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Designing Online Dispute Resolution

By Janet K. Martinez*

I. INTRODUCTION

This Essay stems from my role as a commenter for a panel discussion among leading thinkers on the topic of online dispute resolution (“ODR”).¹ Generally, ODR utilizes information and communication technology to prevent, manage, and resolve disputes. The conference served as a timely pause to assess *what* ODR is, *how* it fills diverse functions in the dispute resolution field, and *when* it can better meet the needs of parties and increase the accessibility and transparency of dispute resolution.² The panelists highlighted their study of consumer, commercial, and judicial ODR. As a follow-up, this Essay compares examples offered by the panelists through the lens of dispute system design: the study of the process and product of resolving disputes of a specific category.

ODR emerged from the unique needs of online e-commerce where it was geographically and legally infeasible to bring disputes to court for resolution.³ In this global online marketplace, eBay was the first to use ODR, building a private online option to address disputes arising from transactions conducted through the site.⁴ Since that time, ODR platforms have unfolded in both private and public domains. Now, nearly fifty courts in the United States—as well as courts in Canada, the Netherlands, India, Brazil, the United Kingdom, and China—have established ODR process options.

ODR potentially enables efficiency through processes that are faster and cheaper—a difference in *degree* relative to traditional, face-to-face processes. My modest experience as an online mediator suggests a difference in *kind*, as well in the qualities of online processes. For example, users experience a difference in the use of various communication channels—synchronous versus asynchronous and textual versus visual, respectively, relative to the synchronous, visual communication of face-to-face dispute resolution.⁵ The experience of online dispute handling may feel foreign to some who prefer person-to-person contact, while the opposite may be true for those who have been online since childhood.

* Senior Lecturer in Law and Director, Martin Daniel Gould Center for Conflict Resolution, Stanford Law School. My deep thanks to Colin Rule for introducing me to the world of ODR. I appreciate his comments, as well as those of Stephanie Smith, Amy Schmitz, and Jean Sternlight on this piece; my gratitude to Peter John for research and editing assistance.

1. We presented at a session of the Association of American Law Schools annual meeting in New Orleans in January 2019. My co-panelists included Peter Reilly, Alyson Carrel, Ethan Katsh, David Larson, Amy Schmitz, Colin Rule (by video), and Jean Sternlight, to whom I am very grateful for their stimulating prompts.

2. Colin Rule, *Technology and the Future of Dispute Resolution*, DISP. RESOL. MAG. 4, 7 (Winter 2015), <http://www.colinrule.com/writing/drmag.pdf>.

3. *Id.* at 5.

4. Louis F. Del Duca, Colin Rule, & Kathryn Rimpfel, *eBay's de Facto Low Value High Volume Resolution Process: Lessons and Best Practices for ODR Systems Designers*, 6 ARB. L. REV. 204 (2014).

5. For example, texting or face-to-face would be synchronous (communicating in real time), whereas email would be asynchronous, with a time lag between messages. Communication can be textual (text or email) or visual (video, such as skype).

Artificial Intelligence (“AI”) capacity—sometimes used in ODR—draws on big data to develop algorithms to predict outcomes and aid decision making that far exceeds what a human mediator could do in real time.⁶ Further, ODR can be a system of its own, such as for smart contracts on the blockchain,⁷ or one process component of a broader system in a court.⁸ Thus, the diversity of ODR in practice makes it difficult, if not misleading, to lump all permutations under one umbrella term in an assessment of ODR. One question, then, might be whether ODR is the right term to capture these diverse functions and case management more broadly—a critique explored in Jean Sternlight’s *Pouring a Little Psychological Cold Water on Online Dispute Resolution*, an article also included in this issue.⁹ Nevertheless, ODR enjoys current parlance, so we will aim to recognize its variation in characteristics and specific functions where possible.

This Essay opens with a description of the panel presentations on ODR in practice.¹⁰ Section III describes an analytic framework for dispute system design (“DSD”) comprised of six elements: goals, stakeholders, context and culture, process, resources, and evaluation, then compares sample ODR processes (public and private) with reference to the framework. Section IV concludes with comments on ODR experience and future prospects.

II. ODR PANEL REVIEW

The American Association of Law Schools 2019 annual meeting included a panel titled “Promises and Pitfalls of Technology in Dispute Resolution.”¹¹ Below is a brief summary of the ODR examples highlighted by other panelists, both during the annual meeting and again in subsequent publications. In sequence, the cases move from the more general use of technology, to the specific use of ODR in courts, to the use of ODR in smart contracts on the blockchain. Carrell and Ebner’s article, *Mind the Gap*,¹² aims to close “the technological gap by incorporating helpful technologies into mediation practice and process . . . [so] the field can realign with the changing characteristics of mediators and parties, and thrive.”¹³ Traditional mediation has evolved in practice to include facilitative, evaluative, transformative, and narrative mediation, as well as various hybrid models, all in an in-person

6. See *Loomis v. Wisconsin*, 881 N.W.2d 749 (Wis. 2016), cert. denied, 137 S. Ct. 2290 (2017); see also Jeff Larson et al., *How We Analyzed the COMPAS Recidivism Algorithm*, PROPUBLICA (May 23, 2016), www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm.

7. Orna Rabinovich-Einy & Ethan Katsh, *Blockchain and the Inevitability of Disputes: The Role for Online Dispute Resolution*, 2019 J. DISP. RESOL. 47 (2019); Amy J. Schmitz & Colin Rule, *Online Dispute Resolution for Smart Contracts*, 2019 J. DISP. RESOL. 103 (2019); Ayelet Sela, *E-Nudging Justice: The Role of Digital Choice Architecture in Online Courts*, 2019 J. DISP. RESOL. 127 (2019).

8. David Allen Larson, *Designing and Implementing a State Court ODR System: From Disappointment to Celebration*, 2019 J. DISP. RESOL. 77 (2019).

9. See Jean Sternlight, *Pouring a Little Psychological Cold Water on Online Dispute Resolution*, 2020 J. DISP. RESOL. 1 (2020).

10. Rabinovich-Einy & Katsh, *supra* note 7; Schmitz & Rule, *supra* note 7; Sela, *supra* note 7. See also Alyson Carrell & Noam Ebner, *Mind the Gap: Bringing Technology to the Mediation Table*, 2019 J. DISP. RESOL. 1 (2019); Larson, *supra* note 8.

11. 2019 Annual Meeting: Building Bridges, *Program*, AM. ASS’N OF LAW SCH. 71 (2019), https://a.m.aals.org/wp-content/uploads/sites/4/2018/12/AM19_mainProgram.pdf.

12. See Carrell & Ebner, *supra* note 10.

13. *Id.* at 1.

environment.¹⁴ In parallel, the world has shifted in its relationship to technology, including a change in how we use technology to engage in conflict and resolve it.

My co-panelists, the authors, collectively traced the trajectory of technology and its implications on mediation, mediators, and mediated parties. Of particular importance is how technology changes “the ways in which we communicate, share, access, and analyze information.”¹⁵ The authors suggest, each in their own way, that by remaining only offline, dispute resolution professionals invite risks to clients, mediators, courts, and commerce. Shifting to an online platform entails different roles for technology—or what is sometimes referred to as the “fourth party”¹⁶—in administrative (case management), communicative (email, scheduling, education, outreach, discovery rooms, etc.), substantive (legal predictive analytics), and practical (aiding lawyers, parties, and mediators at the table) contexts.

Ayelet Sela’s article, *e-Nudging Justice*, probes the use of online courts and tribunals as a means to improve the justice system’s efficiency, access to justice, and quality of decision-making.¹⁷ An online court is a digital environment. A party’s interface with that online court environment influences that party’s behaviors and choices. Thus, ODR constitutes a digital choice-architecture that can be informed by the psychology of perception and behavior. The goal of designers should be to “create choice[-]architectures that encourage SRLs’ (self-represented parties’) engagement in informed and deliberate decision-making, by helping them identify and consider their interests and options, and assisting them in advancing their chosen course of action.”¹⁸ Sela also reviews scholarship in cognitive psychology and behavioral economics on human biases in decision-making and examines how fourth-party architecture can be designed to improve the quality of the user’s decision-making experience.¹⁹ She sorts ODR technologies into categories: transposed, meaning moving from a physical courtroom to the internet; restructured, or streamlining collection and management of information; and automated, which uses algorithmic processes.²⁰ Sela closes with an approach to evaluation of these choice-architectures that addresses the tension between goals of achieving justice and efficiency.²¹

14. For a review of different mediation approaches, see Michael L. Moffitt, *Schmediation and the Dimensions of Definition*, 10 HARV. NEGOT. L. REV. 69 (2005); Leonard L. Riskin, *Understanding Mediators’ Orientations, Strategies, and Techniques: A Grid for the Perplexed*, 7 HARV. NEGOT. L. REV. 17 (1996); Leonard L. Riskin, *Decision-Making in Mediation: The New Old Grid and the New New Grid System*, 79 NOTRE DAME L. REV. 1, 3 (2003); ROBERT A. BARUCH BUSH & JOSEPH P. FOLGER, *THE PROMISE OF MEDIATION: THE TRANSFORMATIVE APPROACH TO CONFLICT* (2d ed. 2004); JOHN WINSLADE & GERALD D. MONK, *NARRATIVE MEDIATION: A NEW APPROACH TO CONFLICT RESOLUTION* (2000).

15. Carrell & Ebner, *supra* note 10, at 14.

16. The first and second parties are the disputing parties; the third party is the mediator, arbitrator, or judge; and ODR technology has become known as the fourth party. See ETHAN KATSH & JANET RIFKIN, *ONLINE DISPUTE RESOLUTION: RESOLVING CONFLICTS IN CYBERSPACE* 93 (2001).

17. Sela, *supra* note 7.

18. *Id.* at 128–29.

19. *Id.* at 130 (noting the work of Thaler and Sunstein, who consider the decisions “most prone to nudging: ‘decisions that are difficult and rare, for which [choosers] do not get prompt feedback, and when they have trouble translating aspects of the situation into terms that can be easily understood.’” (citing RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* 85 (2008))).

20. Sela, *supra* note 7, at 134.

21. *Id.* at 138; see also a discussion on the ethics of nudges, *infra* note 163.

David Larson’s article, *Designing and Implementing a State Court ODR System*, is a richly detailed overview of his collaboration with the New York State Unified Court System to design and implement an ODR platform specifically for credit card debt collection cases.²² The American Bar Association and New York state court officials developed a pilot program to address a case management crisis in this highly regulated industry.²³ Larson and his colleagues undertook an extensive stakeholder engagement process, followed by a rigorous request for proposals (“RFP”) process.²⁴ The RFP called for certain technical specifications (e.g., mobile–friendly, secure, etc.), multi–language capability, an intuitive and simple design, a problem solving mechanism, and a way to offer feedback and generate reports.²⁵ Larson describes the goal as follows:

[The] ODR system was not intended to replace the existing NY Court system, rather, the goal was to increase access to justice by offering consumers an alternative approach that will supplement and complement existing court debt collection procedures[,] . . . [offer] consumers with an opportunity to better understand the process[,] . . . and provide the consumer and the debt holder with online tools to help settle the case within a limited period of time.²⁶

This dispute resolution system included online negotiation and online mediation. The overall goal of the process was to protect consumers’ ability to control the settlement process and provide communication opportunities to mitigate any power imbalance between the creditor and debtor.²⁷ A number of lessons were identified around the design participants and process.

Amy Schmitz and Colin Rule, in *Online Dispute Resolution for Smart Contracts*, introduce smart contracts built on the blockchain as self–enforcing and self–executing by design.²⁸ Smart contracts constructed online raise new issues and point to use of an online mechanism—ODR—to efficiently and fairly resolve disputes. The traditional source of trust based on relationships and contractual security mechanisms is replaced by a coded structure. If disputes arise, e.g., based on coding errors, hacking, or structural defects, or more broadly due to interpersonal conflict or unexpected events, the options span both traditional and newly–devised processes. Schmitz and Rule describe this new domain of contracts, the special challenges encountered by blockchain ODR startups, and specific ideas for preventing and managing problems.²⁹ As they note: “[T]here is no articulated and clear system of rules that apply to smart contracts. Civil law only recognizes contracts that are in written or documentary form, and common law contract rules

22. Larson, *supra* note 8. The A.B.A. and New York state court officials collaborated to develop a pilot ODR option for credit card debt collection cases, a highly regulated industry. An extensive stakeholder engagement process ensued, followed by a rigorous request for proposal.

23. *Id.* at 81.

24. *Id.* at 81–82.

25. *Id.*

26. *Id.* at 83.

27. *Id.* at 92.

28. Schmitz & Rule, *supra* note 7, at 103–04 (“Smart contracts” refers to a class of contracts that use computer code protocol to negotiate and enforce performance).

29. *Id.* at 105.

dependent on choice of law do not fit the decentralized blockchain model.”³⁰ The authors’ proposed solution is to build ODR into smart contracts that can efficiently and fairly resolve disputes that arise along the way.³¹ They describe how start-up companies are creating ODR in the blockchain, including models for online arbitration, crowd-sourced dispute resolution, and AI-powered resolutions.³²

Orna Rabinovich-Einy and Ethan Katsh’s article, *Blockchain and the Inevitability of Disputes*, overlaps, in part, with Schmitz and Rule’s.³³ They provide a history of cryptocurrencies and the blockchain, discuss how governance and trust work in the blockchain environment, and detail how the promise of a dispute-less environment has proven fallible.³⁴ With the shift from traditional contracts to the blockchain, ODR has shifted from use with high-volume, low-value disputes like small claims and e-commerce to the blockchain, which involves higher-value commercial disputes. Rabinovich-Einy and Katsh describe a number of innovative systems and processes for blockchain dispute resolution, including arbitration, crowdsourcing, and hybrids that are both consensual and adjudicative.³⁵ They continue with a discussion of cultural, legal, and technological barriers.³⁶

Now that we have laid the foundation through a review of panelist works, we can take the ODR themes raised by the panelists and analyze them through a dispute system design framework.

III. DSD ANALYTIC FRAMEWORK

Dispute system design offers academics and practitioners alike the opportunity to examine how disputes are handled in different resolution domains, which processes within a given system are effective, and what variables can make a

30. *Id.* at 104–05.

31. *Id.* at 105.

32. *Id.* at 115–22.

33. Rabinovich-Einy & Katsh, *supra* note 7.

34. *Id.* at 48.

35. *Id.* at 59–71.

36. *Id.* at 72–74.

difference.³⁷ The DSD Framework³⁸ is built on a series of assessment questions around the following elements: goals, stakeholders, context and culture, processes and structure, resources, and success and accountability. These elements are described below, followed by examples drawn from the ODR cases set forth in Section II. Note that the “designer” referenced in discussions of system design or redesign may be an individual or team that is either internal or external to the organization of interest.

A. Goals

What do the system’s decision makers seek to accomplish? Which types of conflict does the system seek to address? Goals are fundamental to any dispute–handling system. By explicitly identifying the goal(s) of the system, one can better ensure that the processes align and later evaluate whether the system performs as desired. While optimally one might choose to achieve many goals, it is not feasible to “have it all.” Potential goals include, among others, conflict prevention, management, and resolution, efficiency and resource savings for users and administrators, relationships, accessibility, reputation, safety, confidentiality, compliance, voice, satisfaction, organizational improvement, a fair and transparent process, and just outcomes.³⁹ If there are multiple goals, e.g., efficiency for the institution, enforced compliance with the law, and accessibility to self–represented parties, someone (whether it be the designer or a stakeholder advisory panel) will need to determine which goal is the highest priority and how tradeoffs among those goals will be made.

37. See JEFFREY CRUIKSHANK & LAWRENCE SUSSKIND, *BREAKING THE IMPASSE: CONSENSUAL APPROACHES TO RESOLVING PUBLIC DISPUTES* (1987) (laying a foundation to focus on fairness, efficiency, stability, and wisdom as criteria to measure both the outcomes and procedures of dispute settlement; they anticipate that disputants may trade efficiency off against fairness). William Ury, Jeanne M. Brett, and Stephen B. Goldberg marked a genesis of this field with their book, “Getting Disputes Resolved: Designing Systems to Cut the Costs of Conflict.” They specify principles for designing an organization’s system for handling employment disputes, as well as criteria for comparing process options. They recommend starting with interest–based and moving to rights–based while providing adequate resources and support for all processes. The rationale for these principles is to minimize transaction costs (time, money, emotional energy), increase disputants’ satisfaction with the process and outcome, enhance relationships among the disputants, and reduce recurrence of the disputes. WILLIAM URY, JEANNE M. BRETT, & STEPHEN B. GOLDBERG, *GETTING DISPUTES RESOLVED: DESIGNING SYSTEMS TO CUT THE COSTS OF CONFLICT* 11–13 (1988). Cathy A. Costantino and Christina Sickles Merchant found that higher–quality systems are more efficient (in terms of cost and time) and lead to more satisfaction with the process, outcome, and ongoing relationship between disputants. They include durability in the notion of effectiveness, quantity and character of dispute recurrence, and the effect of resolution on the organizational environment. CATHY A. COSTANTINO & CHRISTINA SICKLES MERCHANT, *DESIGNING CONFLICT MANAGEMENT SYSTEMS: A GUIDE TO CREATING PRODUCTIVE AND HEALTHY ORGANIZATIONS* (1996).

38. This framework was first developed by Maude Pervere and Stephanie E. Smith in 2002, then published in: Stephanie Smith & Janet K. Martinez, *Analytic Framework for Dispute System Design*, 14 HARV. NEGOT. L. REV. 1401 (2009). A revised DSD Framework appears in: Lisa Blomgren Amsler, Janet K. Martinez, & Stephanie E. Smith, *Christina Merchant and the State of Dispute System Design*, 33 GEO. J. INT’L L. 7 (2015); LISA BLOMGREN AMSLER, JANET K. MARTINEZ, & STEPHANIE E. SMITH, *DISPUTE SYSTEM DESIGN: PREVENTING, MANAGING, AND RESOLVING CONFLICT* (forthcoming 2020).

39. This Section is a distilled version of a longer discussion of the analytic framework first published in: Stephanie Smith & Janet K. Martinez, *An Analytic Framework for Dispute Systems Design*, 14 HARV. NEGOT. L. REV. 123 (2009). For a more detailed discussion, see Blomgren Amsler, Martinez, & Smith, *supra* note 38.

Our panel presented different kinds of disputes, different kinds of people (disputants and neutrals), and different kinds of processes (facilitative and evaluative). Carrel and Ebner organized around functional goals: administrative, communicative, substantive, and educational.⁴⁰ Sela examined small claims (including those handled by the British Columbia Civil Claims Tribunal and Her Majesty's Civil Money Claims (Beta))⁴¹ to access justice, efficiency, and quality of process that engaged parties to deliberate on interest-based options. Larson devoted his research and development toward a court system focused on protecting consumers, delivering efficiency, and providing accessibility to justice for credit card collection cases.⁴² Rabinovitch-Einy and Katsh, as well as Schmitz and Rule, focused on smart contracts on the blockchain, which have distinctive characteristics; they are decentralized, immutable, and anonymous to achieve democratic decision-making and automatic enforcement of resolutions.⁴³ Thus, the more emphasis on consumer cases, e.g., civil claims and credit debt claims, the more that access to justice, efficiency, and interest-based process options may be valued as goals by some affected stakeholders. Thus, the balance of user and stakeholder participation in the design process is critical. In the newer case category of smart contracts on the blockchain, as more trust is vested in the technology, the more valued are predictable outcomes and enforcement.

B. Stakeholders

The second framework element is identification of stakeholders and analysis of their interests, representation, relationships, and relative power. Stakeholders include the people and organizations that create, host, use, and are affected by DSD. The more stakeholders, including users, are involved in the dispute system's design and continuous improvement, the more likely the system is to be sustainable in the long term. Larson described an extensive stakeholder engagement process that took thousands of hours interviewing court staff, creditors, creditor organizations, debtors, debt buyers, consumer representatives, legal service providers, and others.⁴⁴ After a rigorous RFP process, the ensuing proposal was not ultimately adopted by the court, in part due to resistance by vocal legal service providers (both participants and nonparticipants in the stakeholder process) and the absence of judge leadership and early participation.⁴⁵ Rabinovitch-Einy and Katsh,⁴⁶ Carrel and Ebner,⁴⁷ and Sela⁴⁸ all noted the centrality of the fourth party, the technological-intermediary. This may be the heart of ODR. How do the case category and system goal(s) integrate with an ODR process? Who has the power to design the technology to bridge the gap and serve as the fourth party, whether serving in an administrative, communicative, or substantive function?

40. Carrell & Ebner, *supra* note 10, at 13, 27.

41. See CIVIL RESOLUTION TRIBUNAL, <https://civilresolutionbc.ca/> (last visited Nov. 17, 2019); see also HER MAJESTY'S CIVIL MONEY CLAIMS (BETA), <https://www.moneyclaim.gov.uk/web/mcol/wel/come> (last visited Nov. 17, 2019).

42. Larson, *supra* note 8, at 79, 92, 98.

43. Rabinovitch-Einy & Katsh, *supra* note 7, at 71–73.

44. Larson, *supra* note 8, at 81.

45. *Id.* at 79–81, 100.

46. Rabinovitch-Einy & Katsh, *supra* note 7, at 72–73.

47. Carrell & Ebner, *supra* note 10, at 26–27.

48. Sela, *supra* note 7, at 138.

C. Context and Culture

The context of the DSD process affects its viability and success. Moreover, the salient culture (organizational, social, national, economic, or other) affects the system. Context is the circumstance or situation in which a system is diagnosed and designed.⁴⁹ Culture refers to patterns of being, perceiving, and behaving that are shared by a group of people. Culture is commonly viewed as arising within national, regional, or religious contexts but can also develop across a profession, a community, or an organization.⁵⁰ A new cultural dimension has arisen from the change in user experiences and expectations.⁵¹

ODR was spurred by the context of e-commerce and the development and expansion of information, communication, and AI technology. Smart contracts on the blockchain represent a leap of capacity to achieve additional functionality. Cultural expectations of various stakeholders—users, designers, administrators, and providers—have a critical influence on how, and for what purpose, ODR continues to expand. Just as the fourth party is an important stakeholder (both as an actor whose role may evolve with machine learning, as well as the owners of that technology), the culture surrounding it is an important background condition. Sela’s research on the effect of digital architecture contributes to our understanding of the causes and effects by which ODR molds our decision making.

D. Processes and Structure

A DSD, which can be either the system design process or the resulting system, may include one or more processes. If a certain DSD has more than one process, how the processes are linked or integrated and how they interact with the formal legal system influences parties’ and stakeholders’ incentives and disincentives for using that particular DSD. Many different types of processes can be used in ODR. Some organizations offer one formal process, such as mediation or arbitration, while others develop a range of processes for one or more types of disputes. If multiple options are offered, those options may be linked, or they may exist as discrete, parallel processes, a concept studied extensively by Carrie Menkel-Meadow and termed “process pluralism.”⁵² A system is usually strengthened by multiple options, subject to the availability of adequate resources, but *too many*

49. Jennifer F. Lynch, *Beyond ADR: A Systems Approach to Conflict Management*, 17 NEGOT. J. 207, 208–11 (2001) (describing the catalysts (“five Cs”) that often trigger organizational system design: *compliance* with legislation or policy; *cost* of grievance, litigation, and settlement to spur experimentation with mediation or arbitration; *crisis* in the media, negligent act, or fraud; *competition* within an industry or among professional firms; and *cultural transformation* to align a firm with its constituents).

50. Michelle LeBaron, *The Alchemy of Change: Cultural Fluency in Conflict Resolution*, in THE HANDBOOK OF CONFLICT RESOLUTION: THEORY AND PRACTICE 581 (Peter T. Coleman, Morton Deutsch, & Eric C. Marcus eds., 3d ed. 2014); Jeffrey Z. Rubin & Frank E. A. Sander, *Culture, Negotiation, and the Eye of the Beholder*, 7 NEGOT. J. 249 (1991).

51. Elayne E. Greenberg & Noam Ebner, *What Dinosaurs Can Teach Lawyers About How to Avoid Extinction in the ODR Evolution*, ST. JOHN’S LEGAL STUD. RES. PAPER SERIES 19–0004 (2019), <http://ssrn.com/abstract=3317567> (describing the administrative functions, communication-related functions, and substantive functions ODR plays in the courts).

52. Carrie Menkel-Meadow, *Process Pluralism in Restorative/Transitional Justice*, 3 INT’L J. OF CONFLICT ENGAGEMENT & RESOL. 1 (2015).

processes can confuse users.⁵³ Dispute systems vary on the basis of whether they reconcile the parties' interests, determine who is right, or establish who is most powerful.⁵⁴ With multiple parties and diverse goals, multiple process options may help achieve improved outcomes.

Designers may need to balance the scope of options available with resource constraints and efficiency. Efficiency should also be understood in terms of the costs and benefits of prevention relative to resolution for parties, as well as to the organizations and institutions that host the processes.

The spectrum of processes designed and used has expanded with the newest versions of ODR. Carrel and Ebner and Larson note progress within mediation, as well as from mediation to collaborative decision making *supplemented* by technology used for communicating, information sharing, and accessing information.⁵⁵ Now, processes are integrated *with* technology. Larson, in the court RFP, contemplated an expert system with a solution explorer.⁵⁶

Smart contracts on the blockchain emphasize rights-based resolutions with anonymous, crowdsourced jurors to deliver inclusive and democratic outcomes, arbitration—utilizing game theory, and AI algorithms that suggest solutions based on big data.⁵⁷ Nevertheless, Sela points out that the bias introduced—even magnified—with AI can anchor the user's experience of digital choice-architecture.⁵⁸

E. Resources

A system's success will be substantially determined by the financial and human resources available at the design stage. Whether internal advisors or outside consultants design the system, the amount of money and staff time devoted to implementation will be important for educating users, training administrators and providers, and ultimately shifting perceptions of fairness, justice, and overall success. This issue of resources is intertwined with the goals of cost efficiency for the institution (which is often the driver for ODR) and cost efficiency for the user. Thus, resources indirectly impact access to justice.

The New York Consumer Debt project aimed to provide a more efficient, less costly case process; the ABA Enterprise Fund Award enabled creation of a pilot ODR system.⁵⁹ The intention was to prepare a financial model that would build and maintain a system that valued transparency.⁶⁰ Rabinovitch–Einy and Katsh describe the complex dispute handling options for smart contracts on the blockchain and detail which processes may involve crowdsourcing of jurors who need to be paid by any party, all parties, or a third party.⁶¹

53. See *infra*, Section III(E).

54. URY, BRETT, & GOLDBERG, *supra* note 37, at 11–13.

55. Carrell & Ebner, *supra* note 10, at 13.

56. Larson, *supra* note 8, at 85–92.

57. Rabinovich–Einy & Katsh, *supra* note 7, at 59.

58. Sela, *supra* note 7, at 138.

59. Larson, *supra* note 8, at 101–02.

60. *Id.* at 78, 96.

61. Rabinovich–Einy & Katsh, *supra* note 7, at 67–69.

F. Success, Accountability, and Learning

Transparency pertains both to clarity on how the system works and the resulting case outcomes, subject to preservation of confidentiality. Evaluation, including independent monitoring and deliberate learning, is critical to the credibility and accountability of DSD. Success can be defined not only by whether the system achieves its intended goals, but also by whether it achieves broader societal goals, including fairness and justice. A system's success is more readily judged if its outcomes are made available to independent evaluators for study and criticism.⁶²

System procedures should be transparent and accountable to all stakeholders and provide fair, just, balanced, unbiased, and effective means for managing conflict and resolving disputes. Nevertheless, transparency is not unbounded; a parallel goal for the DSD may be maintaining privacy of case details, so a balance must be struck. Systems have traditionally been deemed effective if they achieved the goals of lessening transaction costs, increasing satisfaction with the outcome, building relationships among the disputants, and reducing recurrence of the disputes.⁶³

Larson reviewed lessons learned with the New York Consumer Debt project, including the value of a pre-assessment to collect stakeholders' perspectives and interests, the necessity of engaging judges' support early on, and carefully picking the case category and process options (e.g., ODR).⁶⁴ Sela sketched out an overview of digital choice architecture that synthesizes the motivations and the goals in tension: justice and efficiency.⁶⁵ Her proposed evaluation methodology would provide evidence to find the relationship between implementation of targeted digital nudges and user behavior in the online court setting.⁶⁶ Rabinovitch–Einy and Katsh and Schmitz and Rule describe the specific dispute category of smart contracts on the blockchain. There are a number of process options and numerous providers of such options, but a few cross-cutting concerns: cultural, legal, and technological.⁶⁷ The uncertainty of the law and what the “shadow of the law” means in the online context poses a significant problem. But even more so:

At the heart of dispute resolution lies the concept of legitimacy, which is ultimately premised on trust—trust in the system, trust in the process, and trust in its fairness—and therefore a willingness to abide by outcomes. In the blockchain context, on the other hand, there is a belief that trust is generated through technology by creating a secure enough environment that trust in anything but the blockchain itself becomes unnecessary. This

62. COSTANTINO & SICKLES MERCHANT, *supra* note 38, at 142–49.

63. URY, BRETT, & GOLDBERG, *supra* note 38, at 11–13.

64. Larson, *supra* note 8, at 100.

65. Sela, *supra* note 7, at 157–63.

66. *Id.*

67. Rabinovitch–Einy & Katsh, *supra* note 7, at 72–75; Schmitz & Rule, *supra* note 7, at 111–13. For a recent report on evaluating online court programs, see Natalie Byrom, *Digital Justice: HMCTS Data Strategy & Delivering Access to Justice: Report & Recommendations*, THE LEGAL EDUC. FOUND. (Sept. 30, 2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835778/DigitalJusticeFINAL.PDF.

creates a problem when the technology fails to deliver, as it has, and trust is broken, but no mechanisms for re-establishing it are available.⁶⁸

The shift in what constitutes trust—interpersonal relationships leveraged with legal mechanisms, or an airtight coding structure—may pose the most important challenge with ODR. The answer will likely vary with the parties and circumstances and reflect their unique priorities.

G. ODR Design Examples

The following table (1) sketches out an array of systems that incorporate ODR, and (2) identifies their unique DSD Framework elements.

DSD Element	eBay⁶⁹	Court and Tribunals⁷⁰	NextDoor Social Media⁷¹	Kleros⁷²
Goals	Fast and fair resolutions for transaction problems.	Efficiency, streamlined user experience, and justice.	Intervene on fake news and bullying; promote civility, politeness, and neighborliness.	Fair, transparent, scalable, and self-administering.
Stakeholders	eBay, consumers, sellers, and regulators.	Courts, court staff, judges, the public, counsel, and litigants.	Citizens/neighbors, journalists, and regulators.	Commercial disputants, employment or insurance smart contracts, and coders.
Context and Culture	High volume, low value; international or cross-border; transactional relationship.	Public; diverse; formal; various levels of literacy, education, and comfort with technology.	Geographic proximity; personal relationships; different races, ages, and income levels.	Online-first; international diversity; informality; high comfort with technology.

68. Rabinovich–Einy & Katsh, *supra* note 7, at 72.

69. See AMY J. SCHMITZ & COLIN RULE, *THE NEW HANDSHAKE: ONLINE DISPUTE RESOLUTION AND THE FUTURE OF CONSUMER PROTECTION* 33–46 (2017).

70. See Sela, *supra* note 7 (for the British Columbia Claims Tribunal); Larson, *supra* note 8 (for New York court case examples).

71. NEXTDOOR, <https://nextdoor.com> (last visited Dec. 17, 2019) (a social networking service for neighborhoods); Grande Lum & William Froehlich, *Preventing Division—Five Social Media Strategies for Community Leaders*, NEXTDOOR FOR PUB. AGENCIES RES. CTR. (Aug. 31, 2017), <https://medium.com/nextdooragencyresources/preventing-division-five-social-media-strategies-for-community-leaders-b28141e9fcc8>; *Divided Communities & Social Media: Strategies for Community Leaders*, DIVIDED CMTY. PROJECT (2017), <https://moritzlaw.osu.edu/dividedcommunityproject/wp-content/uploads/sites/101/2018/02/Divided-Communities-and-Social-Media.pdf>.

72. KLEROS, <https://kleros.io> (last visited Dec. 17, 2019) (a blockchain dispute resolution service); Rabinovich–Einy & Katsh, *supra* note 7, at 59; Schmitz & Rule, *supra* note 69, at 118; Jay Kim, 85: *Federico Ast, Cofounder & CEO of KLEROS*, PODCAST (Apr. 1, 2018), <https://www.jaykimshow.com/podcast/85-federico-ast/>.

Processes	Diagnosis, negotiation, facilitation, and evaluation.	Settlement, mediation, and trial.	Discussion forums, technology-based coaching and advice, facilitative process.	Online evaluation, crowd-sourced jurors, and incentivized participation.
Resources	eBay investments in the software and case management staff.	Public funds, public employees, supporting non-profits.	NextDoor investments in the software and case management staff.	Kleros overall management, but designed to be self-sustaining.
Evaluation	eBay teams using surveys, user experience research, and data capture and monitoring.	Internal and external evaluation programs and court satisfaction data.	Surveys and user experience monitoring.	Overall usage and growth of the Kleros caseload and user base.
Designer	eBay	Court with external vendors and partners.	NextDoor	Kleros and the worldwide developer community.
Process Selection for Individual Case	Specified in user agreement; initiated by consumer.	Opt-in by filer/plaintiff.	Required by NextDoor software.	Can be initiated by either complainant or respondent.

The primary goals of the above examples overlap significantly and are mostly compatible, but there exists a tension between giving primacy to fairness (eBay, Kleros, and NextDoor) or efficiency (courts). Each example is comprised of multiple stakeholders with likely differentiated goals. The notion of process pluralism underscores the importance of multiple processes that would each meet some goals better than others. Both facilitative and evaluative options are offered, with a tilt toward facilitative with NextDoor and evaluative with Kleros. Context and culture capture both public and private interests, again calling for process options according to parties' priorities. In an individual case, process choice is usually made by the user/consumer with eBay, courts, and NextDoor. Resources and design leadership are primarily provided by the dispute resolution provider. A combination of engaged stakeholder goal assessment, process choice according to rights or interests, and substantive and procedural transparency all contribute to system success.

IV. OBSERVATIONS AND CONCLUSION

The DSD Analytic Framework encourages designers to recognize when they are, in fact, designing. Being deliberate about designing a system calls for being explicit about the goals to be achieved and involving the users and stakeholders to foster the design of processes that resolve disputes more fairly and effectively. To do so, the processes of a system will likely need to balance interests and rights, equity and efficiency, voice and administrative feasibility, prevention and enforcement, and individual and social benefit. The design process itself requires

attention to who controls the system design—whether a single party, all parties/disputants, or a third party—and whether disputants, a third party, or fourth party controls the process choice at the case level.⁷³ Control over design and process choice is a significant source of power.

The panel focused on systems that include (or could include) ODR. However, ODR does not hold a singular meaning, and thus calls for care to avoid inaccurate generalizations. Moreover, ODR has both intrinsic and instrumental values and challenges. Instrumentally, ODR advances administrative, communicative, and practice-support. Intrinsically, a goal for ODR may be to offer a different and more desirable process experience online relative to offline, with synchronous and asynchronous, visual and textual channels, as well as crowd-sourced jurors, who decide case outcomes in which they have a special interest.⁷⁴ Whether ODR is the only option for a category of disputes or just one of many, there may be many process options to choose from and many stakeholders whose goals could be considered in fashioning a given system. ODR scholars are seeking to establish principles and standards to help reconcile the goals, stakeholders, and processes for using ODR.⁷⁵

ODR system design research is advancing within several categories: consumer, commercial, court, algorithmic, and smart contracts on the blockchain, to name those addressed by our panel. Pew Charitable Trusts has undertaken extensive evaluation research on ODR experience to date, which should consolidate the learning for the next generation of ODR system design.⁷⁶

Above and beyond the characteristics of ODR addressed by the panel, how ODR integrates with offline or face-to-face processes also bears consideration. Sela, in particular, focuses on digital choice-architecture that is influenced by the psychology of perception and behavior. Sternlight emphasizes how “human psychology is at the core of many civil disputes;” her piece in this issue questions whether hardware and software yet have the capacity to replace this human element.⁷⁷ It may be difficult to untangle allocation of process responsibility between software and human beings. “Software does what it is told” and is not yet designed to undertake “thinking” in terms of legal, moral, and political analysis or to achieve “optimal engagement with the interests, values, and feelings of parties to a dispute.”⁷⁸ Thomas Malone of MIT has written about the potential collective intelligence of people and computers thinking together.⁷⁹ He sees cyber-human learning not as humans tempering machines but integrating machines into human

73. Blomgren Amsler, Martinez, & Smith, *supra* note 38.

74. For example, a crowd-sourced juror essentially posts a bond of a cryptocurrency that she will get back if she is part of the majority decision.

75. See *Ethical Principles for ODR*, NAT’L CTR. FOR TECH. & DISPUTE RESOLUTION, <http://odr.info/ethics-and-odr/> (last visited Nov. 17, 2019).

76. See *Online Dispute Resolution Offers a New Way to Access Local Courts*, PEW TRUSTS (Jan. 4, 2019), <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2019/01/online-dispute-resolution-offers-a-new-way-to-access-local-courts>.

77. Sternlight, *supra* note 9.

78. For a very nice history of ODR, with concern about shortness in justice and fairness, see Robert J. Condlin, *Online Dispute Resolution: Stinky, Repugnant, or Drab*, 18 CARDOZO J. CONFLICT RESOL. 717, 757 (2018).

79. THOMAS W. MALONE, SUPERMINDS: THE SURPRISING POWER OF PEOPLE AND COMPUTERS THINKING TOGETHER 237 (2018).

activity.⁸⁰ There will be specific intelligence capabilities for which machines will be preferred, but humans will continue to do things that machines cannot.⁸¹

These tensions highlight which ODR processes are beneficial options to consider under what conditions. The most experience has been gained with self-represented litigants in e-commerce, small claims, and family divorce cases. The use and study of ODR options in commercial, court, and other contexts may suggest more carefully calibrated metrics. Empirical research will be advanced with the databases generated by ODR processes, subject to principles of transparency, security, and confidentiality. To start, working tips for use of ODR as a dispute resolution option might include:

- Issues are relatively clear;
- Both the user and the administrator benefit from efficiency;
- Stakeholders (including actual users and decisionmakers) are involved in the design and implementation process;
- Intervention is made “up-stream” (during the policymaking process) to help prevent disputes (for example, with improved case information access and diagnosis process options);
- Multiple ODR processes are offered, including consensual on parties’ interests, and adjudicative options to assess parties’ rights;
- Adequate resources are available for training neutrals, administrators, and providers, and educating users;
- Process and outcomes are transparent (subject to private individual case information); and
- Independent evaluators conduct periodic reviews.

Depending on the transparency of the design, ODR may work less well when: legal parameters are unclear, precedent-setting is important, participants do not recognize the other side’s rights, the process is used as a means to delay or hinder the other side’s rights, algorithms that guide or make decisions are non-transparent, or designers make obscure tradeoffs across goals.⁸²

These tips reflect not only ODR, but process design overall. The ones that are especially a function of ODR seem to be: clearly defined issues with a premium on efficiency for both user and administrator, coupled with focus on prevention that can be achieved with AI; participatory design including users and all key stakeholders; both interest-based (mediation) and rights-based (adjudicatory) processes, especially as ODR includes increasing use of AI and algorithms; and processes and outcomes that are transparent, again, especially around the data inputs that produce algorithms.

On the contra-tips, if precedent-setting and clarity of legal parameters become more important with the need to test enforcement of smart contracts on the

80. *Id.*

81. *Id.*

82. See generally Sternlight, *supra* note 9; Lawrence Susskind et al., *Using Assisted Negotiation to Settle Land Use Disputes: A Guidebook for Public Officials*, LINCOLN INST. OF LAND POLICY 23 (1999), <https://www.lincolninst.edu/sites/default/files/pubfiles/using-assisted-negotiation-land-use-disputes-ful1.pdf>. See also Blomgren Amsler, Martinez, & Smith, *supra* note 38.

blockchain, the pressure for transparency in ODR design may increase. The trajectory of user skills and dependence on mobile and internet use may veer toward increased ODR, while it may also induce a backlash against a process perceived as insufficiently human-based and psychologically grounded. People's goals, cultural preferences for use of ODR or other processes, reliability of data, and complexity of underlying legal issues in dispute will pose continuing challenges to the legal field of researchers and practitioners.

