

# Current States: mapping relational geographies in service design

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## Abstract

As Service Design navigates uncharted territory, maps of all kinds are becoming essential tools for the design process. Maps document the service offering in its current form, celebrating what works and identify challenges. They leverage the agency of visualisation and storytelling to educate, engage and guide internal and external stakeholders along the journey to service innovation. Maps as artefacts are becoming a disruptor for organisations that are accustomed to traditional ways of communicating and allow the voice of the customer to sing in the creation of future strategy and opportunities. Mapping, as a process, is an ideal way to foster co-design and collaboration across hierarchies and institutional sectors. In this way, it operates as a type of ontological design - designing back on the organisation that creates it.

**KEYWORDS:** service design, mapping, maps, service design methodologies, co-design

## Introduction

*I don't think it would be an understatement to say it was quite revolutionary for this institution; in the way we engaged with staff, the way we tested and validated ideas, and looked for opportunities was quite new. Staff were quite nervous at first, but really engaged. Although not all of them agreed with some of the outcomes, they understood the rationale and process. (Justine Hyde 2015, Acting CEO State Library of Victoria)*

Service Design is a burgeoning field and has in recent years reached an adolescence of design research and practice. Services, complex and intangible, have arisen out of linear, industrial models of production and are enmeshed in the nonlinear daily lives of billions of people around the globe. In this tension, services form abstract flows between social, political and

economic landscapes and are often the interface for traversing from one terrain to another. Mapping is a formidable tool to navigate these complex landscapes and to visualise, understand, and guide us on the literal and metaphorical journeys of designing in the 21st century. Maps in the context of Service Design become “design Things”; socio-political assemblages that allow for “a space that permits a heterogeneity of perspectives among actors” (Björgvinsson, Ehn & Hillgren 2012 p102). A map becomes a space to gather both human (stakeholders) and non-human (services, touch-points) to address *matters of concern* (Latour 2005)<sup>2</sup>. Understanding the agency of maps and the value they possess in their ability to communicate complexity through simplicity and reflect a holistic overview of an ecosystem, make them formidable tools for service designers in an increasingly knotty and abstract world.

At Meld Studios, we use maps in many of our projects and these serve different functions at different stages of the design process. Our maps are used as both an *object-in-use* and as a *way-of-imagining* (Hadlaw 2003 p25) and play enduring roles in maintaining the strategic direction of an organisation long after our consultancy has ended. *Maps as artefacts* are usually large-scale posters (some up to 4 metres long), with varying fidelity depending on their sequence within the design process. Low fidelity maps are either hand-sketched or designed with a deliberately naive visual style, to encourage participation and to emphasise the iterative nature of the design concepts in progress. The ‘unfinished’ approach mitigates intimidation for non-designer stakeholders and foregrounds a focus on interacting with the concepts within the maps as they are still being formulated. Maps visualise the complexity and interconnectedness of end-to-end services – their *relational geographies* – through vignettes of service scenarios for both front and back of house. Higher-fidelity maps, with more refined concepts are used towards the end of a project: to deliver a vision of a possible future-state scenario and in many cases, the roadmap for achieving this institutional change for our clients. As designers, maps allow us to: synthesise and structure our research; represent customers and their service journeys; sense-check with internal stakeholders; and engage staff and clients in the design process.

*Mapping as process* becomes a manifestation of our philosophical approach to designing *with* our clients and their customers. It is the social and physical action of creating (sketching, designing and annotating) the maps that visualise a service. Mapping allows conversation and reflection across hierarchies and departments, around the pain-points in the delivery of a service and inevitably within the organisation itself: “It becomes accessible to groups at various levels of engagement and enables opening of conversations via the pen and hand. It is a creative methodological process, which simultaneously acts as participant capacity building and research gathering” (Schultz & Barnett 2015, p6). Mapping provides opportunities for employees to build an ontological understanding of their own roles within a company as a “way of coding a reality we “know” but can never really see for ourselves” (Hadlaw 2003 p26), in many cases giving staff a new perspective on how their organisation functions as a whole. Mapping signifies a “cultivated habitus” (Stephens 1995, cited in Tonkinwise 2011 p 542) in that the participants are socialised into a habitus of codesign, which inscribes future behaviours of participatory decision-making and constitutes an opening for change to take place within the organisation.



**Figure 1. The large scale and low fidelity of the map (*as artefact*) below, allows for stakeholders to participate in the critique, sense checking and enrichment of research findings. This constitutes mapping (*as process*) which inscribes the participants into a habitus of codesign and allows them to gain a holistic understanding of their roles within the wider ecosystem of service delivery. Image: Meld Studios**

## Visualising and storytelling: how we map

*What this approach offers is a way to see that actors within a hybrid, which might be people, organisations, or digital or material things, have the capacities not just needs or requirements. Rather than seeing needs or product characteristics as pre-existing, this perspective recognises that configuring resources in a particular way results in particular types of capacities or qualities. (Kimbell 2015 p42)*

As the geographical landscape of Service Design continues to evolve and its' borders are drawn and redrawn through the development of theory and practice, definitions are nuanced and varied. At Meld Studios we define Service Design as “the intentional and thoughtful design of internal and customer-facing activities needed to deliver a service” (Baty 2012). Our design practice is fundamentally about *intention* (Tonkinwise 2011, p.4) and is anchored in principles based on: a deconstructionist perspective to the problem; approaching ambiguity through multiplicity and the suspension of judgment; an evaluation of ideas through critique (internal) and testing (external); externalised thinking through making things explicit and tangible (from post-it notes to sketches & prototypes); iteration and optimism (Baty 2010 p70,<sup>3</sup>).

We see services as *social, material, relational and temporal* (Kimbell 2011, p49) and maps become significant vehicles to communicate these concepts depending on the intended outcome at each stage of our design process: Understand; Explore; Articulate; Realise (Meld Studios 2015). In light of this, our mapping styles are varied and deliberate. In the ‘Understand’ phase, we conduct research to better understand behavioural drivers and industry challenges. We collect data in interviews with stakeholders, customers and staff and conduct workshops, contextual enquiries and service safaris. We use Affinity Mapping to synthesise and analyse the data collected. We arrange and order data on post-it notes to discover patterns that form themes, to help us gain valuable insights into customer experience and service delivery. This

method allows us to do what Lucy Kimbell calls: *problem finding and problem setting*— allowing appropriate time at the start of a project to analyse the most important issues and consider how they are being framed (2015 p 96) with the wider context of service value creation.



**Figure 2: Synthesised research data through Affinity Mapping (background), is married with concepts generated from stakeholder workshops to forms the basis for vignettes in the Current State Map (foreground). Image: Meld Studios**

In the ‘Explore’ phase we playback our insights in the form of a Current State map. These maps visualise the stories of the service for customers and for staff and render intangible notions of relational complexity into an accessible narrative.

*A story describes actors and actions; it suggests relationships, which we may represent in visual form. A story of what happens suggests a model of what is—an interpretation of our research. The process of coming to a shared representation externalises individual thinking and helps build trust across disciplines and stakeholders. (Dubberly, Evenson & Robinson 2008)*

Current State maps are usually low-fidelity, hand-drawn and paper-based to allow for critique, sense checking and ideation, often in a series of stakeholder workshops with the maps. The tangibility, tactility and large scale of the maps encourage contribution and collaboration. Current State maps also foster an understanding of the emotional as well as the rational journey: vignettes and scenarios highlight pain points and moments of delight, using the power of the customer voice. These are a form of *Opportunity Mapping* (Kimbell 2015) and form the basis for refining, prototyping and testing designs for service improvements. They can also be linear customer journeys or ecosystem maps depending on the framing of the problem space in the ‘Understand’ phase.

After testing and playback, we ‘Articulate’ potential future service possibilities through design, in a Future State map. The Future State map is a highly visual and refined artefact, designed to be a lasting reference point for organisational change. The Future State map utilises the richness gathered from research insights and generative concept workshops, references challenges in the Current State reality and converts them into opportunities for the future. It is through this forecasting that new offerings, products, services, spaces and behaviours can be explored and eventually implemented. In order to ‘Realise’ a service redesign, we can create a Service Roadmap to facilitate a plan for enacting a Future State



vision. Roadmaps identify business benefits, impacts, and risks and aid in prioritising ‘quick wins’ versus ‘long term gains’. There is an inherent temporality to Service Roadmaps as they propose a strategy for action within a designated time frame. All of the maps we use enable us (both designers and co-designers) to “uncover connections and relations previously unseen as well as realities previously unimagined” (Schultz & Barnett 2015, p3) and to mobilise these in order to manifest change in the companies we work with.

## Case study: Co-designing the future of the State Library

*Something that was a bit unexpected, and unplanned by the Library was that staff actually learnt a lot more about the Library and how it works, than they may have previously realised. Outside of their own teams and departments, they learnt a lot more about how the other parts of the Library work and the challenges facing them. (Justine Hyde 2015, Acting CEO State Library<sup>4</sup>)*

In March 2014, The State Library of Victoria engaged Meld Studios to redesign the Library’s services. Over a twelve-week period an integrated, participatory design team (three designers from Meld Studios and two staff from the Library) sought to understand the current state of the Library’s service delivery and the opportunities for a service model redesign to enable the organisation to take-on a new public role in the digital future. This meant that the codesign project had an additional component of skills transfer: training the internal project team to have the capabilities to have ownership of the vision, confidence to lead the next phases of work and that all Library staff were given the opportunity to shape their own future (Gagarin 2014).

The project began with two weeks of intensive research (the Understand phase) shadowing, observing and interviewing customers as they interacted with the Library and its services. The project team also talked to Library staff and senior managers to help identify strategic themes for the new direction of the Library. In order to process the scale and complexity of the research insights, the team chose to externalise and share their research using Affinity Mapping.

*To capture our collective insights we did our analysis and synthesis upon the walls using post-it notes, rather than trading documents created by each individual... We captured our research observations, and insights on post-it notes then clustered them into groups to see the bigger picture and identify patterns. We did our thinking outside of ourselves and made sense of what we were hearing and seeing as a team. (Gagarin 2014)*

The findings from the research were recorded in four Current State journey maps covering the following themes: Interacting with the physical space; Information and collection access; The Library as a place to work; and Community engagement and programming (Hyde, Conyers & Flynn 2015). The maps were made widely available for the Library staff to review and critique. In many cases, this was the first time staff had been exposed to codesign methodologies. Participation in the mapping process allowed for an introduction into the democratic process of participatory design, drawing upon the Scandinavian tradition, which advocates that: “people who are affected by a decision or event should have an opportunity to influence it” (Hussain, Sanders & Steinert 2012, p. 91). See figure 1.



**Figure 3: Over 2 weeks of research, insights were collected. Affinity Mapping was used combined with sketches of the physical space, to structure, contextualise and externalise the insights for the whole team to access. Image: Meld Studios**

*The journey maps were an important communication tool during the project. They were highly engaging and non-linear. Staff could effectively dip in and out of sections of the map to gain an overall impression of the current state, or read it comprehensively. Some of the research results were strongly tied to physical spaces of the Library and the journey maps allowed staff to quickly zero in on services or spaces of particular interest to them. (Hyde, Conyers & Flynn 2015)*

The Explore phase began with series of ideation workshops aimed at exploring the opportunities within the Library for service redesign. They required both formal and informal involvement from staff and staff from customer service, reference, retrieval staff, conservation, curatorial, property, programming and managerial staff all participated in the workshops (Hyde, Conyers & Flynn 2015). The Current State maps were used to identify opportunities and service gaps and were utilised as an internal tool to disseminate the concepts amongst different divisions. The maps were strategically placed in staff areas and staff were encouraged to give feedback and ideas directly onto the maps, via post-it notes (see figures 2 & 4.) Creating this open dialogue allowed for internal buy-in from Library staff and facilitated a smoother transition to change: “given the nature of services, and the service designer’s reliance on co-design methods and visualisations... the design process can be viewed as a communication process” (Blomkvist & Holmlid 2009). Concept development was generated by another series of workshops, which used the previously identified opportunities to build new ideas. This included developing a set of guiding service principles that arose organically out of the first two phases of the project (Hyde, Conyers & Flynn 2015).



**Figure 3: Internal Library stakeholders review and critique the Current State maps. These were left up for several weeks to allow for as many staff members as possible to review and contribute their feedback. Image: Meld Studios**

The concept development became the foundation for three live prototyping sessions that were conducted in the Library before opening hours. More than 100 signs were printed, 80 reams of black fabric, furniture moved and uniforms adopted to test the concepts in action. Over 75 staff participated role-playing new customer and staff journeys. The same day feedback sessions were held at lunchtime to gauge staff responses. These were then added to concept sketches that formed the basis of the Future State map (the Articulate phase). Not only were the prototyping sessions immersive and engaging, they also demonstrated *value-in-use* for the staff members that were more sceptical about the service changes: “exploratory prototyping brings a future innovation ecosystem into partial view and creates concepts and actions that shape value-in-use” (Kimbell 2015, p 154).

The Future State map encased a single vision of the new Library service model. It was 3 metres long and designed to be viewed on a wall and shared with people, in contrast to a report that is read and absorbed individually. In this way, the design of the map actively encourages discussion and collaboration (Hyde, Conyers & Flynn 2015). The new Library vision has sparked over 30 individual projects, to be undertaken over the next three to four years (the Realise phase), some of which have already been implemented.

*At a distance, the map gives a broad overview of the future service. At the macro level it shows an integrated service model that clearly places the collections at the heart of everything we do, with services built around the needs of the customers instead of around our internal workflows or the physical layout of the building, a deliberate decision in order to future proof the model should we make changes to the configuration of the building (Hyde, Conyers & Flynn 2015).*

For the embedded team, additional value came from designing, prototyping and testing for 12 weeks within the Library. This created opportunities for the project team to: test their concepts on the people who would need to implement and live them; manage anxieties about change in situ; identify advocates to help lead the change; identify who had the power to block change; and hear the challenges verbatim (Gagarin 2015). This all significantly contributed to the success of the project.



**Figure 5: The Future State map is presented to senior stakeholders. It is currently being used to implement the Library's service strategy over the next 5 years. Image: Meld Studios**

## Conclusion:

*Through collective activities, problems are brought into being. They are framed through social processes that make some things matter more than others, and that box things up in ways that are recognisable to the people who find the resources required to take action. (Kimbell 2015, p 96)*

Mapping plays a pivotal role in Service Design at Meld Studios. We use *maps as artefacts*, in all stages of the design process. Maps are excellent navigation tools for abstract service ecosystems. Maps are self-sufficient storytellers and can embody the future vision of an organisation and provide inspiration for years to come. Many maps go on to live long and fruitful lives in the companies we have worked with. The *Future State* map in the State Library, now sits on the CEOs wall as a daily reminder of their 5-year vision. We also use *mapping as process* consistently throughout our projects. We invite our clients, their staff and customers to design *with* us and just as we design things, so to do those things act back upon us in a hermeneutic circle of ontological design (Willis 2006). *Mapping as process* fosters reflexivity and collaboration and allows these practices of participatory design to become embedded in the organisations that undertake them, inscribing a new habitus.

Maps and mapping played an essential role in the redesign of the service model for the State Library of Victoria. The ability for maps, to display and decipher a significant quantity of information was fundamental to the success of the project at every stage. The large scale and flat format of the maps allowed openings for democratic discussions and collective feedback. The fidelity and visual accessibility of the maps created opportunities for Library staff to add their expert insights without inhibition. The social practice of mapping encouraged both advocates and critics for change, to make their voices heard. The collaborative learning of mapping skills by the Library staff has empowered them to implement some of that change. Mapping is not new to Service Design but exploring the breadth of maps and mapping process in this paper, may yield some useful insights for other service designers interested in new ways to navigate the increasingly complex and relational nature of service geographies.

## References:

- Baty, S. (2010). Solving complex problems through design. *Interactions magazine*, 17(5)
- Baty, S. (2012, 01 12). *Service design, interaction design & design thinking*. Retrieved 15 09 2015, from Meld Studios: <http://www.meldstudios.com.au/2012/01/12/service-design-interaction-design-design-thinking/>
- Blomkvist, J., & Holmlid, S. (2009). Exemplars in service design. Helsinki: *Proceedings from Nordic Service design conference*.
- Bjögvinsson, E., Ehn, P. & Hillgren, P.-A. 2012. 'Design Things and Design Thinking: Contemporary Participatory Design Challenges', *Design Issues*, vol. 28, no. 3.
- Dubberly, H., & Evenson, S. (2008). On modelling the analysis-synthesis bridge model. *Interactions*, 15(2). pp 57-61.
- Gagarin, D. (2014). *Co-designing with the State Library of Victoria: How we did it, and why it paves the way for change*. Retrieved 20 01 2016, from Meld Studios: <http://www.meldstudios.com.au/2014/06/10/co-designing-state-library-victoria-it-paves-change/>
- Hadlaw, J. (2003). The London underground map: Imagining modern time and space. *Design Issues*, 19(1), pp. 25-35.
- Hyde, J., Conyers, B. & Flynn, B. (2015) Journey Maps and Customer Hacks: Redesigning Services at the State Library Victoria, *Synergy* 13 (1). Retrieved 20 01 16, from School Library Association of Victoria: <http://www.slav.vic.edu.au/synergy/volume-13-number-1-2015/perspectives-local-/491-journey-maps-and-customer-hacks-redesigning-services-at-the-state-library-victoria.html>
- Kimbell, L. (2011). Designing for service as one way of designing services. *International Journal of Design*, 5(2), 41-52.
- Kimbell, L. (2015). *The Service Innovation Handbook*. Amsterdam: BIS Publishers
- Latour, B. (2005). 'From Realpolitik to Dingpolitik or How to Make Things Public', in B.Latour & P. Weibel (eds), *Making Things Public: Atmospheres of Democracy*. Cambridge: The MIT Press, pp. 13-7.
- Meld Studios (2015). *Our Process*. Retrieved 15 09 2012, from Meld Studios: <http://www.meldstudios.com.au/what-we-do/our-process/>
- Schultz, E., & Barnett, B. (2015). Cognitive Redirective Mapping: designing futures that challenge anthropocentrism. Stockholm: *Proceedings from Nordic Design Conference 2015*.
- Tonkinwise, C. (2011). 'A taste for practices: Unrepressing style in design thinking'. *Design Studies*, 32(6), pp.533-545
- Willis, A. M. (2006). 'Ontological Designing', *Design Philosophy Papers*, (2) pp.80-98
- Yaneva, A. (2009). Making the social hold: Towards an Actor-Network theory of design. *Design and Culture*, 1(3), pp.273-288.

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<sup>1</sup> This verbatim came from interviews conducted with Library staff after the completion of the service design project (August/September 2015). These transcripts are part of internal research conducted by Meld Studios and remain unpublished.

<sup>2</sup> For a concise summary of the human - nonhuman dialectic see Alben Yaneva's notes in her article *Making the social Hold: Towards an Actor-Network Theory of Design* (2009, pp. 286)

<sup>3</sup> Steve Baty updated this list (published internally), from the original 5 (published in *Interactions magazine* in 2010) to 8 in 2015 as an iteration of Meld's ongoing design process.

<sup>4</sup> *Ibid.* 1.