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Scaling Up: From labs to systemic change

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Zwaluw | Innovation & Collaboration / VanWaarde / The Hague University of Applied Sciences | Northumbria University / The Hague University of Applied Sciences / Delft University of Technology

The current societal challenges require different stakeholders to act on different systemic levels. Design is seen as a valuable approach to addressing these challenges. Whereas earlier studies provide insights into the practices designers need for systemic design, there is a lack of understanding of the practices designers need to scale up and create the needed impact. This paper describes a study on two extensive case studies that created systemic impact and what the project leads did to create the scale and impact they achieved. From these case studies, we found that creating a governance model, an action-driven approach, storytelling and navigating can help to scale up and hand over to other stakeholders.

The governance model was set up in both cases to ensure national and local ownership. Developing the tools and methods during the process that could be handed over to others and are self-explanatory scale up was enabled in both cases with limited budgets and time.

Both cases required and wanted to create an impact where action on the work floor was required. In both cases, the strategic challenges were translated into smaller local experiments. With an action-driven approach, these local labs and experiments were connected to learning at a larger scale and provided insights into all sorts of challenges for implementation and scaling up.

In both cases, storytelling was used and helped in gaining traction and support throughout the process. The stories of people in the system were used to create an understanding across the different sectors of how different perspectives and people experience the problem and solutions and their accompanying needs. Also, in both cases, media attention helped to create awareness at the right levels to increase the impact and give an enormous boost to the scale up of the projects.

In both cases, the project leaders left room for intuiting. At some point, they felt the need to slow down, speed up, involve different people, strengthen their relationships, or grasp opportunities. Both teams had a clear view of the process to follow and the aim to achieve but left room in their processes to grasp the opportunities and drift away when they felt they needed to do something differently.

KEYWORDS: scaling, scale up, scale-up, systemic change, labs, practices, systemic design

RSD TOPIC(S): Cases & Practice

Systemic design for societal challenges

For example, the current grand societal challenges in health and well-being, energy, food, water, and transport require many stakeholders to act on different systemic levels (Leadbeater & Winhall, 2020). In the broadest sense, design is seen as a valuable approach to addressing these societal challenges. We draw upon Liedtka's notion that design is a "social technology," a collection of methods, processes and skills to negotiate problems and explore possibilities (Liedtka, 2015). On the crossroad of systemic design, design thinking, and transition design, designers and their practices can help deal with the challenges (Buchanan, 2019). Designers and design researchers are often involved in supporting specific interventions and sometimes in enabling entire processes. Practices and literature in "co-creation ecosystems" are a developing field to discuss differences and relatedness of micro-, meso- and macro perspectives (Leadbeater & Winhall, 2020). Designers consider multiple scales and networks across different

domains (Jones, 2014). Designers can bridge the differences between different fields and connect different sectors and silos. They are used to working in these different fields and at different levels (from products to policy (Design Council, 2021a). Further, this paper explores a realm of complexity and impact currently referred to under the umbrella term; DesignX (Norman & Stappers, 2015). We do not seek to define DesignX but rather contribute to understanding how design can be applied at the scale of systems, what design practices are inherent to designers, which can be transferred and which ones become more apparent.

Systemic design is distinguished from service or experience design in terms of scale, social complexity and integration—it is concerned with higher-order systems that entail multiple subsystems (that might be defined services). By integrating systems thinking and its methods, systemic design brings human-centred design to complex, multi-stakeholder service systems. It adapts from known design competencies—form and process reasoning, social and generative research methods, and sketching and visualisation practices—to describe, map, propose and reconfigure complex social systems (Jones, 2020).

Designers have also developed methods for dealing with complex, open-ended questions and can find opportunities and move forward to the unknown (Design Council, 2021b). They are trained to deal with uncertainty. And not only move forward and navigate the complexity of the challenges, but they can also imagine and create possible new futures and complexity—they can rethink and explore alternative ways of thinking (Jones, 2014).

The current challenges do require more than fixing the problem of the old; we need to find solutions for the current system but need to create the potential for a new system to emerge. Design can play a significant role in doing so, but we must evolve our current practices from a systems-conscious way to a systems-shifting way (Design Council, 2021b).

A need for other (design) practices

While there are ideas on how system transitions happen, there is less knowledge on how to steer them in the direction we want and aim for and orchestrate them deliberately. They often do not happen linearly and involve many different actors over time (Design Council, 2021b). For designers, it is important to learn how to contribute to accelerating deliberate transitions equitably. Therefore we need to better understand the practices that can make a difference and how to connect our innovation and propositions to different levels to increase the opportunity for change to make the required system shift.

The Design Council (2021a) described different barriers to change in designing for systemic change. Designers can more often include different fields and sectors and create spaces where different types of expertise and backgrounds can come together, collaborate to build a shared language and relationships and value the different knowledge, expertise, and backgrounds. Designers also need to increasingly be aware of their societal and environmental impact and include this awareness in their design processes to act upon this impact.

The same report of the Design Council (2021a) also describes examples of systemic change that is taking place, which is led by people that use the uncertainty and messiness related to complex challenges to make a difference. These people work like pioneers or activists to use motivation to envision hopeful futures that people want to connect to. They bring people together and connect them to each other and the vision, take risks, fail and learn from their experiences.

Nevertheless, many projects of real complexity, where stakeholders from many different fields have to collaborate, remain in the prototype stages (Jones, 2020). A primary way of exploring and addressing wicked problems towards systemic change by bringing people together and prototyping is in labs. These existing Lab types are social innovation labs, living labs, urban living labs, urban transition labs and public sector innovation labs (Zivkovic, 2018). In their paper, Zivkovic proposes a new lab type by combining the features of existing labs suited to addressing wicked problems: a systemic innovation lab supporting systemic design, solution ecosystem and systemic

innovation approaches. How these labs can sit within a larger approach is described in the impacting systems with labs model (De Lille & Overdiek, 2021) (Figure 1). It describes three distinct phases (time on x-axes) between the local and the national systemic level (y-axes): mapping and understanding the current system, engaging and experimenting in local labs where knowledge was made actionable, which led to prototyping, testing and embedding a preferred future system. These phases enable and support working towards a preferred future as opposed to a potential or probable future (Dator, 2019). This provides us with a view of the process and a first idea of the practices during this process, but not yet with a view on how to scale up and the practices needed to create the systemic change and needed impact.

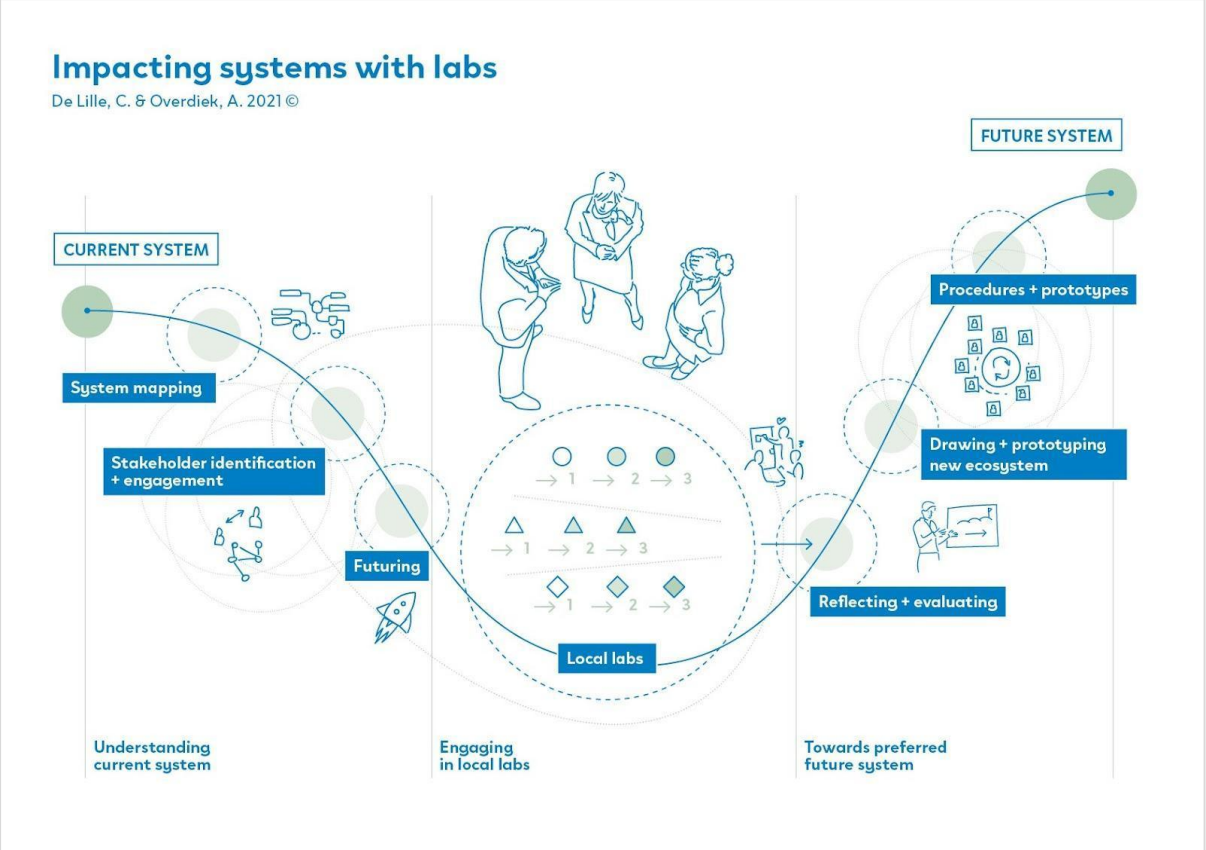

Figure 1: Impacting systems with labs.

This brings us to our interest in the specific practices we need as designers, not only to envision a future and bring people together but also how to get from a vision that people connect to and a prototype or lab in which ideas and concepts are tested, to scale up and the actual deliberate systemic change we aim for. Most of the labs do not include this scale-up while aspiring to change the system (Mulgan, 2014), but when undertaken with the discipline and commitment to achieve implementation, they can make an impact on a systems level (Riddell, 2016). Although the model is described in "From System to Local to System" (De Lille & Overdiek, 2021), we zoom in on the model's third phase: scale up. Within this phase, the two presented cases in this paper are of particular interest as they successfully achieved systemic impact while the involved designers stepped out of the ongoing process. This paper investigates what practices might have been at the base of this successful detachment of designers and which design practices are at the basis of the scaling of systemic change.

Practices found in earlier studies

Different studies are down into the practices designers need for systemic change during the whole process that also may be relevant for scaling up.

Embrace complexity

The first thing mentioned by different authors is the complexity of the problem designers can deal with; they embrace the complexity, understand the interrelatedness between all the different sub-problems and can see the bigger picture (van der Bijl-Brouwer & Malcolm, 2020; Design Council, 2021a). They zoom in and out and empathise with the system (van der Bijl-Brouwer & Malcolm, 2020). They find an integrated solution that solves multiple sub-problems (Design Council, 2021b), and they see their project as a means to create a more significant impact on a larger scale (Design Council, 2021a).

Facilitate collaboration

In order to create systemic change, designers involve people from different backgrounds, different perspectives and different knowledge bases (Design Council, 2021b; Hassan, 2014; Riddell, 2016. Vink et al., 2021) urge for the development of

designerly approaches that aid practitioners in catalysing social systems change. In their work, they attempted to develop an initial portfolio that acknowledges social structures as a key leverage point for influencing social systems. One of these social structures is where designers create a safe environment and movement where those different people can share knowledge, learn together, and be creative (van der Bijl-Brouwer & Malcolm, 2020; Design Council, 2021a) and in which people want to identify with the shared vision to create impact (Design Council, 2021a). They create a shared language and definitions over time (Hassan, 2014). They build stories to create buy-in at the different levels (Design Council, 2021a) and connect to other initiatives doing similar or related things to increase their impact (Design Council, 2021a).

Including all levels

Zooming in and out is a core practice of systemic design, from micro to macro, at different levels in the involved organisations, from root cause to hopeful vision, from present to future and from the individual to the larger system. (Design Council, 2021a). Working bottom-up and top-down, and in- and outside of the context (Mulgan, 2014). Systemic designers constantly switch and include these different levels (in the broadest sense). (Design Council, 2021a).

Reframing

Systemic designers create a systemic perspective on the problem situation and try to understand and challenge the existing mental models, structures, values and beliefs (Design Council, 2021b). They reframe the problem situation and expand the problem and solution spaces (van der Bijl-Brouwer & Malcolm, 2020) in order to build a new set of values (system shifting) that is needed to create an impact.

Creating a vision

To create impact, systemic designers create a vision of how the potential system might look, and they design propositions to imagine this future. They invest in a longer time horizon and take a stand on how this future could look (Design Council, 2021b). Facilitators or lab coordinators are committed to the challenge and work to transform the system. They actively set the agenda, make decisions and show leadership to

achieve the vision and imagined future, including the participants' ideas, knowledge and perspectives (Riddell, 2016).

Iterate

With the vision, systemic designers iterate during their process. With the co-evolution of the problem and solution, they create a better understanding of both the problem and solution (van der Bijl-Brouwer & Malcolm, 2020). By testing their ideas, they get feedback and input that increases their understanding of the current system and how the future system should look (Design Council, 2021a). They constantly alternate between diverging and converging stages to clearly understand the context in which you are working before seeking a solution (Design Council, 2021a). In this way, designers do, act, reflect, learn and challenge their findings to come to better solutions (Design Council, 2021b).

Designing and making

Designers have the technical and creative skills to make things happen and use their “making” skills early in the process (Design Council, 2021a). These prototypes make it imaginable for the people involved and evolve in action, and support the transition from one system to the next system (Design Council, 2021b). Also, visualisations may help to create new insights in labs in worlds where text and numbers are predominantly used (Mulgan, 2014).

People and planet-centred

A human-centred focus is seen as an important practice for systemic designers (van der Bijl-Brouwer & Malcolm, 2020). Whereas in systemic design, the focus may shift from an individual focus to a human-centred focus, including the shared benefits of all living things, also including how we can re-use, nurture and grow our existing and limited assets (Design Council, 2021a).

These are all relevant and valuable practices, but the question remains whether and how these practices help to scale up or whether we need specific or other practices to scale up from the vision, labs, experiments, and prototypes designers make and create

to the actual change in the system. For the most part, designers are not using their skills and knowledge to deliberately change systems in the way they should and could (Design Council, 2021a).

Practices for scaling up

Specifically, for scale, we know that we need to change and break through current systems, structures and economic systems (Design Council, 2021b). The Dutch government has even explicitly indicated the value of creatives in order to create methodologies that allow for systemic change, institutional change, as well as value creation and scaling. These themes come back in the research agenda developed with and for the Dutch government by the creative industry (CLICKNL, 2020). CLICKNL has partially funded one of the two projects documented in this paper as the projects sit at the core of this research agenda: Key Enabling Methodologies for Mission Driven Innovation – Research Agenda 2020-2023. Although the document elaborately discusses the need for systemic and institutional change and scaling innovation, it lacks a basis of insight and references; it primarily describes an existing gap. Scaling innovation is primarily discussed within organisations and not across many organisations or systems (Hillebrand et al., 2015).

Dorst & Watson (2022) describe how bypassing the traditional top-down/bottom-up blockage can be done by connecting the insights from a design project directly to the field or the larger system, whereas the strategy is mostly formulated top-down and not bottom-up by insight from practices. By directly influencing the field with the insights from the project, one can influence the structure top-down and the traditional blockage and create the change we aim for (Figure 2).

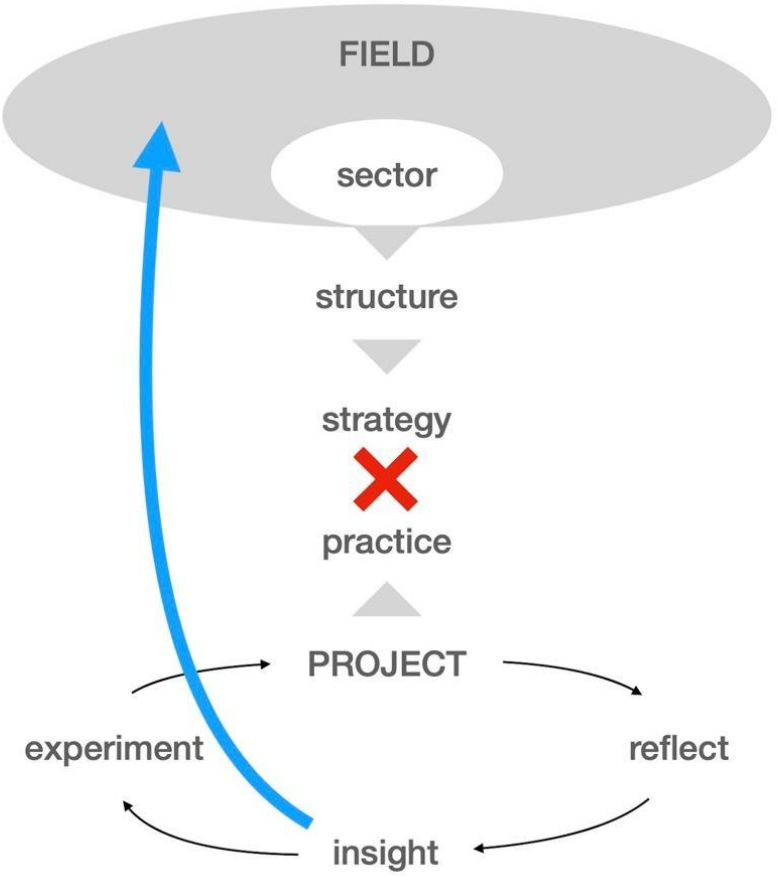

Figure 2: Bypassing the traditional top-down blockage.

Methodology

In this study, we want to learn about the specific practices needed during the process of moving from labs and experiments to the actual system change required, focusing on how the system change becomes long-lasting without the ongoing involvement of designers.

To answer this research question, we set up a case study (Yin, 2009) where we studied two different cases. Both cases dealt with a complex problem of national concern beyond the boundaries of a single organisation and involved many stakeholders and organisations (25+). None of the stakeholders could solve the problem on their own.

Both were challenging the deeper structures of the current systems and required work at the different levels of the system to drive change. In both cases, designers and their practices played a central role. Both cases are, by the stakeholders involved (directly or indirectly), seen as successful cases with a significant impact.

We employed an ontological process approach (Langley & Tsoukas, 2016) by focusing on "process as activity" (Fachin & Langley, 2018). Focusing on the "in the making" phenomenon takes us closer to a process ontology. Such an approach is best suited for analysing a few processes with detailed data collection. This means doing "deep dives" into critical incidents that are revealing for the overall process (Fachin & Langley, 2018). These moments act as a "microscope [that] helps understanding of the whole through its tiny parts" (Rouleau, 2005, p.1419). Each case had turning points where experimentation moved the design process forward and had turning points when the projects went from pilots with a few organisations to a national rollout. We were looking for critical events (Van de Ven & Poole, 1990) as situations of interest.

Data collection and analysis were done iteratively (Miles and Huberman, 1994), triangulating across the data (Jick, 1979). The first step in data collection was creating a description of both design processes. This was done with the project leaders using Miro, focusing on 1) How is this project different? 2) How did the collaboration/organisation change over time? 3) How did the goal/purpose of the collaboration change over time? 4) What makes this project complex? This resulted in a timeline with important moments, decisions, results and insights. We learned that we needed the team members in both projects to learn what they saw as impactful moments. We decided to interview different people in both projects.

For the interviews, we sampled 6-7 people per case. These included the core team and people less involved, people critical and positive about the design processes, and those who did similar projects with different approaches to deepen our comparison. Each interview was split into two parts. The first part was probing to explore pivotal moments in the process ±20-45min). The second part described each pivotal moment in more detail (30-45min - 15min per moment).

For each step in the data analyses, we highlighted the outcomes of each data analysis step for a reflective dialogue with the material and with the researchers and project leaders. We then described for each step the type of insight that led to the definition of the next step. Based on the insights from the identified moments, we realised that different participants had selected similar moments as important. So, we created a timeline per case and proceeded iteratively to create narratives of the cases where the various perspectives were integrated.

Triangulation (Jick, 1979) of different moments and different respondents, reviewing and comparing the timelines of the two cases allowed us to notice how respondents offered various views on similar moments. They then compared both cases to identify themes across the cases. A reflection with the researchers and project leaders on these themes resulted in a few practices that were especially relevant for the scale up of these processes.

The cases

Future-Proof Retail, 22 living labs to change the retail industry

Future-Proof Retail (FPR) was a national design-led research program in The Netherlands with more than 50 partners, conducted between May 2018 and December 2020. The consortium for this project started to form in 2017 as part of an initiative facilitated by the Dutch Ministry of Economic Affairs and Climate Policy called Retail Agenda. Due to digitalisation and changed consumer behaviour, the retail industry is in trouble. Multiple stakeholders from retail branch organisations, municipalities, knowledge institutions, real estate providers and big and small retailers realised that a systems change is required to survive and that current approaches were insufficient to achieve the required change.

In collaboration with two municipalities and diverse retail branch organisations, a design research group from The Hague University of Applied Sciences took the initiative. It rallied seven other regional Universities of Applied Sciences to head up design-led research across what became 22 local living labs. The FPR project was set up as a national program of a network of local living labs with a decentralised governance

structure working directly with small retailers to engage them as users and co-create solutions like learning tools and business model innovations, helped by new technologies. In May 2018, the project received two-year funding from the industry's foundation, Stichting Detailhandelsfonds. After two years, 14 municipalities and 500 retailers participated in the program.

The different teams worked design-led, and research was organised around collectively finding opportunities for change. Possible solutions were prototyped and tested during subsequent lab activity periods and shared with other labs. Six living lab formats were co-designed by researchers and system stakeholders to address specific business, social, and skills challenges that small retailers and retail employees face. Eight more labs joined the network in 2019/2020 to test the developed lab formats in other municipalities.

After the conclusion of the FPR program in January 2021, another four local labs have been organised on the regional initiative, and ten more are in planning. Instead of the research groups, local retail advisors, together with municipalities and retailers' corporations, are in the lead now. Branch organisations, the national platform of retail researchers and the national council of retail educational programs in higher education are all disseminating knowledge and tools from FPR and supporting the local labs.

A urine bag: keeping contrast media out of water systems

As a result of a growing and ageing population, we see an increase in the amount of medicine used. After passing through the body, the pharmaceutical residues are excreted, and they enter the sewage system and ultimately end up in our surface water. This is why the Dutch government wanted to act to prevent bigger problems in future. The Ministry of Infrastructure and Water Management devised a strategy entitled "Reducing pharmaceutical residues in water: a chain approach," a partnership between the Ministry of Health, Welfare and Sport, the Ministry of Agriculture, Nature and Food Quality and regional authorities, as well as a broad spectrum of stakeholders representing the healthcare, pharmaceutical and water sectors (Moermond, de Rooy, 2022). The joint goal of this approach is to reduce the amount of pharmaceutical residue in water without compromising patients' access to care. The issue of

pharmaceutical residues involves multiple policy fields represented by various stakeholders, ranging from pharmaceutical companies, primary and secondary healthcare, pharmacists and municipalities to the water management and drinking water sectors. The approach they were using was, by the World Future Council, rewarded as one of the twelve finalists for the Future Policy Awards.

The company VanWaarde was asked to lead a project with a special focus on contrast media. In the Netherlands, at least 30 tonnes of contrast media are emitted into sewage water every year. The team was responsible for setting up an effective experiment with urine bags. This includes testing the designed procedures, solutions, and materials from the posters in the hospital waiting rooms to the systems for the insurance companies to pay for the disposable urine bags in the long term and everything in between. The experiment with urine bags happened within six hospitals in parallel, with the intention of learning how to implement it in all Dutch hospitals (Hoogenboom et al., 2021). After the experiment, there were 20-40 hospitals interested in implementing the urine bags in the future. For reference, there are 69 hospitals in The Netherlands. With these results, the team was asked to continue their work with a specific focus on the implementation of the urine bags in as many hospitals as possible. The team developed a buddy system, where the hospitals that have implemented the urine bags, guide the new hospitals in the implementation of the urine bags in their hospitals. A toolbox was developed so the hospitals have everything they need to implement the use of urine bags, from information on how to find funding to the communication materials to train hospital staff and inform patients. As of November 2022, 52 hospitals were interested in using the urine bags, of which a few had already arranged the funding.

Results

In the two cases, we found similar design practices that have helped to scale systemic change.

Governance model

In both cases, the governance model was set up to ensure national and local ownership. In Future Proof Retail, there was a core team overseeing the whole project, a team overseeing the labs, and the teams in the labs. This was similar to the urine bags; there was a task force looking at pharmaceuticals in water, a project team focusing on the contrast media, and teams in the different hospitals.

In both cases, all tools were developed to make sure the labs or buddy process to implement the urine bags could be scaled without having to guide all the individual labs/hospitals individually by the same team. Scaling was enabled in both cases with limited budgets and time by developing self-explanatory tools and methods during the process that could be handed over to others. This also meant that in both cases, the project leaders could step out without harming implementation and scale up.

Action-driven approach

Both cases started at a strategic level where the need for change was recognised, and a different approach was requested. Both cases required and wanted to create an impact where action on the work floor was required. For the urine bags, the problem was experienced in the water sector, while a solution could be found in the health sector. This required collaboration through the whole chain to make a difference. At the same time, the hospital staff was not always aware of the problems pharmaceuticals cause in the water sector. And with the intention to not make concessions on people's health, other solutions had to be found to make a difference. The urine bags seemed a relatively simple solution to avoid the contrast media ending up in wastewater, but it required the whole chain to collaborate. There were worries in the healthcare sector about the extra time needed and the willingness of patients to use the urine bags. By setting up an experiment in six different hospitals, all with different profiles, the teams learned about all possible challenges to overcome for national implementation.

This was similar in the future-proof labs; by setting up the labs in all sorts of contexts, all over the country, where the teams experimented with different solutions, the team found all sorts of challenges the sector has to deal with and possible solutions to overcome these challenges.

In both cases, the strategic challenges were translated into smaller local experiments. These local labs and experiments were connected to learning at a larger scale and provided insights into all sorts of challenges for implementation and scaling up. These challenges could be solved, or solutions developed during experimentation or while moving from experiments to scaling up to make sure the required impact could be made.

Storytelling

In both cases, storytelling was used and helped in gaining traction and support throughout the process. The stories of individual shop owners, patients, and hospital staff helped to explain at different levels what and how people experienced solutions that were developed. These stories were used to create an understanding across the different sectors of how different perspectives and people experience the problem and solutions and their accompanying needs. These stories were most often concrete. In the discussion on implementing the urine bags in hospitals, a hospital staff member became aware of the effect of the contrast media in the wastewater and realised that she should not throw leftovers through the sink. This was a prime example to show policymakers that they should implement not only the urine bags but also create awareness of the problem we were trying to solve, and the urine bags were a good enabler in the hospitals to create this awareness.

The Future Proof Retail team also organised lab tours, and interested municipalities and policymakers were invited to visit the labs and experience for themselves what the lab coordinators and stakeholders were doing in the labs.

In both cases, there was an opportunity to get media attention. Future Proof Retail was invited to hold a physical event at Dutch Design Week. Although there were discussions about whether this was the right timing to scale up from a local level to a national level, they decided to take this opportunity to engage policymakers and branch organisations

and increase the awareness of the impact they could make. The Dutch Design Week event piqued the interest of not-yet participating municipalities in local labs. The learning ecosystem expanded, particularly because some policymakers from Dutch provinces had attended and wanted to get on board. The branch organisations and Retail Agenda were so impressed with the developing new ecosystem that an additional year of funding by the sector's foundation was suggested after DDW (and was subsequently granted).

A similar opportunity came up for the urine bags. While they were struggling to find a budget to make a movie in which they could present the outcomes of the experiment to show other hospitals how the implementation of urine bags would work, national television approached the team to produce an item on the urine bags. This resulted in national awareness of the urine bags, and in the next few days, the team was approached by 80 people that were interested in exploring the possibilities of implementing the urine bags at many different hospitals.

In both cases, this media attention helped to create awareness at the right levels to increase the impact and give an enormous boost to the scale up of the projects.

Navigating

The project leaders left room for intuiting both in the future-proof retail case and in the urine bag case. At some point, they felt the need to slow down, to speed up, to involve different people, to strengthen their relationship with people, to grasp opportunities. And although we don't have clear yet what steers their intuition and makes them have the gut feeling to take certain actions, it was clear that in both cases, the project leads used this gut feeling to steer the action they took and find the right buttons to make the needed change. Both teams had a clear view of the process to follow and the aim to achieve but left room in their processes to grasp the opportunities and drift away when they felt they needed to do something differently.

They also had a clear understanding of the current systems and were able to understand what could be left behind and changes, and also accept what needed to stay in the system and could not be changed. For example, in the urine bag case, the time of the hospital staff was experienced as a barrier to the implementation of urine

bags. So the whole design of the new process of handing out the urine bags was designed in such a way that the time spent handing out the urine bags was minimised to seconds, and these could be spent during other activities. By reducing this time in a maximum way, the adoption of urine bags could be improved. This also avoided the potential challenge of increased costs for healthcare when hospital staff would need more time for a sustainable solution. In the end, the only additional costs for implementing urine bags are the cost of the bag itself, increasing the chance of changing the system.

Discussion

The different insights we created from the case studies on the practices for scaling up add to the existing practices in systemic design but are well in line.

Although storytelling in itself is not a new concept in design (Erickson, 1996), applying storytelling as a practice in such a context of systemic change with a number of stakeholders as in the presented cases is rather undocumented (Beckman, 2009). Stories are the means by which knowledge is exchanged and consolidated, and perhaps even systemic cultures are developed and maintained. Multiple lenses on storytelling in organisations—social constructivism, organisational symbolism, critical theory—have been used over the years to gain insight into the role that storytelling plays, particularly in expressing organisational culture (Boyce, 1996). Storytelling in organisations has been identified as a means to share norms and values, develop trust and commitment, share tacit knowledge, facilitate unlearning, and generate an emotional connection. These cases hint that this is also the case across organisations at a large scale.

We found that one has to create national and local ownership for the governance model. As Dorst argues, “never miss a major stakeholder and always work on all levels” (in Design Council, 2021b). This is well in line with the findings of earlier studies (mentioned in this paper) that describe the importance of involving different stakeholders and perspectives. Whereas their focus mainly was on involving the stakeholders to understand the problem and find solutions that fit all needs, scaling up and creating an impact also means making yourself obsolete as a designer or project lead. “Mapping Transition Readiness” (Goss et al., 2021) establishes levels of helping

designers understand how or where to intervene in a system to accelerate a transition. Perhaps systemic handover readiness levels might be needed to help designers understand how and when to step back from a system.

The action-driven approach aligns with the insight on designing and making but even more explicitly focuses on doing things on an operational level to steer the change on a systems level. It provides insights on how to move from a project level to a systems level, adding to the findings from Dorst & Watson (2022) on how to bypass the traditional top-down approach. Edeholt & Joseph (2022) posit that as designers, we need to use our disciplinary skills to co-create new knowledge in a bottom-up, relevant and situated manner to focus on current and practical situations related to the larger impact we want to achieve at a systems level.

Whereas the earlier studies described the value of prototypes and visions to communicate and test ideas and further increase understanding, using storytelling to expand the impact for scale up was not extensively found. The Design Council (2021b) described the importance of communicating the intention behind the solutions for systemic change, and Dorst (in Design Council, 2021b) described the value of design to change the public narrative. Riddell (2016) describes the importance of managing communication to involve the wider public to engage the wider system during scale-up. From both cases, we learned that using the media or events can have an enormous impact on the scale up of systemic change.

For navigating, as designers, we are probably never involved from the early start to the last action, so we need to design our processes and approach for handover. Only then could we increase our chance of creating the impact we aim for. To do so, we need to involve all necessary stakeholders and build a network in which we can make ourselves obsolete. We need to make ourselves redundant and the team responsible for the challenge at hand and give them an action perspective to make the change. With the team, we need to create a clear vision and create the enthusiasm to make a difference in this vision. In “Systemic Design: Design for Complex Social and Sociotechnical Systems” (Jones, 2020), the last step of seven is “conceived as an integrated design/system thinking stage of defining transition pathways for coordinating the interventions or change program. Transition planning and landscape fitness pathways

are key methods in this step." In this step design for handover and the designer stepping out are not mentioned. It implies coordination of interventions while design for handover comes even after these interventions have taken place. As Riddell (2016) states, the process of labs is adaptive and nuanced and requires following opportunities to create maximum impact.

This study provided us with some interesting insights on the practices we need for scaling up but also raised new questions:

- How could these practices be used purposefully in projects that require systemic change?
- What do the designers need to apply the practices in a practical manner?

We are also interested in further analysis of these cases to see whether we can increase our understanding of what the project leads have done and why they made certain decisions. It would also be very relevant to learn this in the spur of the moment when project leads are making decisions and reflection-in-action instead of (hindsight) reflection-on-action.

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