Touchpoint

Redefining Value Creation

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Redefining Value Creation

For this issue of *Touchpoint*, we wanted to take a different approach than usual. Rather than looking at how or where service design is being practiced, we wanted to explore 'towards what ends'.

The commercial contexts in which service designers typically work means we fit into and support a familiar economic model: Efficient and effective (and happy!) employees rely on sensibly-designed systems to provide meaningful and valuable service to end customers. Profitability, shareholder value and the 'bottom line' are the driving forces to which our practice is ultimately held to account.

But more and more, service design is supporting alternative models of value creation. There are organisations out there operating with the 'triple bottom line' in mind, considering the boundaries implied by the 'ring' of 'doughnut economics', and achieving things such as B Corporation certification. In those contexts, service designers' perspectives and goals are sometimes markedly different, perhaps providing inspiration to others who want to realign their own work.

In this issue, you can learn about a set of sustainbility-focussed food chain interventions from Italy, a community health promotion project from Taiwan, and how to implement a planetary perspective into your work, from a Swiss contributor. Plus many other viewpoints which I hope widen your perspective, and potentially alter the ways you create value, as well as the value you create!

Jesse Grimes for the editorial board

Jesse Grimes is Editor-in-Chief of *Touchpoint* and has fifteen years of experience as a service designer and consultant. He is an independent practitioner, trainer and coach, based in Amsterdam and working internationally. Jesse is also Senior Vice President of the Service Design Network and Head of Training for the SDN Academy.
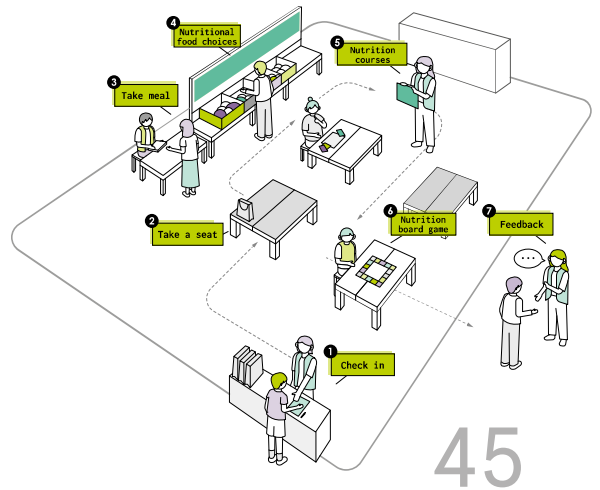
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Julia Schaeper is a regenerative design practitioner with more than 15 years of experience in service design and a PhD researcher at the University of the Arts, London. Her work focusses on designing organisational infrastructures based on the commons to support regenerative economics and planetary health. She has published on how commoning practices could allow designers to recognise the importance of decentering the human perspective and provide a framework for doing so.

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Making Service Design Future-Proof at NASA

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How can service designers create services that simultaneously address customer needs both today and in the future? Using a new method called 'triangulated recursive mapping' to combine futures research with human-centred research, we learn to create services that are responsive to rapidly evolving customer needs over time.

The NASA SBIR/STTR Service

The NASA Small Business Innovation Research (SBIR) programme provides financial and technical assistance to small businesses, and the Small Business Technology Transfer (STTR) programme offers financial and technical assistance to small businesses, as well as links them to research institutions.

These targets of these two programmes often need help advancing their space-applicable technologies due to a lack of financial resources or network. The NASA SBIR/STTR programme therefore plays a vital role in advancing these technologies, paving the way for eventual transition to a private investor or public investor (i.e., a government programme manager or project manager) who will fund further development. The goal for the small business and research institution customers is to successfully infuse their technology into a government programme or achieve commercialisation through a private investor[1].

There are multiple types of customers impacted by NASA SBIR/STTR services. First are the innovators: Small businesses and research institutions with new space-related technologies who apply to receive financial and technical support from the SBIR/STTR programme. Second are investors who are looking to find companies and technologies in which to invest and commercialise.

There are also multiple types of service employees within programme, hired through different mechanisms, such as direct hires, contractors, interns and volunteers. Distinct roles or functions of SBIR/STTR employees include programme executives, programme managers, project managers, finance, security, legal, help desk, outreach and communication, engineers, designers, researchers, data scientists, product managers, etc.

The NASA SBIR/STTR service has a gender, service and racial equity lens. We work to improve the presence, participation and representation of women-owned, minority-owned, veteran-owned and service-disabled veteran-owned small businesses. In addition, we work

to improve the presence, participation and representation of women's colleges and minority-serving institutions.

To forecast future customer needs shaped by evolving space technologies and exploration missions, we use strategic foresight and futures methods. However, futures methods are often easier to implement for new services[2]. For existing services such as ours, there are the current customers' needs that we are required to meet by law.

It is possible to use strategic foresight and futures methods to redesign a service in a way that does not meet current needs of real customers. Additionally, it is possible to use Human-centred Design (HCD) to redesign a service to meet current needs in a way that builds design debt and does not move the service in a futures-oriented direction[2,3]. Synthesising a futures approach and a human-centred approach allows us to design services that are responsive to evolving customer needs in the present, in the short-term, and in the long-term.

This article outlines a new methodology called 'triangulated recursive mapping' that enables us to create services that address current needs while also addressing future needs, trends and drivers of change. We break down each part of this methodology with examples of how it is used by the NASA SBIR/STTR team. Finally, we discuss how our methodology helps service design leaders to shape a programme strategy that is 'future proof'.

Triangulating across multiple research streams

On the NASA SBIR/STTR team, we combine multiple research perspectives to gain a multi-level understanding of a customer's experience. Our service design research includes the pursuit of multiple 'ways of knowing' and multiple forms of 'triangulation'. We differentiate between 1st, 2nd and 3rd-person 'ways of knowing' to gain deep contextual knowledge of our customers and stakeholders. We pursue 1st-person knowing through experiential research methods such as mystery shopping and work-alongs. For 2nd-person knowing, we build relational and community knowledge by including customers and employees as permanent members of the design team. Finally, we engage in 3rd-person knowing through positive deviance research, employing methods such as interviews and observations.

Triangulation is the process of approaching a problem in multiple ways to see if each approach aligns or diverges, giving greater confidence in findings when they are seen to align. There is data, method and investigator triangulation.

First, instead of just looking at a snapshot of one programme, we analyse data across both our SBIR and STTR programmes, encompassing different populations and multiple programme years. This is an example of data triangulation. Second, we employ research methodologies that not only include ethnographic, quantitative, asset-based, systems and experiential data from the past, but also futures research like signals, drivers and trends that let us prepare for different possible, plausible, and preferred future states of the services. This is an example of method triangulation.

Lastly, we break up into small sub-teams and ensure that different groups of design researchers using the same methodology arrive at similar research conclusions, without collaborating or planning together in advance. For example, we create customer journey maps with a participatory employee team while a separate participatory customer team also creates customer journey maps. This is an example of investigator triangulation. Compared with other well-known design methods such as the 'Double Diamond' from the UK Design Council[4], our method adds time as an explicit dimension through the addition of futures research during the triangulation process. This enables us to design services that simultaneously address current needs while preparing for future needs.

Mapping

Throughout this section, we use the familiar terms 'current state service' and 'future state service'. The future state service can be broken down into a near-term future state service that addresses current customer needs, as well as a long-term future state service that addresses customer needs at least ten years in the future. HCD methods usually help us to locate a near-term future state service, while futures methods focus on the long-term future state service.

The design work toward the near-term future state may build up design debt toward the long-term future state due to being misaligned[2,3]. Instead, we try to design for current and future customer needs at the same time. First, we introduce

the term 'mapping' to describe the progression from the current state service to the long-term future state service using a futures process. Next, we show how we arrive at a near-term future state service using an HCD process, and we discuss the limitations of this method.

Lastly, 'recursion' is introduced as a method of integrating futures research into the HCD process so that the current state service, near-term future state service, and long-term future state service are aligned. 'Triangulated recursive mapping' is so powerful because it allows us to address both immediate and future customer needs simultaneously.

The term 'mapping' is the process of charting alternative, possible futures and creating what we call a 'futures design'. This is different from 'design futures', which are design artifacts used to speculate about the future, trigger discussion, critique an aspect of society, or inspire people to action. Our futures design process is used to create a long-term future state service and then build a roadmap of design experiments and changes from the current state service towards the long-term future state service, as illustrated in Figure 1.
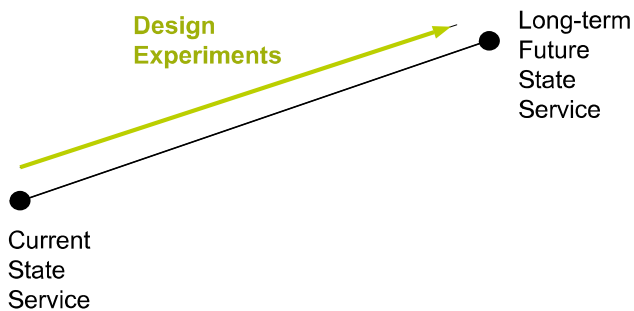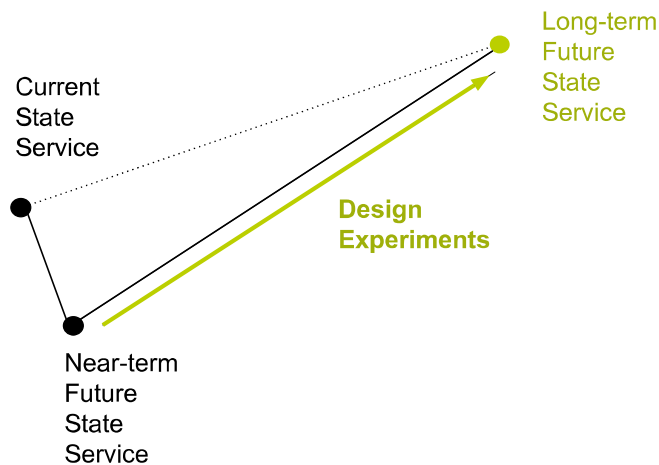

Fig. 2: Using an HCD process to arrive at a near-term future state service may take us off the trajectory of design changes that are needed to reach the long-term future state service

Fig. 1: Through design experiments that 'map' possible futures, we can change from the current state service to the long-term future state service

One might ask why don't we just use a futures process if we can develop the concept of a long-term future state service and work towards it? If we are creating a new service, that might indeed be possible. However, because we are improving or refining an existing service, we need to address both future trends and future needs as well as the present needs of today's customers. This dual focus provides direction to our NASA SBIR/STTR programme strategy, which outlines how our service is delivered today, and how it will evolve over time.

We can also arrive at a near-term future state service using an HCD process to address the immediate needs of our customers. However, the HCD process is limited because it only gives us insight into current customer needs and is focused on immediate changes in the short-term. Therefore, by using an HCD methodology, we can only arrive at a near-term future state service. Another major pitfall of using HCD to design our services is that the design changes we make to address current needs may take us in a direction that will not help us address long-term needs.

Figure 2 illustrates that if we first use HCD to arrive at a near-term future state service, we may detour away from the long-term future state service. In that case, we would need even more design changes to reach the long-term future state service from the near-term future state service, as indicated by the green arrow.

So, how do we reach the long-term future state service more efficiently while still designing for current customer needs? We introduce a 'recursive' process that infuses futures research into our HCD process so that our design changes move in the direction of the long-term future state service.
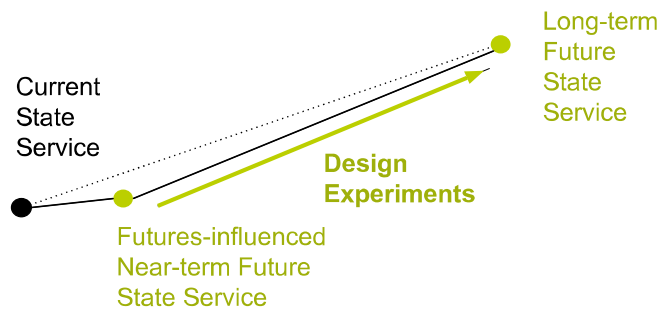

Fig. 4: Using 'triangulated recursive mapping', the current state service, near-term future state service and long-term future state service are all influenced by futures research

Fig. 3: We align the near-term future state service to the long-term future state service by incorporating futures research into the HCD process

The near-term future state service then becomes a 'futures-influenced' near-term future state service[2]. In this way, we align the futures-influenced near-term future state service with the direction of the long-term future state service.

Finally, we institutionalise our futures process so that each year, we create a new long-term future state service and a new futures-influenced, near-term future state service. Because of this recursion, at any given time the current state service is also influenced by previous futures research.

Recursive process

Instead of only using a futures process to reach the long-term future state service, we can use futures research at every step, even the HCD step which produces the near-term future state service.

In a recursive process, outcomes from one phase inform and loop back into earlier stages, creating a continuous cycle of improvement and adaptation in which each iteration informs the next cycle of research and design. We utilise this futures-influenced HCD process in which we mix human-centred research with futures research, and use insights and foresight to brainstorm ideas for the near-term future state service.
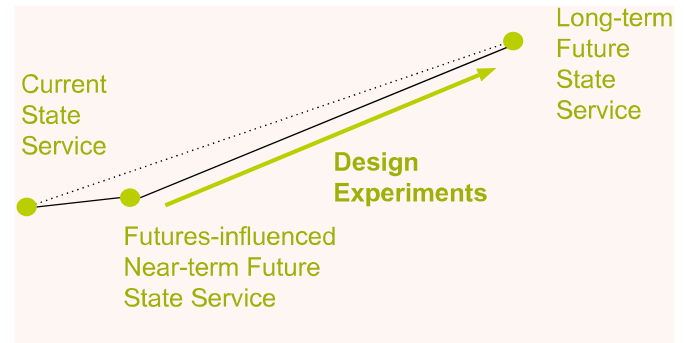
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