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A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Intervention to Make Courts User-Friendly

Margaret D. Hagan
Stanford University, mdhagan@stanford.edu

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A Human-Centered Design Approach to Access to Justice: Generating New Prototypes and Hypotheses for Interventions to Make Courts User-Friendly

Margaret Hagan*

ABSTRACT

How can the court system be made more navigable and comprehensible to unrepresented laypeople trying to use it to solve their family, housing, debt, employment, or other life problems? This Article chronicles human-centered design work to generate solutions to this fundamental challenge of access to justice. It presents a new methodology: human-centered design research that can identify key opportunity areas for interventions, user requirements for interventions, and a shortlist of vetted ideas for interventions. This research presents both the methodology and these "design deliverables" based on work with California state courts' Self Help Centers. It identifies seven key areas for courts to improve their usability, and, in each area, proposes a range of new interventions that emerged from the class's design work. This research lays the groundwork for pilots and randomized control trials, with its proposed hypotheses and prototypes for new interventions, that can be piloted, evaluated, and—ideally—have a practical effect on how comprehensible, navigable, and efficient the civil court system is.

INTRODUCTION

There is increasing discussion of how new technologies and interventions can be used to improve legal services, particularly for people without lawyers. Court professionals have explored how to adopt new technology to increase self-represented litigants' access to the courts.[1] Court researchers have examined how new technical ecosystems can be fostered to increase the growth of new online and mobile applications that are oriented toward litigants.[2] Scholars and practitioners focused on self-represented litigants have made inventories of how technology can facilitate access-to-justice initiatives.[3]

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* Margaret D. Hagan is the Director of Stanford's Legal Design Lab, and is a lecturer at Stanford Law School and Institute of Design. She holds a DPhil from Queen's University Belfast, an MA from Central European University, and a JD from Stanford Law School.

1 *See* Bonnie Rose Hough, *Let's Not Make It Worse: Issues to Consider in Adopting New Technology*, 26 HARV. J.L. & TECH. 256, 256–57 (2012).

2 *See* James E. Cabral & Thomas M. Clarke, *Access to Justice Integration with Emerging Court Technologies*, 26 HARV. J.L. & TECH. 278, 279 (2012).

3 *See generally*, JOHN GREACEN, SELF-REPRESENTED LITIG. NETWORK, SERVING SELF-REPRESENTED LITIGANTS REMOTELY: A RESOURCE GUIDE (2016); Linda Rexer & Phil Malone, *Overcoming Barriers to*

What would a more user-friendly court look like? Would it be a highly technological and automated system, in which people could accomplish most tasks online without ever having to step foot in a court building? Or would it be a high-touch in-person, experience, in which a concierge-like figure would guide and support each individual through the process according to their own particular needs and mental models? It is not immediately clear which of these two extremes would best serve people who are in need of legal help and who should be using the court system to get this service.

This Article proposes that a human-centered design approach can lay the groundwork to reform the court system so that it is more accessible to people without lawyers. Human-centered design is a methodology that begins with a fundamental concern for user experience combined with an experimental and iterative approach to developing new solutions.[4] It has been used to improve other professional and government services and is only recently being adapted into the domain of law.[5]

This Article first presents what a design approach to access to justice means at a theoretical level and also at a practitioner level by documenting the philosophy of this approach as well as the particular activities it entails. Then it presents how the author and her research group applied the design approach to court services, in order to improve the usability and experience of them, in a series of three interactive classes taught at Stanford Law School and the Institute of Design.[6] The case study focuses on a design project to analyze and redesign California county courts' Self Help Centers, which are meant to serve people going through family law issues, oftentimes without lawyers, without cost. This study demonstrates how exactly the design approach can be brought into the legal system, with lessons that can be analogously applicable to other organizations besides courts and Self Help Center challenges. It is one of the first instances of a design-driven approach being applied to the legal system in the United States.

Finally, the Article presents the findings and proposals that the design process generated. These include a series of insights and potential pilots for the courts to use to improve the services they offer. Our exploratory design work (1) identifies core user requirements of people trying to use the civil legal system without a lawyer, (2) defines the key points of failure of the current system for people without lawyers, and

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Adoption of Effective Technology Strategies for Improving Access to Justice, 26 HARV. J.L. & TECH. 305 (2012); Chris Johnson, Note, *Leveraging Technology to Deliver Legal Services*, 23 HARV. J.L. & TECH. 259 (2009).

4   *See* Tim Brown, *Design Thinking*, HARV. BUS. REV., Jun. 2008, at 84, https://hbr.org/2008/06/design-thinking (providing a description of the methodology and accounts of its application).

5   *See generally* W. David Ball, *Redesigning Sentencing*, 46 MCGEORGE L. REV. 817 (2014); Dan Jackson, *Human-Centered Legal Tech: Integrating Design in Legal Education*, 50 LAW TCHR. 82 (2016); Lorne Sossin, Designing Administrative Justice (Nov. 1, 2016) (draft), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2892153.

6   The case study documented here emerged from a series of two Stanford Legal Design Lab classes, Prototyping Access to Justice. The first version was taught in Spring 2016 by Margaret Hagan and Janet Martinez. The second was taught in Winter 2017 by Margaret Hagan and Kursat Ozenc. The class was taught in partnership with the California Judicial Council and the Self Help Center/Family Law Facilitator's office in San Mateo County. The classes had teams of law and design students conduct design reviews of the court from the user's point of view and then generate proposals for improvement.

(3) proposes a range of new services, products, and other interventions that could improve users' court experiences. The Article lays out seven core areas for improvement in courts' Self Help Centers and documentss new technologies, services, spaces, and other interventions that could enhance the user experience.

The recommendations include overarching principles for good legal help design, as well as specific clusters of ideas for improvement. Our design work points to seven key areas for courts and Self Help CentersSHC to focus on when making their system more usable and efficient:

1. Courts must coordinate **Navigable Pathways**, which help people understand the whole sequence of events that will face them during their legal processes, and more effectively assist them through that process.

2. People need more robust **Wayfinding Tools** to physically orient themselves and navigate through the court, and also to navigate its bureaucratic procedures. People need more **user-friendly signage** in person and online to assist in this process.

3. When initially engaging with the legal system, people **need warm and efficient welcome experiences** to encourage them to follow through with the procedure and to give them confidence and dignity while doing so.

4. The court experience is defined by paperwork: forms, brochures, worksheets, motions, and more. Redesigning **paperwork to be more visually clear, prioritized, and manageable** can have a major improvement on people's ability to use the system well.

5. Before people come to court, and in between their visits for assistance and hearings, there is an opportunity for them to get more of their legal tasks completed online. This Article proposes the development of more **online court tools that can help people prep for their court visits and get their tasks done correctly**.

6. When in the court building, people need better **work stations and materials** to get their tasks accomplished, so that they are prepared for the clerk and the judge.

7. Overall, the court system needs to develop **a culture of usability testing and feedback** in order to understand where there are failpoints for the litigants, as well as negative and frustrating experiences or ideas for improvements.

Having proposed these seven areas of focus and specific ideas to implement in each area, the Legal Design Lab's upcoming research involves crafting specific pilots of these ideas and then evaluating their outcomes with metrics focused on efficiency and experience. Our initial design research indicates that these concepts promise to be meaningful and feasible, but follow-up work is needed to examine which

interventions work best in practice. Beyond these specific recommendations, the Article aims to introduce the field of design into the work of legal organizations in order that they may benefit from its creativity and emphasis on empirical user research.

The purpose of these generative design pilots is to develop hypotheses that can feed into rigorous empirical trials of these proposed interventions. The intention is that these trials can be used by practitioners and funders as they decide how to proceed with "court innovation.". We also intend them to lead to further scholarly work, with rigorous pilots, trials, and explorations of the outcomes that these proposed interventions lead to. Our initial, qualitative, exploratory work lays the groundwork for more extensive, controlled empirical studies.

I.   THE PROMISE OF HUMAN-CENTERED DESIGN FOR ACCESS TO JUSTICE

A.   *What is a Human-Centered Design Approach?*

Human-centered design is a methodology that has grown out of other fields of design and innovation in the past two decades.[7] It aims to generate promising new interventions that can address wicked, complex problems. It begins with a profound focus on the people whom a product, service, or system is trying to serve. It uses this understanding to inform quick, agile creation and testing of new things to serve these stakeholders. It posits that the best way to evaluate existing offerings and to create new, better ones is to focus on the needs, values, and aspirations of the people who are the target audience of the offering.

This approach stands in contrast to the default approach to creating interventions, which is to take the point of view of the professionals or of the leadership in charge of the system. Their preferences, metrics, and hypotheses typically control how a system, like the court system, is created and run, as well as how new improvements are made. The human-centered design approach argues that to improve the functionality and experience of a given system, the needs and preferences of the user should be the guide. It judges a product, service, or system by what the experience of its audience is. Can they use this thing easily? Does it give them value? And is it engaging of their time and attention?[8]

What is the process of using a human-centered design methodology? It is a cycle of five main steps: understanding, synthesis, brainstorming and prototyping, testing, and refinement. Human-centered design begins with a research team conducting a substantial amount of user and field research regarding the status quo of a system. Based on this research, the team then scopes a particular design brief and set of target users to orient their work around. The team then begins to brainstorm new ways to serve the target users and solve a wicked problem they are experiencing. Then the team goes through multiple cycles of creating quick, rough

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7   *See* Brown, *supra* note 4, at 86.
8   *See, e.g.*, Richard Buchanan, *Design Research and the New Learning*, 17 DESIGN ISSUES 3, 13 (2001).

prototypes of new interventions, testing these prototypes with users and experts, and then refining them based on feedback. The goal is to act quickly and to build things in order to test hypotheses rather than merely speculating about what new idea will work best. It prioritizes getting feedback and testing results from actual intended users rather than only the evaluation of experts or system professionals.[9]

Human-centered design does not, in itself, propose what type of intervention will best solve a problem. It is a methodology that could result in various types of specific design work, like the design of new graphics, information layouts, technological products, service flows, organizations, rules, or systems. The approach is not limited to a particular format or channel to be delivered, but rather it focuses on the activities a team should employ to create the most appropriate solution for the context.

A human-centered design approach may also be termed a "user-experience design approach." The term "user experience" is commonly used within the technology industry to refer to the way that product teams research consumers' behavior, craft new technology to suit their needs and desires, and constantly test products to see if it is engaging the user.[10] The term "design thinking" is often used to refer to this approach as well, particularly when the approach is applied in social sciences, medicine, finance, and the humanities.[11] In this Article, the term "human-centered design" will be used for consistency, but "user-experience design" and "design thinking" would be equally relevant terms to refer to the approach.

i.   Research Through Design as an Academic Adaptation of Human-Centered Design

Though human-centered design is practiced commercially as an innovation strategy, it also has been brought into academic research under the framing of Research Through Design methodology. This practice, taken from the fields of Design and Human-Computer Interaction, is both analytic and generative. It involves the study of a "current state" of a challenge, with its many stakeholders, dynamics, and constraints, and then explores how to transform the challenge situation into a "preferred state.".[12] Rather than merely profile what the current situation is, a Research Through Design approach investigates what interventions could be employed to address the known problem areas and failpoints of a system. The approach is useful to create a vision and agenda for near-future innovations and to

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9   To read more about the practice of human-centered design, and the various types of ways to go through its core process, see generally MARGARET HAGAN, LAW BY DESIGN (2016), http://lawbydesign.co; LUCY KIMBELL, THE SERVICE INNOVATION HANDBOOK: ACTION-ORIENTED CREATIVE THINKING TOOL kit FOR SERVICE ORGANIZATIONS: TEMPLATES, CASES, CAPABILITIES (Warren Davis ed., 2015); LUMA INSTITUTE, INNOVATING FOR PEOPLE: HANDBOOK OF HUMAN-CENTERED DESIGN METHODS (2012); MARC STICKDORN & JAKOB SCHNEIDER, THIS IS SERVICE DESIGN THINKING: BASICS, TOOLS, CASES (2010).

10   *See generally,* ALAN COOPER, ROBERT REIMANN, DAVE CRONIN & CHRISTOPHER NOESSEL, ABOUT FACE: THE ESSENTIALS OF INTERACTION DESIGN (4th ed. 2014).

11   *See* Brown, *supra* note 4, at 86.

12   *See* John Zimmerman, Erik Stolterman & Jodi Forlizzi, *An Analysis and Critique of Research Through Design: Towards a Formalization of a Research Approach*, *in* PROC. 8TH ASS'N COMPUTING MACHINERY CONF. ON DESIGNING INTERACTIVE SYS. 310 (2010).

build prototypes that allow for these interventions to be tested and evaluated. It also helps to identify unexpected outcomes and human experiences that result from the introduction of novel technologies, bringing a critical approach and an attitude of experimentation to discussions of technological innovations in a field.

Research Through Design uses human-centered design methodology to analyze a current situation as it is, propose new interventions and treatments informed by this initial research, and then test and refine these interventions. It has a dual purpose of promoting scholarly understandings and real-world change. The initial research into the "as is" situation produces material for both academic work and design workshops, identifying who the main "users" of the system are, what tasks they are trying to accomplish, what needs (both short-term transactional and long-term experiential needs) they are trying to fulfill, and what their requirements are for a good system. Then, the process turns to designing interventions to get to better "future states.". This is not mere speculation, but rather involves the creation and testing of prototypes with users, experts, and other stakeholders. The process of creating prototypes produces further learning for an academic audience, and the vetted prototypes are potential pilots for real-world organizations to implement.

B.   *Legal Professionals are Increasingly Recognizing This Approach's Relevance to the Justice System*

Human-centered design methods have emerged out of other disciplines, notably computer science, human-computer interaction, and product design. Now they are gaining influence among practitioners and academics concerned with improving the legal system.

People working on bringing innovations or improved services to the justice system have begun to employ human-centered design. Los Angeles County court professionals Clarke and Borys identified that courts need to take the user's perspective to consider how to reform themselves.[13] They propose for legal professionals to take a "usability"-driven approach to considering how better to operate.[14] From their work in California courts, they recognize that what laypeople want from their court experiences is not understood or served by court professionals. They propose that courts create new models of service to fit with litigants' preferences for self-service, education and orientation, and a concierge to guide them.[15] More broadly, they propose that courts invest in usability work to understand their users' needs, their abilities, and what new concepts would improve their experience.[16] They draw the link between improved user experience and courts that will be more efficient, and able to operate better with limited budgets.[17]

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13   John A. Clarke & Bryan D. Borys, *Usability is Free: Improving Efficiency by Making the Court More User Friendly, in* NAT'L CTR. FOR STATE CTS., FUTURE TRENDS ST. CTS. 76 (2011).
14   *See id.* at 78.
15   *See id.*
16   *See id.* at 79.
17   *See id.* at 78–79.

In British Columbia, court leaders and legal aid lawyers are explicitly embracing human-centered design in order to improve the quality and efficiency of the services they offer. The British Columbia A2JBC initiative, led by the Chief Justice of the province, has centered its work on an ethos of user-centered experimentation, empathy, and collaboration.[18] Shannon Salter and Darin Thompson have brought user-centered design to reimagine how to resolve disputes in their efforts in British Columbia to create a new online dispute resolution system.[19]

In the UK, a design agency worked together with the technology company Cisco to initiate a design cycle on improving court technology to facilitate more fair and accessible courts for litigants.[20] They brought a design-thinking approach to examine what various stakeholders in the court need in regards to appearances, hearings, and videoconferencing, and then used the approach to explore the best ways to implement videoconferences so that they could support litigants.

In particular, those concerned with self-represented litigants have embraced a human-centered design approach. Fifteen years ago, there was a unique collaboration between a law school (Chicago-Kent) and a design and technology school (Illinois Institute of Technology) that conducted a multi-year design project to remake the court system from the self-represented litigant's perspective.[21] They carried out extensive observations, interviews, and focus groups to understand how the system currently operates and to identify new ideas that could be implemented to improve the litigants' abilities and experiences. At the end of their project, they produced a book of ideas for technology, service, and space design that courts or non-profits could utilize to improve the usability of courts.[22] From these proposals emerged the A2J Author/Guided Interview software, which has been implemented across the country to allow for visual, humanized interviews of litigants and to make it easier for people to fill out court forms online.[23]

There are an increasing number of organizations, primarily based at universities, that focus on developing new innovations for improved court experience. These include Northeastern University's NuLaw Lab,[24] Stanford's Legal Design Lab,[25] University of Denver's Institute for the Advancement of the American Legal

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18   *See User-Centered*, ACCESS TO JUST. B.C., https://accesstojusticebc.ca/approach/user-centred/ (last visited Oct. 19, 2017).

19   *See* Shannon Salter & Darin Thompson, *Public-Centred Civil Justice Redesign: A Case Study of the British Columbia Civil Resolution Tribunal*, 3 MCGILL CTR. DISPUTE RES. 113 (2017).

20   *See generally* JAMIE YOUNG, ROYAL SOC. ENCOURAGEMENT ARTS, A VIRTUAL DAY IN COURT: DESIGN THINKING AND VIRTUAL COURTS (2011).

21   *See* CHARLES L. OWEN, RONALD W. STAUDT & EDWARD B. PEDWELL, INST. DESIGN & ILL. TECH. CHI.-KENT C.L., ACCESS TO JUSTICE: MEETING THE NEEDS OF SELF-REPRESENTED LITIGANTS (2001).

22   Owen, Charles L, Ronald W. Staudt, & Edward B. Pedwell, *Access to Justice: Meeting the Needs of Self-Represented Litigants*, Chicago , 2001, https://www.kentlaw.iit.edu/Documents/Institutes and Centers/CAJT/access-to-justice-meeting-the-needs.pdf.

23   *See* CTR. FOR ACCESS TO JUSTICE & TECH., ILL. TECH. CHI.-KENT C.L., A2J AUTHORING GUIDE (3d ed.).

24   *See About the Lab*, NULAW LAB, http://www.nulawlab.org/about (last visited Oct. 26, 2017).

25   *See Legal Design Lab*, STAN. L. SCH., http://legaltechdesign.com (last visited Oct. 20, 2017).

System,[26] Michigan State's RnD Law,[27] Chicago-Kent's Law Lab,[28] Brigham Young University's Legal Design Lab,[29] and Harvard Law School's A2J (Access to Justice) Lab.[30] Each of these relatively young university innovation centers conducts a mixture of research into the current models of services provided to litigants without lawyers combined with design work to craft new proposals, software, paperwork, and other interventions to improve the service. Other institutes outside of universities, like the Self-Represented Litigants Network (SRLN) and HiiL in the Netherlands, have also begun to explore new models for how courts can support litigants' access and use of the courts. HiiL uses an adaptation of the design process to run Innovating Justice projects with courts.[31]

C.   *How it Fits Into Legal Theories and Approaches*

Human-centered design, and the academic adaptation of Research Through Design, is not completely alien to established legal research approaches. Though legal academics tend not to use the language of "design," the practices and values of a human-centered design approach links quite closely to several long-standing and new trends in legal research. In particular, a design approach is interlinked with empirical legal studies, law and society research, and legal participatory action research. It is worthwhile to situate this interdisciplinary design research among the existing legal research disciplines. Design thinking and Research Through Design can be a complement to these other domains of legal research, which bring more quantitative rigor and long-term observations. Our design methodology allows for more rapid cycles of observation, creation, and vetting of ideas for interventions in ways that can serve the more long-term research methodologies in other disciplines.

Our design research approach is a complement and a predecessor for **Empirical Legal Studies work**. Empirical legal scholars focus on rigorous testing of the outcomes that result of interventions, while a design approach focuses on the development of better interventions to test rigorously. Our intention is to create better, more vetted, and more promising interventions that our empirical legal studies colleagues can test. A Research Through Design scholar experiments more with what new interventions might be possible, what outcomes result in focus groups or lab simulations, and what new technologies and insights into human behavior might lead to interventions that are more likely to succeed.

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26   *See Institute for the Advancement of the American Legal System*, U. OF DENVER, http://iaals.du.edu (last visited Oct. 20, 2017).

27   *See Legal RnD: The Center for Legal Services Innovation*, LEGAL RND, http://legalrnd.org/ (last visited Oct. 20, 2017).

28   *See The Law Lab*, ILL. TECH. CHI.-KENT C.L., http://www.thelawlab.com (last visited Oct. 20, 2017).

29   *See* Joe Hadfield, *BYU Law Launches LawX, an Idea Incubator Within a Classroom*, BYU NEWS (June 20, 2017), https://news.byu.edu/news/byu-law-launches-lawx-idea-incubator-within-classroom.

30   *See A2J Lab*, ACCESS JUST. LAB AT HARV. L. SCH., http://a2jlab.org (last visited Oct. 20, 2017).

31   For a high-level description of HiiL's process to help make courts work more quickly and with greater attention to users, see *Innovating Procedures*, HIIL, http://www.hiil.org/audiences/innovating-procedures_(last visited Oct. 20, 2017).

A human-centered design approach also connects with a **Law in Action** research approach. These branches of legal scholarship emphasize how the legal system applies to society and how it affects people's lives in the real world.[32] To understand law, this approach argues that legal researchers must not only study what is written in the books but how it is practiced and experienced. A human-centered design approach also prioritizes lived experiences of stakeholders in the legal system and encourages researchers to observe, interview, and experience how it feels to go through legal processes, make arguments, and navigate the system.

Similarly, the **Law in Society** approach relates closely to a human-centered design approach. Law in Society scholars focus on how law operates as a social institution, researching the effects it has on social, political, and economic activities.[33] A human-centered design approach takes a similarly holistic approach to the legal system. It is not concerned with law as an end in itself or under the pretense that it is a closed-off domain unto itself. Rather, it starts from the premise that people—litigants, lawyers, court professionals, and other stakeholders—experience the legal system in a much broader context of needs, wants, and aspirations. Like Law in Society scholars, this Article is also interested in how experiences of the legal system affect people's wider life situation, including their economic level, their family stability, and their relationship with institutions.

A final related field is **Legal Participatory Action Research.** Like a human-centered design approach, this form of action research also involves close work with the stakeholders in a given challenge area, and it encourages researchers to use interactions and creative work to produce new insights. Legal design borrows from the social science Participatory Action Research approach. It involves researchers working alongside the people whom they are studying, or in the context that they want to understand. The researchers and stakeholders work collaboratively to understand critically how the current social and legal systems operate and describe the effects they have.[34] This grounds the analysis in "lived experience" rather than theory.[35] Then the researchers turn to questions of social change, using the same collective process to consider how to improve the system vis-á-vis the stakeholders. For example, one team of legal researchers took a Participatory Action Research approach to young people's relationships with the criminal justice system on site at a public high school class oriented around social justice and constitutional rights.[36]

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32   For further exploration of this field, see generally STEWART MACAULAY, LAWRENCE MEIR FRIEDMAN & ELIZABETH MERTZ, LAW IN ACTION: A SOCIO-LEGAL READER (2007).

33   For key collected works from this research area, see generally LAWRENCE M. FRIEDMAN, LAW AND SOCIETY: AN INTRODUCTION (1977); THE LAW AND SOCIETY READER (Richard L. Abel ed., 1995); THE LAW & SOCIETY READER II (Erik Larson & Patrick Schmidt eds., 2014).

34   *See* Caitlin Cahill, *Defying Gravity? Raising Consciousness Through Collective Research*, 2 CHILDS. GEOGRAPHIES 273, 275 (Aug. 2004).

35   *See* David Stovall & Natalia Delgado, *"Knowing the Ledge": Participatory Action Research as Legal Studies for Urban High School Youth*, 2009 NEW DIR. YOUTH DEV. 67, 68 (2009).

36   *Id.* at 73–76. Stovall and Delgado's research project had them as teachers of this class, but also doing legal research with their students about reforms to the criminal justice system, and observations about the students' lived experiences of the system.

The Participatory Action Research process tends to be open and developmental, with co-construction of themes, insights, and outcomes, led by the stakeholders.[37] This approach is very closely related to a human-centered design approach to legal services, with a shared focus on interaction with stakeholders, generative work, and iterations of understanding and building.

D.   *Bridging Design to Access to Justice*

Our team decided to adapt a human-centered design process to the current legal system in order to explore its value in promoting access to justice. This emerged out of ongoing workshops and exploratory design research at Stanford Legal Design Lab, including several with courts, legal aid lawyers, and Self Help Center staff. These day-long and half-day workshops prompted us to consider that there would be worth in a longer, more robust, design-driven study of court Self Help Centers. Our partners in the work, the California Judicial Council, and the Self Help Centers in San Mateo and Santa Clara county courts, have the mission of supporting self-represented litigants. Their goal of public legal education and service to litigants (especially those without lawyers) was in sync with our own focus on improved user experience.

In our discussions with our partners and other experts leading up to our design work,[38] we heard many anecdotes and explanations that reinforced our perspective that a human-centered design approach would have particular relevance to improving the court system for the litigants' interests. If the access to justice crisis is in part fueled by a "user experience breakdown," then a process that focuses on improving this experience and taking the user's perspective into account might have power to ease this crisis.

The first anecdotal insight we heard was that the court system has evolved primarily via a top-down approach, oriented around historical precedent about how to provide services ("we've always done it this way") and a priority on the system professionals ("the legal system was made for judges, clerks, and lawyers").[39] Traditionally, the rules, spaces, forms, and other materials of the court have not been made based on the litigants' needs. Thus, a review of the system from the user's experience may unveil critical opportunities to improve how it functions and how people relate to it.

Our second key insight from our pre-work is that the court system often is experienced as intimidating and overwhelming for litigants. The rules, forms, and other procedures frequently are communicated with legal jargon. They also can be

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37   *See id.* at 75.

38   Our teaching team conducted expert interviews and site visits, including thorough presentations of our work, design sessions, and feedback sessions at the Self-Represented Litigant Network conference in 2017, the Beyond the Bench conference for family courts in California in 2015, the Equal Justice Conference in 2017, and the LSC TIG Conference in 2016.

39   For a discussion of how the legal system's history has biased its services and mental model towards legal professionals and against the interests of self-represented litigants and other non-legal experts, see Salter & Thompson, *supra* note 19, at 117–18 (2017).

quite complex, with many tasks, options, and hand-offs, which makes it hard to quickly understand.[40] People struggle to figure out how to apply the system to their own cases and then to make their way through its pathways. At the same time as the system is confusing, the stakes of using the system are high for users. The process can be expensive and demanding, and the outcome can have a binding effect on their lives, with penalties, rules, and life changes decided by the system in response to the person's interactions with it.

The third user experience breakdown we heard about was that litigants felt as though they lacked meaningful "choice" in the system. In most cases, entry into the legal system is a mandatory thing, and this exacerbates the poor experience. Laypeople often do not "choose" to go to a court to deal with their problems, but rather do so because circumstances have forced them to. This means that they enter into the experience without wanting to be there or trusting that it will work out for them. As a result, as many litigants are going through the system, they are not fully engaged in the procedures and decision-making—so they miss deadlines, they don't complete tasks well, they don't fill in forms to their best advantage, they don't represent themselves well before judges, and they otherwise don't take full advantage of the legal system.

Fourth and finally, we heard that legal systems demand a great deal from a person in order to successfully complete a process to resolution. Even if a litigant makes it to the court and begins the paperwork, getting to resolution requires sustained engagement in completing tasks and long-term thinking to make strategic choices. These are demanding of a person, particularly when they are already in a difficult life situation, going through problems with family, housing, debt, employment, or otherwise. The volume of tasks and length of time required can be overwhelming and eventually lead to disengagement.

These four factors—the top-down design, the intimidating language and interfaces, the mandatory nature, and the difficult decision-making—were presented to us as leading factors in why many litigants have poor experiences in civil court. These factors are present in the civil legal system even in the better scenarios of a court design. When a court's spaces, signage, websites, forms, and interactions have not been designed well for litigants, this can make for even poorer user experience.

Our design team used this input from court professionals and academic research to frame questions for our fieldwork. We began with a set of questions that emerged from the input. How could we transform users' experiences of the civil court system? What would a court experience look like that would be navigable, accessible, supportive, and engaging? How can it be easier for a person without a lawyer to use the rules, procedures, and customs of the justice system to get to a resolution to their problem with minimal intimidation, confusion, and inconvenience? And what is the process we can use to get to these innovative ideas and vet them?

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40   For confirmation of this, see D. James Greiner, Dalie Jimenez & Lois R. Lupica, *Self-Help, Reimagined*, 92 IND. L.J. 1119 (2017).

II. OUR THESIS: HUMAN-CENTERED DESIGN CAN SPUR INNOVATION IN ACCESS TO JUSTICE

Our design team's main hypothesis is that we can improve access to justice by focusing on improving the user experience of the legal system and using the human-centered design approach to craft new interventions. Within this overarching position, we have three particular hypotheses to explore:

1.   We can adapt methodology from human-centered design process to the question of how to provide more effective, efficient legal services to people (especially those of modest means without legal representation).

2.   This approach will empower us as researchers, along with our court professional partners, to generate new interventions in quick, agile, and experimental ways that will help us get to promising new initiatives more quickly.

3.   If we focus more on people—our "users"—we can produce ideas that have more promise and value to them. This approach will guide us to spend limited public funds in more strategic and successful ways, with better procedural justice for litigants and efficiency for the court.

A.   *Our Work and Classes*

We explored these hypotheses through a series of workshops and classes taught in partnership with courts and their Self Help CentersC. With these aspirations, our group of students and faculty began a series of human-centered design sprints in partnership with court Self Help Centers.

In Spring 2016, Stanford's Legal Design Lab ran the nine-week class "Prototyping Access to Justice."[41] It aimed to gather on-the-ground findings about self-represented litigants' user experience needs, failpoints, and guiding principles. It was taught at Stanford Law School and Institute of Design in partnership with the San Mateo County's Self Help CenterC. The class involved the first half of the design process, with user research, synthesis of findings, and an initial set of new ideas for interventions that the court could implement to improve user experience. It generated a list of possible new innovations that range from the inexpensive and immediate, to the expensive and long-term.

A second round of this class was taught in Winter 2017, again at Stanford Law School and Institute of Design.[42] This second version of the class built on the first

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41   To see this first class, see *Prototyping Access to Justice: Designing Better Self-Help Materials for Litigants*, LEGAL DESIGN LAB, http://www.legaltechdesign.com/prototyping-access-to-justice-designing-better-Self Help-materials-for-litigants/ (last visited Oct. 20, 2017).

42   To see this second class, see *Prototyping Access to Justice Courses*, LEGAL DESIGN LAB, http://legaltechdesign.com/access-innovation/prototyping-access-to-justice-courses/ (last visited Oct. 20, 2017).

class's research, insights, and prototypes. It focused more on the second half of the design process: building new prototypes, testing them with various stakeholders, and determining how they might be implemented as pilots in the court organization.

In addition to the classes, we also ran shorter workshops and hackathons on the topic of improving the user experience of courts. These were meant to complement the classes' long design cycles with short sprints of research, in new contexts and settings. This included a September 2016 two-week short course at Northeastern University's School of Law, entitled "Access to Justice by Design."[43] That course focused on improving user experience of housing court in Boston for people without lawyers. In February 2017, we participated in a Harvard Law School hackathon on designing new access to justice tools for people going through guardianship proceedings in Massachusetts.[44] In April and May 2017, we held another intensive workshop series, "Design for Justice," focused on improving traffic courts' user experience in Alameda County, California.[45]

We ran and participated in this series of courses and workshops in order to generate and hone promising new ideas for a better litigant-court experience. A Research ThroughT Design approach encourages going through multiple cycles of design work, in different settings, with different sets of participants and experts. This iteration can generate more ideas and also identify which trends have the most overarching promise.

Each workshop and course constituted a new design cycle in a slightly different context. Each cycle was a test of our core hypotheses, of whether this approach would be able to generate promising service designs for courts and improve the user experience of courts. The iterations also helped us to refine the approach we took, to see exactly how best to make a general human-centered design approach more relevant and particular to court leaders, legal aid groups, and others. The primary goal was to evaluate whether the approach would be able to surface and prioritize possible interventions that would test well with both court professionals and self-represented litigants.

B.   *How We Used the Human-Centered Design Process*

In each stage of the cycle, we followed the arc of human-centered design process to conduct this work as a Research Through Design project. We adopted the design process in order to generate promising ideas for a better court system, but we also used it to create intermediate deliverables to ensure that we understood the terrain and the various stakeholders' perspectives.

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43   To see a listing of this short course at Northeastern, see *Givelber Distinguished Public Interest Lecturer Program*, N.E. U. SCH. L., http://www.northeastern.edu/law/academics/conferences/givelber.html (last visited Oct. 20, 2017).

44   To see notes on this Hackathon at Harvard Law School, see *The A2J Lab's First Hackathon*, ACCESS TO JUST. LAB, http://a2jlab.org/the-a2j-labs-first-hackathon/ (last visited Oct. 20, 2017).

45   To see details on this class, see *Design for Justice Sprint*, LEGAL DESIGN LAB, http://www.legaltechdesign.com/design-for-justice-sprints/ (last visited Oct. 20, 2017).

In each cycle, we first formed small interdisciplinary teams of students, and we brought in volunteer visual and interaction designers to coach each of the teams. Each team was introduced to the Self Help CenterC court staff and the other representatives of our court partners.

Our teaching teams oriented the teams in the challenge area. We provided them with literature reviews of access to justice, court redesign, and other innovation literature. The teams visited the courts and spoke with stakeholders, including litigants, staff, and court leaders, to understand the "as is" situation of Self Help resources in the partner court. During this empirical, qualitative work, the teams focused on a short set of questions:

1. **Where are there gaps?** Where does the status quo not deliver? Where are there gaps in the theories and models? Where are the desired outcomes and the current products not in sync?
2. **What has been tried before?** What other interventions or concepts have been used to improve the situation? How have they fared? How could they have been done better?
3. **What else is possible?** Draw on larger theories from the field or analogous fields about what other types of models, patterns, products, and services could be useful to achieve the outcomes.

The students mapped out the stakeholders, the process that litigants went through, and the physical space and resources that they were supplied with. They observed the court and Self Help Centers in action. They interviewed clerks, volunteers, security guards, judges, lawyers, directors, and other professionals about what they observe about service provision. They also interviewed litigants about their experiences at court. Finally, they went through the services themselves, doing "service safaris" and "walk-a-mile" exercises, in which they attempted to navigate court processes and buildings as if they were self-represented litigants.

They used this research to create a first set of design deliverables: requirements, personas (described below), and other guiding insights. These deliverables will be useful as empirical research findings that can guide other work to identify possible interventions and to measure their effectiveness, as well as hypotheses about what successful strategies might be. The first half of the design process generated the following empirical learnings about self-represented litigants, as captured in the following design deliverables. These materials are documented online on our class site for the audience to explore.[46]

1. **Journey maps** that document how people proceed through the system. A journey map documents the series of tasks that a

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[46]   To see the class work product, see *Prototyping Access to Justice Courses*, LEGAL DESIGN LAB, http://legaltechdesign.com/access-innovation/prototyping-access-to-justice-courses/ (last visited Oct. 20, 2017).

person goes through to get from the beginning to the end of resolving a problem.

2. **Empathy maps** that document what people are saying, feeling, and thinking in the given situation. These maps capture the experiential factors that offer depth to the tasks in the journey maps.

3. **Failpoints of the current system** that set an agenda of what needs to change. These are where the litigants get frustrated, disengage, or otherwise have a negative experience.

4. **User needs and problems lists** that complement the failpoint list. User needs are defined more around the things, features, values, and experiences that the litigants must have in order to have success.

5. **User goals** that point to users' longer term aspirations and deeper emotional and social dynamics at play in their interactions with the system. A goal is more abstract and long-term, while needs are more explicit and transactional.

6. **Personas** that document the primary user types.[47] They are fictionalized versions of real test users' behaviors, expressions, preferences, and ways of working. They can also be considered composite user archetypes. The personas should include details about these archetypes' "mental models"—how they understand the system, what heuristics they use, and what metaphors and assumptions they have.[48]

These lessons then led the teams to create more systematic summaries in the form of **guidelines of what we should be building and how to measure it.** These guideline deliverables include the following:

1. A **User Requirements list** that spells out the explicit "must-do's" and "must not-do's" that define what people need for solutions. This shortlist directs the future design work, constraining the work to what the users actually will use and do.[49]

2. A **synthesized set of Design Principle**s for this specific challenge area that define what the core guiding values should be for this area. This takes the findings of the earlier synthesis work and distills it into a set of core principles to follow.

3. **Key Intervention Points** that mark out exactly where in a system's operations or a user journey is a rich opportunity for a new design. This borrows explicitly from the journey map, the

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47   *See, e.g.,* COOPER ET AL., *supra* note 10, at 67.

48   *See* INDI YOUNG, MENTAL MODELS: ALIGNING DESIGN STRATEGY WITH HUMAN BEHAVIOR 2–8 (Karen Whitehouse ed., 2008).

49   *See id.*

empathy map, and the failpoint list. Points of high emotion are typically these opportunities to focus interventions toward.

4. **Design Briefs** that crystallize the needs, goals, and other observations into single challenge questions. A brief is an encapsulation of the thing that the design team should be solving: how might we resolve this user problem, given the important constraints and dynamics we have observed? The design brief focuses the team on certain personas and needs, scoping them for a particular type of target.

As the design cycle turned from examining the present state to defining a better future state, scoping these design briefs was crucial. The teams each began to focus on a different type of user or point in the process as the area for which they would direct new interventions. The teams crafted design briefs, framing the general questions of "how to improve the user experience of the courts" to a more particular challenge, type of user, and point in the process. This moment of focus is meant to produce better ideas, using constraints to generate more particular and targeted interventions.

From these briefs, the teams turned to the second, generative half of the design cycle, working to create new concepts for solutions and interventions and to evaluate them. They began with a wide-ranging brainstorm. Before jumping straight to a new solution to pursue, the team went wide with ideas and concepts. They used rapid feedback methods and in-field implementations to gather lessions about which of the ideas had the most promise to resolve the challenge area.

Then the teams prototyped and tested interventions to judge whether they would in fact get to a "preferred state" for the various stakeholders. As they got feedback about their prototypes, they then either abandoned or refined them, aiming towards the development of a feasible, viable, and desirable initiative that the court or a third-party would actually pilot. The cycle concluded with a working prototype of the intervention, a plan of action about how it can be feasibly, viably implemented in a pilot context, and a plan for how it can be evaluated. These materials were presented back to the court leaders and other subject matter experts for them to consider if they would develop and pilot it. This review helped us to evaluate our hypothesis to determine the value of the method and the ideas it produced.

Each of the cycles used the same process, though some were more focused on the beginning part of the process (understanding the stakeholders and defining requirements, principles, and briefs) while our subsequent cycles spent more type on the second half (brainstorming, prototyping, iterating, and planning for pilots). Our teaching team saw the iterative cycles as a benefit, in which new teams could learn from past ones' findings and concepts to refine their own thinking more quickly and jumpstart creativity in defining even more clear and ambitious concepts. We created a website resource to capture each cycle's output.[50] Our hope is that similar courses

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50   *See How Can We Make the Legal System More Accessible, User-Friendly & Just?*, Access & Ct. Innovation, http://legaltechdesign.com/access-innovation/ (last visited Oct. 20, 2017).

could be repeated in other schools or courts and act as further iterations that leverage this earlier work to arrive at even stronger, more successful design work.


III.   FINDINGS AND RECOMMENDATIONS FOR A BETTER COURT USER EXPERIENCE

Having gone through these multiple design cycles with courts and Self Help Centers, we distilled the various sets of user research findings, journey maps, requirements, personas, and other intermediate design deliverables. This Section presents our key user research findings about the experience of courts. The next section turns to the actual ideas for interventions with a shortlist of opportunities for improving access to justice in courts.

A.   *Particular Types of Users, and Common User Needs and Situations*

In our fieldwork and discussions with professionals, our design teams encountered distinct types of Self Help service users. These include the litigants themselves, as well as advocates and family members who accompany them and are co-users of the system. In our interviews and observations, our teams investigated what these various users appreciated and what they disliked about the current system. Several of the themes that emerged were about trade-offs between technology and high-touch human services, wanting to know lots of information versus avoiding too much detail, and control over who was actually doing the work and making decisions.

From this design work, our teams generated personas to capture the different archetypes that innovation efforts should consider. In particular, they identified four main user groups. These archetypes allow courts to provide customized solutions to particular user types. These types exist along different vectors of characteristics, which would lead to different kinds of solutions.
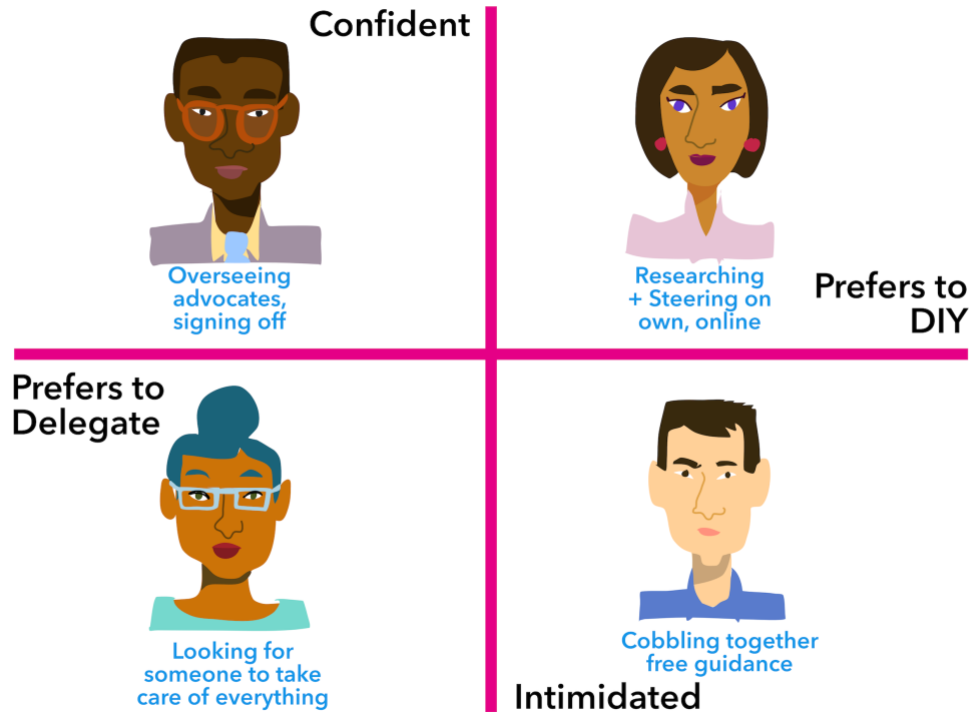
During our design sessions, we progressively synthesized the main types of personas into four quadrants, along the vectors of the person's confidence/intimidation within the legal system, and the person's desire to delegate/do-it-themselves. The four personas within these vectors are as follows:

1. **The Confident Delegator**: who feels able to understand their options and expectations, but who would prefer someone else to do the work and watch over the case for them.
2. **The Confident DIY-er**: who wants to do their own legal research and preparation, make their own choices, and feels that they have enough knowledge and skills to be effective at DIY.
3. **The Intimidated Delegator**: who doesn't feel they can navigate the system on their own, and who wants to find an expert to hand over their decisions and process.
4. **The Intimidated DIY-er**: who, even though they feel overwhelmed by the legal system, still wants to assemble their own strategy and work, while asking for some help and support.

We observed these four core personas during our focus groups, interviews, expert conversations, and observations. These categories can be a way to judge future interventions: Would a given intervention serve all four of these core archetypes? Or should there be a multi-pronged strategy of interventions, which target these different archetypes in different manners?

In addition to these core personas, our user research also unveiled some other key points about user types that should guide future work on improving user

experience in the courts. The following types of needs and features should be a checklist for interventions, so that ideally any new solution would be sure to cover this type of person:

1. **Limited English proficiency.** We encountered so many language access issues with the current service offerings from the court. There is a high need for those who have difficulty reading, writing, and speaking English. Future solutions must ensure that they are built to serve people who lack this English mastery.

2. **Apprehension about being in a government system**. We heard from many people who are not just lacking confidence about the legal system, but who generally did not feel capable of navigating a government system or discomfort with being part of one. Any intervention must be aware of this anxiety that people have regarding "being in the system.".

3. **Technology limitations in ownership and usage.** Most people we encountered did have a mobile phone, at least, and were comfortable using it to text, send messages on other platforms, and search the Internet. Some did change their phone and their number frequently. Many did not use a desktop or laptop computer at home. This indicated to us that future interventions should be built primarily for the mobile phone experience, and should not be dependent on a stable phone number.

4. **High undercurrent of negative emotion.** Particularly for people who were in court to deal with family law and housing law issues concerning their separation from a partner, protection from abuse, custody of kids, or their ability to stay in their house, there was a general high level of emotional responses. In our observations of lines and waiting, our team observed several outbursts of frustration or sadness, apparently prompted by long waits in tight spaces, while overhearing other litigants' stories. Generally, people expressed that even if they were there for mundane tasks of paperwork or talking with lawyers, they had an undercurrent of strong, negative emotions like anxiety, fear, and sadness. We supposed that future interventions should aim to relax these negative feelings and not to add more points of frustration that can lead to outbursts of them.

5. **Time pressure during the workday.** A regular concern we noted, pervasive across many different archetypes, was the stress around spending time at the court because of the costs it incurred to the person. This included paying for parking (and then having to repeatedly leave and return to the court to extend payments for parking), getting childcare coverage, taking vacation days from work, and transit costs to get to the building.

6.   **Multiple people on a "team.".** A final observation that we regularly observed was that an individual does not go through a self-represented case on their own. Oftentimes, there are friends or family members who are assisting, translating, recording, and supporting the litigant. In some cases, the non-litigant is taking a lead in gathering information and making decisions for the litigant, particularly when the litigant is not proficient in English. Future interventions could recognize these family "teams" around a litigant and support the joint communication, decision-making, and work these teams must do together.

These user insights can serve almost as a checklist of concerns that future interventions should be assessed with. The concerns are user-based metrics by which to judge whether a proposed intervention for a court would be addressing core needs and constraints of litigants. Ideally, new solutions will take into account these concerns and help resolve these frequent user issues.

B.   *User Needs and User Experience Breakdowns*

After documenting these particular user situations and insights, our team synthesized our observations and interviews into higher level specifications of key user needs. We decided to frame them in terms of "user experience breakdowns"— where the litigants had spikes of negative emotions and reported problems with their court process. As documented in another article we have written about two of the design cycles, we observed three overarching groups of problems that self-represented litigants experienced while going through a court process.[51]

Many people experience a **lack of control** while going through the system. They feel that there are so many tasks to complete, and they are highly confused while trying to do them. People report that the process of going through family law matters, traffic tickets, housing problems, and other civil court processes is confusing. The system has so many steps in its processes, and its jargon and rules are unfamiliar to most laypeople. This means that people do not understand how the system operates, and they feel that they lack control while inside it.

At the same time, there is a **lack of trust** that the system will serve them well. There is a suspicion that people cannot rely on the system to protect their best interests, and there is a fear that they might be taken advantage of because of this ignorance. This lack of trust also manifests as a need for more face-to-face services, with a distrust of online or even telephone-based services, based on a feeling that the litigant needs to see the face and character of the service-provider in order to feel comfortable trusting them.

Finally, litigants report high levels of **fear and stress** while trying to navigate the court process. The stakes are high for litigants, with their family, finances, and

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51   Margaret Hagan & Miso Kim, *Design for Dignity and Procedural Justice*, *in* Advances in Intelligent Sys. & Computing, Proc. Applied Hum. Factors & Ergonomics Int'l Conf. (2017).

housing at risk, depending on the outcome of the court process. There is a great deal at risk, and without clear outcomes, so many are very apprehensive about what is happening to them. The fear and stress are often exacerbated by the acute awareness that this system favors "lawyers" above "non-lawyers,", positioning self-represented litigants as second-class users of the legal system.

These destructive dynamics are clear problems for users' experience of the courts. People are typically using the legal system because they are trying to deal with a major life problem regarding their family, employment, housing, income, or security. The processes of the legal system seem to exacerbate these negative emotions and feed into poor user experience.

Engagement as a primary challenge for people in the legal system
Our work also pointed to "engagement" with the legal system as a major challenge. It is difficult for many litigants to begin a process with the courts, and it is also challenging to stay on top of this process, to complete it correctly, and to resist the urge to disengage. We saw this "engagement" challenge manifest in four different dimensions:

1. **Ignorance** of the legal system and the services it offers to people who want to use it. People are unfamiliar with the process, as well as the "legal mundanity" of where to go, how to dress, how to speak, and other unspoken details of navigating the court system.[52] The ignorance then leads to a lack of engagement or sustained follow-through.

2. **Intimidation** that prevents use of the service because the person feels that they don't have the resources (time, money, etc.) or the capacity to use it. This often manifests in people feeling confused or lost as they attempt to start using the legal system. Other research around litigants' experience in Self Help centers also points to the need to address anxiety and apprehension of people in this unfamiliar system.[53]

3. **Logistical inertia** to begin the process, because it is hard to find the time or money to access the services, or because they are confused about what actually to do.

4. **Burn-out** while trying to complete a process. Even after a person starts to use the legal system, bad experiences combined with the length and expense of the process to trigger the person to disengage.

All of these are user experience and service design failpoints. For example, when a person is trying to figure out how to get a guardianship for their nieces, many of these engagement breakdowns occur. The person might be slow to start the court

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52   See the same findings of "legal mundanity" as a hindrance in self-help centers, in Greiner et al., *supra* note 39, at 1130.

53   *See id.* at 1128–30; *see also* Salter & Thompson, *supra* note 19, at 118 (documenting the experience of litigants being intimidated, confused, and stressed in the Canadian legal system).

process because they lack awareness that they are required to get an official guardianship. They might be aware of the process, but then be intimidated by the fees, timing, and requirements of the processes, and avoid it.

If they do begin a guardianship process, they still might disengage from it because of the amount of paperwork, steps, and fees involved it. And even if they have been able to get going with the process, they might disengage after investing efforts into the process, not feeling that they have made sufficient progress, and getting burnt out with it to the point of exiting the process. The nuances between these engagement failures are important for the designer because there must be different types of strategies to deal with each.

C.   *How Human-Centered Design can Benefit Access to Justice*

From these needs, our teams went through brainstorms about what could be improved. In the next section of our paper, we go through the particular interventions that emerged from the brainstorms, which had the most promise according to the stakeholders. In addition to the particular concepts, we also documented the higher-level themes of where design was found to have the most promising application to the court system and advancing access to justice. These are each hypotheses for future study, or practice, about where design interventions should focus on improving the court system for people.

At the most general level, our design work suggests that a focus on **better user experience in courts can lead to litigants experiencing greater procedural justice.** Human-centered design appears well-suited to address common, poor experiences that people have when going through a court process. Out of this synthesis work, our design team drafted a short list of opportunity areas for user experience improvement in the court system. Each of these areas is a strategic opportunity for future design work to target in order to improve both the user's experience and the procedural justice quality.

1. **Counter negative emotions**: Our design work led us to the hypothesis that we can open up litigants' ability to comprehend information and to think strategically by countering negative emotions. If we can create services, communications, products, and systems that increase clarity and confidence, the litigants will experience less frustration, and their other negative emotions will be calmed.

2. **Reduce confusion and enhance perceived control**: Another hypothesis that emerged during the design process is that if we provide more process guidance, with a clear explanation of what to do, step-by-step, we will relieve their stress and give them confidence in their ability to take care of their problem. Ideally, a well-designed court system can make a person feel that they know their options and the steps along the pathway—thus giving them

a sense that they are in control. In this way, the redesigned court system could increase their chances of following through with the process and decrease the amount of drop-outs.

3. **Strategically advise people**: Even if a litigant is a total novice in the legal system and feeling as though they might disengage from it because of intimidation or burn out, we hypothesize that well-designed interventions can keep them engaged. As many of our brainstorms suggested, better designed communications (posters, paper dashboards, maps) or interactive products (apps, bots, calculators) can help them make wise choices. By understanding the user's mental model of the current system, the data points they need to make decisions, and the best way to present them complex information, new design work can give them supportive tools to help them form strategies that will carry them through the process.

4. **Allow for more efficient, simple experiences**: Ideally, the design process will identify where there are duplicative, unnecessary, or needlessly confusing points in the system. Users can evaluate problems with the "back-end" of the system (including rules, forms, deadlines, and substantial requirements) in addition to the "front-end" of how the court is set up, how services are provided, and what communications are offered to them. A design review of where inefficiencies and frustrations exist, on both of these front- and back-ends, can make clear what interventions are needed to simplify the process in ways that can dramatically improve user experience.

5. **Give respect and dignity through the process:** The act of consulting litigants about what they want and need, and following a design process that integrates their participation in the creation of improvements, can convey that the court system cares about the people who use it. A human-centered design process ideally will infuse the system with a sense of dignity and respect for the litigants. The process itself, apart from any particular intervention, can be a strong opportunity for improving procedural justice.

D.   *Overarching Principles*

As our design teams moved from synthesizing the current situations of litigants in Self Help CentersC towards potential new solutions, they crafted a list of overall principles that can guide future lawyers, court administrators, developers, and designers who aim to improve the court experience. These points emerged out of our discovery work, as well as the direct input from litigants and professionals in the court. Whereas the previous list, in SectionS 4.3, focuses on strong hypotheses of

where courts should focus to improve litigants' experience, this list is of higher-order principles that also suggest particular design strategies. These can be guiding principles to inspire and evaluate future interventions. Meaning, as courts create new websites, apps, forms, flyers, posters, and other materials, they can be evaluated with these principles, to see if these new things promote more consistency, full-journey support, system oversight, and mobile companionship, or if they neglect to.

1. **A Full-Journey View of the Litigant.** The court must consider the experience of the litigants and their co-users from their first contact with the legal system. This could be a summons in the mail, a visit to a website, or a chat with a friend. From this initial point, the court must view the user's journey as it proceeds through various "days in court,", work they must do outside on their own, and the gradual conclusion of their case.

2. **It Is Hard but Necessary to See the Entire System.** The court users we spoke with could not see the whole, bird's eye view of the processes, rules, paperwork, and organizations. Even some of the professionals were not able to see the system in its entirety. This is complicated even further if the litigant is seen as part of multiple social service and community systems. The sheer amount of process, different professionals, and varying requirements mean that it is very hard to feel the system is understandable and navigable. Design work must focus on helping people to see a comprehensive view of the system.

3. **Consistency is KeyK.** Across the paperwork, signage, website, forms, resource flyers, and other interfaces, there is a need for consistency and interoperability. Even if only in a standard visual language, with labels, hierarchy, icons, and modes of presentation, more intentional and user-centered presentation of court resources could help people find the information they need and make sense of all of the paperwork that they have. Whether in digital or paper-based format, litigants must deal with huge amounts of information resources, and consistent design and interlinking references would support rather than burden the litigant.

4. **Mobile, Process-Centered Companionship**. Resources are most useful if they can accompany a litigant throughout their various contexts on their journey. Ideally, it can be with them at home, in courtrooms, in waiting rooms, and in Self Help Centers. Currently, the huge amount of paper is unwieldy. Litigants must manage large amounts of conceptual information and physical materials. Our team heard repeated requests for more coordination of this information, in staged ways—so that it would be presented in short sequences according to where the person

was in the process. There is an expressed need for a more companion-like guide, that is easier to physically manage, and that lightens the cognitive burden on the litigant by providing only contextual information, sequenced according to the process.

5. **Self Help Resources Must be Customizable.** Even if the courts are an institution serving the general public, the services they provide do not need to be entirely generic. The same process or service can be delivered in ways that better serve different archetypes of litigants. Some court users hunger for technology-based, do-it-yourself-empowering versions of services, though others would prefer high-touch, face-to-face human services. Future solutions must explore how the same content and service could be delivered via multiple channels and service modes in order to accommodate varied preferences. All of these variations can be equally available to all, but people can self-select the level of technology, the language, the ability to do it yourself, and other key variables.

These design principles do not prescribe particular solutions, but they do provide a means by which to judge whether a new solution will be human-centered.

IV.   PROTOTYPE AGENDA FOR COURT INTERVENTIONS

During each of our team's design cycles with the courts and Self Help Centers, we gradually defined a shortlist of prototypes that promise to improve litigants' user experience and ability to navigate court processes. Some of these interventions target particular fail-points, where people's current user experience is marked by confusion, frustration, and discomfort. Others build from current moments of success, where the user experience is positive, and which could provide even more engagement and satisfaction.

This shortlist of recommendations focuses mainly on in-person experiences at Self Help Centers, with proposed interventions that deal with improving how people receive services in real time, in a physical location. In part, this focus on in-person services derives from the nature of our design processes, which had their fieldwork in court buildings and which focused on litigants who had already found their way to court. Our design team realizes that other types of prototypes and priorities are worth exploring, particularly for those users who have not yet engaged with the court, or who have finished with it and now must continue to live with the process' outcomes. We flag many related opportunities for virtual and digital services, before a person comes to court and after they leave. We recommend further research to examine these "outside-the-court" experiences to uncover more opportunities for solutions delivered online, on the phone, in community-based locations, or through other technology-based channels.

This Section lays out the key areas for prototyping one by one, presenting our findings from our qualitative research about the current experiences at the courts and Self Help CentersC, along with the recommendations that emerged from our design work. We give particular emphasis to interventions that can be low-cost and quickly implemented, while also pointing towards blue-sky, ambitious initiatives that would require more staff, funding, and time to develop.

The key opportunities for creating better court user experience are as follows:

1. **Coordinated Pathways:** Streamline help into distinct, navigable pathways.
2. **User-Centered Signage:** Offer visual, coherent signage and wayfinders.
3. **Better Welcomes:** Provide efficient and human welcomes to the system and physical space.
4. **Smart, Clear Paper:** Revise paper forms, worksheets, and guides to be easier to understand and effective to use.
5. **Work Stations that WorkW:** Lay out spaces and tools to help people get their tasks done in the court buildings.

A.   *Area 1. Coordinated, Navigable Pathways: Supporting People Through Their Legal Journey*

From our user research, we observed that litigants' mental model of their court experience is a journey, not as a single task or function. Unfortunately, the current system does not provide people with a system-level view of how a journey through the system would work. We recommend that design interventions should support people's understanding of this entire system journey. It should promote coordination of a journey from the initiation of litigants' engagement with the legal system, before they comes to court (and even before they decide they need to come to court at all), through their many stages of interactions, all the way to a resolution in which they exit the court system and live with the outcome it imposes upon them. We propose several ways to construct a system journey to support litigants who are dealing currently with scattered resources, confusing pathways, and disjointed handoffs.

i.   Our Findings on Navigation of Court Process and Offices

From our research on site, we found that court Self Help Centers provide useful help and that the staff provide meaningful support to people in need. There are many opportunities to transform the in-person support, paper-based help, and the conversations and referrals, so that they become more coordinated and actionable. The help to litigants that is provided often can be scattered, with notices and resources provided, but not in a central place or with explicit guidance about what is relevant for a given problem scenario. Also, help is often provided verbally, via conversations or from a standard script. The litigant is not always able to capture

and 'take in' the verbal help, and often they are unable to make use of it. Especially when there are many next steps to be done, and these steps are unfamiliar to the litigant, verbal help is not enough.

The names of the offices and job roles in the court also are not as navigable as they could be. People don't always know who they are looking for. Additionally, the names aren't consistently used across all signs and materials—with the Self Help Center sometimes called the Family Law Facilitator. The people who work in the building tend to refer to the Self Help Center as the Facilitator, which regularly caused confusion. Even more, some names are remarkably similar to each other. In some instances, people were confused by what they were looking for, between the Family Law Facilitator, Family Law Services, or Family Law Clerk.

The court has many services to offer, but it doesn't present them in a way to let people discern which they were meant to use for which function, let alone remember what people had told them to do with the different ones. The names were not staged, so the litigants didn't know which should be their first stop. For example, if a litigant came to court to file for a divorce, often the staff in the building would direct them to the Clerk. But if they phrased their request as needing help in filing for divorce, staff would direct them to the Family Law Facilitator. This led to arbitrary and confusing service journeys. Litigants often were looking for the words "Free Help,", but this was not flagged in the current naming system.

ii.   Our Recommendations for Better Process Navigation

Our design teams propose that there be more points of entry to help people find the Self Help Center. Once the litigant arrives there, the Center should have more coordinated, easy-to-follow resources and explanations for litigants. The resources online, in person, on the wall, and on paper should be coordinated so that a person can easily identify which of the offerings apply to them, and how to proceed through them on a clear journey. A guiding principle of the Self Help Center design should be about helping people find their path and stay on it, so the visuals, layout, scripts, and paperwork should all reinforce the pathway approach.

We have listed out here the types of new (or updated) "touchpoints" that our design teams created during their generative sessions, and then vetted with users. These concepts aim to make the user's journey less confusing, and more empowered.

Structured Resource Wall. In the waiting area of the Self Help Center, there should be a coordinated Resource Wall, with distinct categories and pathways of flyers that a litigant could take. Rather than have a happenstance posting of flyers and offerings of handouts, the wall would provide labelled sets of fliers that a person in a particular situation should be taking. It would be labeled according to what the legal problem and task is, that the resource applies to. The wall should be color-coded with the same colors used in other signage. The wall should have summaries of what the handouts and resources are to give context about why the user should care and what they should do with them. They can be labeled for easy self-assembly, like, "If you are filing for divorce, take the papers from the #1, #5, and #8 areas."

Coordinated Litigant Resource Packets. Many of our concept designs revolved around coordinating the many materials offered to the litigant. These include a master sheet, structured packets, and process maps.

A **litigant master sheet** would streamline and support a person's journey in the form of a passport or a hospital chart for the litigant to have as a record of their interactions and course of action. The person would carry it around with them and show it to court professionals for them to quickly get caught up on what's going on in a person's process. Various officials that they talk to can write on this sheet about what the person is supposed to do, and what others should know about the situation. The officials can have a clear view of what is happening. The litigant would not have to repeat their story and does not have to try to account for what others have said previously about their situation. This master sheet could also be digitized as a portable data tool——whether online on a court tool, on a flash drive, or otherwise. The portable data would include this master draft of information, stored electronically but in the litigant's control.

Another variation would be a **structured packet** of all the flyers, forms, and guidance that a certain type of litigant would need. These can be pre-made packets that are customized for users. In addition to assembling forms together, there can also be flowcharts and checklist templates that can be further customized to a particular litigant's specifics. The paperwork can allow the person to take the right notes and have it organized for follow-through. The routine scripts of "next steps" that the staff currently says verbally can be written down. This structured packet would be an alternative to the current stacks of paper that litigants carry with them, typically quite haphazardly.

To help people see the legal system in terms of pathways, we also propose that the court provides litigants with **process maps of the legal path they are on**. They can be made large and posted on the wall, scaled down to a paper size, and even scaled down further to be on a business card style. The process map should help the person see the full sequence of events that they will be going through and orient themselves about how to get there. It will help the litigant make sense of the legal system and prep for their journey through it.

The process maps might also be converted into **visual photo storyboards**, in which each of the steps of the process are illustrated with a photograph of a person doing the step. This real-life visual will make the process clear and approachable. It will help people envision the steps they will be doing. These can also be made at a large scale and posted on the wall, made into digital screens for electronic signs, and printed off as brochures.

B.   *Area 2. Wayfinding is Key: User-Friendly Signage*

In addition to guidance around the process, there is a huge need around physically understanding the spaces of the legal system. How the court provides signage for different offices, services, and people is a crucial, make-or-break initial experience. The signage system determines the quality of the experience that people

have, especially for those who are new to the physical building and the legal system. The court must provide a more coherent, user-centered signage system in order to orient and direct litigants through its physical space. This includes signs inside and outside the court building as well as signs referring to other legal organizations related to the court's work, like legal aid groups, law libraries, bar referral services, and other social service providers, that are located elsewhere.

i.   Our Findings regarding Wayfinding

As we observed how people came into court and looked for the Self Help Center, we realized there are many common fail points around signs and directions inside the building. Signs are one of the key things people are seeking out as guides and support, but often they worked against the person.

Currently, the signage is not bold and apparent enough. It is not consistently phrased, named, or branded. And it is not oriented around the frames and tasks that people use when thinking about why they are in courts. People often get lost inside the court building. Some specific problems include that some signs are confusing regarding whether their upward-pointing arrow means to go straight ahead or up an escalator. There is no indication whether the office they are pointing to is on the first or second floor. Another signage problem is the inconsistent use of names; some refer the same office as the Family Law Facilitator, others as the Self Help Center.

Additionally, we found that people want guidance from a combination of visual signs and human interactions. Even as they are seeking out signs, most litigants would rather talk to a person to quickly find the right place for them. They would rather talk to a security guard (or someone else who seems to be "in the know"), so they can make sure that they are reading the signs correctly. They would want to use the Information Booth, but they would want to speak to a person there. Currently, the Information Booths in the various courts we worked in were not staffed, or staffed only sporadically. Litigants did not use them, even when they did have stacks of brochures or maps, if there was no person staffing the Booth.

The security guards, when asked for help by people, tend to give very short answers and sometimes incorrect answers. The guards do not want to be "sign interpreters.". They'd rather the signs be effective. They do not want to give directions and try to resist people's attempts to engage them in discussion. They are the only apparent employees of the court, which litigants can find to get oriented and directions, so the security guards become the default signage support.

ii.   Our Recommendations for Improved Wayfinding

Wayfinding is a huge opportunity to improve the court experience, in a very low cost and immediate way. The court can invest in a new wayfinding strategy that will help people get through a series of interactions—from when they are preparing for court, to when they arrive outside the building, to their ultimate offices inside the building. By putting more distinctive, visual signs at key places throughout the

building, and coordinating this in-real-life guidance with online cues, the court can support people so they can navigate the space with confidence and ease.

Overall, we recommend that the court system throughout the state invest in defining an information strategy and graphic identity. This will lead to a more coherent way to indicate where different services are available, and have the signage consistent across in-person spaces, digital platforms, and paperwork and maps. This strategy and identity can come in the form of a stylesheet that sets what fonts, colors, icons, logos, and composition rules will define how the Self Help Centers and related bodies will communicate with the public. It will ensure a consistent identity to make the resources more identifiable and the user's ability to navigate them stronger. People will be able to recognize the Self Help Centers, and the staff of them can be more efficient by following the guides.

Second, we recommend that courts reconsider **the layout of their building** to better coordinate litigants' visits along a clear physical pathway. Rather than having a person have to follow a difficult trail, office to office, floor to floor, can we make the offices all in one clear section of the building? Especially for the most common tasks, can the building work for the person rather than against them? This would mean possibly moving the Clerk and Facilitator to the same corridor.

Our other overarching recommendation in this area is for the creation of a **coherent, user-friendly system of signs** to support people through the physical spaces of the courts and beyond. There should be a signage review to ensure that all of the arrows and names are pointing to the correct room. New signs should be drafted, at least for the Self Help Center/Family Law Facilitator, with larger fonts, consistent color coding, and use of pictograms. The names should be consistent across all signs, and they should be phrased in terms of the problem or task of the user that they are addressing rather than the term that the legal system has created for them. Different 'Family Law' services should be sequenced and delineated from each other. The wayfinding system should have a language access priority as well—there must be supplemental signage in any other prominent non-English languages, like Spanish.

Based on our tested prototypes, we have specific design recommendations for what a user-friendly court signage system would be.

1. **Signs Oriented around Problems.** The signs should be "task-oriented" signs, especially at the beginning, to help you know where to go to get a certain task done. Even if a person does not know the name of the office that they are trying to find, they can see what task they want to accomplish and what office corresponds to this task. Especially at the front entrance of the building, and right after the metal detectors, these tasks should figure prominently in the signage to help people understand what office is appropriate for them.

2. **Amplifying the Signage.** The signs should be larger, with big messages, and should be consistent in the words they used to call

different offices, the colors they used to represent them, and other visuals and graphics that are included. Especially for communications made for the general public, there should be large, consistent visual cues. Color should be used as a core means of communication with the same color used for a certain issue.

3. **A Big Map at Building Entrance, with Smaller Handouts.** When people enter the court space, they should be presented with a large scale map of the building that lets them determine where they are going and how to get there. It could be in a floor plan, akin to how an airport, museum, shopping mall, or hospital might present its space. In addition to the big map, there should be handout versions right next to the security guard that can be taken by litigants, annotated, and used when they are navigating the space. A more ambitious version of the map would be to **Digitally Map the Interior of the Courthouse**, and integrate it into Google Maps, akin to how some airports and shopping malls have.

4. **Pictograms and Icons,** humanizing the sign's written content, should also be used. The pictograms can also assist with language access. Each of the different types of offices (or groups of offices) should have distinct pictograms that visually represent what goes on in that office, and that can be used across signs, and also on maps or other handouts serving as directions.

5. **Using the Floor's Real Estate** is also a key strategy. When we prototyped having "floor trails" for the most common routes that people have when entering the court, we used masking tape on the floor and observed whether people would follow it. Litigants reported that as long as they had some orientation about what the colored path referred to, it was enormously helpful in finding the right office. The other use of the floor can be better demarcation of when an office is open to the public, versus a private space. Many litigants were intimidated by the closed doors in hallways and even the entrance to the Self Help Center, and felt they might be incorrectly walking into an off-limits space. If there were floor welcome mats, or other indications that the office was public-friendly, then people would be less confused.

6. A more ambitious idea is for **Adaptive Signs** that use a combination of "beacons" installed in the courthouse and smartphones' bluetooth signals to make electronic signs display custom guidance for a person. The electronic signs can sense when a person is standing in front of them, based on their mobile phone's presence. Then, if a person has previously downloaded a court's mobile app and chosen their language preferences or their

destination, then the sign can display to them directions in their chosen language and to their correct location.

In addition to the overall wayfinding system, courts should also focus on improved communication about the Self Help Center and its services. We recommend a **branding campaign of the Self Help Center.** Throughout the building, there should be improved Self Help Center advertisements, signs, and branding. This internal campaign should explain that there is a free place for legal assistance, called the Self Help Center. These should be concentrated at key triage points, like at Information Kiosks, the Clerk's Office, right before and after the Security Check, in elevators, and in bathrooms.

Orientation Signage at Self Help Center's Entrance. At the entrance to the Self Help Center "zone" of the court (meaning, before entering into the office itself), there should be an Orientation Poster to triage possible visitors. This could be on paper or via a digital screen. It would explain what type of tasks can be done at the Self-Help Center, and what types of requests should be taken elsewhere. This orientation sign would help a person understand the following:

1. What kinds of issues can be tackled here?
2. What kinds of questions/issues don't belong here?
3. What should you do to get started with help (i.e., take a number, sign up on the list, come on in, or otherwise)?
4. What is the basic process of what will happen in the Self Help Center (with a map of the tasks—talk to the receptionist, meet with a volunteer, fill in forms, get them checked, go to the clerk, and further)?

User-Friendly Disclaimers. Another key way to set expectations of the Self Help Center is to lay out disclaimers and user expectations in posters, handouts, and other communications. Currently, there are small, letter-sized posters hanging in the Self Help Center that explain what the person can expect from the legal assistance provided there. Instead, there should be large posters that say what the Center can provide and what it cannot. It should use pictograms to convey the concepts clearly. The communication should also be prioritized, putting most common and pressing concerns first. Along with the poster, there should be handouts and cards made with the same content that can be distributed to individuals.

C.   *Area 3. Efficient and Human Welcomes: Humanized Welcomes into the Court*

One of our team's initial expectations was that technology-driven solutions could make the court experience more efficient, and thus a better user experience. But contrary to this expectation, one of our central findings was that people want more human guidance during their time in the court building. The lack of human

support at the entrance of the court building, combined with the long wait time to get to a human helper in the Self Help Center was a pain point that needs resolution.

i.   Our Findings Around the Entrance into the Court Experience

The welcome experience at the court's entrance and in the Self Help Center is a huge opportunity to set the tone of a person's time in courts, but currently it is having a negative effect. The lack of a human, friendly presence at the building's entrance and the Center's entrance means that people set off their experience in a negative way. They are seeking human interactions to get oriented, confirm they are on the right track, and find out what to be doing next. They come to court feeling insecure and, often, intimidated. They want to talk to humans, and ideally in a private, personable way, in order to get comfortable and confident.

When they finally do get a chance to speak to a person in the Self-Help Center, they are relieved and happy——this is one of the high points for the litigant. They feel like they are "heard,", and that they are accomplishing what they set out to do in court. There need to be more of these human-to-human interactions that are respectful, empathetic, and guiding. The court should be helping people know what to expect, where to go, and what's going on.

Additionally, the setting of the waiting experience and the help experience should be as comfortable as possible. Lines tend to have a highly negative effect on people, with build-ups of impatience, frustration, and animosity when they are standing and waiting to speak with someone. Also, when they are in line alongside interviews and work going on, there is a feeling of crampedness, with the space lacking privacy and a sense of "air.". They really "feel the line.".

ii.   Our Recommendations for Human Welcomes

Our recommendations all revolve around a few key factors.

1. Giving everyone who comes to Court, and especially to the Self Help Center, the sense of **a human welcoming them and supporting them**, as soon as possible once they have entered the building.
2. **Depressurizing all waiting** experiences, to take the "line" factor out, and prevent the waiting experience to feel like a negative, frustrating, andand competitive experience.
3. **Confirming or correcting** whether people are in the right place for their given task as soon as possible——so they are not waiting somewhere irrelevant to them. People should know any common mistakes people exhibit (like, "you think you should be here, but you actually need to be in this other office," or "there is an express possibility if you just go online or to that wall of resources").

Our specific proposals reflect these general principles.

Human, or human-like, Greeters at transition points. At the court's entrance, immediately past security, and at the entrance of the Self Help Center there need to be people (or signs, kiosks, or other interfaces) that welcome a person, ensure that they are screened for being in the right place, and redirect them to common other places where they should be. In addition, these improved welcomes can provide a moment of empathy, to make the person feel recognized and dignified.

Common Mistake Posters. In places where people are waiting in line, the court should post large-format posters with common mistakes or reasons you don't need to be in the line. These can catch people's attention and confirm to them who should be in this line and correct those who are in the wrong place. They could also go on smaller placards along the line.

Physical Support while Waiting. Where there are places people are waiting in line, give them some physical relief. Have somewhere to lean against or sit while still holding their place in the line.

Insulating Line-Waiting from Consultations. People waiting in line should not be sharing the same space with people who are being interviewed, filling out forms, or otherwise working on the specifics of their cases. When conversations are overheard, it can agitate those waiting in line, because of the lack of privacy and the personal nature of the conversations.

Have Line-Jump Shortcuts for Special Cases. There are some users who need relief from the waiting experience more quickly than others. Those include people who have children with them, who have mental health issues, who are experiencing strong emotions, and other extenuating factors. If they wait too long in line, a small crisis may occur that can possibly disturb everyone in the space. It is not always immediately apparent who needs these line-jumps in order to prevent a problem situation. Ideally, a concierge-like person would be able to greet everyone coming into the space, and assess if there an extenuating circumstance to give the person a jump to the front of the line.

Additional People Support at Information Desk and Work Stations. As people are making choices about where to go, or trying to figure out a task or a resource, more human-to-human help would be a welcome intervention. People requested more human support from different levels of professionals——from legal experts who could provide guidance, stories, and mentorship, to non-lawyer peers who could provide understanding, comparisons, and a sense of normalcy. In addition, people just wanted more "in-the-know" friendly people interactions, because these tended to be their most satisfying moments in court. They wanted people who could play roles of concierges, mentors, and wise navigators for them.

D.   *Area 4. Paperwork that Works for People: Visual, Clear, and Coordinated*

Paper-based resources play a huge role in people's experience in court. We recommend keeping paper in the system, because it has huge potential to orient,

accompany, and support a person through a confusing process. The ideal paper resources are those that are visual, prioritized, and customizable.

i.   Our Findings Around Paperwork Experiences

One of our team's unspoken assumptions going into the process was that technology would be at the core of many of the solutions that we would propose. We were thinking of ways that mobile phones, social media, and interactive websites could be used to make the legal process more efficient and more engaging. There certainly are scenarios and user types for which this hypothesis does prove true. Many people want online, digital support and tools.

But there are also is a huge need for paper-based resources. Our team was surprised to realize how important the offline types of solutions would be, especially those regarding paper. We do believe that the courts should be trying to reduce the amount of paper that it gives to litigants, but we also see the great potential for better kinds of paper resources to be deployed.

We found that people very much wanted paper-based help, particularly for navigation, transparency, and summaries of what they were supposed to be remembering and taking away. Paper can be a very important way to ensure that a litigant is comprehending what's going on, and that they will follow up after they have left the building.

The court and Self Help Center offer a huge selection of paperwork to help a person with a legal process. There are the mandatory court forms, but also handouts describing services, pamphlets with "know your rights" background, referral sheets about other help contact points, worksheets to help you through complicated procedure, and informational sheets with the court's logistic information. People tend to leave court with a huge stack of information, and if this is not their first visit, they have a binder, folder, or other collection of paper with them.

In addition, most of the Self Help Center's means of supporting and guiding a person happens through paper. As the assistants work with users, it is all focused on paper packets. The assistant customizes a packet of forms for the person they're working with, and then starts the person through the task of filling them out correctly. When the person returns to the Center, the assistant checks through the paperwork to assess their progress and help them prepare for the next stage.

ii.   Our Recommendations on Improving the Paperwork

Paper still matters for the litigant and the court, but it must be designed better. We must reinvent the hand-out with stronger use of visual design, graphics and illustrations, and coordinated maps. To that end, we reiterate several of the ideas that have already been discussed in regards to navigable pathways and wayfinding in the building. We recommend that Self Help Centers invest in creating more customizable paperwork, with process maps, flowcharts, and to-do list templates that can be modified for each litigant.

We have some specific communication design suggestions. All forms, worksheets, and other paper meant to be filled in must have **generous white space** that let people write in large handwriting rather than squeezing in tiny writing. Paperwork should be written in **fourteen point font by default**, so that it is easier to read. There should be incorporation of **pictograms**, photographs, and illustrations to humanize the text.

We also recommend a series of **Content Sprints**, in which the Self Help Center remakes its paper-based resources quickly and in a coordinated fashion. These quick sprints could help make good progress efficiently. A sprint would involve a design team and a legal expert team coming together and working on a specific target content or specific paperwork. The design team could remake the current layout, text, and visuals into a new design.

Even more, they could produce **a forked set** of the same content in different formats. Particularly for instructional paperwork, they can produce four versions of the same guide.

1. A "magic card,", a business-card sized guide for the person to carry with them
2. A letter paper sized guide for the person to take away
3. A poster sized guide for the Center to display in waiting and working areas
4. A web and mobile-friendly display of the guide for online resources

The same content can be delivered through multiple channels, and a sprint can aim to coordinate all of this at once. It can also then be translated in a uniform way, with the same translation being forked to multiple channels.

E.   *Area 5. Work Stations and Materials on Site*

Inside the court building, litigants are trying to get legal tasks completed and they need the space and materials to do this. Often, people do not come prepared with their paperwork completed beforehand, nor do they come with the office supplies required to complete and manage their work. There are spaces in the courthouse and nearby buildings that have the potential to offer the area and materials needed to help people with their tasks. Often these spaces are underutilized. We propose many ways for law libraries, Self Help Centers, atriums, and other court spaces to better help people get legal work done.

i.   Our Findings About Working in the Court Building

We found litigants trying to make uncomfortable court spaces become working areas. This meant using benches to lay out papers, setting up an impromptu workspace on an unused countertop, or searching around for a working pen to try to

get a filing compiled. Even within the Self Help Center, where there are tables and materials for getting work done, the space is crowded with many people standing in line and working on their own materials with others and without a place to comfortably work with the amount of paper and private information that the tasks involve.

At the same time, there are spaces better suited for work—namely, law libraries. The law library in the building next to the San Mateo County Court Building is open to the public and a three minute walk from the court building, but it is minimally used by self-represented litigants. The law librarians there reported that they have some visitorswho are often looking to do legal research, but not nearly the number of people who visit the Self Help Center. Typically they reported seeing one to ten visitors per day who were in a family law court process. The law library is also disconnected from the court, lacking the software and the forms that the Self Help Center can offer to the litigants.

The law library is well suited to directing people to more resources, particularly books, primarily process guides. Librarians help a person find exactly which process guide book and which part to focus on. Sometimes people do need cases, and then the librarians direct them to case books. It is not focused on technological support. The library could also serve as a work space to get tasks done before returning to court to file paperwork or have it checked.

ii.   Our Recommendations for Workspaces

We have a shortlist of near-term improvements to litigants' workspace needs in the court. We recommend both more off-site places for litigant support, work, and education, as well as making more supportive on-site working environments.

First, courts should better partner and refer litigants to nearby law libraries, both for resources and for space. The law library should be similarly branded and stocked with coordinated resources, like the Self Help Center. Additionally, the law library could be host to digital versions of Self Help Center guidance and workshops— in video format, in paper format, or in an online education platform. The technology potential could be exploited by documenting and recording the Self Help Center's staff's knowledge and then reproducing it for litigants to watch and use in the library.

Additionally, the library can be better equipped to direct people to the most helpful resources. The most common processes, like filling out divorce or custody forms, can be captured in a worksheet of recommendations and references. The librarian's knowledge would be documented, so that litigants could easily find the right book, or even have the book's content replicated for them to take away. The librarian could also cue up existing online resources on its computer bank, so they could more easily direct people to guides, articles, and form tools online.

Aside from law libraries, courts should use spaces in atriums and waiting areas to establish more supportive work stations, along with materials that support efficient work.

1. There should be **open, public Wi-Fi** so people can access their saved information from emails and other online sources.

2. **Pens should be plentiful and free**, whether fixed permanently to tabletops, or simply provided free (perhaps with a sponsorship from a company). Not having a pen with you should not stop you from getting your work done. Bountiful offerings of pens should be in the clerk's office, Self Help Center, and any place people are queuing or waiting.

3. **Privacy screens** should be placed to demarcate litigants' work areas in the Self Help Center or in other places where people tend to be filling out forms (like in some waiting areas or atrium areas). Litigants consistently expressed frustration at how exposed they felt while telling their stories and filling in forms, with very personal details overheard by everyone else. We also recommend exploring sound devices that would provide white-noise or other inhibitors of people overhearing conversations. A major point of frustration and sense that their dignity was being compromised was in hearing other people's very personal stories and having to share one's own personal story for others to overhear.

F.   *Additional Future Areas for Design Work*

Most of our recommendations have thus far focused on the in-court experiences, because this is where our fieldwork was located. But there is a huge opportunity to enhance court users' capacity to get tasks done, and navigate the process successfully by equipping them with more resources outside of court. This means supplying them with help before they come to court, after they make their first visit, and throughout the rest of the journey.

We urge further design work that studies people in their homes, community centers, law clinics, and other settings in which they are doing the out-of-court legal work. This can help understand what principles and prototypes will help litigants most. Our design work preliminary suggests that there should be more mobile-based form filling tools. A mobile-friendly tool would ideally auto-populate fields in multiple forms, it would allow for voice-based input or easy typing, and several people could collaborate on a single form.

In addition, we heard requests for communication tools that lets litigants and the Self Help Center be in touch with reminders, suggestions, and support conversations. Litigants value their relationship with the Self Help Center, and want tools that help them continue to seek resources and help from them, without coming in person.

We also recommend that the court invest in a broader project to bring more user voices into their decision-making and agenda-setting. This means changing the culture to one that values how usable and user-friendly the court's services, tools, processes, and spaces are.

We encourage courts to invest in more organized and accessible user research groups that would give both court employees and outside researchers access to people who have had experiences with the courts and who are open to participating in surveys, focus groups, design workshops, and other initiatives that can both lead to better ideas for improving the courts as well as evaluation of the status quo and these new ideas. Some possible models for this exist with the Blue Ridge Labs in New York[54] and Smart Chicago's Civic Usability Testing group.[55]

CONCLUSION

This Article has two aims: to illustrate the value of a design approach to legal services and to stake out a vision of principles and interventions that could lead to a better court user experience. It aims to have a practical effect in the near-term on how courts present information and offer services to their end users. Based on the specific courts we did design work in, California and Massachusetts, our design team offers a series of recommendations for changes that state civil courts and Self Help Centers could make in order to enhance user experience. Our particular audience are court administrators and Self Help Center directors, who are concerned with incremental and long-term improvements to self-represented litigants' experience of the legal system.

This Article lays the groundwork for pilots and rigorous empirical trials of how courts can better promote access to justice. It presents key user and process understandings, as well as a prioritized agenda of prototypes that could be piloted. In addition, the Article lays out the design research approach as a methodology to generate and vet these new possible interventions.

A.   *Key Takeaways*

A central takeaway of this Article is that **a design approach has the potential to improve access to justice**. By flipping our view of the legal system from that of legal professionals to that of laypeople who have to navigate the legal system, we can identify opportunities for change. We can understand where key failpoints and frustrations are and think about what system changes or new products and services can improve user experience of the system. In order to create better, more grounded, and more creative ways to improve the accessibility of the legal system, the design process can be a key method.

As we adapt human-centered design to the field of legal services, it points us to a new way to evaluate the success of services. It is about **the entire service "journey" of a person going through the legal system**. It is not just about improving the ability to understand how to fill in a form, or how to file it with a clerk.

54   *See About DIG*, BLUE RIDGE LABS DESIGN INSIGHT GROUP, https://labs.robinhood.org/design-insight-group/ (last visited Oct. 26, 2017).

55   *See* DANIEL X. O'NEIL, SMART CHI. COLLABORATIVE, THE CUT GROUP BOOK (2017), http://www.cutgroupbook.org/.

Rather, it is about helping the person through the series of many legal tasks. Typically, this journey includes the tasks of issue spotting, engaging with the legal system, finishing tasks, attending hearings, and coming to a resolution. We need to build for and evaluate on "sustained engagement"—whether a person can remain engaged and on track through the entire journey through a court process.

Next, our design research has generated **a short list of possible interventions** that courts, foundations, legal aid agencies, and clinics can invest in piloting and evaluating. These concepts have been vetted for their initial promise with qualitative evaluation, via interviews and focus groups. These ideas are grounded in user research and design workshops, and seem to have great promise in increasing people's understanding of the legal system and ability to use it. Now there is a need to run short experiments, and then longer pilot implementations, of the interventions to determine if they in fact do have the positive outcomes their initial testing indicates.

Finally, we present the user research findings that make clear **guiding principles, product specifications, and user preferences**. These can support the piloting of the ideas and prototypes we present here. Essentially, these are rules to guide the implementation work of innovation in courts and legal services. In the spirit of agile development, we propose concepts not with the expectation that they will succeed perfectly, but rather that they can be piloted, tested, refined, and implemented at a larger scale.

B.   *Next Steps: Piloting and Evaluating These Concepts*

What does this design research lead towards? The main next step is refinement of various proposed ideas, into discrete pilots to implement in the field. Then these concepts can be evaluated with rigorous empirical methods, like randomized control trials. Then the value of the new interventions can be determined in terms of more specific outcomes.

1. Do these interventions improve litigants' **efficiency** in getting through a process more quickly and with **ability** to complete legal tasks more correctly?
2. Do the interventions lead to a greater sense of **procedural justice** with litigants being satisfied with the process and the system?
3. Do the interventions improve litigants' **sustained engagement** with the legal process so that they are able to get to resolution through the legal system?

Before pilots and rigorous trials, the prototypes can be refined based on the specific partner and implementation. They can be evaluated in focus groups and other qualitative methods to ensure that they are clear and the experience of the users is

positive. This initial qualitative assessment will then ensure that the pilot versions are as strong and engaging as possible.

These trials can help identify what interventions might best serve laypeople in the legal system in many different situations. The goal is that empirically evaluated interventions can become common strategies to improve the legal system.

C.   *Next Steps: Standardized Self-Assessment and Scouting Tools*

In addition to taking these specific concepts further, we also propose the development of standardized instruments for courts and legal aid groups to use to measure the user experience of their clients. In this, we take inspiration from the National Center for State Courts' CourTools instruments.[56] The NCSC had created this series of surveys and research plans that courts can use to evaluate the quality of their services as well as the quality of the court as a working environment.
In addition to these surveys, our research identifies the need for more standardized instruments to help courts to determine whether users are experiencing their services and whether key outcomes are being achieved. These instruments should particularly focus on:

1.   The user's comprehension of the materials and information that the court is trying to communicate;
2.   The user's ability to navigate the court's' procedures;
3.   The user's engagement with the system, including their willingness to get tasks done and to follow through from start-to-end of the process.

Currently, there are no standard surveys to measure comprehension, navigation ability, and engagement of laypeople in the legal system. If there were such tools, it would be easier to do the user experience research and generative design that we carried out here in our courses and workshops. Standardized user experience design evaluations could be run by courts, legal aid organizations, law clinics, and other service providers.

They could also be used in more rigorous studies of the effectiveness of different types of designs, technologies, and other interventions. These instruments could be used to facilitate more randomized controlled trials and other kinds of true experiments which can help bring more rigor to the evaluation of different innovative ideas or improving user experience of the legal system.

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56   To see the NCSC's CourTools on their website, see *Trial Court Performance Measures*, COURTOOLS, http://www.courtools.org/Trial-Court-Performance-Measures.aspx (last visited June 25, 2017).