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Urbano, Marcela, Nørregaard, Maria and Glaahs, Tabea

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## **From the Classroom to the Real World**

### **Our experience of introducing gigamapping in a public sector digitalisation agency**

**Marcela Urbano, Maria Nørregaard, and Tabea Glaes**

Oslo Origo<sup>1</sup> | The Oslo School of Architecture and Design

This action research builds on the interest of the authors to test knowledge acquired through the Executive Master of Systems Oriented Design in their own design practice at Oslo Origo, a public sector digitalisation agency. Here, the authors are employed as in-house service designers. The short paper builds on their hands-on experiences of trying out gigamapping as a technique of systems oriented design.

Through four case studies, the authors describe how they have introduced gigamapping in their workplace. Their learning path of putting the theory into practice made the authors reflect on the context in which a gigamapping session is embedded and how this context influences the mapping process itself, as well as the usefulness of the outcome. The analysis resulted in three boundaries to consider when moving from the classroom theory to practising gigamapping in “the real world”: 1. the inner boundary of the systems oriented designer (as confidence, trust) 2. The immediate boundaries of the workplace (as hierarchy, relations and culture) and 3. The wider boundaries of the organisation (as power dynamics, flows of money, paradigm). The suggested boundaries and the

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<sup>1</sup> <https://www.oslo.kommune.no/etater-foretak-og-ombud/oslo-origo/#gref>

questions that come with them might be useful for other designers who want to start experimenting with systems oriented design at their workplace.

KEYWORDS: systemic design, public sector, gigamapping, service-ecosystems, boundaries

RSD TOPIC(S): Cases & Practice

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## **Presentation summary**

This action research builds on the interest of the authors to test knowledge acquired through the Executive Master of Systems Oriented Design<sup>2</sup> (AHO, 2022) in their own design practice at Oslo Origo, a public sector digitalisation agency. It builds on the hands-on experiences of the authors trying out gigamapping (Sevaldson, 2011) as a technique of systems oriented design (SOD). The authors of this paper are employed as service designers.

Origo is the digitalisation agency of the municipality of Oslo. It develops digital services that meet the needs of the citizens of Oslo when and where these needs occur, independent of how the municipality is organised (which is characterised by silos). The employees in Origo work in transdisciplinary, autonomous teams. The role of the (service) designer consists of facilitating a common understanding between all the stakeholders of the product/service ecosystem (Vink et al., 2021), mapping out the user and stakeholder journeys, the problems that they meet, and the opportunities that they encounter, in order to develop products and services that deliver value to everyone involved—mainly citizens and public servants.

In order to navigate their everyday tasks, the authors identified the need to address and visualise dynamics and interrelations in these complex service ecosystems. However, service design is dominated by a view of looking at parts of the system in isolation

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<sup>2</sup> <https://aho.no/en/studies/executive-master-systems-oriented-design>

rather than looking at the complexity as a whole (Vink et al., 2021). This is why the authors enrolled in SOD studies.

The authors have the opportunity to put the learnings into practice whenever the theory and techniques from the field of SOD seem applicable. Theoretical descriptions of gigamapping paint a technique to capture and visualise complexity (e.g. Sevaldson, 2011; Sevaldson, 2015). The boundaries are wide, and a gigamap might take on various forms. The technique is defined as being un-dogmatic, and "...imposed rules are counterproductive and limiting" (Sevaldson, 2015, p. 4).

When introducing gigamapping as a technique in Origo, the authors tried different approaches in order to learn what resonated with the specific environments. The model of three boundaries is a result of the first case studies where gigamapping was tested in a public sector agency by in-house designers.

## **Methods**

Qualitative data was collected from observations of each case study. The authors themselves followed a reflection-in-action and reflection-on-action approach (Schön, 1991). Observations, reactions, quotes, and reflections were captured in elaborated field notes in action as well as afterwards. In the third case study, qualitative feedback was furthermore gathered from each participant after the session, as well as four weeks later, in order to capture the teams' reflections on the technique and also if and how they kept using the (results of the) gigamap. The gigamaps themselves were being shared as products with participants.

## Case study 1: Visualising a meeting

Here, gigamapping was used by one author in a meeting to capture the ongoing conversation visually, drawing connections between topics. Introducing gigamapping in an “every-day-meeting” was a way to get confident with the technique in a safe space. During the conversations, the service designer took notes of everything that was being said on a big sheet of paper. The participants of the meeting related to the writings and drawings on the paper and began to draw relations and connections that otherwise would remain invisible.

Table 1. Case study 1. Visualising a meeting.

<b>Purpose of gigamapping</b>	<b>Designers role</b>	<b>Participants</b>	<b>Main takeaways</b>
<ul style="list-style-type: none"> <li>- introduce colleagues to gigamapping</li> <li>- get a shared understanding</li> <li>- Be able to link seemingly unrelated topics</li> </ul>	Takes notes of everything that is being said on a big sheet of paper	From inside Origo: Cluster for “open city”  From outside Origo The Brønnøysund Register Center	The theory of jumping conversations (Wettre et al., 2019) played out in practice and build confidence in the designer to trust the technique. The technique was introduced and fitted organically into the work, which made the colleagues use it.

## Case study 2: Collecting personal research

Gigamapping was used by one author over a period of time in order to collect and map her ongoing research about the volunteering sector in the municipality. Through this personal gigamapping, she widened her perspective of the subject while at the same time drawing out zoom points that she could discuss in more detail with the team.

Table 2. Case study 2. Gigamapping personal research.

<b>Purpose of gigamapping</b>	<b>Designers role</b>	<b>Participants</b>	<b>Main takeaways</b>
Gigamapping as a tool to collect, build and widen understanding around a topic.	Building and developing the map and knowing when and what to present to others.	Service designer	Gaining practice and confidence in building a map before introducing it to colleagues.

### Case study 3: Building shared mental models

One author used gigamapping in order to build shared mental models (Edmondson & Harvey, 2017) within her transdisciplinary team for how the law influences public welfare services. The team was newly established, researching the complex field of services for citizens with long-lasting, complex needs. The whole team was open and expectant towards gigamapping as a way to manoeuvre the complexity they faced.

Table 3. Case study 3. Building shared mental models.

Purpose of gigamapping	Designers role	Participants	Main takeaways
Testing Gigamapping as a tool to gain a shared understanding of a domain/ problematique. Getting a better overview of the complexity the team faced as well as introducing gigamapping as a technique to the team.	Introducing and facilitating the mapping process. Activate and involve all participants in the making of the map. Reminding participants to write down their conversations and to describe the relations they identified	Service designer (from Origo), Service designer (from NAV, co-facilitator), Service developer (NAV), lawyer (Bydel Gamle Oslo), Team lead (Origo), Tech lead (Origo)	Participants appreciated the facilitated mapping process to get a better overview. And used it to interview each other. One participant (the lawyer) was the one interviewed the most due to the theme of the mapping. Even though the map became quite messy, it was still visited as a source of information later.

## Case study 4: Planning a strategy

Here, one of the authors introduced gigamapping in a workshop with designers across the municipality to map the current state of a network for service designers in the municipality and to imagine future scenarios.

Table 4. Case study 4. Gigamapping to plan a strategy.

<b>Purpose of gigamapping</b>	<b>Designers role</b>	<b>Participants</b>	<b>Main takeaways</b>
Gigamapping as a tool to plan a strategy (and future) for network	activate participants to discuss and capture the discussion themselves	service designers from various agencies/ departments in the municipality	In this case, it was easier for the designer to suggest and make use of the technique. Due to the group of like-minded designers, there was an immediate positive reaction to try out gigamapping. The fact that the designer, in this case, was in a central position in the group also made it easier to gain support when suggesting trying out the technique.



## Learnings: a reflection on boundaries

The experiences of putting the theory of gigamapping into practice made the authors reflect on the context in which a gigamapping session is embedded and how this context influences the mapping process itself as well as the usefulness of the outcome. The analysis resulted in three boundaries to consider when moving from the classroom theory to practising gigamapping in “the real world” (Figure 1). These boundaries are inspired by the theory of boundary critique, which suggests that we need to “sweep in” a variety of different perspectives when aiming for systemic interventions (Midgley, 2000). To make these boundaries useful and approachable for other practitioners (specifically other newcomers to SOD), our findings are framed as questions to the reader. This should furthermore clarify that these boundaries are individually and fluid and not set in stone.

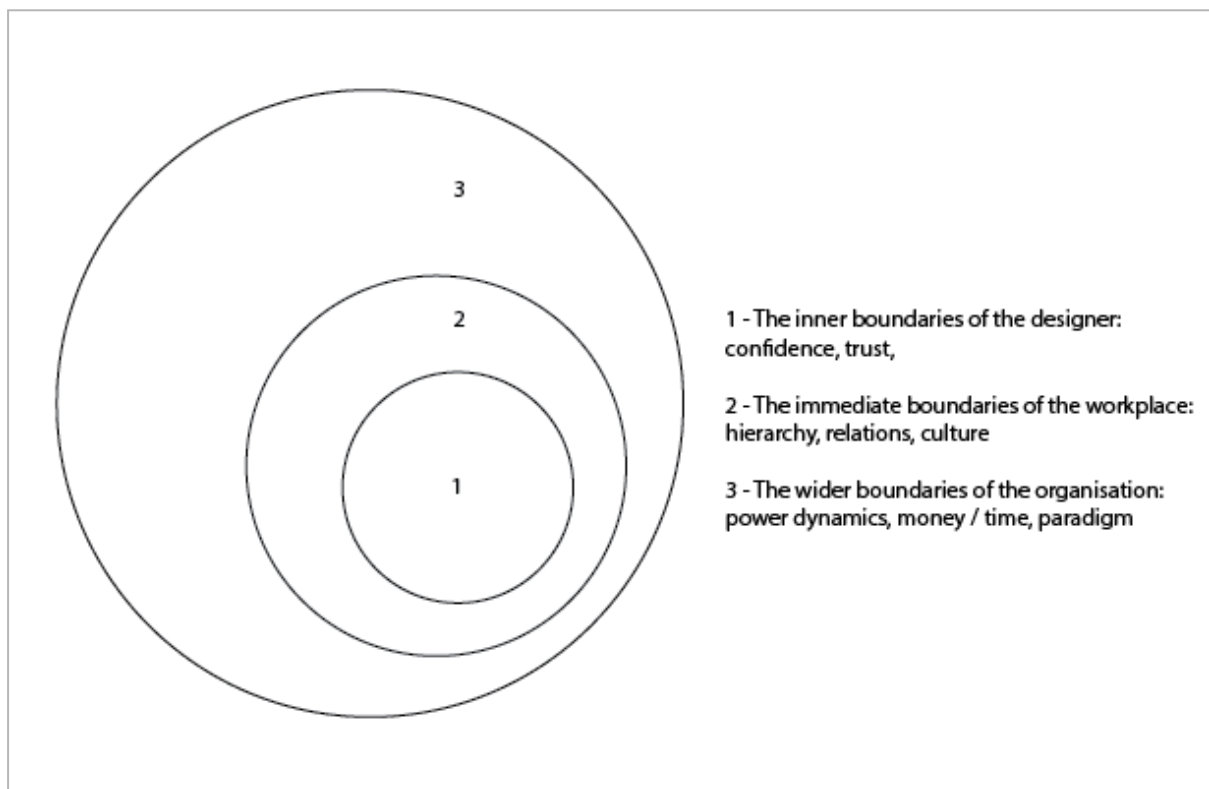


Figure 1. A visualisation of the boundaries identified.

**The inner boundaries of the designer (confidence, trust)**

How comfortable are you with your new knowledge? Do you trust that it is useful? Which parts come easier to you compared to others? Do you dare to stand in the uncertainty of not knowing and not providing answers and of giving away control? Do you dare to show yourself vulnerability? How patient are you?

**The immediate boundaries of the workplace (hierarchy, relations, culture)**

Who or what is enabling and encouraging you to test your new knowledge? Who or what might stop you and why? How willing are your colleagues to learn together with you? Who would be a natural partner-in-crime/potential copycat? Is there enough trust to stand in uncertainty together? What are the expectations from your colleagues towards you? And what are you expecting from them?

**The wider boundaries of the organisation (power dynamics, money flow, paradigm)**

Is it encouraged in your organisation to experiment with new knowledge? If yes, in what kind of environment? Will you get punished if you don't show immediate results? What is valued in your organisation, and how can you use this to open doors? What are the time frames in which your organisation operates? What are leverage points within the organisation that you could use for seeding what you have learnt?

## Conclusion

This short paper builds on the practice of three in-the-making systems oriented designers. From testing out gigamapping in Oslo Origo, the authors have drawn a model of three boundaries that are relevant when implementing SOD, or frankly, any new knowledge in a workplace. It is important to highlight that this model is the result of SOD-inspired, design-led action research, and it is within this landscape of both theory and practice that the presented model lies.

It might be interesting to compare the findings with other studies from, for instance, organisational psychology, but this would go beyond the scope of this presentation.

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