Touchpoint

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Designing Citizen-Centred Public Services

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Social Work: From Services to Screen

How casework software benefits from service design research

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Developing product-service hybrids is an emerging practice that offers organisations a rich connection to their customers. This article explores how an integrated product and service design view is informing a citizen-centred approach to social work software development within the larger context of government human services. Through ethnographic and participatory research methods, designers can glean deep product insights by observing the system of services that occur off the screen.

The landscape of social service IT systems in the United States is dominated by case management software focused solely on policy compliance over user experience. Current software appropriately fulfils important regulatory requirements, but falls short in fulfilling the needs of social workers in the field. The Annie E. Casey Foundation (AECF), a leading philanthropic organisation dedicated to child welfare, is working to improve the current state of social services nationwide. By funding the development of digital products in tandem with service design, the AECF is driving child welfare innovation with social workers and ultimately the children they protect at the centre of the design process.

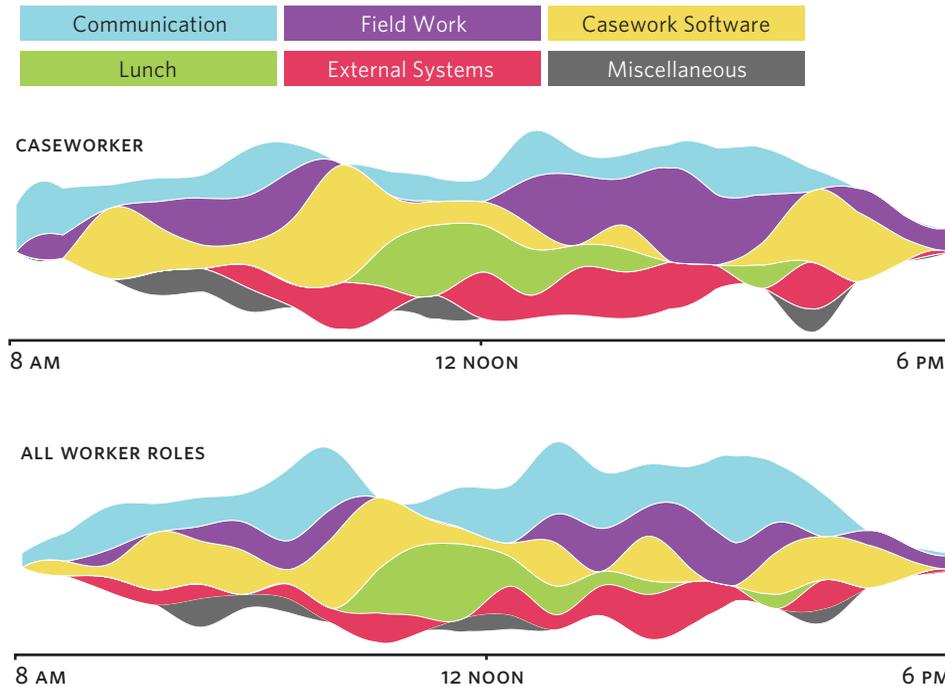Case Commons, a non-profit technology startup incubated by AECF, applies a product-service hybrid approach to improving social services through products that are designed as an inseparable part of the service system. This approach allows designers to improve both child welfare software and service design in tandem. The design team at Case Commons developed ethnographic and participatory design research methods to gain an empathetic understanding of how case management tools can provide an array of digital touchpoints along the child-welfare service journey.

BEYOND HEURISTICS

A foundational goal of Case Commons is to develop case management software that is human centred and easy to use. We view the amount of accurate and timely data that is entered into the system by caseworkers as a metric to judge the success of our digital products. Often the problem

HOW DO DEPARTMENT OF CHILD SERVICES EMPLOYEES SPEND THEIR DAY?

Activity streams based on samples logged every 30 minutes with 8 workers across 2 days in October, 2012.

Communication	Field Work	Casework Software
Lunch	External Systems	Miscellaneous

CASEWORKER

8 AM   12 NOON   6 PM

ALL WORKER ROLES

8 AM   12 NOON   6 PM

Logging the day-to-day activities of social workers highlighted how much time was spent in the field away from their computers

of missing or inaccurate data can be addressed through usability testing that informs continuous improvements to the user interface (UI). After replacing the Department of Child Services legacy IT system for our client state in 2012, our analytics indicated persistent data issues despite UI improvements. The design team's initial inquiry into the contributing factors pointed to a larger disconnect between the software itself and the core competency of DCS in providing child welfare services. Social workers held on to their legacy perception of IT systems primarily as repositories for retroactive data entry rather than viewing their new case management software as a tool for planning services and for reflecting on data.

UNDERSTANDING THE SERVICE CONTEXT THROUGH ETHNOGRAPHIC RESEARCH

To address this disconnect, the design team realised that a deeper understanding of social workers in the field was required in order to embed their case management software as a driving digital touchpoint integrated into the larger system of child welfare services.

The design team conducted ethnographic and participatory research with the goal of gaining insight into ways to design products that encourage social workers to experience case management software not as a bureaucratic obligation but as a tool that enhances their ability to provide services. We used the following research methods in state and city child welfare agencies across the United States.

SHADOWING

In order to design for the services that social workers provide daily, we followed workers throughout their day-to-day routines. A challenge we faced in doing this was keeping a low-key presence while remaining close enough to understand the perceptions and decision patterns workers used throughout the various interactions within their provided services. A key insight we found while shadowing was the large amount of time and planning that occurred outside of the office and offline. Whether investigating an allegation of child abuse or facilitating a parent visitation with a child removed from their

A person's workspace provides visual prompts and act as a tangible framework for discussing how they work
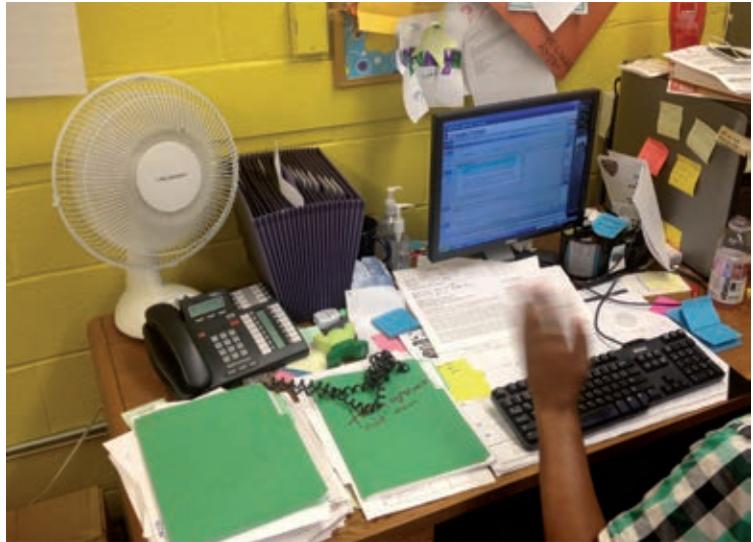
home, often the most critical data was collected by social workers during intensely sensitive scenarios while in the field. We gained a deeper empathy for the emotional and physically demanding roles played by social workers while supporting at-risk families. We began to realise how mobile technology could easily be perceived as cold and inappropriate during these critical interactions in the field where social workers need to develop a personal connection with children and facilitate parents in providing a safer environment. We began to think about intermediate locations where workers could enter data, such as in their car immediately after a home visit or during the long waits often required at parental court hearings. We mapped the services provided by social workers by logging where and what type of activities each type of social worker was engaged in every half hour. These activity logs painted a clearer picture of when and how our case management software was used within these provided services.

CONTEXTUAL INQUIRY

In order to observe social workers when they weren't in the field and to observe workers with office roles, we used contextual inquiry as a framework for understanding their paperwork structure. We asked workers to give us a tour of their desks to see how they physically arranged their work and where data entry and retrieval still occurred offline. These desk tours acted as physical prompts to structure storytelling of their daily processes and workflows. The challenge we faced while observing these tasks was to encourage

workers to project their thoughts about what they were doing onto paper and on screen without disrupting the work itself. One way we addressed this was to have key prompting questions handy to encourage explanation of the activity they were currently engaged in without overwhelming workers with pointed and leading interview questions. We began to see ways in which office layout supported or hindered an informal support system of communication between social workers and supervisors based on the proximity of cubicles. We also observed instances where reference data was posted for quick access, which gave us insight into what data should be readily available on screen within our digital system. Often workers would receive calls that required them to break away from the casework they were currently engaged in and jot down notes on a different case. This insight led to our development of a digital note-taking feature that could be accessed from anywhere within our system with a single click.

CONNECTING PRODUCT TO SERVICE THROUGH PARTICIPATORY DESIGN

Case Commons' key strategy in promoting the adoption of social work software as an integral touchpoint in the larger child services context is to create products that make data immediate and useful to social workers in the field. Designers at Case Commons have developed a creative toolkit for participatory design to help social work managers imagine ways in which data could better inform their team's strategy to improve services that impact a child's experience in care. The use of creative toolkits as

physical artefacts upon which people's thoughts, desires, and emotions can be projected, is an effective method of engaging participants in creative expression in order to elicit insights that they might otherwise be unable to articulate. The creative toolkit included a playful set of laminated widgets and buttons that participants could adhere to a small whiteboard with magnets. The whiteboard was framed by a browser image, providing a blue-sky window for team managers to create their dream data tool while storytelling the services they provide.

CREATIVE KIT ELEMENTS AND INSIGHTS

The following list details elements that made the creative toolkit an effective method of eliciting product and service insights during participatory design research.

- Each session began with a guided narrative that gave us insight into the useful roles data and metrics have in team management. By first narrating how they use data today, the participants were in a frame of mind to generate blue-sky ideas with the creative toolkit on how a digital product might make data more useful to the services social workers provide.
- By seeding the kit with generic graphs, charts, and social work terms, we were able to observe what elements of the kit participants naturally gravitated towards and what social work concepts were important, without our direct intervention.
- The style and scale of the creative kit was important in creating an accessible set of artefacts that could be written and drawn on that were evocative of a general user interface (GUI) without feeling restrictive or overly technical in appearance. The scale also invoked a natural hierarchy as participants had to decide which widgets could fit on their whiteboard 'browser window'.
- Participants were encouraged to think out loud and continue to storytell while they were creating. The act of creating and playing with the creative kit facilitated these narratives, which provided meaningful connections to how data might better aid in the management of child services.

NATIONAL IMPLICATIONS

As Case Commons continues to build product-service hybrids for child-welfare agencies across the United States, a paradigm shift in the perception of casework software from repositories for retroactive data entry to fully integrated tools for implementing services and data reflection is imperative. Service design research provides a critical framework to align software with caseworkers' core mission of providing services vital for the safety, permanence and wellbeing of children. Indeed, government workers across the broader human-services spectrum would benefit from products that reflect a deeper understanding of the services they provide. ●
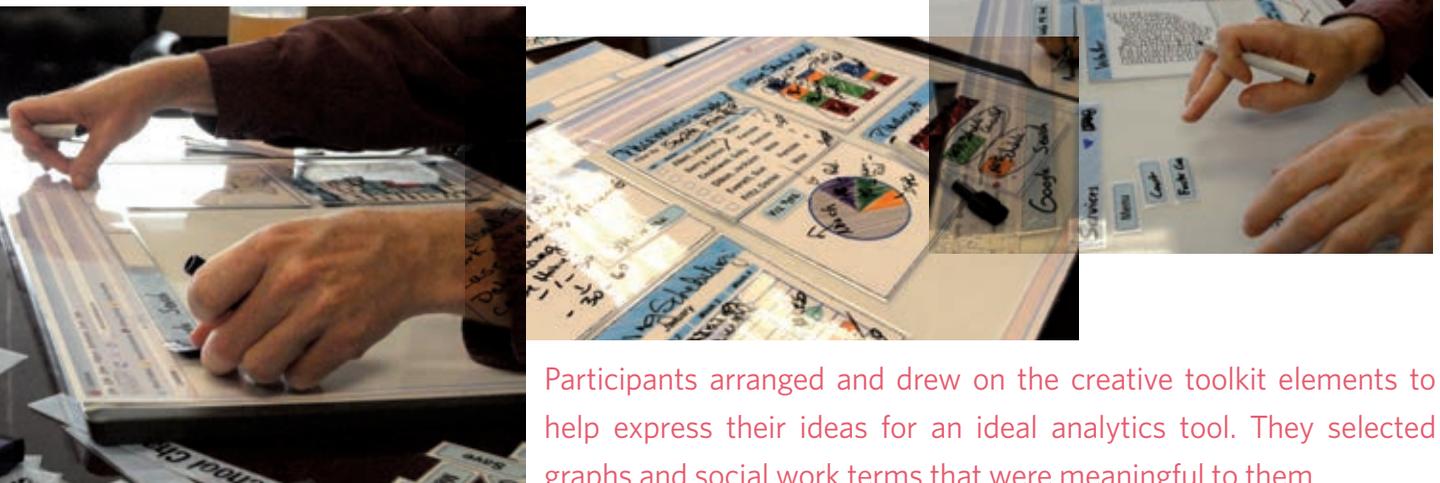
Participants arranged and drew on the creative toolkit elements to help express their ideas for an ideal analytics tool. They selected graphs and social work terms that were meaningful to them