

Exploring mapping tools for service design through the *Voitto* project

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This chapter is situated in practical service design. It discusses learning through action by employing established service design tools and processes, including learning through co-creation (Sanders & Stappers, 2008). Due to the iterative working approaches that involve co-design, testing and evaluation, service design enables continuous and peer-to-peer learning (Kuure & Miettinen, 2013). Mapping both a physical and action-driven process, is explored in this chapter as a useful tool for learning through action in service design processes. Mapping is a powerful visualisation tool as it produces artefacts, the physical maps, which transfer semiotic data for stimulating new insights and progressing learning in customer journeys.

Voitto is a Finnish word meaning victory, and a shortened word representing the Finnish phrase *voimavaroja, toimintakykyä ja osallisuutta Lappiin*, meaning increasing resources, viability and social participation in Lapland. This word was chosen as the title for the project discussed in this chapter. The practical use of mapping in the public sector where new tools are continuously sought to improve public services and address societal challenges (Kuure & Lindström, 2012). *Voitto* is an EU funded three year project that was initiated in 2017. The project seeks to explore new services for men who experience social isolation over a long period of time. The Education and Development Services from the University of Lapland leads the project, supported by an expert counselling team that includes the Regional Council of Lapland, the Eduro Foundation, Lapland Te Services, University of Lapland, Northern Finland's Centre for Social Services, Ranua Municipality and Lapland Ely Centre. The Faculty of Art and Design at the University of Lapland contributes expert service design and artistic knowledge to the project. The project includes participants and project stakeholders from three municipalities in Finnish Lapland, which are Ranua, Inari and Ylitornio.

The aims of *Voitto* is the social and economic empowerment of men who have become socially isolated and unemployed over years in these municipal areas. The target group (later in this article also referred to as participants or customers) are the most vulnerable and marginalised men that are ageing, (long-term) unemployed, often disabled and recipients of social welfare. Improving the work capacity

of unemployed men, their quality of life and reintegrating them into their communities is at the core of the project. Social workers, guided by the expert counselling team, identified the participants.

The project aimed to guide, counsel and train personnel in the application of the selected service design methods, including ethnographic observations and mapping. This entailed the development and modelling of participatory tools for the processing of current life scenarios by the target group, whilst simultaneously developing and formulating participatory tools for guidance and counselling for utilisation by the municipal workers who also fulfilled the role of counsellors. Service designers from the University of Lapland fulfilled the roles of process mediators. Table 1 illustrates how each municipality has participated in the working process and at what period.

TIMETABLE	MESS MAPPING PHASE	STAKEHOLDERS	PLACE
19.02.2018	Meeting of Mess Mapping and creating the sub-themes	All three municipalities represented by their social workers; facilitators from the University of Lapland	University of Lapland
19-20.04.2018	Early childhood/ kindergarten/ schooling/ army	Service design facilitators from the University of Lapland	University of Lapland
02.05.2018	Health and social services; social & healthcare services (Sote) reform and new legislation; social & healthcare services (Sote) reform and new legislation	Social workers from Ylitornio; <i>Voitto</i> -participants; facilitators from the University of Lapland	Ylitornio
07.05.2018	Hobbies; free time; connections; family; self-esteem	Social workers from Inari; <i>Voitto</i> -participants; facilitators from the University of Lapland	Inari
14.05.2018	Substance addiction; urban-rural divide; law and order issues	Social workers from Ranua; <i>Voitto</i> -participants; facilitators from the University of Lapland	Ranua
28.05.2018	Analyse and peer-review of the maps; identify connections between the sub-themes; identify the key impediments for development	All three municipalities represented by their social workers; facilitators from the University of Lapland	University of Lapland

Table 1. Timetable of the sequence and themes of Mess MappingTM with the stakeholders.

The goal of the project is to find meaningful forms of participation despite the difficult social situations these men face. Development work is being carried out by municipal workers who will be able to reform existing municipal services for new and improved customer experiences. The project aims to improve the participation rate of the target group through new experiences that strengthened self-worth and status of the participants as contributing and confident community members.

THE MESS MAP™ PHASE OF THE *VOITTO* PROJECT

The project designs development measures by defining needs and goals for socially isolated men who live in the participating municipalities in regional Lapland. The development work is being carefully guided by the participants themselves. This phase of Mess Mapping™ entailed that service designers, counsellors, social workers and other professionals focused on building and expanding existing knowledge about the participants, followed by the identification of their needs through service design, a process in which end users are situated at the core of the process (Rytilahti & Miettinen, 2016).

The long term aim of the project is to develop new types of inclusive services, operating models and counselling methods that will be planned with the relevant stakeholders. Specific care will be given to the uniqueness of each of the rehabilitation processes with the participant groups. The team of experts share an awareness for the long-term impact and sustainability of the project. The future transferability of best practices are, as an example, a concern as they may impact on individuals, groups and local contexts in the Arctic. Thus, the focus is on co-creation with the target group and other stakeholders to develop services that include appropriate, suitable and implementable tools. Improved public services, with appropriate outreach and access mechanisms, are essential for reaching participants and beneficiaries.

METHODOLOGY

The focus on mapping processes and mechanisms in the *Voitto* project, employs an ethnographic methodology angle, because ethnography, says Geertz (1974, p. 5), entails the mapping of fields, through maintaining diaries, understanding relationships, and recording texts among other activities. In ethnographic practices, the behaviour of participants is usually observed within their own environments instead of inviting them to artificially created spaces to be observed (Banks, 2007, p. 58). However, service designers often use workshops to create spaces where co-creation is enabled through participation, whether they work with participants in their own environments or in specially prepared or created environments (Kuure & Miettinen, 2013; Miettinen, Sarantou & Akimenko, 2016).

This project used a series of six workshops of Mess Mapping™ as a base to start developing new services with the participants. Workshops enabled the exploration, analysis and understanding of the broader contexts in which the participants functioned, which include their different life experiences, and their social, economic and environmental situations (Banks, 2007). During the workshops service designers and stakeholders engaged in interviews and group discussions that were captured and processed through narrative and content analysis. Service designers approached workshops with the aim to understand the participants and stakeholders' situations in a holistic sense, including all aspects that relate to their usual daily (in)activities. Due to the sensitive nature of the project (involving marginalised and socially isolated individuals), the inclusion of participants in group activities such as workshops proved to be challenging. To bridge this challenge and to enable understanding between the service designers and stakeholders, a series of workshops and group activities was planned and conducted.

Maps are designed artefacts, because they are planned and drawn with the assistance of reflections upon journeys (Sarantou, 2014). During their journeys in specific worlds, however, travellers improvise their routes, because they embark on forward-moving actions and they 'know as they go', or discover as they proceed (Ingold, 2000, p. 228). The service designers collaboratively with the participants mapped the experiences of the stakeholders and participants as well as the envisaged solutions to their problems, thus the 'making' of maps, tangible and intangible, was based on forward-moving, improvisatory actions (Anusas & Ingold, 2013).

The tactile tools used for map making processes were, sticky notes, notebooks, photographs, audio recordings, physical bodies and enactment, while intangible tools included imagined scenarios, memories, intuition and knowledge. Letsiou (2017) refers to aesthetic mapping as a method for documentation in which collage, mixed media and other visual materials were used to produce meanings in relation to experiences. Aesthetic mapping is used by artists to explore societal, historic and political issues (Letsiou, 2017). However, art-based approaches to mapping can also be used to transform experiences into new meanings and sense-making processes.

The knowledge about the maps (and map making processes) used in this project is shaped through past experiences and service design theory (Zomerdijk & Voss, 2010), in addition to the memories, stories and knowledge of all the stakeholders involved in the process. The extensive planning and designing invested in *Voitto* in this phase was a mapping process. This chapter discusses two map making processes namely Mess Mapping™ and Resolution Mapping™.

DISCUSSION: MAPPING AS A SERVICE DESIGN TOOL

Mess Mapping™

Mess Mapping™ is a tool that was created to generate the understanding of social problems that are wicked by nature (Horn & Weber, 2007). According to Rittel and Webber (1973), wicked problems should meet ten criteria before they should be labelled as such. These authors contend that one wicked problem may be the consequence of another, thus they refer to spin-off problems that are caused when appropriate resolutions are not found for existing wicked problems. According to these theorists, wicked problems don't have solutions but rather are in need of resolutions as efforts can be made to contain or tame wicked problems, but not to solve them (Rittel & Webber, 1973).

Developed by Horn and Weber (2007), Mess Mapping™ is used to visualise social fuzziness that is based in social, political, historical and environmental complexities such as unemployment or social isolation. Figure 1 presents a semi-final version of the Voitto Mess Map™. As the name of this tool states, the realities that the project faced, which included the challenges that both stakeholders and participants faced, were messy and difficult to comprehend. However, this map revealed sufficient information to the stakeholders for generating a deeper understanding about the wicked problem.

The Mess Map™ process aimed to carefully label, organise and place actions, relationships and processes within a system. Mess Maps™ indicate existing stakeholders, actual actions, relationships and processes and should therefore not be confused with mind maps that illustrate ideas. The role of organisations and stakeholders are important in Mess Maps™ as they influence and impact on outcomes (Horn & Weber, 2007). Mess Maps™ offer holistic views and create understanding of wicked issues and the participation and collaboration needed from different entities to ensure the success of the project (or process).

The process of Mess Mapping™ is explained in Figure 2. The process for the service designers working in collaboration with the municipal representatives, which consisted of social workers and counsellors, is illustrated. While the service designers guided the structure of the mapping process, the social, historic, organisational and environmental details of the problems were provided by the municipal representatives. This illustrated the exemplary co-creation approach of service design. The service designers were responsible for creating and breaking down into finer details categories and themes from the knowledge that was provided by the municipal representatives and facilitators from the University of Lapland. The service designers together with the participants were then able to create a Mess Map™ as a result of the relationships that unfolded as illustrated in Figure 1.

The themes that were identified in the Voitto Mess Mapping™ included schooling and education, family scenarios, addictions and substance abuse, health, law and order issues, urban-rural divide, to name a few. Remoteness and geographical isolation impacted on participants' working and schooling opportunities due to the limited services that smaller schools offer compared to larger learning centres and schools in populated, larger cities in Finland. One issue that became known in this project was that the majority of the social workers in the project were women. This detail was acknowledged in the research application of the Voitto project. During the initial Mess Mapping™ process the role of compulsory military service for Finnish men was first omitted and then later added to the map as this factor can potentially contribute to social exclusion.

During the first sessions of Mess Mapping™, prominent themes and subthemes were identified such as family, schooling, health, urban-rural divide, substance abuse, hobbies, self-esteem, law and order issues, and anticipated changes to Finland's social and health service legislation. New themes were also identified during the separate Mess Mapping™ sessions. The tool continued to deliver new insights into service design co-creation as the views and knowledge of all stakeholders were incorporated to form a holistic understanding of the Voitto project's target group.

Each of the municipalities processed a group of themes that was later reviewed by experts and social workers from the partner municipalities. During the final Mess Mapping™ session of the project connections between the themes and topics were established, which created new understanding of the relationship between the problems participants experienced. For example, the theme 'self-esteem' was well-connected to additional themes in comparison to others (illustrated in Figure 3). Self-esteem seemed to affect many stages of the participants' lives with potential negative effects such as unemployment or substance abuse. During the sessions many social workers made new discoveries, for example that the majority of men who participated in Voitto had client relationships with social services since their childhood. This illustrates how negative experiences in early life stages are able to escalate into significant challenges in later life stages. Another discovery was that the term 'motivation' received multiple and complex meanings during the mapping process. To unpack this theme, participants realised that it was a main development objective for the municipal services, but without the participants' motivation and commitment to a program, the efforts seemed to have little value, which posed challenges to the social workers who have to drive positive outcomes.

The feelings of some participants were controversial after finalizing the map. Some felt that the process required hard work, while others experienced it a pleasant way to discuss and process the themes. Adhering to project schedules also proved challenging to some, while others were concerned about the oversimplification, or generalisation, of the identified themes and challenges. One participant acknowledged that sim-

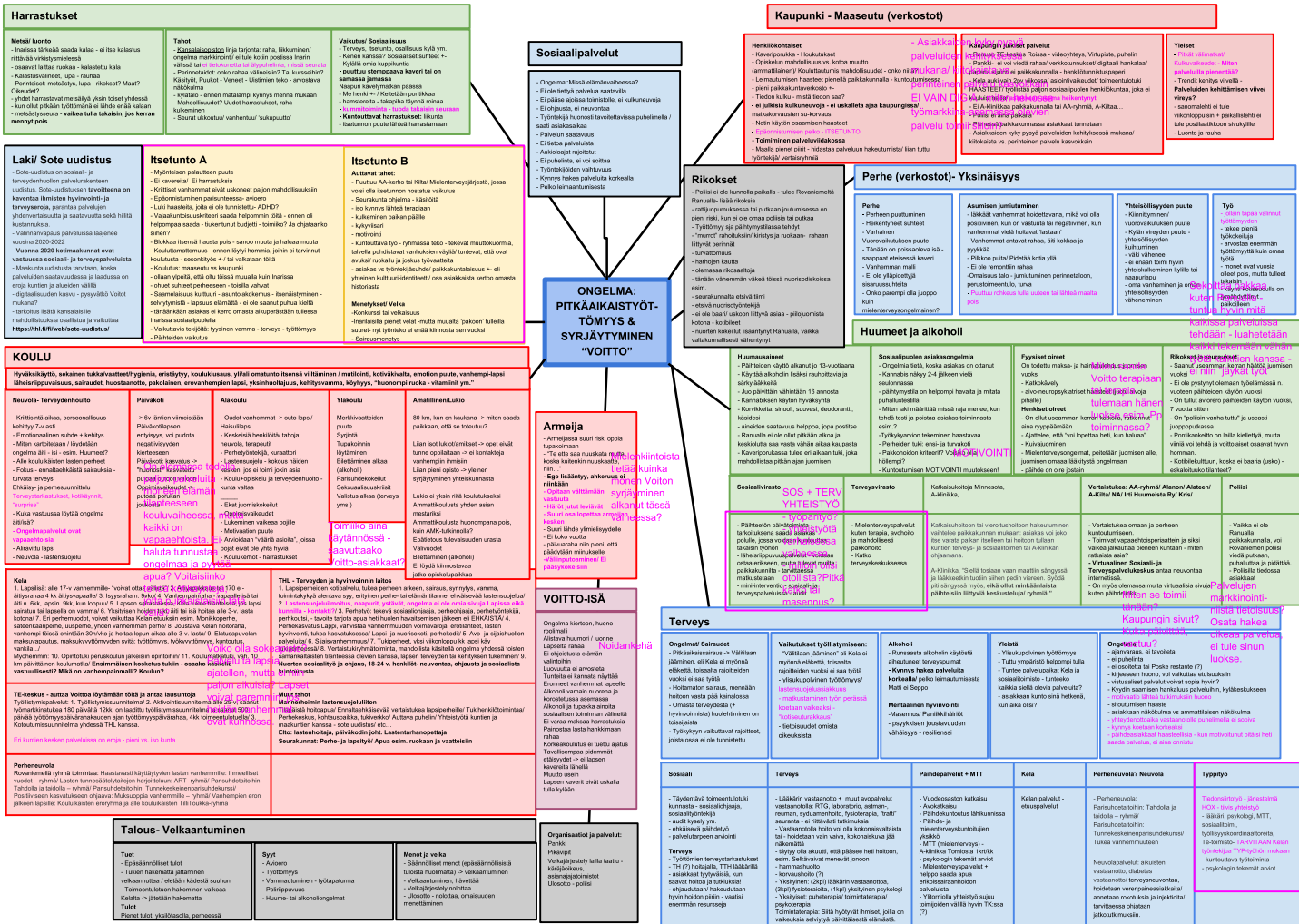


Figure 1. The initial Mess Map™ of Voitto made together with the social workers by the municipalities. This Mess Map™ is created in the Finnish language as it is the actual map that was created in Voitto.

MESS MAP

Designers create:

1. Creating categories

The process is initiated by creating categories of the service user's problems. The causes of problems are to be mapped.

2. Making a more detailed breakdown

Based on the information provided, sub-headings are created for existing categories.

3. Spreading the categories on the map

Problem categories are placed on the map in a preliminary order.



Municipal representatives create:

Problem mapping

Based on the categories, the problem areas of the individual target audience are mapped.

Completing details

Sub-headings complement the problem areas or attempt to map new ones.

Creating relationships

Connections or causal relationships are sought between problem categories.

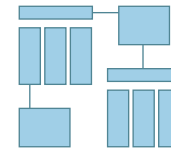


Figure 2. Mess Map™ structure used for Voitto, designed by Joel Saarimäki and Mari Suoheimo (2018).

plified themes and scenarios was necessary for the creation of services. However, each *Voitto* participant presented a scenario despite the many similarities that existed. It was also acknowledged that flexible and simplified services may be better adapted to suit individual needs.

In Autumn 2018, the next phase of the project, Resolution Mapping™ will follow the Mess Mapping™ process. Resolution Mapping™, instead of solution mapping, refers to Horn and Weber's (2007) theories, which argue that resolutions rather than solutions exist for wicked problems. Resolution mapping will focus on the discoveries made in the Mess Mapping™ workshops.

Resolution Mapping™

Resolution Mapping™ is similar to scenario mapping as it explores the future of a problem (Horn and Weber, 2007; Ramírez & Lang, 2017). In the project Voitto the outcomes of the Resolution Mapping™ will be the stories of fictive personas. Due to the sensitive nature of the Voitto project it was difficult to involve the identified participants in group activities and workshops. Thus, the social workers from each municipality will present them as they work with the unemployed and socially isolated men in their usual environments on a daily basis. To stimulate participation, fictive personas will be used as instruments to stimulate storytelling and discussions between the stakeholders. These personas were already created for the Mess Mapping™ process through the existing knowledge of the municipal representatives from Ylitornio, but were reviewed in a workshop, hosted in Rovaniemi, with municipal representatives from Inari and Ranua.

The storytelling tools that will be used are constructed around representations of past and future scenarios of these persona, for example how the person appears now, and how it will appear in the future. Storytelling will be used to explore, question and inform how a persona is enabled to overcome challenging and complex life situations, such as unemployment or reintegration into society. The journey between the initial persona and the later versions may potentially illustrate positive outcomes. Included in the Resolution Map™ will be blocks, or steps, that represent themes and 'pain points' that were discovered through the Mess Map™. Each block represents actions that should or shouldn't (represented with a red diagonal strikethrough) happen.

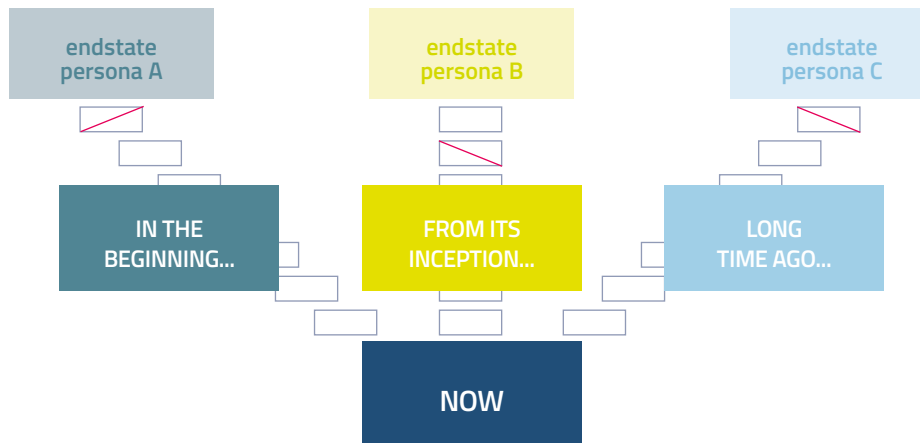


Figure 4. Resolution Map™ adapted for the Voitto project (adapted from Horn & Weber 2007, p. 22).

The Resolution Map™ (Figure 4) aims to present ideal participant journeys. The user's journey tool is widely used in service design (Baranova, 2016). In this Resolution Map™ the journeys are expected to be complex as they may indicate various services that are delivered by public and private organisations and entities. Storytelling and performativity will be additional service design tools used to explore and experience different steps in a participant's journey (Sarantou, Kontio & Miettinen, 2018). The narrative function associated with storytelling will serve as a 'sense-making' process as it has the potential to enable participants and stakeholders to verbalise their service experiences and have their voices heard in process development (Kuure & Lindström, 2012).

Figure 4 illustrates the persona tool developed for the Voitto project to stimulate participation through storytelling and performative engagement with stakeholders. This tool illustrates the positive journey that will be explored by stakeholders. This tool will serve as a persona map to illustrate life journeys. The first persona represents a challenging life scenario, while the second illustrates an improved situation. Indicated between the two personas are various actions and options for development that will be discussed and explored by the stakeholders during the forthcoming workshops.

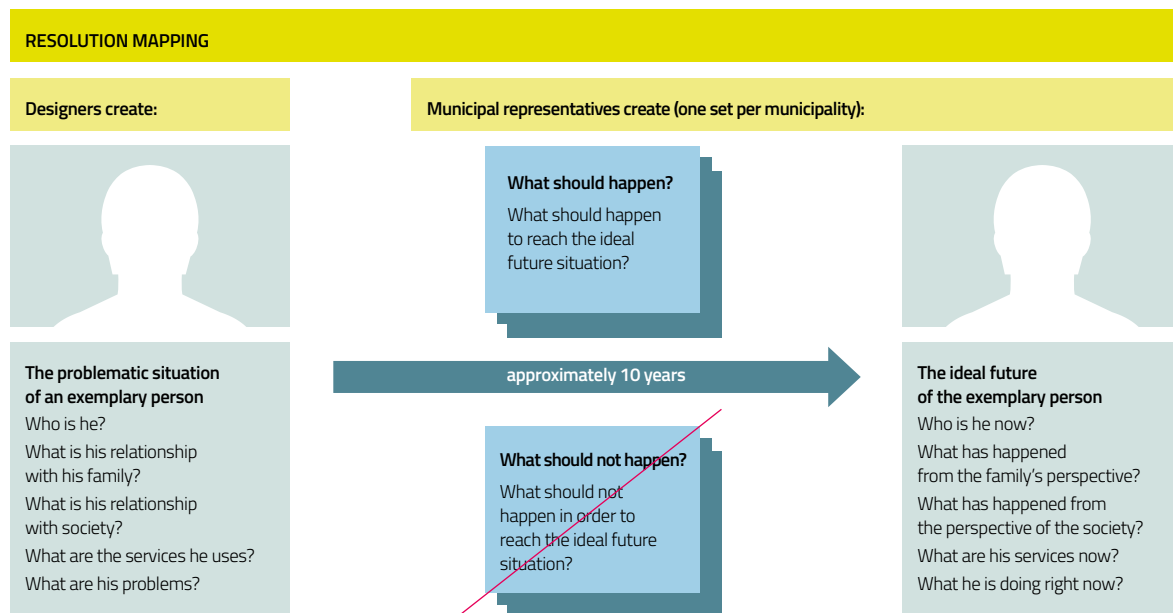


Figure 5. The Resolution Mapping tool designed for the Voitto-project by Mari Suoheimo and Joel Saarimaki (2018) (adapted from Horn & Weber 2007, p. 22).

The primary purpose for using the persona tool, or map, is to enable empathy processes between stakeholders. Miettinen, Sarantou and Akimenko (2016) explained empathy creation processes as reiterative cycles that can be used in any of the service design stages or practice-based research cycles, such as design research and enquiry, methodological development, concept design, prototyping and implementation (Creswell, 2013). The empathy creation process suggests a cycle of the often messy and overlapping phases of discovery, immersion, connection (and disconnection), detachment and analysis, followed by the last phase, planning, which is needed to proceed with follow-up processes when required (Miettinen, Sarantou & Akimenko, 2016). The persona map may be useful in the initial phases of the empathy creation cycle, which are discovery and immersion. During these phases reciprocal introduction, storytelling and sharing tools (Miettinen, Sarantou & Akimenko, 2016), enable familiarisation between stakeholders.

It is important that all stakeholders think of themselves as change makers and planners of better futures by using their places of work as platforms to achieve these goals, while remaining sensitive towards the needs of their customers or end users. The three municipalities reviewed and agreed on the suitability of using the same personas in all locations to stimulate participation of the socially isolated men. In Inari a group of men were identified that were different from Ranua and Ylitornio. Many of these men moved from southern Finland to Lapland to experience peace of mind and the Arctic natural environment. Thus, an additional persona was created for this group. These personas aided the creation of the Mess Map™ and are expected to so during Resolution Mapping™ with the aim to create positive futures for all stakeholders.

CONCLUSION

The Mess Map™ tool used and developed during the Voitto project can create new understanding of current scenarios of Voitto clients, while Resolution Mapping™ is a potential tool for envisaging new positive futures. Maps are agile working tools, while they also are tangible artefacts that facilitate participant engagement. For example, the documented feedback of participants in the Mess Mapping™ workshops illustrated that their voices have been heard. The participants also felt that the mapping created new insights and knowledge about the issues related to long-term unemployment and social isolation, which were the wicked problems in question. The sharing of experiences and service knowledge during the mapping process was also valued by the stakeholders. When utilising their full potential, maps are sensitive tools that offer stakeholders the opportunity to express identities and nonverbal messages about themes and realities they deem necessary to address.

During the Voitto workshops, paper, markers and post-it notes were used to determine the initial themes in the project. These tools are used as they often deliver fast and effective results. Through critical obser-

vation, however, the over-dependence on these usual tools, such as post-it notes in process development, can be substituted by more engaging art-based approaches. One example is the use of aesthetic mapping as it offers powerful creative strategies that span various disciplines such as visual and performative art (Letsiou, 2017; Sarantou, Kontio & Miettinen, 2017). Art-based approaches could be used by service designers in Mess Mapping™ as it offers new avenues for powerful visualisation, performance and in-depth engagement between stakeholders.

Art-based activities also enable empathy creation (Miettinen, Sarantou & Akimenko, 2016), especially in marginalised contexts where sensitive approaches to community engagement and data collection are needed. In empathy processes, aesthetic map making that draws on mixed disciplines, such as printed, painted and illustrated images, or performative arts, offer journeys of discovery and immersion, which are the initial phases of the empathy creating journey. Art-based approaches to research and development processes seek to be democratic, accessible by design. Thus, these approaches are able to facilitate engagement with complexities such as sensitive and marginalised contexts.

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Above: Snowsculpting workshop in Kautokeino in collaboration with Sámi University College. Photo: Tanja Koistinen.

Left: Tanya Kravtsov, *Silhouettes*, 2018, detail of an installation: photography, drawing, video.