The Human-Centered Design Process

The Future Services Institute's Experience in Minnesota's Human Services Fields

FUTURE SERVICES INSTITUTE
BOLSTERING INNOVATION &
EFFECTIVE IMPLEMENTATION

WRITTEN BY

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Introduction

In the past few years, the public and nonprofit sector buzzed with the possibilities offered by the human-centered design process (also sometimes known as 'design thinking'). While it has been seen as a meaningful and impactful way to solve the complex problems we see at work in society, there is also a lot of misconceptions about it. At the Future Services Institute, the human-centered design process is fundamental to the work we do. It provides an anchor to our innovation work in the human services field and other adjacent sectors.

So in this brief, we want to provide our take on the practice as applied to the public and nonprofit sector. It reflects what we have learned in the past few years working with a range of approaches, provides an example of our application, and considers how others might use this methodology to address complex issues in our work.

Why design? Design's place in the public and non-profit sector

Everything is designed. Great strides have been made in the last few decades to improve the design of everyday objects, from kitchen appliances, food dispensers, automobiles, to mobile phones. In the public and nonprofit sector, it is easy to lose sight of the fact that our program practices, our teams, and organizations, even our relationships with other entities are designed. Many of these arrangements were originally adopted to solve a particular problem, and yet, over time, are institutionalized and maintained, even as that original problem changes. The appeal of an intentional design process – and engaging in redesign in public and nonprofit sector work -- is that the mismatch between the needs and what exists can be improved.

When researchers write about using design to make change, they often talk about the changing nature of public problems we face, the new and greater expectations from citizens, and the need for creative solutions within constraints. Historically, public institutions were valued for their stability, predictability, and accountability. Yet increasingly, we expect governments and nonprofits to be responsive and innovative, to be able to demonstrate the public value they create.

Design offers a systematic methodology to develop feasible, viable, and desirable solutions within constraints. It is pragmatic and focused on developing local solutions that fit local contexts, building upon understanding and awareness that might exist but are often obscured by existing hierarchy or process about how to improve services and products. Design creates space for out-of-the-box problem solving, where stakeholders (or "user groups") bring valuable insights, stories, perspectives, habits, and resources to both shape the understanding of problems and the co-creation of solutions to follow.

The Future Services Institute uses a design-based approach in our work because much of what has created inefficiency and ineffectiveness in human services is a result of bad design. Those who work in the human services sector often begin this work because they are passionate about people and changing lives, but the nature of the system wears those passions down. This creates difficulties for people who turn to the public sector for support. Additionally, the talents of staff and managers working in the publicly-funded systems are not put to use for the common good.

Design provides a methodology that works to make change. It provides frameworks, tools and methods that help to break open traditional ways of delivering human services.

However, it's important to be clear that design is not a substitute for good management, or effective project management. It is not a substitute for courageous leadership. In fact, it directly depends upon these complimentary skill sets to move forward implementation of new ideas and creative solutions. In other work, we have discussed four key principles for starting public sector redesign work: understand the context, focus upon improving public value, use probes – both those from within the setting and bring resources from outside – and enable leaders to respond to what emerges from the process (Figure One).
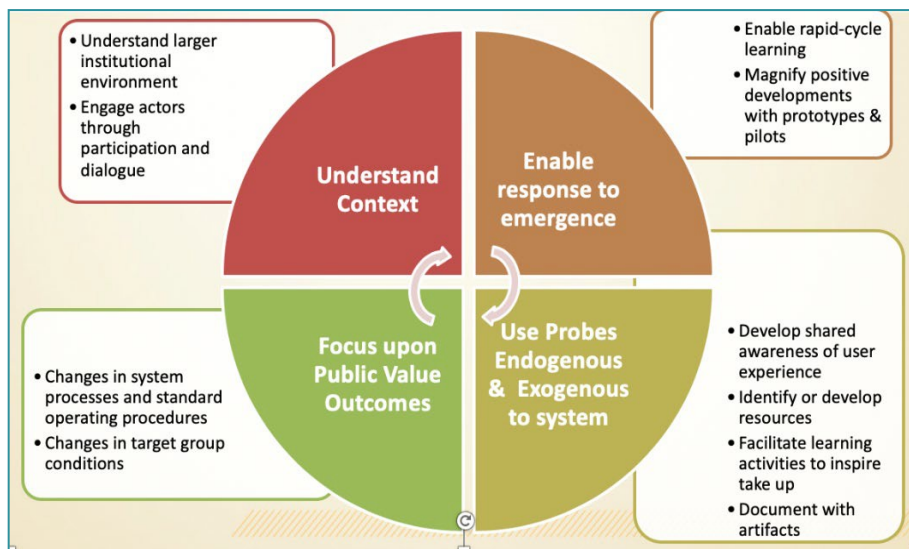

Figure One: Design Principles for Public Affairs

Box One: Elements of Design Methodology

Because design looks and feels different than what public sector managers are used to, it can be disconcerting.

Design uses:

- *Tools*. These are concrete artifacts (spread sheets, storyboards, journey maps, personas, policy field audits) often that can be created from templates. These provide the *what* of design.
- *Methods.* These are particular procedures used gather information during the design process. Interviews, contextual observation, focus groups, design labs, these and other methods can help gather information systematically. These provide the *how*.
- *Methodology.* This is the larger articulation of *why*. It help clarify the purpose, assures that the tools and methods deployed are aligned with the purpose and constraints found in the context.

Human Centered Design

Human Centered Design (HCD) is an approach to design which focuses on the experiences and needs of intended users. In essence, it is a philosophy that focuses upon using empathy and creative responses from people who play different roles in a system. In many applications of human centered design in human services, the processes focus upon the experiences of families and frontline staff in the current system, analyzing the barriers and bottlenecks they experience. It can be applied to (re)designing products, services, and larger implementation systems of public and nonprofit organizations. In the human services field, it helps to assure that we are directing design efforts to the real problems that need resolving by the communities they impact and to improve the publicly valued outcomes of governments and nonprofits.

Human centered design is concerned with experiences because people recall experiences and build habits and workarounds based on their experiences. Think about your last experience receiving public services, whether it

was at the post office, Department of Motor Vehicles (DMV) offices, or the public library. How did that feel? What came to mind as you recalled that experience? How might the organization improve or strengthen parts of the experience? Might your experience be one they hope to constantly produce or to change? When applied in human services, human centered design processes aim to improve experiences so residents feel they are getting good value from their interactions with public agencies. Many times government services were not developed with this type of outcome in mind, as concerns about regulatory compliance or efficiency have shaped much of public sector service delivery.

The design process begins with deep investigation into the problem – what is known about it? Who experiences it? How has it been created? Oftentimes, this begins by questioning assumptions being made within the system. Some refer to these first stages as *inspiration*, others refer to it as *empathize and define*, or *exploration* or *exploring the current space*. Rather than merely conventional methods of interviews, surveys or focus groups, there is a wide array of tools that are used, including user journey maps, customer audits, literature reviews, and contextual observation. The purpose of the first stage is to help the problem solvers or the designers see the experience of the problems and what holds them in place. This uncovers not only the limitations of a system's operations but also the strengths within the system that could be used to disrupt ineffective practices.

The design process also systematically enables stakeholders to create a wide array of potential solutions through brainstorming, idea exploration, and other techniques in design workshops. Again there are many different terms used to describe this step in the process, such as *ideation, creation* and *generating alternative scenarios*. The purpose is to explore a range of ideas creatively without regard to constraints and to explore what a possible future might be like without limitations. People are encouraged to question everything, ask what they might think are 'stupid' questions to help everyone involved in the design process understand assumptions that might be at the core of the problem.

Some insights are then turned into tangible ideas that can be implemented quickly in the context. Often, this is done through developing low-cost *prototypes* that are tangible and easily experienced – for example, three-dimensional models, roleplays, photos, storyboards, and wireframes. This allows the idea to be refined, worked on by others, and then tested to learn about the potential changes in interaction in the real world. Again, there are many words that people use to describe this dimension: *implementation, testing, enacting new practices,* using *rapid-cycle test* or *reflection*. This part of the process provides an opportunity for people to assess the adequacy of ideas they've created to address the challenges that are the focus of design. Ideas that seem to be working are formalized and tried at a larger scale through pilot programs.

The three dimensions of the design process are not linear, but rather continual, iterative and overlapping. Figure Two provides an illustration of the interdependent relationships between the dimensions. There are diverse tools and methods that designers can bring into the process to support its development (some resource guides are summarized in Box One). What's considered appropriate for use is largely contextual – the art of this practice is the sensibility of the designers to try what's meaningful and appropriate to the issue and context.

When applied systematically, human centered design creates a means for carrying out organizational and system improvement aligned with backward mapping. [1] Changes in supervision and management, accountability, and policy within the organization or system can be altered to support implementation of the final design. It can be used to design or improve products and materials (such as assessment tools, applications, brochures), services (especially the user experience and internal processes), and administrative arrangements (such as staffing, funding processes, resource allocation). Because a wide variety of stakeholders are engaged, initiatives and projects that were once seen as impossible are now well within the realm of possibility.
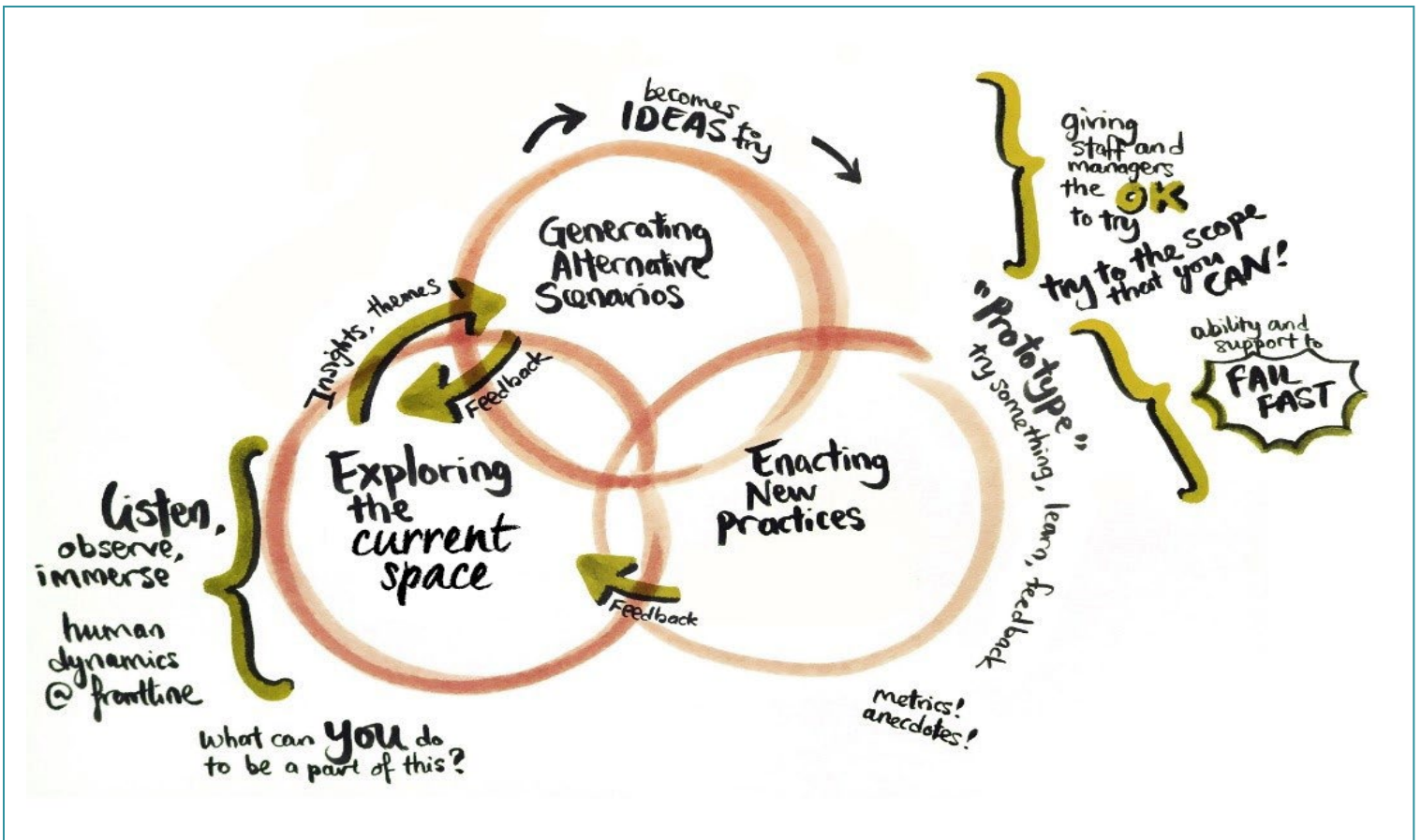

Figure Two: Overview of Public Sector Design Process

Source: Sook Jin Ong adapted from Christian Bason (2017). *Leading Public Design: Discovering Human-Centered Governance*. Bristol, United Kingdom: Policy Press

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[1] For more information about 'backwards mapping' in public policy analysis see http://www.hubertproject.org/ hubert-material/349/

What have we learned (thus far) as the Future Services Institute?

The Future Services Institute was established in 2016 with a focus on advancing human services into the 21st Century. In applying human-centered design to the human services sector, we included a few strategic principles:

Whole Families as a focus

Given the focus upon regulatory compliance in program implementation, we are directing most of our design work to consider the whole family perspective. We don't just see the end-user as the child or adult, but see service recipients in the context of their larger network of their social relationships and supports. Many of today's practices, programs, and policies operate narrowly to respond to a need and do not take into consideration the complexity and interconnectedness of economic assistance, education, housing, post-secondary education and workforce development, health and wellness. That limits the effectiveness of publicly-funded services and doesn't respond to what people need when they turn to the government for assistance.

Uncovering Systemic Causes

Sometimes design work can get myopic, seeing creative solutions as the means for dealing with constraints. Our understanding of social policy, however, helps us to integrate in a more macro view to make sure we are trying to solve for the actual problem. Rather than only exploring the experiences of individuals (what designers think of as the 'user groups'), we place those experiences within the organizational and policy field context. This systems perspective help us to uncover that problems might have originated in arbitrary interpretations of law or institutional practices not focused upon desired outcomes. A systems view stresses the structures developed, not necessarily just the decisions of individual members. It recognized that systems have a life of their own and there is a level of inertia baked into existing systems unless purposeful interventions are made. Changing a system requires slow, meticulous, persistent work.

Developmental evaluation as a methodology for feedback

Many in publicly-funded human services world are familiar with continuous quality improvement, the practice of gathering information systematically to make process improvements. This practice is an important part of the human centered design process, particularly in testing prototypes to see if they are working.

Sometimes, though, a more robust methodology is needed. Developmental evaluation (DE) focuses on supporting innovation, to inform and support development and adaptive change in complex, dynamic environments. The emphasis is on real-time feedback and utilization of findings by innovators in order to propel the innovation forward. While the use of developmental evaluation and human-centered design is growing, with the exception of a few key resources, knowledge of their practice in the context of the public sector is still emerging. At the Future Services Institute, we see developmental evaluation and human centered design as complementary frameworks. Both have similar goals when it comes to innovation and adaptation and work to match program design with participant needs and circumstances.

Equity as a process and an outcome

Racial inequities in Minnesota across countless outcomes has been a catalyzing and mobilizing factor for much of our work within human services. We have brought this awareness into how we implement the human centered design process in programs. For example, when we are starting to help an organization *explore the current space* in a design project, we specifically probe understandings about identities and power, and institutional practices that discriminates against communities of color and indigenous communities. In pushing people, including ourselves, to check their assumptions, we center conversations upon how institutions have historically disenfranchised marginalized communities and consider ways to design a new institutional reality. When we test prototypes developed, we often seek to understand how they are working for marginalized communities to assure that ideas that become pilot efforts are addressing, rather than perpetuating racism.

In our role as system change facilitators, we provide opportunities for individuals and organizations to reflect upon issues of identity, power, and structures as we build capacity for new ways of working, thinking, and leading.
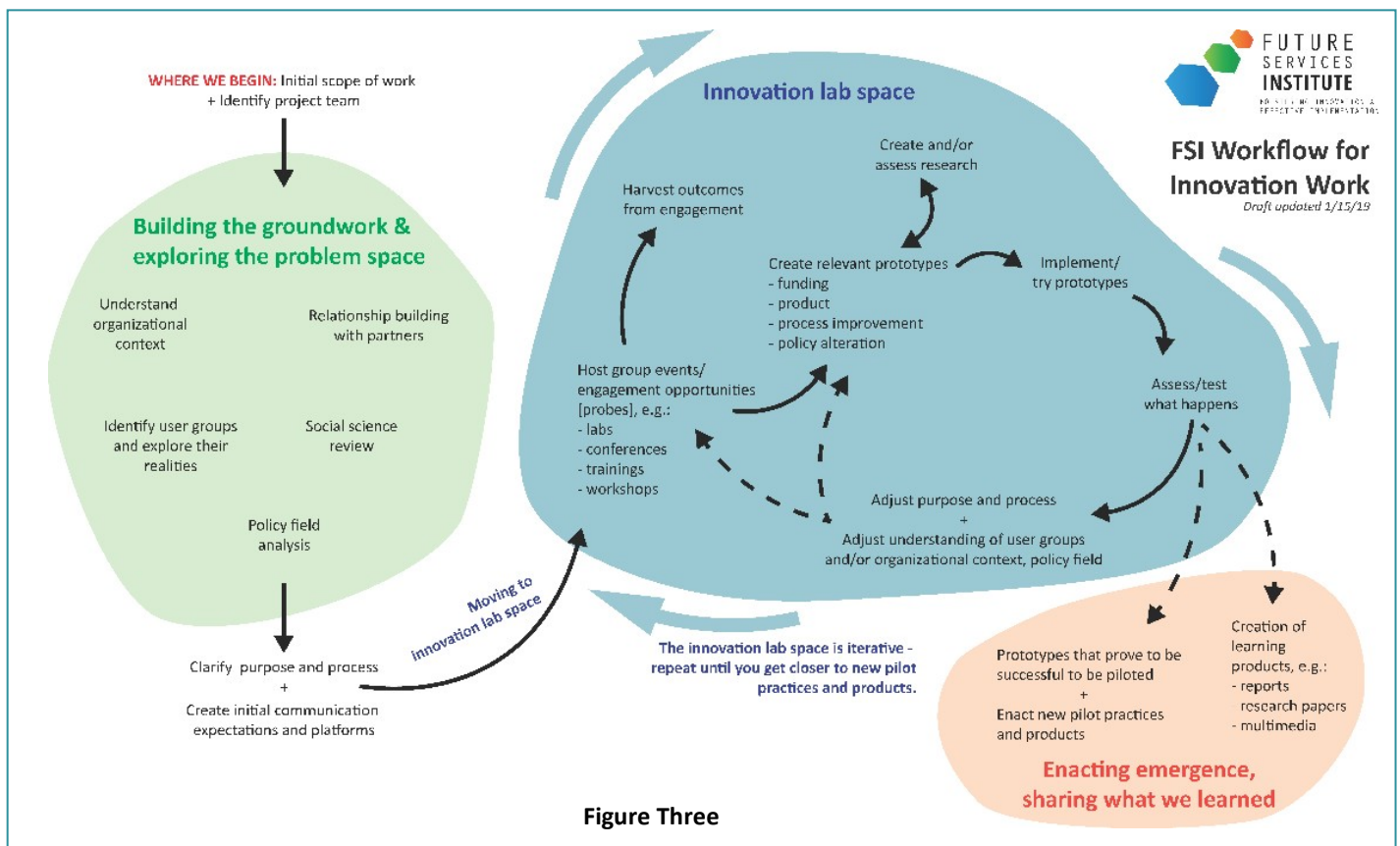
Pragmatic Workflow

Figure Three

To live into these principles, we have developed a workflow for each human centered design project. Illustrated in Figure Three, it begins by exploring the nature of the problem, both as it is experienced on the group and the policy and institutional environment that gave rise to it. The actual space of innovation comes through

strategically engaging groups of people who have knowledge about the problem – families receiving services, frontline staff, supervisors and senior managers from both the public and nonprofit sectors. We take care in hosting the group events, sharing back with the group what results, consulting research and other bodies of knowledge, and supporting the development of ideas into prototypes that can be tested. As the figure illustrates, this often creates refinement of the design process, as well as a deeper understanding of the institutional context or user groups. We then support development of the prototypes to be piloted and sharing of the substantive learnings. This also is when we might also change our roles, and move more into formal evaluation of the implementation process or program outcomes.

To help illustrate this process, we wanted to share a recent design project done in partnership with Olmsted County and Family Services Rochester to develop a new, integrated services assessment tool.

Designing the Integrated Services Assessment Tool (ISAT)[2]

FSI was brought in as a design partner in an initiative in two counties focused upon developing more integrated services models in the public sector. To support this significant change in the services system, county leaders realized that a new assessment tool needed to be design, to help both frontline staff and the system better understand the assets and needs of families seeking support. Such a tool would also allow the government to document their impact by measuring changes in a family's wellbeing over time.

To launch the design project, FSI team took a number of steps to **explore the current space**:

- Identified, studied and spoke with experts involved in using 15 various assessments (nationally and globally) to learn more about how they were created, their purpose and intended use, and the staff and participants' experience in using the assessments. We analyzed similarities and differences across tools with respect to the domains assessed, the nature of response categories, and their implementation stories and methods.
- Convened state, county and non-profit experts who had experience either developing, adapting, or implementing similar assessment tools to talk about what was working, and what needed to be changed when thinking about a comprehensive, integrated services tool.
- Convened the frontline social workers in one county to talk about their current service delivery experience, and where a tool like this would be helpful. The staff were clear on how an integrated services tool would matter because, although they were on a team-oriented toward responding to the needs of whole families, they did not have a structured tool to reflect their commitment

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[2] For more information about ISAT, please see http://futureservicesinstitute.org/assessment-tool.

This multidimensional engagement made a significant difference in the rest of the design process. Rather than creating a tool to merely document the range of domains, such as income, education, health and well-being, we realized that any tool needed to be design to support the frontline practice model for Integrated Services. This, then, had us focus initial ideas about ways to support the engagement needs of frontline staff, as well as track interactions and changes in family circumstances. For example, how might space be incorporated in the tool to document information and stories told by participants about their cultural identity?

We developed this idea and others and made rough sketches of the potential layout and visual attributes. Staff provided feedback about essential elements, such as enabling it to be touched and used by families and reducing its technocratic look. Another idea that was tested was how to best highlight areas of strength as well as need, and to let families identify their own priority areas for assistance.

We began working with the county to develop more complete prototypes of various versions, keeping these ideas, goals, and constraints in mind. The team created initial paper/pencil interface as well as several visual metaphors depicting experiences from in-crisis to thriving. We solicited feedback from program managers and front-line staff and revised the tool based on this feedback.
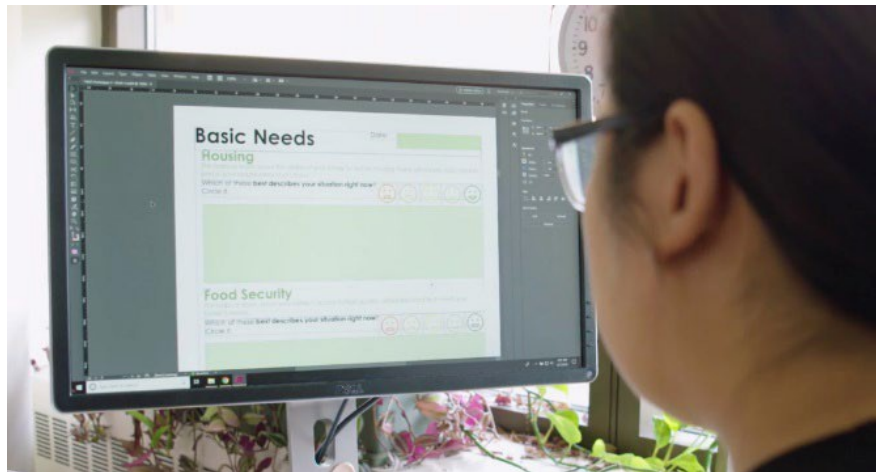
Ultimately, we decided upon a name: the Integrated Services Assessment Tool (ISAT). Rather than the conventional 1-5 rating, human faces with

different emotions (from frowning to smiling) were decided upon to denote "in crisis" to "thriving." We created a booklet version, complete with perforated tear-outs, additional blank templates, and a caseworker record form. We

also developed other supporting materials too, such as a training manual, a 'cheat sheet,' and promotional flyers to use with clients. This version of tool was tested out small scale in a rapid-cycle learning trial from May to August 2018. The staff administered ISAT with fifty 50 families. To provide systemic test of the tool, our team held focus groups and walkthroughs of actual use with the staff. They shared tweaks they made that improved the interactions with the families and pointed out the parts where they repeatedly ran into difficulties – for example, they described how the thickness of the booklet was intimidating to certain families who felt the pressure to 'finish the booklet'

even if it was not the intention. They provided feedback about the various versions via email, a structured web-survey, and check-in calls.

In a revision of the initial prototype, the ISAT booklet was then modified to be half its original size, with only the key domains listed, and optional ones addressed through 'blank' domain pages. Staff who tested ISAT also developed innovations to improve its usability, too – for example, some of them begun laminating the 'smileys' to make it reusable with various clients. Updated copies were made available for the more formal tool evaluation period, a validation study focused upon determining concurrent validity or whether or not staff assessments are corresponding to other, independent measures.

Box Two: Collections of Tools and Methods of Design

There are an array of collections of tools and descriptions of methods that people are using in design and, increasingly, evaluations of particular applications. Many tool-kits are online or supplemented with online materials:

Coughlan, Peter, Jane Fulton Suri, and Katherine Canales. 2007. "Prototypes as (Design) Tools for Behavioral and Organizational Change: A Design-Based Approach to Help Organizations Change Work Behaviors." *Journal of Applied Behavioral Science* 43 (1): 122–34. https://doi.org/10.1177/0021886306297722.

Institute, Luma. 2012. *Innovating for People*. Pittsburgh: LUMA Institute, LLC.

Martin, Bella, and Bruce Hanington. 2012. *Universal Methods of Design*. Beverly, MA: Rockport Publishers.

Stickdorn, Marc, Adam Lawrence, Markus Hormess, and Jakob Schneider. 2018. *This Is Service Design Doing*. Sebastopol, CA: O'Reilly Publishers.

Stickdorn, Marc, and Jakob Schneider. 2011. *This Is Service Design Thinking: Basics, Tools, Cases*. Hoboken, NJ: John Wiley & Sons.

IDEO.org, Design Kit. URL: http://www.designkit.org/. IDEO also provides a PDF version of their Design Kit via URL: http://www.designkit.org/resources/1

Stanford d.school, *Tools for Taking Action*. URL: https://dschool.stanford.edu/resources

18F, General Services Administration of the US Government, URL: https://methods.18f.gov/

Creative Reaction Lab, *Equity-Centered Community Design*. URL: http://www.creativereactionlab.com/eccd

In conclusion: What HCD Is and Isn't

The human-centered design process is not a magic cure-all to public sector challenges. If used without care and thought, it will not create the change we seek. If poorly implemented, it could even breed more cynicism for yet another 'flavor of the month' management concept. However, from our use of the process, we see the human-centered design process as an important methodology in institutional change.

- It offers new tools and methods for systems analysis and change, encouraging us to think at multiple levels, from a group's unique experience all the way to that of the entire system's behaviors, habits, narratives, values.
- It brings both a structured and creative process to enable local knowledge about culture, place, and/or community be reflected in the creation and improvement of solutions.
- It creates settings where state and local actors can affirm shared commitments and focus on desired outcomes.
- It creates the conditions for relationships to be built or rebuilt across boundaries.

We also want to stress - more importantly – what the human-centered design process isn't:

- It does not substitute for good managers and supervisors who shape the conditions for good work to happen.
- It does not substitute for good project management that builds and feed the momentum needed to push change forward.
- It does not substitute for courageous leadership from all levels in the organization and across the policy fields. Change is difficult and requires champions and political ambassadors for systems change.
- It does not automatically overcome legacy challenges or override dynamics of hierarchy, power, privilege, contracting and reporting requirements, and institutionalized discrimination.

Ultimately, one of the biggest lessons we have learned is the importance of nuance and context in doing this work thoughtfully and well. Human-centered design can do a lot to provide us a set of tools, systematic methods, and an overall philosophy to make positive changes in human services.

Box Three: Deepen your Exploration of the Overall Concepts of Design in Public and Social Sectors

There are many different frameworks being promoted by consultancies and governments to support human centered design. These resources are ones we find particularly helpful in supporting the practices within public and nonprofit organizations:

Ansell, Christopher K., and Jacob Torfing, editors. 2014. *Public Innovation Through Collaboration and Design*. New York, NY: Routledge/Taylor and Francis Pubishing.

Bason, Christian. 2017. *Leading Public Design: Discovering Human-Centered Goverance*. Bristol, United Kingdom: Policy Press.

Gray, Barbara, and Jill M Purdy. 2018. *Collaborating for Our Future: Multistakehold Partnerships for Solving Complex Problems*. Oxford: Oxford University Press.

Johansson-Sköldberg, Ulla, Jill Woodilla, and Mehves Çetinkaya. 2013. "Design Thinking: Past, Present and Possible Futures." *Creativity and Innovation Management* 22 (2): 121–46.

Martin, Bella, and Bruce Hanington. 2012. *Universal Methods of Design*. Beverly, MA: Rockport Publishers.

Norman, Don. 2013. *The Design of Everyday Things: Revised and Expanded Edition*. Basic books.

Osborne, Stephen P., Z. Radnor, and G. Nasi. 2012. "A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach." *The American Review of Public Administration* 43 (2): 135–58. https://doi.org/10.1177/0275074012466935.

Sandfort, Jodi R. 2018. "Theoretical Foundations and Design Principles to Improve Policy and Program Implementation." In *Handbook of American Public Administration*, edited by Edmund Stazky and H. George Frederickson. Edward Elgar Publishing.

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