Seller Feedback Rating on Electronic Auctions* 43 J. COMPUTER INFO. SYS. 56 (2003); Stephen S. Standifird, *Reputation and e-Commerce: eBay Auctions and the Asymmetrical Impact of Positive and Negative Ratings*, 27 J. MGMT. 279 (2001).

<sup>214</sup> See Resnick et al., *supra* note 211.

<sup>215</sup> See Resnick et al., *supra* note 213.

<sup>216</sup> E-commerce websites that operate a feedback mechanism typically offer a process for reporting and handling feedback abuse. *See, e.g.*, Ali Express Policies on Reporting Abuse & Removing Feedback, ALI EXPRESS, [http://activities.aliexpress.com/adcms/help-aliexpress-com/feedback\\_policy\\_report\\_feedback\\_abuse.php](http://activities.aliexpress.com/adcms/help-aliexpress-com/feedback_policy_report_feedback_abuse.php) (last visited July 28, 2016); EBAY, *Can I get Feedback Changed or Removed?*, <http://pages.ebay.com/help/feedback/questions/remove.html> (last visited July 28, 2016).

<sup>217</sup> See generally Tristan Morales, *Social Media Campaigns as an Emerging Alternative to Litigation*, 38 RUTGERS COMPUTER & TECH. L.J. 35 (2012).

<sup>218</sup> *About Us*, GRIPEVINE, <https://gripevine.com/about> (last visited July 27, 2016).

<sup>219</sup> *Id.*

place your customer experiences or specific problems squarely and prominently on the web . . . if sharing to social media is something you want to do, we have all the connections required to easily make that happen . . . We'll get it in front of the right people—those who have the desire to set things right. Once the business responds, you can communicate with them in public or through the private messaging system . . . When the business sends you a Resolution Response to your gripe, you will rate your satisfaction with their offer and you will have had your say in their Customer Resolution Index, for all to see on the company's business profile page.<sup>220</sup>

Services such as Gripevine are more akin to consumer advocacy agencies or customer care agents than to ODR systems, in the sense that they assist complainants in seeking redress from large goods and services providers rather than render decisions that settle the dispute. However, used in a coordinated fashion and in compliance with basic procedural rules and due process safeguards, this model has the potential to evolve into a new type of ODR. The realization of this process design depends on ensuring the accuracy and effectiveness of its shaming whip. Accordingly, it would require instituting a feedback quality control process<sup>221</sup> and creating a sufficiently large user-base to produce accurate reputational scores and a meaningful economic impact. Such a regime could be achieved by uniting services, sharing information between them, or institutionalizing central feedback information repositories.<sup>222</sup>

Other online complaint systems compliment the reputational system with additional components that encourage resolution or redress. For example, in PeopleClaim,<sup>223</sup> the claimant is allowed to post the complaint for public review and comment if the respondent has not resolved the issue to the complainant's satisfaction by the scheduled deadline. Under such circumstances, the complaint can also be delivered to regulators, watchdog organizations, and the media. Another potential system design combines the reputational system with a traditional dispute resolution service in a tiered fashion. For example, Scam Book<sup>224</sup> offers a hybrid, two-tiered system design, beginning with a reputation system, connecting consumer complainants with responding businesses to facilitate the resolution of their disputes, and potentially escalating the case into an arbitration process.<sup>225</sup> PeopleClaim also offers the option of resolving a

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<sup>220</sup> *Id.*

<sup>221</sup> See *supra* note 216 and associated text.

<sup>222</sup> One option is to operate a transactional reputational repository in a model akin to Credit Bureaus. See FEDERAL RESERVE, Credit Reports and Credit Scores, <https://www.federalreserve.gov/creditreports/> (last updated Feb. 15, 2011).

<sup>223</sup> PEOPLECLAIM, <http://www.peopleclaim.com> (last visited July 27, 2016).

<sup>224</sup> SCAMBOOK, <http://www.scambook.com> (last visited July 27, 2016).

<sup>225</sup> *Frequently Asked Question*, SCAMBOOK, <http://www.scambook.com/faq> (last visited July 27, 2016). "Scambook provides a platform for users to voice their concerns

posted claim through online mediation.<sup>226</sup>

To a certain extent, the aggregate reputational score and the economic sanction or benefit it carries can be seen as a new form of collective action. A power-in-numbers of similar complaints that are aggregated to create a reputational score that can have behavioral effects: incentivizing traditionally stronger parties to behave normatively, comply with their commitments, and remedy or compensate for misconduct.<sup>227</sup>

#### 4. ODR Learning Systems: Quality Control, Dispute Prevention and Dispute System Design

Process restructuring, digital records and case management features present ODR systems with unprecedented abilities to monitor their operation and continuously improve. A good example for this unique capacity is eBay's Resolution Center, whose design as a learning system is described in Section 0(0). The reliance of ODR systems on information technology not only makes design choices more visible, it also "allows for more ex-post study of the impact of design choices and [for] quality control of decision-making . . . through data documentation and analysis. . . improper conduct, poor performance and problematic process design can be quite easily uncovered."<sup>228</sup>

ODR systems readily produce large detailed digital data-sets about the nature of the disputes they handle and the processes used to resolve them. Generating equivalent data in offline processes would necessitate

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and to tell others about possible scams, frauds, and companies engaged in bad business practices . . . Scambook will attempt to contact the person or business in dispute in hopes to begin the resolution process . . . allow[ing] businesses to respond, refute, or take steps necessary to resolve alleged complaints. Scambook also provides an opportunity to have complaints reviewed pursuant to an Expedited Arbitration Program which is designed to have an outside arbitrator review facts provided by both sides. If the arbitrator determines that a user's complaint is not factually accurate, an arbitrator may determine to redact a complaint or, in certain circumstances, may determine the entire post should be removed." *About Us*, SCAMBOOK, <http://www.scambook.com/about> (last visited July 27, 2016).

<sup>226</sup> *Become an Online Mediator* PEOPLECLAIM, <http://www.peopleclaim.com/mediation-home.aspx> (last visited July 28, 2016).

<sup>227</sup> *PeopleClaim* enables claimants to connect with other claimants with a similar dispute for the purpose of sharing information and strengthening their claim, but the system does not offer coordinated collective action ("claimants can find others with similar complaints, or who may have dealt with the same organization . . . When you file your claim you can choose to receive input from other users . . . Such input can be valuable in negotiation. If, for example, you find other people have had problems with the same product defect, you know yours is not an isolated case but an important issue the manufacturer must deal with." *Frequently Asked Questions: How Can I Get Help from Other PeopleClaim Users?* PEOPLECLAIM, <http://www.peopleclaim.com/faq.aspx?cID=1> (last visited July 28, 2016).

<sup>228</sup> Rabinovich-Einy & Katsh, *supra* note 22, at 50, 52. See also Orna Rabinovich-Einy, Technology's Impact: *The Quest for a New Paradigm for Accountability in Mediation*, 11 HARV. NEGOT. L. REV. 253, 274-76 (2006).

complicated and costly data collection, coding and processing. ODR systems that rely on web-forms and questionnaires are able to glean data in a standardized format, requiring very little additional processing in order to automatically and rapidly generate analyses and insights about their operation. The comprehensiveness, accuracy and analyzability of these data enable both close monitoring and improvement, especially in institutional settings. For example, identifying usage patterns can help to expose bottlenecks, delays, inefficiencies or inaccuracies; inform betterment strategies and optimization of resource-allocation; and facilitate the automation, simplification or restructuring of typical or redundant aspects of the process, in iterative cycles. When an ODR system is operated by institutional intermediaries or disputants, identifying dispute patterns and their common causes paves the way for improving policies and conduct upfront, in order to *prevent* such disputes from arising in the first place.

#### IV. CONCLUSION: REGULATING JUSTICE AND REDRESS IN ODR

Almost twenty years have passed since the first ODR experimental pilot systems were launched. ODR enthusiasts have much to be proud of: the field has grown tremendously in scope, volume, and variety, and the multitude of ODR systems prove that ODR technologies can be used to provide redress and effective access to justice. Yet, the potential of ODR is far from exhausted; much is left to be desired and many questions and challenges are yet to be addressed.

A key issue that resonates through many of the discussions in this Article is whether ODR systems are (or should be) designed to provide justice or redress. This issue is intertwined with, and affected by, the many dimensions that define the spectrum of ODR, such as whether the system is operated in a private or public setting, the type of dispute resolution method that is being used, and the role that technology plays in the process. The dominance of the “efficiency paradigm” in law and technology initiatives and the fact that, to date, most ODR systems were designed by private service providers (most commonly commercial companies)—seem to have tilted the pendulum towards a concept of redress. Reaching an acceptable solution to a dispute, without necessarily ensuring or promoting justice in a broader sense, may suffice when the alternative is no resolution or a disproportionately costly resolution. This may be the case when ODR is applied to address the latent market of disputes.<sup>229</sup> However, as the process of integrating ODR technologies into

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<sup>229</sup> Richard Susskind was first to conceptualize the role ODR (and other technologies) can play in addressing the latent legal market. See SUSSKIND, *supra* note 39, at 273–74; THE END OF LAWYERS, *supra* note 40 at 99. Recent American Bar Association research indicates that “for every person who turns to the justice system

courts and public agencies gains momentum,<sup>230</sup> and ODR technologies become incorporated into ADR processes, ODR service providers are bound to seek greater legitimacy and place greater emphasis on delivering justice.

Accordingly, for ODR systems to be widely adopted, issues of legitimacy, reliability, due process, quality assurance, ethics and procedural governance need to be systematically addressed.<sup>231</sup> As of yet, no organized or enforceable governance framework for ODR has been set forth to substantiate and enforce ODR standards of conduct,<sup>232</sup> either by national or international regulation, or by industry self-regulation frameworks.<sup>233</sup> However, several “architectures of confidence” have been

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for their legal matter, more than six do not. Some of these people may have come to the conclusion it is just not worth going through the process . . .” American Bar Association, *Tapping into the Latent Legal Market: An Interview with Guest of the LRIS Committee Chair, ABA Senior Staff Attorney, Will Hornsby*, 18 DIALOGUE, Fall 2015, at 1.

<sup>230</sup> See HAGUE INST. INTERNATIONALISATION L., *ODR and the Courts: The Promise of 100% Access to Justice?*, Report IV, <http://www.onlineresolution.com/hiil.pdf>.

<sup>231</sup> See Sara R. Cole & Kristen M. Blankley, *Online Mediation: Where We Have Been, Where We Are Now, and Where We Should Be*, 38 U. TOL. L. REV. 193, 207–10 (2006) (discussing quality issues and the lack of quality standards in ODR); Pappas, *supra* note 16; Anjanette H. Raymond & Scott J. Shackelford, *Technology, Ethics, and Access to Justice: Should an Algorithm Be Deciding Your Case?* 35 MICH. J. INT’L L. 485 (2014); Louise E. Teitz, *Providing Legal Services for the Middle Class in Cyberspace: The Promise and Challenge of On-Line Dispute Resolution*, 70 FORDHAM L. REV. 985, 1010 (2001) (arguing that potential users of ODR are faced with lack of customary indicators about the legitimacy and reliability of ODR services). Among the normative and positive questions that will need to be addressed: whether ODR software can be fair; who bears liability for procedural misconduct (and what is the standard); and whether ODR services conduct unauthorized practice of law. See CURTIS E. A. KARNOW, *FUTURE CODES: ESSAYS IN ADVANCED COMPUTER TECHNOLOGY AND THE LAW* 137–38 (1997) (discussing issues of liability in the context of distributed artificial intelligence); David A. Larson, “*Brother, Can You Spare a Dime?*” *Technology Can Reduce Dispute Resolution Costs When Times Are Tough and Improve Outcomes*, 11 NEV. L.J. 523, 546–48 (2001) (discussing responsibility for negligence in ODR); Lodder, *supra* note 50 (discussing the practical and legal relationships between the disputants, the neutral, the technology and the technology provider in ODR); Steffen Wettig & Eberhard Zehendner, *The Electronic Agent: A Legal Personality Under German Law?*, in LEA 2003: THE LAW AND ELECTRONIC AGENTS 97 (Anja Oskamp & Emily M. Weitzenboeck, eds., 2003).

<sup>232</sup> There have been some attempts to formulate such frameworks. See, e.g., ABA, RECOMMENDED BEST PRACTICES FOR ONLINE DISPUTE RESOLUTION SERVICE PROVIDERS, <http://www.americanbar.org/content/dam/aba/migrated/dispute/documents/BestPracticesFinal102802.authcheckdam.pdf>; *Online Dispute Resolution Standards of Practice*, ICANN, <http://www.icann.org/en/help/ombudsman/odr-standards-of-practice-en.pdf>; see also Lucille M. Ponte, *Throwing Bad Money After Bad: Can Online Dispute Resolution (ODR) Really Deliver the Goods for the Unhappy Internet Shopper?*, 3 TUL. J. TECH & INTELL. PROP. 55, 87 (2001) (discussing the need for formal ODR standards).

<sup>233</sup> See Richard Birke & Louise E. Teitz, *U.S. Mediation in 2001: The Path that Brought America to Uniform Laws and Mediation in Cyberspace*, 50 AM. J. COMP. L. (SUPPLEMENT) 181, 212 (2002) (“E-mediation often slips between the cracks of regulators, both state and federal . . . what is missing . . . is a means of ensuring



proposed to legitimize and regulate ODR.<sup>234</sup> For example, *accreditation* would require a central body to assess or certify ODR providers, possibly using a seal.<sup>235</sup> In a *clearinghouse* model, a centralized body will act as a go-between that controls users' access to approved ODR providers.<sup>236</sup> In an *appeal-based* model, users will have the option to appeal decisions to a different legitimate instance on a case-by-case basis.<sup>237</sup> UNCITRAL is promoting a consumer ODR procedural code to which parties could *contractually opt-in*.<sup>238</sup> Industry *self-regulation* would depend on an inclusive and transparent process of formulating and enforcing standards.<sup>239</sup> Self-regulation seems particularly critical for ODR since the code of the ODR software, determined by its designers and programmers, is an important yet non-transparent component of the way the process operates. Finally, *traditional due process mechanisms* that were developed for offline processes—such as the due process protections in arbitration processes codified by the New York Convention—can be applied to govern some aspects of online processes.<sup>240</sup>

At the end of the day, much like traditional dispute resolution systems, not all ODR systems share the same goals and needs. As the review of the landscape of ODR shows, we may have to accept that different disputants and ODR systems seek to achieve different goals in different settings and for different disputants. Thus, each ODR system presents different trade-offs between accuracy and simplicity, fairness and cost, accessibility and flexibility, etc. Accordingly, they raise different system design challenges and warrant development of specific best practices, procedural rules and regulatory standards.

ODR technologists and entrepreneurs seem to have fulfilled their end of the deal. It is now up to policy-makers, regulators, institutional decision-makers and practitioners to create appropriate governance for ODR, so that the full potential of technology to improve access to justice

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quality and minimum standards, either by government regulation or co-regulation with industry.”); Larson, *supra* note 231, at 557–58 (discussing several options and questions relating to the regulation of ODR); Ponte, *supra* note 232, at 87 (proposing that oversight of ODR providers should be provided by either a self-regulating internet body or a single government entity within each country).

<sup>234</sup> See, e.g., Rafal Morek, *The Regulatory Framework for Online Dispute Resolution: A Critical View*, 38 U. TOL. L. REV. 163 (2006); Thomas Schultz, *Does Online Dispute Resolution Need Governmental Intervention? The Case for Architectures of Control and Trust*, 6 N.C.J.L. & TECH. 71, 79 (2005) (Schultz's model focuses on small-claims).

<sup>235</sup> Schultz, *supra* note 234, at 94–95.

<sup>236</sup> *Id.* at 97.

<sup>237</sup> *Id.* at 100.

<sup>238</sup> See *Working Group III*, *supra* note 37.

<sup>239</sup> See, e.g., the standards discussed in *supra* note 232 and associated text.

<sup>240</sup> Such direct application will not exhaust all needs and may be impractical or insufficient. See Raymond & Shackelford, *supra* note 231, at 521–22.

and redress can finally be realized.