# A Design Tool-Box to Scale Social Innovations from one context to another

## Unfolding the Scaling Journey of Designscapes Initiatives

Master Thesis
Strategic Product Design
**Chiara Marradi**

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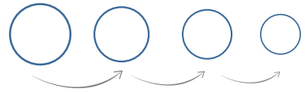


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Master Thesis

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# Acknowledgments

This thesis marks the end of my graduation project, as well as my Master Journey. It is the end of a phase and the start of a new one; I like to imagine this report to be the bridge between the two paths, bringing me to pursue what I started (plying design for social good and positive change) without forgetting all the experiences and learnings acquired.

This past (long) eight months without doubts has been the hardest (graduation put me in front of all my weaknesses), but facing challenges is how we can learn something, and it is 'per sè' a learning process. Challenges become opportunities and learnings points once overcame. While I imagined it to be much more 'participatory' and immersed in the real context, I am glad about this thesis's outcomes and its learning: design helped me with being creative even beyond a screen.

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Thanks a million to everyone, enjoy the read now!

# Executive Summary

*Since a lot has been done during the project, the report ended up being quite long and extensive. For this reason, I decided to provide a summary for the readers who do not feel like reading the whole report. However, I recommend to go through the entire report to have a more prosperous and better understanding of the topic, the process, and the multiple iterations followed. If this is the case, do not be spoiled by this summary, because final results are presented here.*

In the last decades, more and more complex societal and environmental challenges are rising. Social Innovation is an emerging and promising framework to tackle complex global challenges at the local level of urban contexts. These projects are socially, culturally and contextually embedded and highly dependent on the local ecosystem of resources. Due to their reduced size and non-profit driven structure, social innovations lack financial resources and the needed capacity, hindering them from scaling and achieving a larger impact. Hence why these small-scale and hyper-localized projects often struggle to take root in new contexts. Design capabilities are exponentially considered a fundamental enabler of innovation processes (Scott, 2018), and recently the awareness toward design tools in supporting bottom-up, local innovations increased. Initiatives such as the Designscapes project are examples of a design-capability building program aiming to foster innovation through design by helping these small-scale urban initiatives to scale and achieve impact goals. Although design has great potential to enable innovation, the design process stops at the implementation stage, failing to provide innovators with the needed tools to achieve large-size impact.

Therefore, the current project explores how design could support social innovations to scale and achieve impact by unfolding the scaling journeys of Designscapes initiatives. In addition to the research goal, understanding the scaling process of social innovations through design, the project aims to develop a framework/tool-kit enabling small-scale urban initiatives to overcome challenges and develop strategies to scale from one context to another. Several design elements have been used to carry research throughout an iterative double-diamond design process to respond to the project goals. Theoretical knowledge has been applied and used as an exploration mean to conduct empirical research within the practice of Designscapes initiatives.

At the end of the research phase, the research questions are answered, and the theoretical 'Scaling Framework' is developed as the outcome of this part. The scaling framework intends to empower Social urban Innovators to proceed with confidence in their scaling path and function as theoretical motivation for developing the design outcome. The framework consists of a 'Scaling Process Map' (check Figure 81 for the final result) and the 'Principles & Criteria' to scale SI (Chapter 9.3).

The' Scaling Process Map' has been developed to answer the RQ1 'How can social innovators scale-out an intervention from one context to another?' as it functions as a guide to navigating SI through the journey of scaling. Every scaling process can be different and unique, but common steps were identified regarding scaling-out and replicating social initiatives. On this matter, the 'Scaling Process Map' supports the SI. It guides them through those crucial steps: acknowledging differences and similarities between the contexts of scaling, capturing what to scale based on those conditions, and then articulating strategies to scale-out according to the identified goals, needs and resources available.

The key factors that can be replicated when scaling-out to a new context depend on the project's specific situation and context scenario. However, it has been found that to be able to scale-out in multiple contexts and achieve a larger impact, specific principles and criteria of scaling need to be taken into accounts, such as having a sustainable business model, aligning effective demand-supply through network formation and community engagement. To respond to the RQ2 'What are those key factors that need to be replicated when scaling into another context?', the principles & criteria have been developed as an acknowledging base for Social Innovators willing to scale and achieve social impact. Despite everyone scaling differently, by activating and considering all those aspects and variables, a viable, feasible and desirable solution could be scaled.

Network formation has been proposed as an effective way of scaling-out SI (Chapter 9.2), and this scaling strategy is chosen as the focus of the Design Phase. Hence, to respond to the RQ3 'Would cultural replication be an effective way of scale-out to multiple contexts?', the concept of cultural replication has been re-framed into 'Implementation with integrity'. It means that, rather than replicating the culture, innovators should be able to respond and match the needs of the people, community, stakeholders with their aspirations, goals, and resources available. The project should be desirable and generate value for the community while simultaneously leveraging the local resources offered. Indeed, an effective way of scaling means using the minimum resources to achieve the most significant impact. Throughout a learning process and 'moments of knowledge exchange and knowledge awareness, SI will capture what to scale by identifying the core elements that will generate the desired effects and then decide how to scale according to the local context conditions.

However, social urban innovators face several challenges along their scaling journey. To form networks and to be able to replicate the project in an unfamiliar and unknown context, these small-scale social initiatives have to overcome two main challenges, identified as the cognitive and context gap.

Therefore, the research outcomes have been turned into a 'Scaling Tool-Box' to make the scaling framework and process actionable and operational, hence useful for its intended users (social innovators). The final result of the project, 'a design tool-box to support Social Urban Innovators scale from one context to another, responds to the identified challenge by facilitating small-scale social initiatives bridge the gaps and develop strategies to form local networks. The Tool-Box consists of different parts. It includes the 'Scaling Framework' which functions as theoretical guidance, a Strategic Blueprint and Action Road-map, two activities meant to be used in a (self-facilitated) Workshop, and a set of Action Cards to inspire and trigger discussion during the workshop and activities. Besides, to enable the user's navigation through the 'process', the metaphorical storytelling of 'Scaling as an Interstellar Journey' has been used in the Workshop Activity as a facilitation and communication tool. Activity 1 of the Tool-Box will support urban innovators in acknowledging differences and similarities between context conditions and capture what should be scaled of their innovation to overcome the cognitive gap. This gap corresponds with a lack of knowledge regarding what should be scaled to match the different context conditions. Activity 2 will help the innovators to bridge the context gap and develop strategies to form networks and strategic collaborations in the new context. Indeed, most of the time, social initiatives lack the resources necessary to implement the project in another context. Hence, deciding 'how to scale' and articulating strategies to mobilize those resources is paramount.

For a more detailed explanation and presentation of the overall outcomes, go directly to the Delivery Phase, Chapter 12. For a snippet into the development and exploration of those outcomes, check the Design Phase, Chapter 10 and 11.

# Reading Guide

This reading guide explores an overview of the report helping the reader find the text's logic. The report is organised according to the process followed in the project: the double-diamond design process (presented at p.26). It is mainly divided into a Research and a Design part. Both the research and the design sections are divided into 'Phases', and each of them marked with a different colour scheme.

- Introduction
- Research Phase I
- Research Phase II
- Research Phase III
- Design Phase - Cycle I
- Design Phase - Cycle II
- Delivery Phase - Cycle III

All the chapters of this thesis begin with a little introduction to the topic and the content covered. General conclusions are also discussed at the end of each chapter. Sometimes on the side of the text, 'guidances' about where insights come from or where they end to and what they contributed to are present to enhance the navigation and not lose track of the story, since several elements are discussed, and multiple layers of analysis intertwine.

**The yellow boxes highlight hypothesis, assumptions or other elements which require special attention from the reader.**

Appendices are attached in a separate section of the report.
For privacy purposes and to protect the Designscapes project research copyrights, some data are kept within internal documents accessible only upon request.

**Abbreviations used:**
SI = Social (Urban) Innovators / Social Innovations
SE = Social Entrepreneurs
EU = European Union
DEI = Design-enabled Innovations
DD = Doubel-Diamond Design Process
RTD = Research Through Design (elements)
IDE = Industrial Design Engineering
RP = Research Phase
DP = Design Phase
RQ = Research Question
DQ = Design Question
CVD = Context Variation by Design theory

# Preface

We live in a transitional phase, which means that societies worldwide are going through rapid and dramatic changes (Mulder & Van Selm, 2019). In this complex reality, society serves more and more as a laboratory for experimenting with new ways to tackle the so-called wicked problems (Rittel and Webber, 1973). The society can be seen as a system where different actors interact at different levels; hence the development and embedment of an innovative solution at a systemic level may result very demandingly as it requires a high level of engagement and advocacy to share the value among the whole civic society (Haxeltine et al., 2017). From the direct users of a product or service to the public authorities regulating norms and laws to the broader market of stakeholders and beneficiaries that may consider adopting the same innovation, valuable proposals must be in place to ensure an initial adoption and a larger scale development. Moreover, different stakeholders and actors from different sectors need to collaborate (e.g. developing co-creative partnerships) to achieve a larger impact and bring the innovation to scale.

In this scenario, design capabilities are considered a fundamental enabler of innovation processes (Scott, 2018) and especially useful in the complex process of adaptation and value creation required for the systemic embedment of an innovative solution. The value of design in tackling widespread global challenges for systemic change is drawing more and more attention (Avelino et al., 2019; Haxeltine et al., 2017; Concilio, Cullen & Tosoni, 2019), and the awareness and recognition of design enabled innovation (DEI) increased. For instance, several projects are rising at the European level to support those changes and foster innovation through design and other capability programs (European Commission n.d.).

While exploring and reading about topics such as ‘Transition Design’, ‘Systemic Design’, ‘Social Innovation’ and Design-enabled Innovation’, the following reflections popped up in my mind. They triggered me to embark on this graduation research project.

*‘Is the world really becoming more complex? Or isn’t it just that the methods designers are using were never designed for complexity? Isn’t it that we maybe require a different set of tools, a different mindset, different ways of working? If so, wouldn’t it be better to change the methods and approaches, rather than blaming complexity?’*

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# INTRODUCTION

Chapter 01

## Project Background

*This chapter introduces the background of the project, providing an overview of the context from which it took shape and illustrates the main stakeholders. The chapter begins describing the scope chosen for this research purpose and then presenting a snapshot of the topics of exploration leading to the project set-up and assignment.*

*Before to start a research, project is essential to define the scope and frame the context of interest. Indeed, framing the context for a designer could be seen as equivalent to a photographer's job. Setting the lenses through which the project will be analyzed gives depth to the final results, and it helps to contextualize the story and the reasons behind certain choices. Moreover, having a set and defined context narrows down the focus on specific situations while linking the research and design process to a more holistic overview.*



## 1.1 Project Scope

***A 'box with boundaries' does not hinder creativity but it fosters it.***
*(According to what has been always taught to me in my design studies)*

The current project intends to explore the Social Innovation (SI) domain, and it will look at **Design Enabled Innovations (DEI) taking place within the European context at an urban level.** The broad European context provides a diverse array of initiatives tackling many challenges but with a common denominator factor: being a **small-scale hyper-localized initiative embedded in a particular urban context**. This rich contextual framework will enhance the project with learnings from the perspective of various practitioners.

**The primary 'users' and target group of this project are the urban social innovators running design-enabled small-scale initiatives selected for the funding and capacity building program of Designscapes.** Designscapes is a cooperation project funded by the European Commission to enhance and upscale social innovations across multiple cities throughout a (design) capacity building program. These urban innovators and practitioners are motivated to positively impact their local community and scale the impact beyond the initial context with the long-term vision of triggering systemic change. Doing the graduation project in collaboration with these urban initiatives will allow exploring and demonstrating the value of design tools and methods supporting the scaling process beyond the usual design and prototyping phase.

Although the project will target mainly Urban Innovators selected in the call for funding of Designscapes, this does not preclude the fact that the outcome could be applied to a more general target of Social Innovators and Entrepreneurs behind this contextual framework. Besides, during

the research phase insights will also be gained by looking 'out of the box', for instance learning from successes and failures of existing Case Studies either in the business and the social sector, or by applying the innovation processes used in different scenarios. Since the SI domain is still in its discovery phase and little literature can be found compared to the traditional entrepreneurial sector, learning from the business world and how those types of innovations enter the market could be an opportunity to exploit some successful strategies and key learnings and apply them in this specific research context.

*In summary, this graduation project takes shape as a collaboration with the EU funded project Designscapes. It addresses urban innovators and the scaling journey of their DEI initiatives as primary users for the research. This project is also part of the Participatory City Making Lab, from Delft Design Labs in TU Delft.*

# 1.2 Context of Exploration

## Innovation in the Socio-Urban Context

Innovation is a process of change where new functions, new forms of use and new meanings are created (Concilio and Tosoni, 2019; Norman and Verganti, 2014). Innovation can be categorized according to different 'spaces' of intervention (Concilio and Tosoni, 2019), such as Incremental innovation, Value-Driven Innovation, Radical Innovation, Design-driven Innovation (Norman and Verganti, 2014), Social Innovation, Open Innovation, User-Driven Technological Innovation, Disruptive Innovation and so on; Those different 'types' of innovation follow, more or less, the same process which is nonlinear, iterative, multilevel and embedded in a complex ecosystem of networks. According to the Rockefeller Foundation and BRAC, **innovation is a patient process of iteration, learning, evaluation, implementation, and, importantly, scaling successful practices** (Muhammad & Rodin, 2016). It is essential to understand this because the same 'process' will be resumed later on to explain the scaling process of Social Innovation; Social Innovation tackling urban challenges is, indeed, the main focus of this project.

***What is Social Innovation, and why are urban environments relevant to those type of innovations to grow?***





## The rise of Social Innovations

In the last decade, a new generation of active people emerged worldwide who started to look more critically at what is happening in our surroundings, in our society, and more specifically in the urban context, and brought up **new ways of addressing social and global challenges throughout hyper-localized projects**. These new approaches often fall underneath the umbrella definition of Social Innovation (SI). Indeed, SI is recently emerging as a **promising framework for delivering service innovation and achieving urban sustainability transitions** (Manzini, 2015).

A more detailed overview of the topic of Social Innovation is presented in Chapter 03.

## Cities as hubs of innovation

In the last decades, the main reason why more and more challenges are rising within the urban context has been due to the global trends defined as 'urbanization'. The high density of population concentrated in the urban areas leads to a series of problems related to sustainability issues, which could be turned into opportunities for change (Koning, Puerari and Mulder, 2019). On the other hand, thanks to people's high concentration, **urban environments become crucial hotspots and generative hubs for innovation because they integrate diversity through interaction and network (**Concilio and Tosoni, 2019). Indeed, cities are the context in which the **collaborations occur and through which new tools, methods, instruments, products, processes, policies and services are generated** (Concilio et al., 2019). In this complex system, multiple actors play a crucial role (citizens, government, regulations, urban innovators, policymakers, designers, researchers), and each part is connected to another through interdependent relations. **The interactions between these parts are fundamental for the dynamic of the city itself**. Cities embed an 'organizational climate' (Concilio & Tosoni, 2019) where the innovative capacity and its impact on society depends significantly on a combination of context factors: shaped by the structured frameworks (such as existing policies or rules) and by the social and cultural environment (such as entrepreneurial culture, existing city maker initiatives or other cultural associations) (Puerari, 2016). Those are the conditions that characterize the urban landscapes and make cities, or urban environments, **a dynamic context in which new ideas can be conceived and where processes towards systemic change and transition in local and global communities can be ignited** (Concilio & Tosoni, 2019). However, the responsiveness of being a generative hub for innovation depends also on the presence of spaces that promote learning and experimentation (Yee, Raijmakers and Ichikawa, 2019), diversity and richness (Moroni 2015), and the presence of an open mindset among the local community.

***How can learning environments be fostered, and what is the role of design there?***

## DEI to tackle urban challenges

*Design serves as an integrating function, bringing together more closely and coherently all the various skills, steps, and stakeholders involved in the urban context.*

(Scott, 2018)

*As mentioned in the previous paragraph, innovations need a culture of open mindset, which triggers learning and experimentation, but how could this culture be fostered? Here is where Design-Enabled Innovation (DEI) enters the scene and explains why a design perspective and intervention could be relevant for this project's scope.*

In this transitional phase and evolutionary context, the design has been said (de Koning et al., 2019; Manzini, 2015; Meroni, 2008; Bason et al., 2013, p. 8) to have a vital role to play in taking actions toward change and new ways of tackling wicked problems; for instance, by **enabling and supporting bottom-up, local innovations to thrive** (Concilio & Tosoni, 2019). Design tools and methods applied to a new context domain are gaining interests; design-led innovations and practices, such as co-governance, co-design, or co-production where multiple stakeholders (citizens, experts, governments) work closely to provide better public services, hold a disruptive potential for the public sector and its institutions. In this case, **designers play a crucial role in diffusing capacity to different civic stakeholders.** Indeed, designers cannot 'solve' or change the world alone. Manzini (2015) said, 'there are different actors that initiate and drive change, and it is not necessarily the designer who has to take this role'. Designers can either act as problem-solvers where design is solution-oriented or as **facilitators and mediators who make things happen** (Manzini, 2014). In that case, designers will **ease transitions by nurturing citizens' skills** (Manzini, 2015). According to a personal statement:

*Design is a process, not a solution.*

Therefore, **design can enable innovation and empower people to achieve change by building the needed capabilities and functioning as a framework guiding innovation through a particular thinking process**. Given the growing recognition that **a lack of expertise can cause barriers to innovation,** it is essential to support increased capability programs and a culture of design at all levels (Scott, 2018). For instance, this is reflected by EU programs such as Designscapes aiming to build the needed design capacity to enable innovation. Design, among other capabilities, is valued along the social innovation pathway from ideation until implementation and scaling (designscapes. EU, n.d.). However, **the role designers will have in this context is still open for exploration and experimentation** (Manzini, 2014; Mulder, 2019). Therefore, **this research project positions itself with the scope of addressing this gap and taking up the chance to explore the role of design within the SI domain.**





# 1.3 Project Stakeholders

## Designscapes Project

As mentioned earlier, this project takes shape in collaboration with the European project Designscapes.
Designscapes (Building Capacity for Design enabled Innovation in Urban Environments) is an H2020 project funded by the European Commission to enhance upscale social innovations across European cities. In particular, the project aims to build the needed (design) capacity among those urban innovators so that they can ideate and implement their initiative in one city and then scale it and replicate it in other contexts as well to achieve a larger impact on society (designscapes.eu, n.d.). This project started in 2016, and it has a term of four years, which is quite long for a Horizon2020, but not enough to make a transition visible. Indeed, transitions and systemic changes happen in a much longer time frame.

Currently, the project entered its last and third phase related to 'scaling'. The program is divided into three calls that follow the main steps of the Social Innovation Process (Murray et al., 2010):

- Prototyping
- Implementing and Sustaining
- Scaling

At each Call, some applicants have selected the EU Program's funds to bring their innovation to life. Other than being sustained economically by the EU funds, those initiatives are followed in their process by the Designscapes community of experts through the 'Training Modules'. Designscapes is a consortium made of an eclectic mix of European partners that work at various levels. Those researchers, design practitioners and policy-makers are working together to develop a community where different urban social initiatives can gather and thrive through a mutual learning and collaborative environment.

## Designscapes Innovators

**The Designscapes innovators can be addressed as Urban Social Innovators or City Makers;** they can be considered **niches, calling for and acting towards change in the urban regime** (Koning, Puerari, Mulder & Loorbach, 2017). **They represent innovative ways of managing and dealing with new issues as well as current problems. Most of them are practitioners who implement solutions locally and at a small scale by responding to the urgency of global issues**, such as inequality, climate change, social exclusion, young unemployment, aging society, to name some. Therefore, they are locally adapted but globally connected (de Moor, 2018). The strength of social innovations, such as

Designscapes applicants, reside in their inherent collaborative nature that brings different types of knowledge and expertise together (De Koning, Puerari, Mulder & Loorbach, 2019). Some of them have a basic level of design knowledge, but they all have at least a high level of domain knowledge and agency to make decisions within their local context.

This graduation project focuses on the current 3rd stage of the program, where the following ten initiatives have been selected to be sustained in their scaling journey:

- Agroplaza (Spain)
- City Hearing Log (Italy)
- Civimetro (Spain)
- CrossWalk (Slovakia)
- Street Debater (UK)
- Swinga (Sweden)
- Ticket to Change (France)
- T.Ospito (Italy)
- Keystone (UK)
- Start Park (Italy)

This last call's participants focus on the scalability of their innovation to other (suitable) urban contexts across Europe. These initiatives are united by being embedded within an urban context and its system across Europe; most of them also adopt collaborative approaches to engage with the community. However, they differentiate from each other by other means (this has been explored during Phase 2 and presented in Chapters 6.2 and 6.4).

To conclude, the Designscapes project leverages Design Thinking and Design Driven Innovation concepts as blueprints. It has a direct and purposeful focus on the scalability potential of Design-enabled Innovation. Therefore, **this graduation project aims to contribute to the research and outcomes of the DESIGNSCAPES project and empower through design the applicants of the program to scale their innovation successfully.**

## Participatory City Making Lab

Considering the context frame of the project and the willingness to use design as a collaborative tool to gather insights from the 'field', I decided to conduct this research in collaboration with the Participatory City Making Lab (PCM), one of the Delft Design Labs at Industrial Design Engineering Faculty at TU Delft. The Lab adopts research through a design approach. It uses a participatory framework to coordinate the activities between grassroots initiatives and the public sector within the urban context. It focuses on connecting designers and researchers with the public sector and the civic society so that urban challenges could be tackled collaboratively by co-creating (design) interventions.

Being part of PCM Lab during the graduation project allows benefiting from a network of students and research experts interested in participatory design and innovation in urban contexts; this enriches the experience and opens up the opportunity to learn more about participatory tools and methodologies which I can explore and apply myself in a still 'safe space'. It is also a way of connecting to people and getting insights from very different and multicultural perspectives. Lastly, the collaboration with the Lab is relevant to the type of research project that will be conducted. Indeed, Participatory Design methodologies are crucial for enabling innovation within the urban context and supporting the Designscapes initiatives in their 'journey to scale'.





# 1.4 Project Assignment

*The initial background research conducted regarding the contents of scaling social innovation across urban contexts supported the formulation of the following project brief. The brief sets a direction and a lens through which a more narrowed and in-depth research will be conducted as the starting point of this thesis.*

The social impact sector just recently started growing more by 'building the capacities and culture for innovation, and, as a result, holds great promise for transformative breakthroughs' (Muhammad & Rodin, 2016). 'But for various financial, political, and organizational reasons, many effective approaches operate only at a small scale' (Muhammad & Rodin, 2016). Indeed, one of the biggest challenges faced by social innovations that want to scale and achieve a larger impact relies on **the lack of financial sustainability due to their size and structure**. It is the case for most of the Designscapes initiatives, which are small and hyper-localized. Some of them rise as a solution for specific problems of a particular area or target group, while others are trying to tackle more general global issues (e.g., the crisis of values, crisis of democracy, climate change, and footprint) at a local level.
Moreover, they are **dependent on specific local resources** (Mortati and Villari, 2014) and embedded within the cultural norms, institutional routines and values of a specific context. Additionally, **these small-scale social initiatives face a lack of capabilities and resources, which hinder their potential to grow** (Cangiano et al., 2017). Consequently, replicating, expanding, or adapting the project to a new context is a challenge for those cases and several factors that need to be considered when scaling, especially in a different environment. Hence, the need to address the question of what is being scaled in the first place, i.e., products, organizations or impact and then uncover strategies for doing that. While performing this initial research, a hypothesis has been formulated.

*Research Hypothesis*

**Social Innovations could scale-out in multiple contexts through 'cultural replication';**

Therefore, the opportunity spotted for this assignment is to investigate how design can support social innovators, and more specifically, Designscapes urban initiatives, developing an impact-driven strategy to scale out their innovation in multiple contexts overcoming the contextual barriers throughout 'cultural replication'. In this sense, 'cultural replication' will be treated as an initial hypothesis to be explored during the project; this means that more research needs to be conducted, especially empirical studies, to define culture better and possibly redefine the stated hypothesis.

The main research objectives of this assignment are the following:

1. ***Understanding 'WHAT' is worth scaling when replicating an intervention from a context to another throughout Literature Review and 'Field Research'. What will be replicated as it is and what instead will be adapted to the new context;***

2. ***Once insights are gained on what should be scaled, these will inform how strategies are better to adopt and 'HOW' to scale-out SI.***

Hence, a framework/Tool-Box will be developed to help social urban innovators building their strategy to scale effectively in multiple contexts.

*Project Assignment*

**Design a framework/Tool-Kit that can support urban social innovators to develop an impact-driven strategy to scale out the initiative from one context to another while replicating 'culture'.**

*Chapter 1 detailed the context of this project and presented its assignment. The second chapter will describe the selection of methods and activities that form the approach chosen to execute the project objectives. The initial Project Brief document is contained in Appendix A.*



Chapter 02

# Project Approach

*The present chapter focuses on describing how the project will be approached. It will illustrate how the methodology selected has been applied to the project research to address the objectives articulated previously, and it concludes by providing the structure given to this report.*

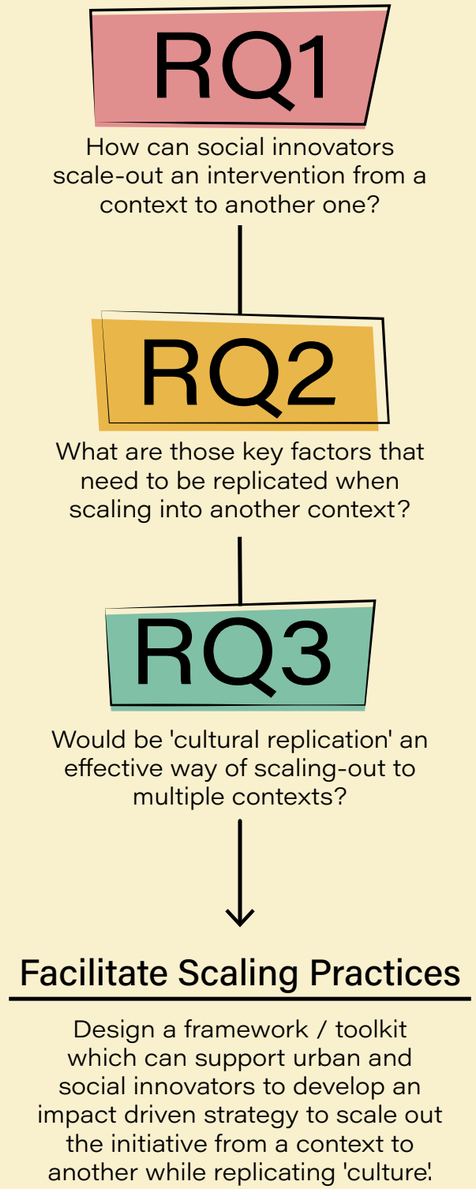



*Figure 01. Overview of the main research questions and project goal*



# 2.1 Research Questions

The goal of the project is to support, with design tools and methods, urban social innovators in their scaling journey, mainly when replicating a hyper-localized project and its 'culture' from the initial context to another or multiple ones (scale-out) to achieve a larger impact. As outlined, the main challenge those social urban innovators face during their scaling phase is context-specific factors and a lack of capabilities and resources.
Therefore, the research question formulated in order to accomplish the project's objective stated above is the following:

- ***How can social innovators scale-out an intervention from a context to another one?***

In the following Chapters (3,4), Social Innovation and, more precisely, the social initiatives participating in the 3rd call of Designscapes Project will be investigated. Along with that, Literature Review will be conducted regarding 'Scaling SI' with a focus on 'Scale-Out'; for this section, some existing Case Studies of business and social enterprises will be taken into account, and some interviews with experts will be carried to derive some key learnings about strategies, approaches and any eventual 'rule of thumbs'. The conclusions derived from this first part of the research will inform the second research question:

- ***What are those key factors that need to be replicated when scaling into another context?***

Hence, identifying what to scale is a first step in defining 'how' to scale since strategy depends on the goals one wants to achieve. In addition to the Literature Review, other research and design activities will be organized to answer this second research question.

The last research question has been derived from the hypothesis formulated during the project assignment regarding' cultural replication'.

- ***Would be 'cultural replication' an effective way of scaling-out to multiple contexts?***

This question provides a more leading direction and lens through which look at the different initiatives involved. However, 'cultural replication', as well as the meaning of culture and the role this plays in the scaling process, at this stage is still a relatively abstract concept which needs to be more carefully addressed and explored over the project.

Through this last question, an added layer to the project has been given because **'effective ways of scaling' set the focus and criteria of research**. It means that **this project is not merely looking at 'how SI scale-out' in general but more precisely wants to improve, through design, how Social Innovators currently put in practice their scaling process. 'Effective' will then be addressed as a crucial evaluation criterion for developing the outcome.** However, what 'effective scaling' means still need to be defined through theoretical research.

# 2.2 Research & Design process

## The Double-Diamond Design Process with 'twists'

*This chapter presents the process followed over the project. The standard double-diamond (DD)design process has been used as basis to develop the project, but in practice the process ended up being more chaotic, complex and iterative than expected; hence, some 'twists' were added to the standard DD process. During the project, several design activities with the users were carried and multiple design elements used which helped the exploration of such a complex topic.*

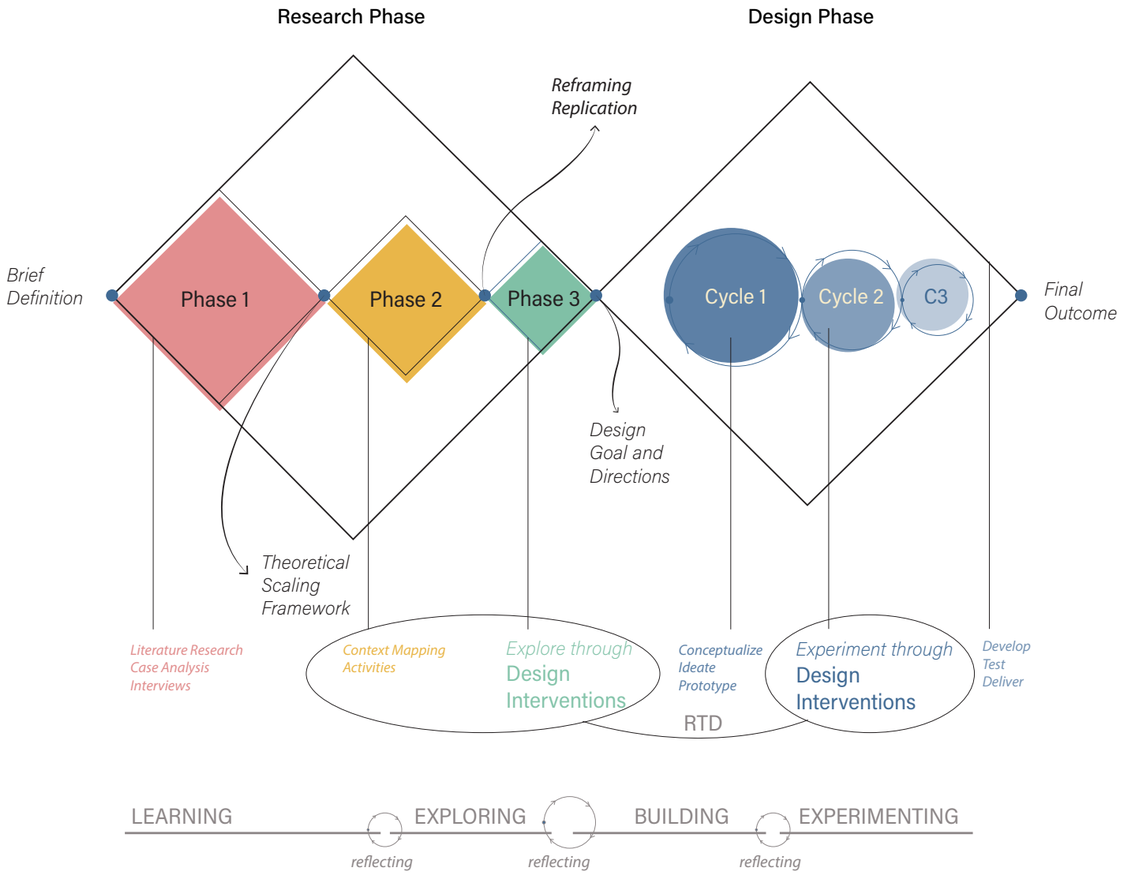



*Figure 02. A personal elaboration of the Double-Diamond Design Process as followed in this graduation project.*

Different methodologies and approaches will be used to uncover the complexity of the topic of this graduation project: understanding what and how to scale (effectively) social innovations beyond their context of origin.

This project presents a double goal on two different levels:

*Research Goal*

**Unfolding and mapping the scaling process through research and design interventions.**

*Design Goal*

**Develop & deliver a tool that supports Social Innovators build strategies to achieve their scaling goal.**

The Project Assignment's main objective is to design the infrastructure and 'tools' that facilitates and enables social urban innovators to develop strategies to scale their project from a context to another and further. Simultaneously, this research project will explore a novel space for the design field: there is a gap in Literature regarding design tools and processes that could support the social innovations' scaling phase; hence, **through research it will be explored how SI scale in new contexts and how it could be enabled and facilitated through design tools and methods**. **Existing design theories and innovation processes will be consulted, several methods explored and used in a novel way to unfold the scaling process of SI in the context of Designscapes initiatives.**

According to the initial plan, the intention was to follow the Research Through Design Approach (RTD) (Stappers & Giaccardi, 2017) mainly because of the need for more research (from a design perspective) in this domain and the complexity of the phenomena considered. However, because of the double goal set (research + design) the RTD approach has been employed, eventually, in a different way turning into '***doing research through multiple design elements***'. **Multiple methodologies have been mixed-and-matched,** ending up in a personal elaborated version of the double-diamond design process, as pictured in Figure 01 (on the left side). The process follows a research part with multiple phases where **theoretical knowledge and empirical studies alternate and inform each other's: theory is applied to the context domain considered** (Figure 04). Besides, design activities will be organized to explore the scaling process in the context of Designscapes initiatives (Figure 03). Therefore, **design will be either used as a mean to conduct research, with the goal of finding answers to the research questions and**, in the final phase of the project, **it will be used to develop an outcome which respond to the design goal set**.

# The Methodology:

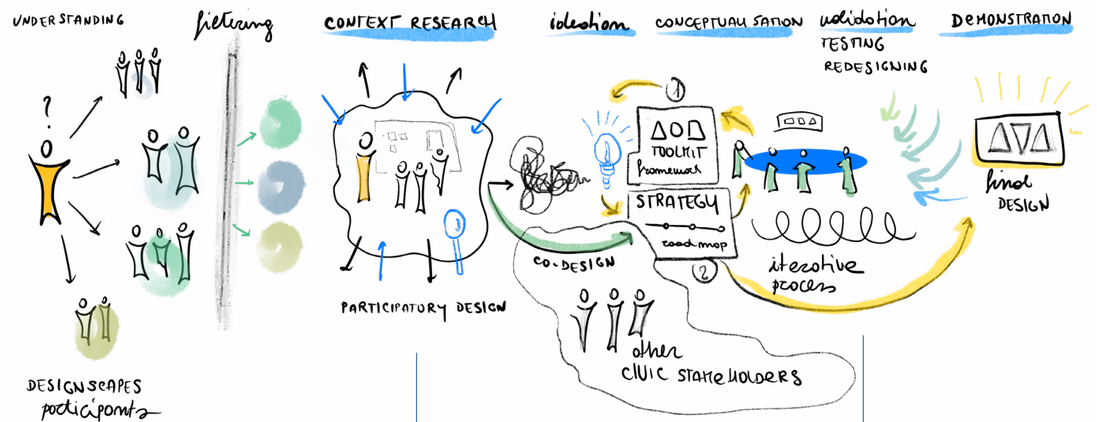
## Research through multiple design elements

**Research Through Design & Participatory Approaches**
RTD is a research approach that utilizes artifacts to trigger participants' reactions and other otherwise non-observable phenomena, enabling the researcher to capture insights and create new knowledge (Stappers & Giaccardi, 2017). Since one of the goals is understanding the scaling process in the SI domain from a design perspective, this will be uncovered by **studying how Designscapes initiatives 'design' their process**. In this way, the RTD approach will be followed, and **the initiatives will be engaged in participatory design interventions where different design elements will be used to trigger the participants' reactions**.

The participatory approach will help, on one side, uncovering otherwise non-observable phenomena and diving deeper into tacit layers; on the other hand, it could contribute to the Designscapes Program, diffusing design capacity among the participants and empowering them. Figure 03 shows how Designscapes initiatives will be engaged during the project. In the research phase, **the initiatives will be engaged in a participatory manner to dive deeper into understanding how they 'design' their scaling process** and study the contextual challenges they face. The knowledge and insights generated during the research will inform further interventions to develop a design outcome by following an iterative process.

*During the interventions and the whole project, various design elements will trigger knowledge and insights generation. In the following page, I will explain some of the key design elements and methods that helped explore the project's topic.*

*Figure 03. The plan to engage in a participatory manner the Designscapes initiatives throughout the different phases of the project process*




**Context Mapping**
*Understanding the contextual challenges of scaling and the scaling strategies adopted by the initiatives when they replicate from context to context.*

**Design Explorations**
*Unfolding the scaling process of Designscapes initiatives through participatory design interventions.*

**Design Experiments**
*Research through design experiments about how design tools can support the initiatives overcome challenges and achieve impact. goals*





**Visual Storytelling and Metaphors**
*Stories and visualizations helped dealing with the complexity of the topic and make ideas and concepts tangible and understandable.*

Visual and metaphors have been used extensively during the project to accomplish different tasks:

1. To reflect and make sense of the knowledge gained;
2. To translate data collected into a digestible piece of information and tangible concepts;
3. As a communication tool to present and share concepts and ideas with third parties;
4. To trigger conversation and spark interactions during design interventions;
5. To create a mutual understanding and common background, especially when dealing with abstract concepts, which are more difficult to express with other words and easy to misunderstand.

**Creative Thinking + Learning Attitude**
*The learning attitude helped looking with curiosity at the topic and explore the complexity by uncovering its multifaceted challenges and characteristics.*

PRAXIS
Theory
Practice

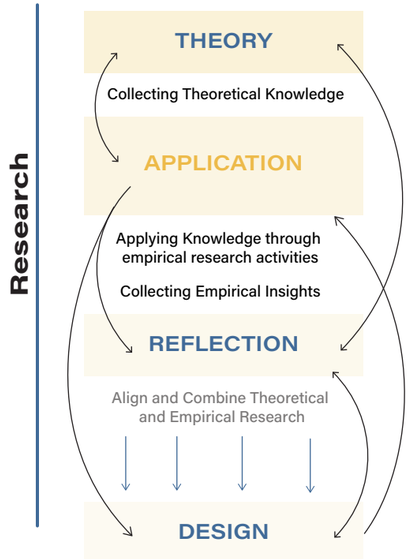



*Figure 04. Graphical overview of the iterative and reflective praxis followed during the research process*

This research project follows a learning-driven and reflective praxis. Indeed, the intention is to learn from the context and the experts in social innovation and then reflect upon the knowledge generated to respond to the design goal setting, and this praxis is exemplified in Figure 04. This praxis is driven by curiosity, which led to dive deeper into the layers and insights collected over the research, but it also helped create a safe space for learning and experimenting.

*There is no learning without reflection.*
*Creative reflections helped to let information and data sink to generate new knowledge and insights.*

During the project, reflections will have a crucial role in turning information and findings into valuable and meaningful insights by functioning as a knowledge development method. Reflections were activated using 'pen and paper' when data was translated and converged into a visual sketch. This process allowed to generate new understanding and insights; together with a creative attitude, it was possible to mix and match existing theories with empirical knowledge and inform

the development of novel design practices for the context domain considered. Indeed, creativity has the potential to find ways to get around struggles and solve problems.

These elements have been found particularly relevant for the scope of the project, especially when collaborating and interacting with (non-design professional) urban innovators and from the distance of a screen (due to the Covid-19 scenario).

## Zoom-In of the process' phases and methods employed

**RESEARCH PHASE**

**Phase 1**

The theoretical knowledge will be initially consulted to gather a general understanding and overview of the context domain and the related topics, mainly through Literature Research and Case Analysis. This knowledge will then be applied to the context and enriched by empirical studies (Figure 05).

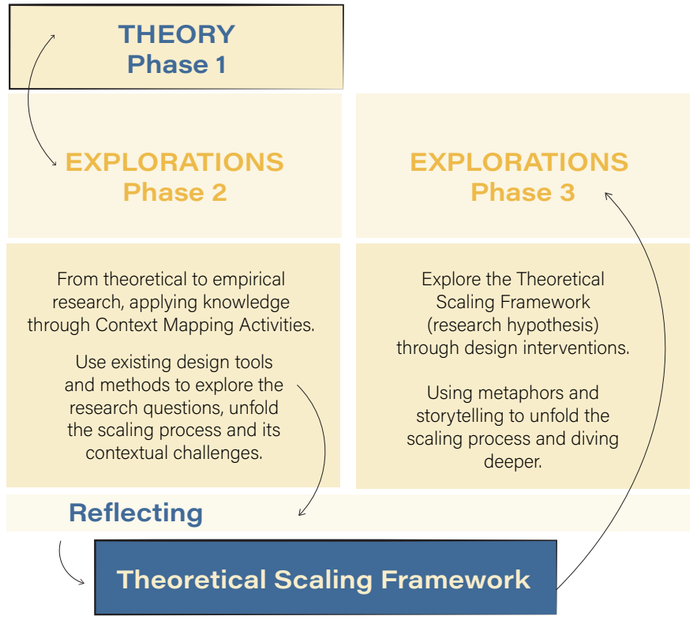



*Figure 05. Zoom-in of the praxis followed over the Research Phase*

**Phase 1 + 2**

During the first research phases, qualitative design methods will be used to collect and analyze data, such as Online Questionnaire, Semi-Structure & In-depth Interviews, Generative and Context Mapping Exercises. Several experts in the field of Social Innovation and related fields will be included in this Research Part.

**Semi-structured interviews** are extensively utilized in this project as a research methodology, especially in the first two research phases as data collection methods and context mapping activity to get to know the urban innovators from Designscapes and explore their strategies scaling. Semi-structured interviews give the necessary flexibility to explore a specific topic through an informal and open conversation set up with the initiative's members; simultaneously, it allows to dive deeper into unexpected upcoming insights and prompt participants with questions outside a strict interviews guide. Therefore, it was an excellent method to use in the first research phases where the main objective was to diverge, understand and explore.

In Research Phase 2 and 3, different design tools and techniques will be used in a participatory manner throughout creative sessions and design interventions held with peers and Designscapes initiatives. Phase 2 focuses on context mapping activities to explore the context and uncover the scaling challenges. In Phase 3, the RTD approach will be adopted to carry out specific design interventions with the initiatives, where specific design settings and elements will be used to trigger participant's reactions diving deeper, understanding their process and uncovering challenges.

**Creative Sessions** with participants, most of which will be held online, are used in this project to host and carry out the research activities with urban innovators from Designscapes. Those are great for having participants' attention and intention, engaging with them, and prompting them to dig deeper into their context and processes. Despite the online setting, participants will have the possibility to interact with the activity developed while giving me the possibility, as a researcher, to gather data through observations, recording and feedback interviews. Besides, participatory sessions will also be used in this project to ideate and co-design with design students and other peers.

**DESIGN PHASE**

Although the traditional DD Process make a distinction between the research and design phase, for the approach followed throughout this project a clear distinction cannot be made. Design elements are used throughout the entire project to carry research and explore the topics. On the other hand, the research outcomes will inform the development of an actual design result (Cycle 3).

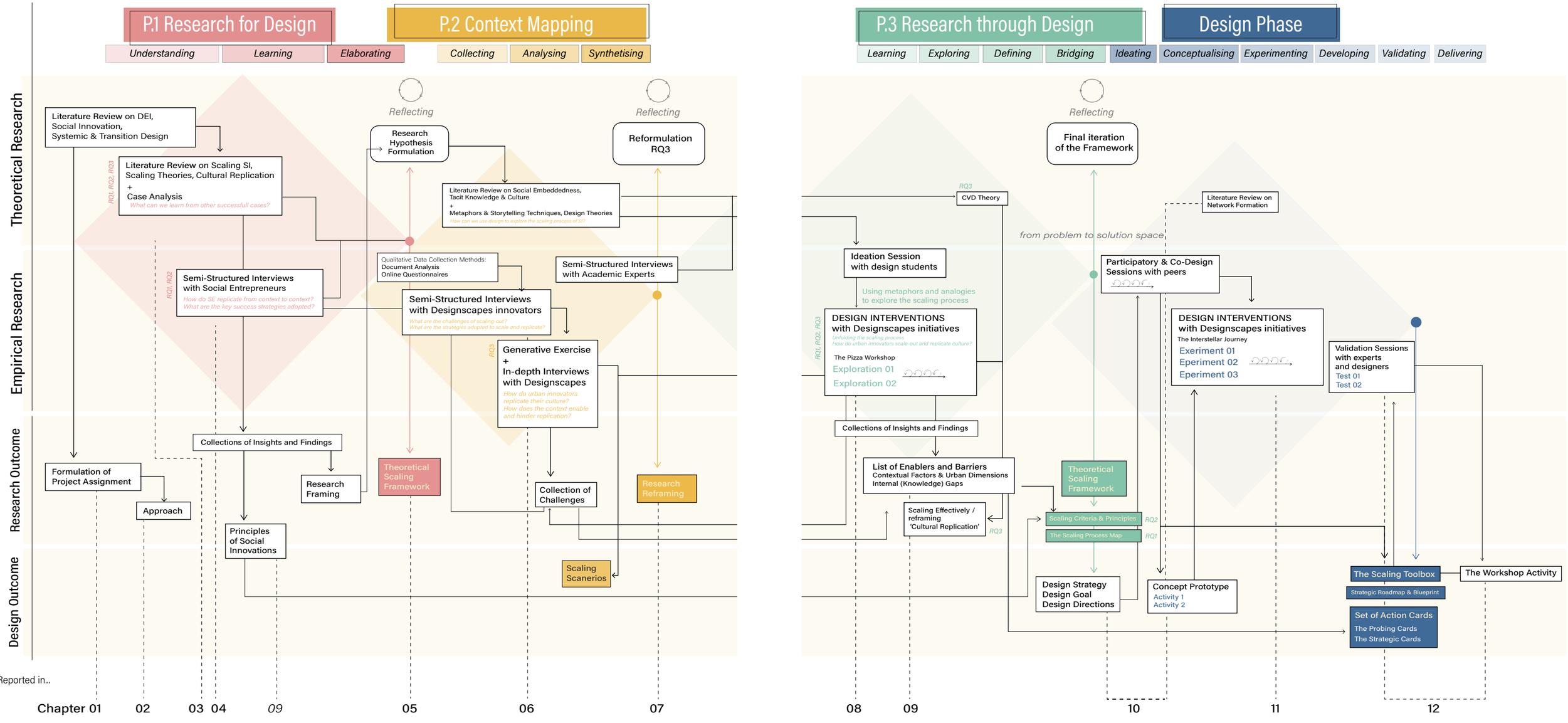
**Concept Prototyping and Design Experiments**

Developing a prototype, which could take any form and format, is a fundamental aspect of carrying out a Research Through Design approach. Indeed, the interaction of participants with prototypes makes their behaviors observable by the researcher. In this project, the prototype will be firstly used in an exploratory way to experiment different design tools and methods with the users (Phase 3). Then the resulting observation of those interactions will inform design decisions, and the insights will be used to iterate the research hypothesis. In a second moment, during the Design Phase, specific prototypes will be used to explore design concepts with the users (design experiments of Cycle 2). Regarding this latter, the prototype will be essential for evaluating the concept and for the generation of requirements that will lead to the final design outcome.

# 2.3 Report Structure

This report aims to present the mains steps, their rationale, intermediate results and insights that gradually were obtained to reach the final concept and results of this project. Figure 06 shows the main activities conducted during the project process with the primary derived outcomes, and it highlights in which chapters of the report those can be found. However, it needs to be said that the order in which things are presented in this report do not reflect the actual project process, and the activities are not always reported in chronological order. Since the process was chaotic and highly iterative, the report's scope gives structure and order to the research to provide a coherent and linear story to the reader.

*Figure 06. Graphical overview of the Report Structure*



*Understanding SI,*
*Scaling Strategies and Scaling Out ,*
*defining Cultural Replication*

# Research Phase I

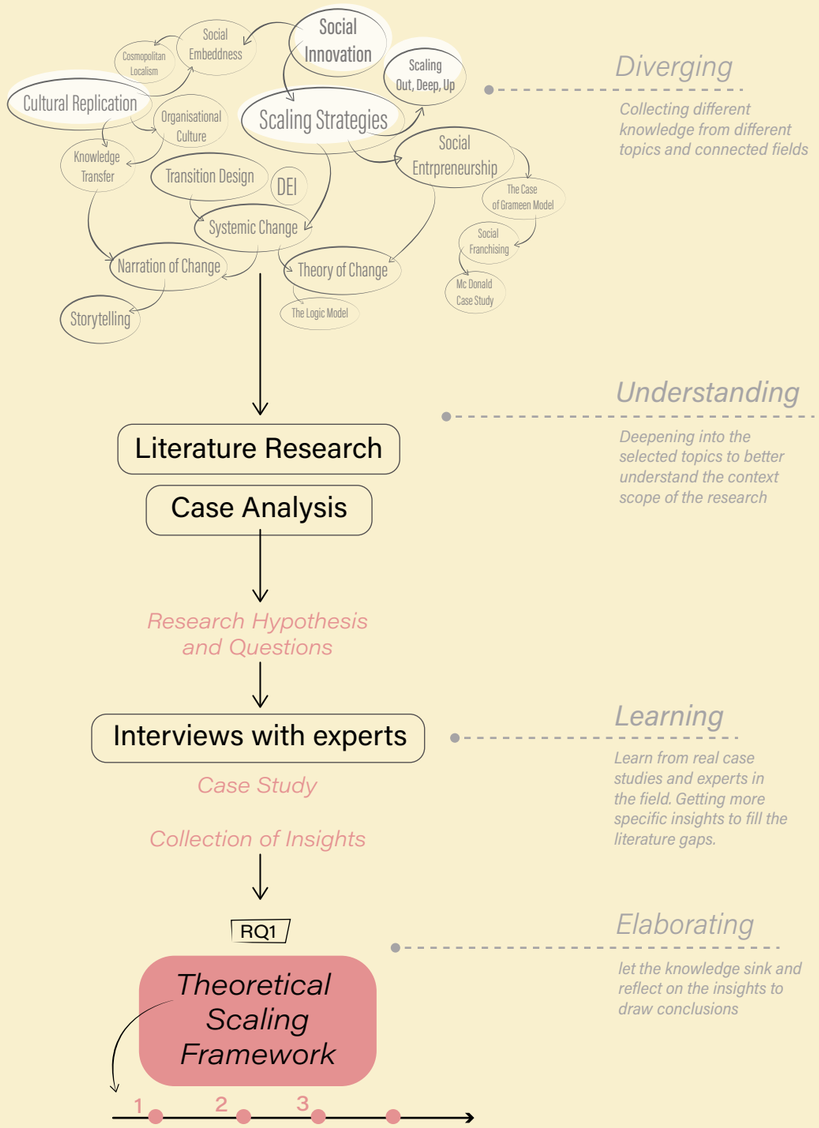



*Figure 07. Structure overview of Research Phase 1*

*This first research phase focuses on understanding and exploring, from a theoretical perspective, the ingredients that are part of or somehow related to the project topic: scaling social innovation. The selection of the topics to explore through Literature Review has been led by the main research questions (Chapter 02)*

*In this Phase, the main research questions will be addressed from a theoretical perspective. Then the theoretical knowledge gained will lead to further questions and assumptions, which will be uncovered through empirical studies and interviews in Research Phase 2.*

Chapter 03

# Literature Research

*This Chapter provides an overview of the Literature. It introduces theories about Social Innovation and Scaling. During the literature research, successful case studies have been consulted, analyzed, and compared to understand what made them successful; the main insights are presented with the conclusions at the end of the Chapter. A broad and diverging approach has been adopted in this phase to acquire theoretical knowledge. The topics researched through Literature have been selected by breaking down the main research questions into smaller pieces. By doing so, I could better understand each part that constitutes the scope of the project before answering the questions. Eventually, some literature gaps have been found, and new questions will be formulated and explored in the next chapters through empirical studies.*



## 3.1 Social [urban] Innovation

***What is Social Innovation, and what is the opportunity for designers to intervene in its process?***

Avelino et al. (2019) define social Innovations as: 'new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations in the civic context'. To better understand the meaning of 'Social Urban Innovation', let us decompose the concept and analyze each of the words. It is social to the extent that it creates social actions, is socially accepted and diffused in society (Davis, 2014, p.122); It is urban in the sense that it tackles global challenges (linked with some of the Sustainable Development Goals) on a local context level, within a city or an urban community. In this scenario, citizens, communities and collaboration are crucial (Mortati & Villari, 2013). It is an innovation, a process of change (Concilio & Tosoni, 2019; Norman & Verganti, 2014), as such, it follows a specific 'path' that is non-linear, multilevel and networked. In this case, the process followed is described by Murray et al. (2010) through the golden Section' or spiral of Fibonacci (Figure 08); the process starts with a simple and rough idea before to achieve impact and systemic change. This process recalls the Double-Diamond Process of Design (Tschimmel, 2012; see Appendix B); The main design stages (discover, define, develop and deliver) can be used to organize the different steps of the innovation process of Murray et al. (2010) (as highlighted in Figure 08). However, the design process and its contribution usually stop at the delivering and implementation phase. In this case, **design methods and tools fail in supporting SI to scale and achieve systemic change; hence, a gap has been identified, and this graduation project aims to contribute with knowledge creation, demonstrating the value of design and how design tools could support the scaling path of SI.**

*'Design is the best tool we have for bringing that human perspective into the innovation process and so plays a vital role in delivering outcomes that are more viable, desirable and usable.'*
*— Ben Griffin, Innovate UK*

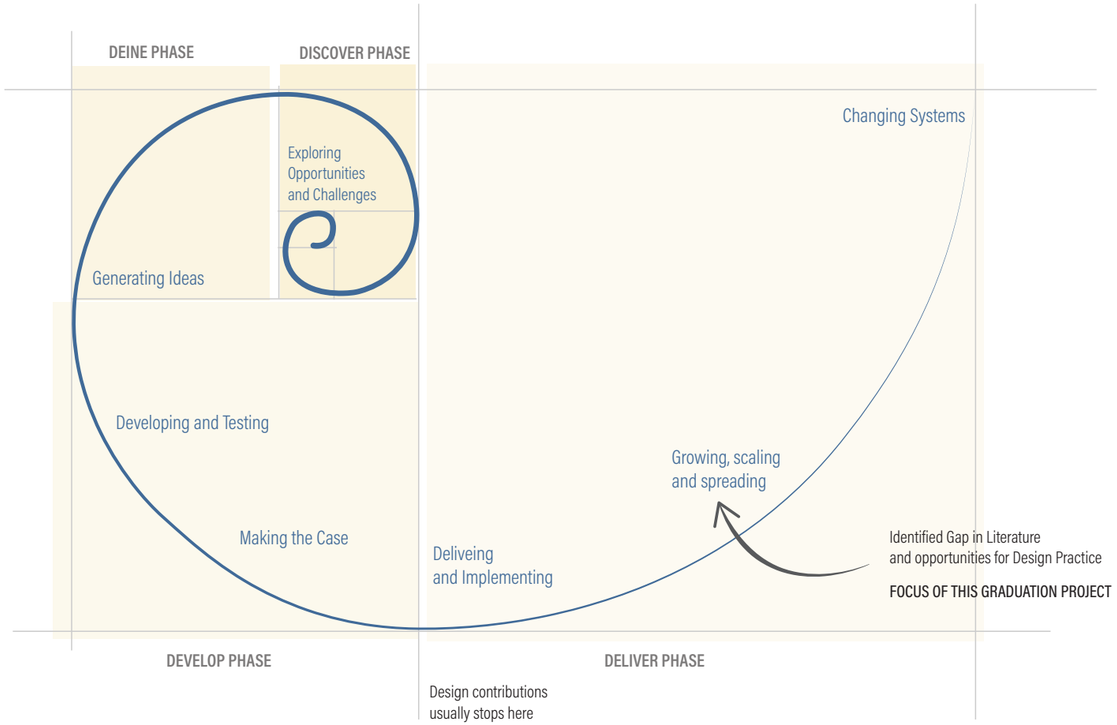



*Figure 08. The Social Innovation process explained through the spiral by Murray et al. (2010). This visual illustrates the similarity between the SI process and the one of design process, and highlight the gap opportunity identified in Literature*

The concept of Social Innovation has been explained, and the focus of the research highlighted before to understand how this project can bring a contribution to the scaling path of SI, the way is still long, more knowledge about 'scaling' needs to be acquired, especially in regard with the SI domain. Therefore, in the next chapter, some theories about scaling will be uncovered; this will help narrow down the research direction and better scope the frame of the project.





# 3.2 Theories about Scaling (SI)

*This section unfolds the complex spectrum of scaling from a theoretical perspective and provides orientation regarding the various layers and scaling strategies. The chapter will start with a general overview of scaling and why it is relevant for SI; then, it will narrow down, paragraph by paragraph, toward the scope chosen for this project. At the end of the chapter, conclusions from the theories and the (successful) Case Studies consulted will be presented to inform the two main research questions: what and how to scale.*

## The relevance of scaling SI

According to the definition provided in the dictionary (Cambridge University Press, 2020), scaling can be generally defined as: 'to increase the size, amount, or importance of something, usually an organization or process'. Compared to other types of business innovations, whose scaling size could be measured by the amount of profit generated, social innovation scaling is a far, more complicated matter. The success of scaling SI cannot be simply measured by its income growth since this is not the main focus and not even the goal of Social Innovation. Indeed, in the context domain of SI, scaling is not only about growing in terms of size and profit generated; instead, achieving a larger impact on society means being able to benefit and bring value to a larger pool of people (Murray et al., 2010), through innovation addressing and responding to social needs, while improving their overall quality of life (Avelino et al., 2019). Scaling can be seen as 'proof of success and implementation of change' (Linn, 2014).

However, the social impact could be achieved in many different ways; according to that, the innovators could adopt various strategies to scale, and in theory, a distinction can be made between three main types of scaling: scale-out, scale deep and scale-up (Moore and Riddle, 2015).

## Scale-Up, Out or Deep?

There are different ways an innovation could scale and different strategies that could be adopted based on the goals that one wants to achieve. Following the theory proposed by Moore and Riddle (2015), scaling is not only about organic replication or adaptation (scale-out); to change the system, you have to change the rules of the game (scale-up) but also change the mindset and the culture of a particular 'institution' (scale deep). However, if it is possible to differentiate those strategies theoretically, there is no proper distinction in practice, and eventually, one initiative could mix and match different strategies to reach their impact goals, as pictured in the spectrum of Figure 09 and detailed in the Tables 10.

**Scaling is not black or white and is not a linear process; it happens organically and on multiple levels**. The spectrum of Figure 09, from left to right, illustrates the different levels and layers of scaling. Replicating an innovation could be a first step toward impacting many people; by contrast, integration and disruptions work on a systemic level affecting the current institutions to change the system. Eventually, penetrating and nudging go deeper by impacting the people's behaviour and deep cultural root of the system. The deeper the innovators will try to go, the longer it will take to achieve the goal, but greater and more significant will be the final impact.

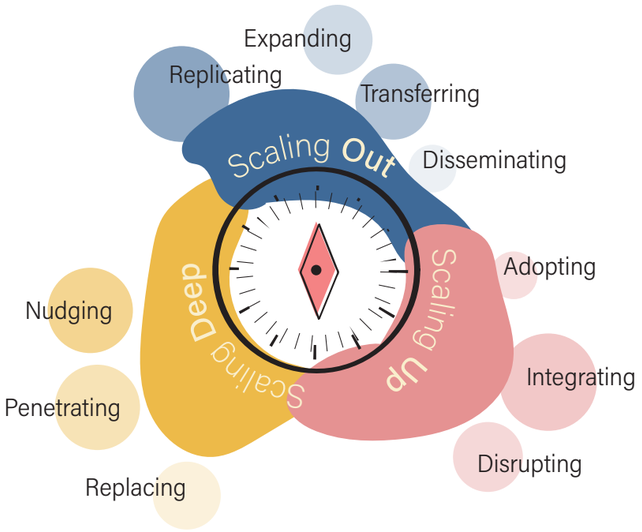



*Figure 09. Spectrum overview of the scaling pathways , according to the theories of Moore and Riddle (2015).*

On the right page, the Table zoom-in on each of those pathways and layers illustrated in the spectrum. In the table, an explanation for each of them is provided. Although, some of them are not reported because they are more like in-between bridges that cannot be accurately distinguished, such as penetrating is a gradient of nudging and replacing, it is a mix of the two.





## Scale-Out

***'Impacting greater numbers'***

The main goal of this type of scaling is to reach out to a greater number of people and communities and improve their quality of life with 'innovation'. It is about going out of the initial 'context'

Considerations:
*Where are you going to scale?*
*How many people do you want to impact?*
*What needs to be transferred?*
*What are the core principles of the initiative?*
*What are the successful elements of the idea?*

## Scale-Up

***'Impacting the institutional system'***

The goal is to change the institutions at the level of policy, rules, and laws.

Considerations:
*What do you want to change in the current system?*

## Scale-Deep

***'Impacting culture and mindset'***

The goal is to change the mindset, cultural values, and beliefs of the people as well as the relationships and connections within the system.

Considerations:
*What are the roots you want to attack? What are the new values that the initiative is bringing up?*

## Replicating

Copying a proven product, process or business model. Introducing and implementing it to a new area or target group, out of the initial context.

## Integrating

In this case the change will happen incrementally. The innovation will be adopted and slowly integrated into the current system. The goal is to find trade-offs and common grounds.

## Nudging

In this case change is triggered and nudged in a subtle way and slowly it will influence and challenge the current status quo with new habits and ways of thinking. The goal is to penetrate from within.

## Expanding

Growing the initiative by operating on the idea itself and adapting it to different and new target audiences (e.g. adding new features, expanding throughout new sector domains..).

## Disseminating

Dissemination, also recognized as generative diffusion, can take very different forms. The goal is to inspire others to innovate (named as local champions) and change, hence the 'diffusion' will be organic and generative: it will spread without control throughout multiple people. It could be seen as a sort of contagion and viral type of scaling.

## Disrupting

In this case the innovation will bring up a radical change by disrupting the whole current system. It seems to happen suddenly but it actually requires other changes to happen in the landscape that opens up for this right moment to occur.

## Replacing

The old values and beliefs will be destroyed by some sort of disruptive events and the new ones will enter the regime. In this case change is led from top to down and with control.

*Figure 10. Detailed explanation of the Scaling Strategies as presented in the spectrum of the previous figure.*

# Scaling-Out

Among the various theoretical classifications of scaling, previously explained, this graduation project intends to explore scaling-out SI from a design perspective.

Cooley and Linn (2014) define **scaling out as 'expanding, replicating, adapting and sustaining successful programs or projects in multiple geographic spaces and overtime to reach a greater number of people'**. Scale-Out is then a process of multiple steps to achieve a larger impact in different geographical contexts. **The first step is to take the project implemented in the first context and adapt it to the new one; once this scalability has been proven successful, multiple other implementations could be generated**. The social impact is the change in communities or social grouping due to the innovation (Acs, Zolta & Sany, 2009).

As shown in the tables of Figure 10, scaling-out means 'impacting a greater number of people' with the innovation, and it could be achieved in multiple ways: by replicating the innovation, expanding it or through 'generative' diffusion. Due to the limited time given to carry this research project, and to be able to achieve relevant and feasible outcomes in the end, the scope needs to be narrowed down even more. Therefore, this project will focus mainly on one of the scaling-out possibilities mentioned: replication.

## Replicating innovation across contexts

### The first step to (social) impact

Replication has been chosen as the main focus of this research because it is the first step of the scaling process toward impact, and it is the stage where most of the targeted users (Designscapes initiatives participating in the EU program) find themselves. The other reason is that replication is widely shared in the business sector domain, but less in the social one and is just recently happening to get popular. For this reason, it could be relevant and noteworthy to learn from business cases and transport those success factors and critical learnings toward the social domain.

Replication means implementing a (successful) initiative or innovation from the original context to a similar one (Bradach, 2003; Gabriel, 2014) by 'copying' parts of its product, process or business model. If the innovation works in the new context, this could be an initial criterion to measure its replication success. Once the project is proven successful, it could be perceived as ready for being transferred further in multiple other locations (scaling-out), and at that moment, a larger impact will be achieved.  There are different approaches and strategies widely recognized and adopted by the traditional business market to replicate a project in one or multiple contexts (PHINEO, 2016):






### Direct Delivery

(Bradach, 2003)
According to this strategy, the project/innovation will be replicated by the 'owning' organization / Team. Some concrete examples that adopt this approach of scaling are the followings:

• ***Organizational Growth***
The social innovators will have total control over the idea and its diffusion. In this case, what it grows is the innovation 'per sé', replicated in multiple contexts, while the organization itself can become a bigger venture capital or NGO.

• ***Branching***
Refers to creating local sites (branches), the central organization will open up different offices in different (strategic) places under its control and leadership.


### Strategic Partnerships, or in the business sector better known as affiliation (Mulgan, Halkett & Sanders, 2007);

In this case, the innovators partner up with organizations located in replication to deliver the project there. The diffusion is controlled directly through specific processes, methods or guidelines the social innovators pass over to someone else; this can happen in different ways:

• Informal and Professional Networks (e.g. learning communities)
• Federations (e.g. autonomous local branches)
• Licensing (e.g. IP controls)
• Franchising

Setting Strategic Partnerships usually appeals to the innovators because it ensures financial security with less few burdens, but, on the other hand, it will require quality assurance processes. This practice is mostly diffused in the business market, but it is now arriving in the social field, better known as Social Franchising (Berelowitz, 2012).


### Third-Party Delivery

(Bradach, 2003)
The owning organization will generate some (legal) contracts to collaborate and deliver the intervention to a news organization. In this case, the initial settings will be replaced and rearranged according to the agreements eventually stipulated between the parts. This approach entails extensive effort for training the new organization, pass materials and other types of needed information; Compared to the two previous approaches, this is much more collaborative oriented. For this strategy, two slightly different options can be considered:

• ***Capacity development***
It means building new organizational capabilities to reach out to new geographies and markets or deepening the existing ones to generate more impact.


*This insight will led to the reformulation of the concept of replication*

• ***Dissemination of knowledge***
This aspect focuses on sharing key learnings and tools to generate impact through the same theory of change. Therefore, find a way to make knowledge and information open and accessible for adoption by other entities that want to extend the impact of the innovation on their community.

Close to the last approach mentioned (dissemination of knowledge), but more commonly diffused in the Social Innovation field is the

**Open Innovation Approach** (Gryszkiewicz, Lykourentzou, & Toivonen, 2015); the strategy of scaling through Open-Source Models.

Although, on a theoretical level, replication is perceived as the process of finding the optimal business and solution to a particular problem and then copying and disseminating it (Berelowitz, 2012); **in practice, replication does not work as a simple copy and paste' process** (Winter & Szulanski, 2001). A clear example is the one of McDonald, which gave rise to the franchise approach, today widely adopted all over the world; **what McDonald's did is not just a 'copy-paste' of a (successful) formula; it extrapolated the successful part of the idea, and then created its own 'formula' that can be easily adapted in different local contexts** (Winter & Szulanski, 2001), hence it developed an effective strategy to scale-out. *What is this formula about? What consist of? How can it be identified? Do other Cases also use this approach? How different is social franchising from the traditional model?*

*Insights contributing to the understanding of the scaling process and crucial steps developed in a framework*

In order to better understand how replication works in practice and willing to find out whether a replication formula to scale exist or not, different (successful) scaling cases, either from the business world and the social sector, have been selected, analyzed and compared (more can be found in Appendix B). The Case Analysis has been conducted with the above questions in mind, and some key learnings have been retrieved. It has been found that several cases, in the social domain as well, adopt similar approaches to the one of McDonald: **identifying the crucial elements of the innovation, capturing the 'secret' and unique formula of success, and then understand how to adapt those elements and replicate that 'formula' to different context scenarios.** Moreover, both social and traditional businesses recognize the need for an inclusive, interactive network that enables scaling and foster innovation widely.





# 3.3 Cultural Replication

*During the brief formulation, while collecting information about Scaling SI, it has been sensitized that culture may play a significant role because of context embeddedness where the social innovation originates. In the case of Designscapes initiatives, this refers to the urban context. As acknowledged in the introduction, cities are complex systems of interdependent and interconnected socio-cultural, economic and political factors. For this reason, in the project assignment, 'cultural replication' has been mentioned as the hypothesis of an effective way of scaling SI. To answer RQ3 and explore this hypothesis, first of all, the theoretical meaning needs to be understood and defined. This paragraph will provide a theoretical understanding of culture. In the next research phases, 'culture' will be explored from an empirical perspective through design activities carried with the Designscapes initiatives.*

***What do culture and cultural replication mean?***

According to Bradach (2003), 'replicating an organization's culture is more complex than just replicating some program elements' because of the complexity such concept entails. In this case, culture identified at an organizational level refers to how the organization operates – its structures, systems, and processes, all reinforced by the 'leaders' ' purposeful efforts. However, culture is a much broader and complex topic because it could be addressed from different perspectives and levels. There is the **culture at an individual level, at the organizational level, the society or the national level**.

According to Northouse (2012), **culture is a specific mix of values, learned beliefs, rules, norms, symbols and traditions shared by a group of people or community**, as cited in (Kersten et al., 2015). House et al. (2002) defined culture as 'patterned ways of thinking, as quoted in (Tian, Deng and Zhang, 2018), whereas Zimmerman (2015) talks about 'characteristics and knowledge of a particular group of people, defined by everything from language, religion, cuisine, social habits, music, and arts'. What unites those definitions is that **something is shared among a specifically defined group of people**, and **abstract elements such as values and beliefs are expressed throughout more tangible artifact** such as customs, rituals, behaviours and so on (Ghinea and Brătianu, 2007; Zimmerman, 2015). As mapped in the matrix (Figure 11), culture could entail either visible and invisible aspects, external and internal, and depending on the perspectives, it can be referred to different levels.


*Figure 11. The visual matrix of the factors characterizing the concept of culture.*

In the above matrix, all the factors characterizing the broad concept of culture have been mapped out and organised according to the two axis; on the horizontal axis, internal (referred to the organizational level) vs external (referred to the urban dimension) aspects are plotted; on the vertical axis the aspects are mapped from the visible layers (top-to-down) to the invisible ones, following the Iceberg Model.
These aspects have been retrieved from academic papers consulted regarding the topic of 'culture', 'socio-cultural embeddedness', but also from theories about SI and the Case Studies analyzed during the Literature Research.





# 3.4 Conclusions and Takeaways

*Crucial insights regarding the scaling process that will be unfolded and detailed over the course of the research*

Replication does not only mean copy-paste an innovation. Scaling Out implicates replicate, implement and adapt to the new circumstances. In the traditional business sector, these circumstances are mainly defined by the contextual market, while for social projects, those also relate to socio-cultural contextual aspects. **Before setting the strategy, it will be essential to identify those key ingredients that will need to be transferred**, what will change and what will be different. According to **the NESTA Model of scaling** and other theories; (Mulgan, Halkett, & Sanders, 2007; Dees et al., 2004; Winter & Szulanski, 2001), before deciding how to scale, it is essential having defined what it will be scaled. **What to scale and how depends very much on goals and other contextual factors that influence how an innovation originates and spread**. Because of that, a one-fit-all strategy does not exist, the options are multiples, and there is no standard formula every case can apply. On the other hand, a strategy is needed in order to succeed. Therefore, the strategy that could be considered is: first, identifying the crucial elements of the innovation that are worth scaling and replicating; second, explore what could work in different locations, and then decide how to scale. Moreover, it needs to be acknowledged that not every project is suitable to scale and that scaling is a complex process requiring time and more significant resources to employ. On the other hand, case studies demonstrated success by employing a network of supporters and strategic partnerships.

In conclusion, other than how to scale, what will be scaled needs to be discussed and vary based on the impact goals set (Bradach, 2003). Indeed, it is not only the idea that could be scaled or the outcome, it is not a simply copy-paste of the project innovation, but **knowledge and processes should be disseminated as well, such as the organizational model, the blueprint and the culture of the initiative** (Davis, 2014).

*A general understanding of the project's topic has been acquired, and theoretical insights and conclusions have been retrieved through Literature Research. The scaling strategies presented from theory provide answers and insights on how SI could scale; however, it is not yet clear what should be scaled and how it varies according to the different scenarios and goals set. Therefore, in the next chapter, the theoretical insights will be turned into assumptions and new research questions. Practitioners will be consulted to dive deeper into real-case scenarios and learn from their experiences, successes and failures of scaling SI.*

Chapter 04

# From Theory to Practice

*This Chapter presents the main insights and conclusions of the interviews conducted with Social Entrepreneurs. A specific Case Study will be analyzed and used to provide a concrete example of how SI could successfully replicate across contexts to achieve impact.*





# 4.1 Interviews with Social Entrpreneurs

***How did Social Entrepreneurs scale-out and achieve impact?***

## Insights from Scaling Practices

The previous theoretical knowledge has been turned into the following assumptions that will be explored and addressed through semi-structured interviews with the CEO and Co-Founders of successful social enterprises. Thanks to this qualitative research method's potential, it is possible to learn more and go deeper into the researched topics and questions.

*Assumption 1* **To replicate a project from a context to another, the key (successful) elements need to be identified.**

*Assumption 2* **The critical elements of an innovation need to be translated into something that could work in the new context.**

**Goals and Research Questions**
Apart from getting inspired by 'hands-on' experiences, the following goals and questions will be tackled:

Understand the replication pathways of social ventures, steps and challenges;
- *What is scaled, what is copy and pasted and what is adapted to the new context?*
- *What are the key elements that need to be considered when scaling?*
- *What are the common strategies adopted when scaling Social Innovations across contexts?*

Understand the role of context in the innovation and scaling process
- *What does affect and influence the scaling process when replicating into a new context?*
- *What does influence the decision on which strategy to follow?*
- *How context is explored, what is it taken into account? Which local characteristics?*

**Setup of Interviews and Structure**
Several CEO and Co-Founders of Social Enterprises and other social initiatives worldwide have been reached out through LinkedIn. A total of 4 semi-structured interviews have been conducted and carried through Zoom. All the interviews started with a general introduction of the research project to explain and clarify the interview's reasons and goals. Then space and time were given to the interviewee to talk about the (scaling) experience and the social initiative. Afterwards, the following main topics have been addressed in order to answer the questions stated above:

- Challenges and Successes;
- What has been scaled;
- Key requirements and enabling factors of scaling;
- How to scale: pathway, strategies, processes, steps;
- The role context plays in scaling-out and the influence of local context factors;
- Culture and Philosophy of the initiative;

*As follows, the analysis of one case has been reported. All the other interviews' main insights are summarized in the conclusions at the end of this Chapter.*

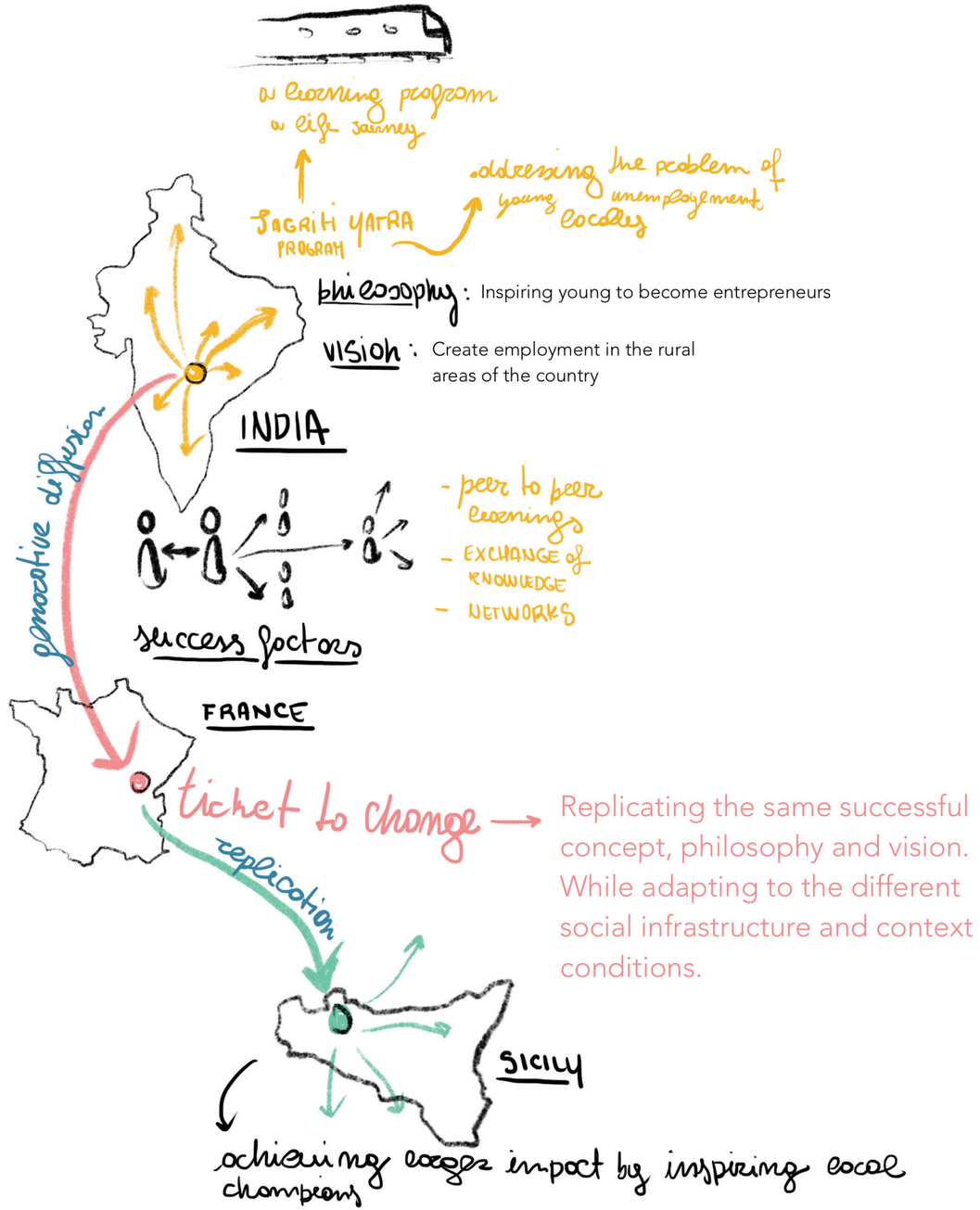



*Figure 12. The scaling pathway followed by the Jagriti Yatra Program innovation from replication in multiple contexts toward larger impact*

## Case Study: The Jagriti Yatra Successful Program

*This project is explained and reported here because it provides a clear overview of what scaling-out means and what are the relations between the different approaches of scaling-out.*

This case replicated in multiple locations across the country of India. It was able to scale-out and achieve a larger impact thanks to the active ecosystem of networks created with different partners, organizations and local stakeholders sharing the same vision; this was indeed identified as a crucial and successful factor by the Project Manager of the Jagriti Enterprise Center.

> *[..] being able to create a community of enthusiast who wants to contribute to making it bigger and be heard by others, people with the same vision and beliefs... everywhere is about the network!*
> Vibhuti Sharma, Project Manager at Jagriti Enterprise Center

They adopted a 'branching' strategy (PHINEO, 2017) to reach out to multiple locations, and throughout sponsorships and partnerships, they were able to gain the support and resources needed to sustain and grow in the long-term. However, the Jagriti Yatra Program did not only achieved impact within the same country; thanks to the successful idea and inspirational philosophy behind the program, other local champions, driven by the same motivation, started over a similar project (Ticket to Change) in France. This project, named Ticket to Change, is part of the Designscapes funded program and is currently trying to replicate its program in Italy by transferring it to another local champion, Push Studio.

> *'[..] there is now replication of this concept and program because this is for a good cause. Many repeated the same idea. Maybe other yatras have gotten inspired, and they started their journey.'*
> Chinmay Vadnere, CEO of the Jagriti Yatra Programa

To conclude, this Case is an example of a successful Social Innovation, which did not only replicate in multiple contexts within the same country but generated a larger systemic impact throughout a generative diffusion (Murray et al., 2010; see Chapter 03). The strong vision and mission of the program inspired other 'local champions' to drive the same change in other parts of the world. Similar is with the Case of Ticket to Change France.

# 4.2 Conclusions and Takeaways

## Experiences & Insights from Social Entrepreneurs

**Network formation is a good strategy enabling social ventures to achieve a larger impact.**
*'These kinds of programs are supported by a lot of organizations, a lot of NGOs.. So eventually, you would want to see that it reaches a bigger mass. And it is converted to something which we can measure'*
Vibhuti Sharma

*It is vital to have a network of support [...] like a network of like-minded people that Have the same passion for seeing a positive change in the world.*
Diana Popa, Extensio

**It is essential to generate value and show the impact to build networks and gain (financial) support.**
*'[...] they can recognise us and the value we bring [...] people need to believe in you'*
Chinmay Vadnere, Jagriti Yatra Program

**When scaling is essential to show the value and demonstrate the impact** the project will have to build networks and strategic partnerships. Network formation helps inspire others to drive change, get support, gain access to funds, and form strategic partnerships. Building networks is fundamental to be able to scale further.

*What are the core elements of the project that should be replicated?*
The philosophy or impact (vision) goal and the 'positive effects' an initiative can generate in society can inspire and motivate others to scale-out. Therefore, what should be replicated of the initiative is not the whole program, but only those key elements that will ensure the innovators achieve and generate the same 'effect' in the new place.

*'We are driven by this philosophy of inspiring students and new talents to become entrepreneurs'*
Chinmay Vadnere, Jagriti Yatra Program

*'Maybe the culture or the mindset that we have is the empowerment of young people through impact-driven entrepreneurship.'*
Josephine Bouchez, Ticket to Change France

*How did the context play a role in enabling or undermining the scaling process?*
According to Literature research (Gogoi et al., 2014), **context plays a significant role when scaling out in multiple locations.** During the interviews, it has been learnt that **context may affect decisions on what will be scaled and which strategy would be better to adopt**. Indeed, in the Jagriti Yatra Case, the success factors have been extrapolated and replicated in different contexts, while the other aspects have been changed and adapted according to the different context conditions.

*So successful social businesses struggle a lot to scale, for many reasons, external as regulations [...] but sometimes are reasons, very internal, such as leadership capabilities over the entrepreneur...*
German Zubìa, Connovo

*'Every country has different structures [...] The approach will change depending on the context and the person starting it.'*
Vibhuti Sharma, Project Manager at Jagriti Yatra Program

**Effective Demand is a prerequisite for scaling in the new context.**
Nevertheless, the new context must present the same problem the initiative aims to solve. Hence, there should be a need and a market opportunity driving other Social Innovators to replicate the initiative in that context or similar ones.

*[..] understand if the key ingredients of this company can be adapted to new context [...] So there is a bunch of criteria we take into account.*
German Zubìa, Connovo

Other than desirable, innovation should also prove viable and feasible. This is a general 'rule of thumb' valid for every business scenario, product or innovation entering a new market.

*'The solution should sustain, be economically viable. Therefore, you need organizations assisting and supporting your idea... then you can think of a larger goal...'*
Chinmay Vadnere, Jagriti Yatra Program

**The attitude of the innovator influences the capacity to scale.**
Other than external context factors, internal factors related to attitudes, culture, and capabilities influence the capacity to scale and achieve the desired impact.

*'I think attitude is important as well.'*
Diana Popa, Extensio Mexico

More details about the interviews with Social Entrepreneurs are presented in Appendix B, while the links to the recordings of the interviews are available in the internal documents (these are not public and available only under specific request).

Theoretical insights have been combined with the interviews' insights, and recurring patterns and similarities between cases have been identified. Some of the insights here discussed will lead to the formulation of a new research hypothesis. The combination of theories and insights from interviews led to the formulation of a new hypothesis: the 'Scaling Framework', presented in the next Chapter.

Chapter 05

# The Scaling Framework as Research Hypothesis

*In this chapter, the scaling framework formulated as a research hypothesis is introduced. It is a hypothesis of how SI could scale-out, and since scaling is a process, in this chapter, the framework will be presented as such. The Framework presents the crucial steps that innovators should follow to navigate the complexity scaling entails. Indeed, according to what has been highlighted either in literature and through the interviews with practitioners, scaling is a complex matter because there are several challenges and aspects to consider along the process. The theories consulted and the crucial aspects pinpointed in the previous conclusions formed the starting point through which I developed the framework.*

*After introducing the framework, the chapter will present one of the first crucial steps of scaling: considering 'What to scale'. This step will be then addressed and further explored, from an empirical perspective, in the next Research Phases. Therefore, the framework formulated will be used as research hypothesis during the next phases and as basis to develop design interventions.*

*The chapter ends with a reflection before bridging to Research Phase 2.*



## 5.1 Formulation of a Theoretical Framework & Hypothesis to Scale-Out SI

*The framework is formulated as a research hypothesis because it is still in its infancy phase and at a very theoretical level. Indeed, it needs to be further explored from an empirical perspective. This research hypothesis will function as starting point to explore and unfold the scaling process in the context of Designscapes initiatives. The framework will be used to develop design activities and interventions. Consequently, the scaling framework will be iterated according to the research findings that will be derived from those activities and interventions.*

The Framework is formulated as a research hypothesis resulting from a theoretical understanding of this project topic. During literature, various theories and models have been consulted, among them the NESTA Model of SI (Murray et al., 2010), the Double-Diamond Design Process and the Spiral Model of Knowledge Creation developed by Nonaka and Takeuchi (1995) have been used to draw the first draft of the Scaling Framework, as illustrated in Figure 14.

On one side, the framework will be used for research purposes to investigate scaling SI and unfold the scaling process of Designscapes initiatives. In this case, it will be treated as research hypothesis guiding the next research phases and activities. On the other hand, this

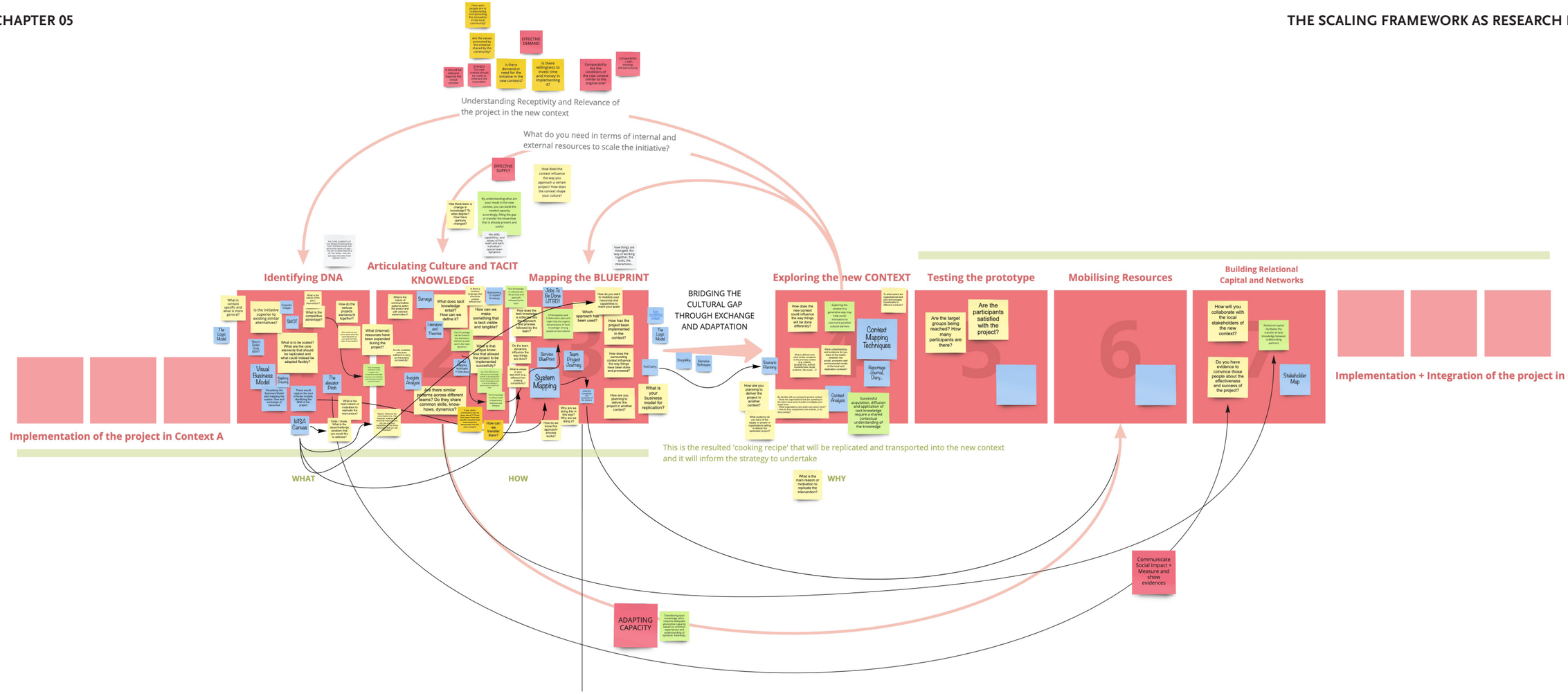



*Figure 13. Screenshot of the first draft of the Scaling Framework sketched in Miro as a process and functioning as guiding hypothesis for the following research phases and design activities*

framework intend to respond to the design goal: 'develop a framework empowering and guiding social urban innovators proceed in their scaling journey'. Therefore, to make it operational, I mapped over the framework (Figure 13) potential design tools that could be utilized to enable social innovators proceed in their journey. For now, those (the design tools, blue-post-its) are only suggestions and assumptions of tools that could enable innovators to proceed in each of the steps mapped. Some of those tools will be explored in the next Phases when carrying empirical research with the initiatives throughout design interventions (Chapter 8.2 and 11.2).

In the image above, some research questions that need to be addressed are also mapped out with the yellow post-its, while the green and the other post-its present some of the main insights which contributed developing the framework.

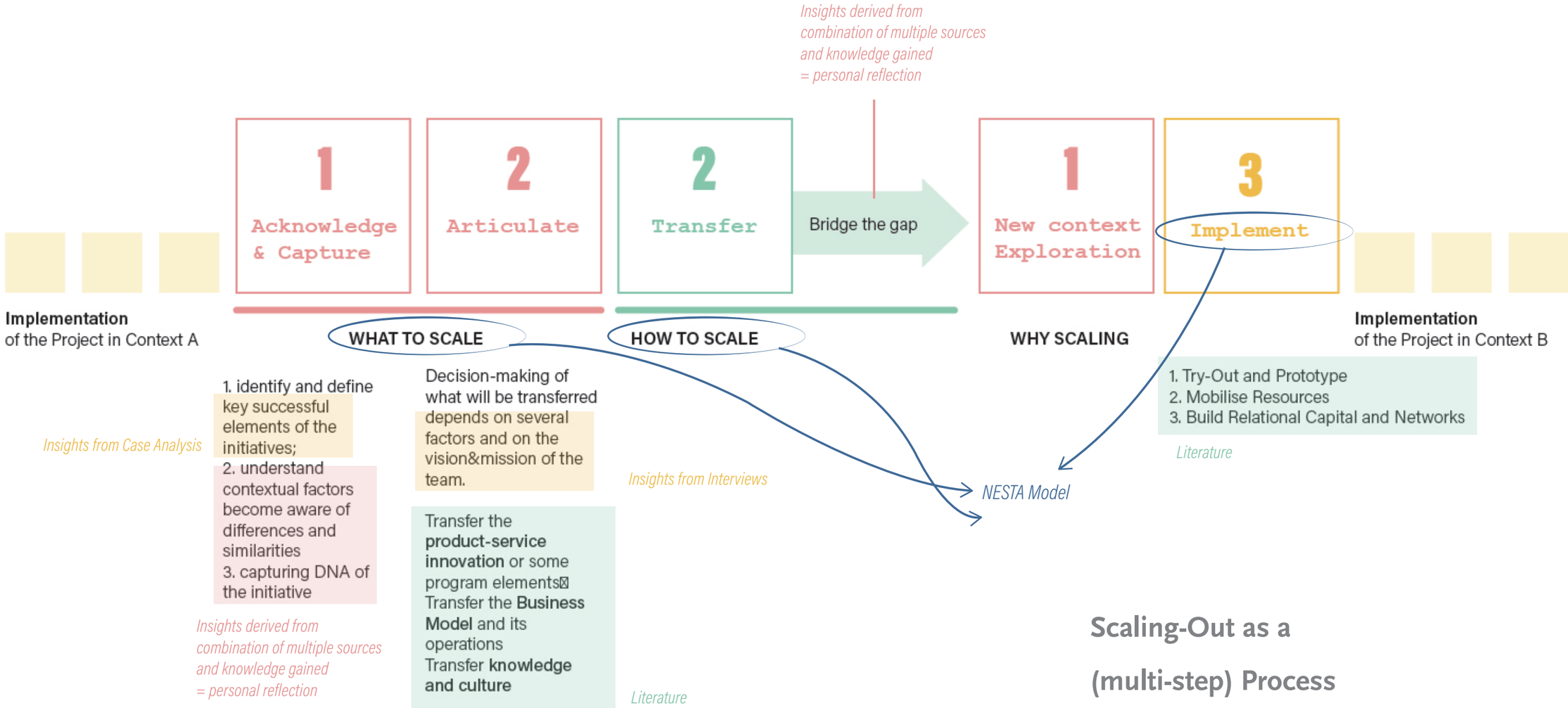



*Figure 14. Graph of the Scaling Framework developed as a multi-process to scale-out SI*

## Scaling-Out as a (multi-step) Process

The NESTA's model (Murray et al., 2010) has been used as base to draw this first draft of the framework. The Nesta model explains scaling through three significant fundamental 'steps' as follows:

- Establishing what to scale (Step 1 of Figure 14).
- Choosing a route to scale (Step 2).
- Gearing up to deliver a scaling strategy (Step 3).

The scaling process is summarized as a ''multiple'' steps journey. These steps are: 'what to scale', 'how to scale' and 'implementing'. From these steps, which form the basis of the framework developed, more details are added from the insights derived through the interviews with SE and in the next research phases, the framework will keep being iterated and further detailed.

Since scaling is an iterative process, a clear distinction between the stages could be made in theory but not in practice. Indeed, according to the insights retrieved from the interviews conducted, the decision of what

scaling will depend on contextual factors, impact goals and motivations, to name some; these are all variables that need to be acknowledged and captured over the process. These "steps" will be explored more in the next research phases using design tools and methods (some are mentioned in Figure 13); hence 'interventions' with the Designscapes Program's initiatives will be planned. What to scale will be the first crucial step that need further exploration and discussion.

Other than the Nesta's model (Murray et al., 2010), other theories have been used to inform this theoretical framework. The replication and implementation of a successful project from a context to another could resemble a learning process where, first you remember (recall on previous experiences), secondly is about understanding (facts are assimilated and compared) in which it is crucial to becoming aware of what is different and what is lacking (step 1 of the scaling process). Lastly, the knowledge acquired will be applied to the new scenario. Drawing from the Nesta Model (Murray et al., 2010), the design and innovation process, and theories of transformative capacity (Strasser, Kraker & Kemp, 2019), the steps and stages for scaling out have been better defined as follow:

### 1. Acknowledging and Capturing
(the knowledge and awareness stage + understanding WHAT to scale)

To replicate or adopt an innovation, it needs to be relevant and widely accepted by the community and other stakeholders. The first important step is to become aware of those key elements that contributed to the success of the project and the differences and similarities between the two contexts.

### 2. Articulating & Transferring 'what could work.'
(planning HOW to scale, setting strategies and co-define future steps)

This also involves choosing what will be transferred, what will be simply replicated, and adapted according to the new scenario. Those elements will then be articulated tangibly and translated into an accessible and flexible 'formula' to scale, hence a strategy to succeed and achieve impact. Several of the Cases analyzed (see Appendix B) mentioned the importance of identifying the key success factors of an innovation (step 1) and its formula to scale. The 'formula' has been interpreted and translated here in 'strategy to scale'.

### 3. Implementing the project in the new context
This will be done by trying out what works or not and throughout iterative prototyping cycles.

More details about the theories and models that inspired the creation of the Framework are presented in Appendix D.





## Step 1 - WHAT to Scale?

As showed in the process of the Scaling Framework (Figure 14), 'what to scale' is the first crucial step allowing SI to scale-out. However, that depends on several factors. First of all, everyone chooses what will be transferred depending on their own goals and mission (Davis, 2014; Bradach, 2003). Those goals will vary based on the intentions of the innovators, which can be categorized as follows:

- ***Transfer the product-service innovation***
In this case, it could be smart to define the key aspects that make it successful, like the main idea behind the concept.

- ***Transfer the Business Model and its operations***
In this case, it is crucial to define what works well and what not and scale those key successful elements of the business model and then adapt the others to the new local conditions.

- ***Transfer knowledge and culture***
If the goal is to disseminate knowledge, then guidelines, models or a framework to initiate the replication somewhere else need to be provided (Bradach, 2003), enabling other people to scale through knowledge diffusion. However, the simple creation of passive guidelines could not be as effective as building capacity more collaboratively throughout co-creation activities and exchange. Indeed, as stated by Pierre Bordieu (1990) and cited in (Xiaowei, 2019) 'knowledge is socially constructed, the human capability to capture and understand complex knowledge is culturally constrained'. This step would entail building capacity and trigger a mutual learning environment between the parts involved.

These three categories entail different complexity and may require different strategies and approaches. In the next phase, context mapping activities will be performed to map how the different initiatives adopt different approaches concerning their goals and other contextual conditions. Hence, **the scaling framework's first steps (Figure 14) will be explored with the Designscapes initiatives through various design activities.** In this way, **data will be derived regarding 'what to scale', and knowledge will be generated about how design and design tools could be used to support social urban innovators achieving their goals, define what and how to scale.**

Moreover, because of the Hypothesis formulated at the beginning of this project (RQ3), particular attention will be put on knowledge transfer & exchange' and 'collaborative culture & approaches'.

# 5.2 Reflections toward the next Phase

For now the Framework has been presented as research hypothesis regarding scaling-out as a  process. However, the 'Scaling Framework' does not include only the process and steps of scaling but it also frames critical criteria and principles that social innovators, as with any innovation, should fulfill to succeed. These principles have been retrieved from Design and Innovation Theories (IDEO, 2000), according to which innovative solutions needs to be desirable, viable and feasible to succeed in the market or, in this specific case, scaling and getting implemented into a new context. It should be desirable in the sense that it responds to the user's demand, in this case, the community's social needs. It should be feasible, possible within the innovators' capacity and viable. It should demonstrate, through the business model, to sustain itself in the long term. A balance and combination of these aspects will allow innovation to achieve social impact (Figure 15). However, how social initiatives will achieve that 'sweet spot' still need to be researched; this part will be covered in the next phases.

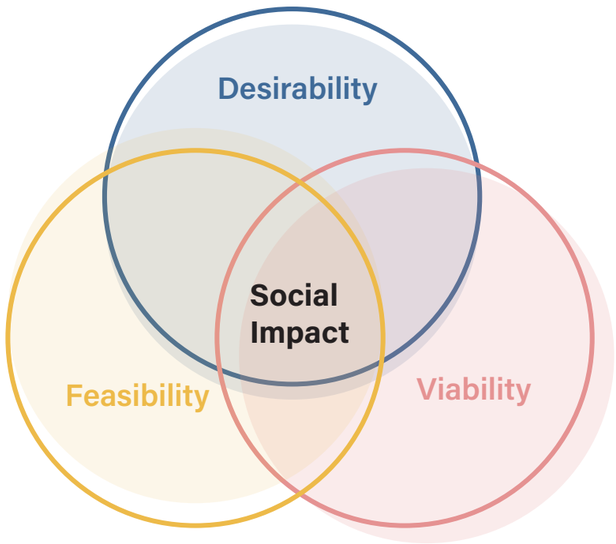



*Figure 15. The 'three lenses' of innovation (IDEO, 2000) are part of the Scaling Framework as principles Social Innovators should fulfill to scale-out and achieve impact.*

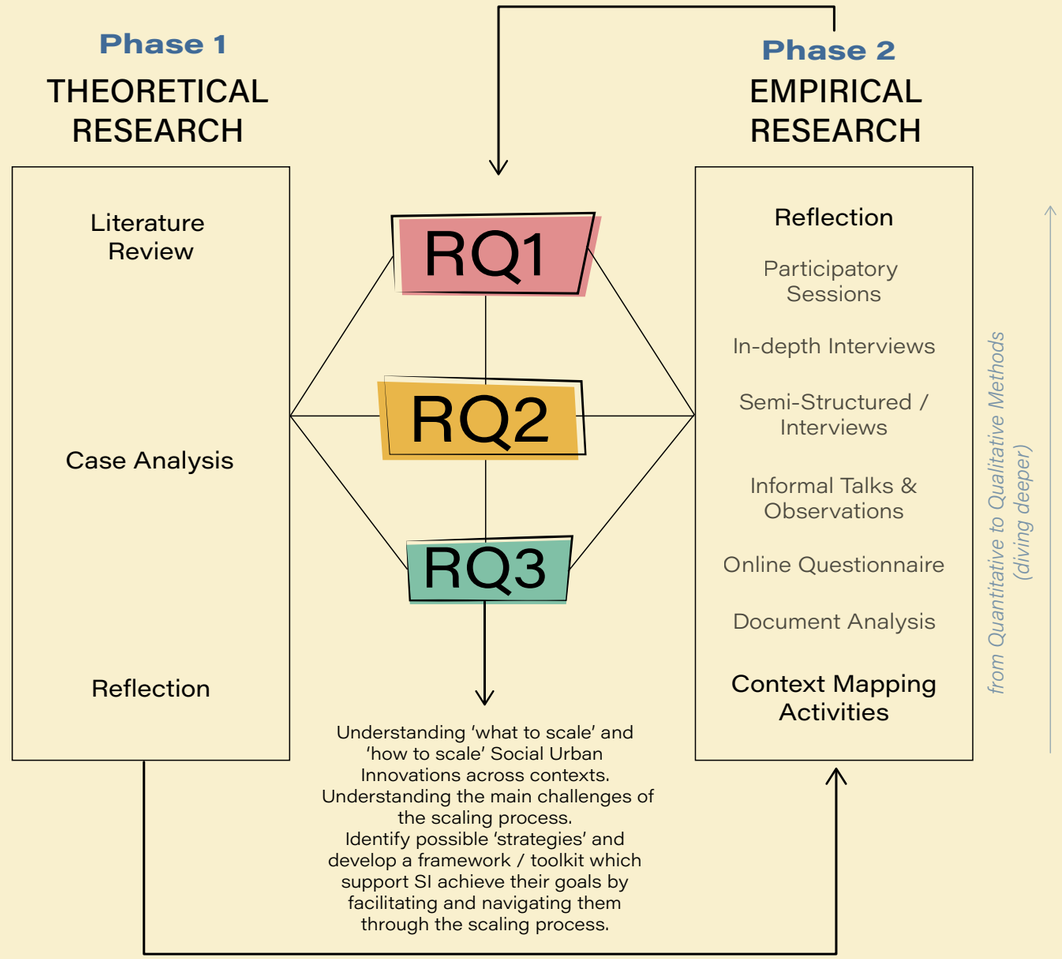
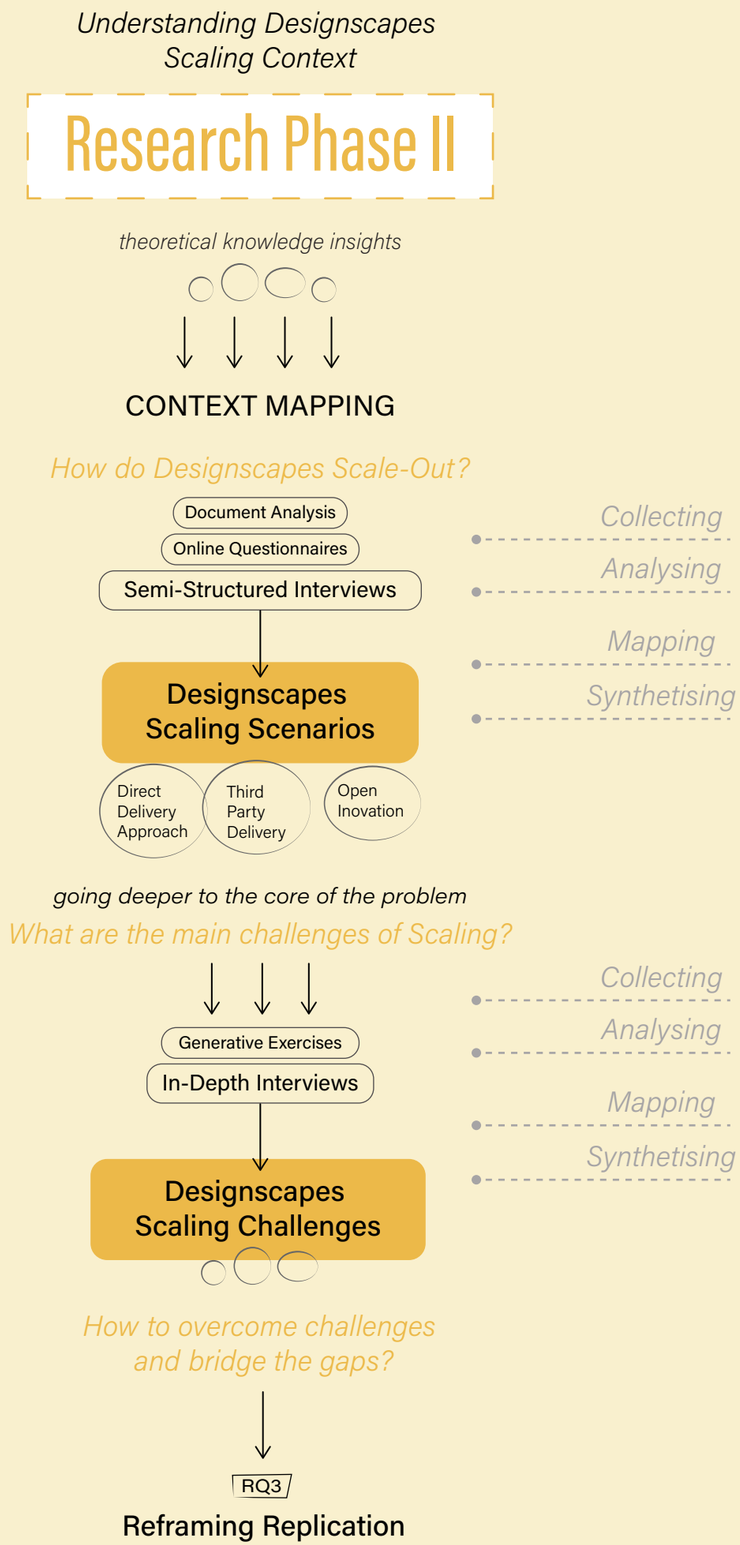



*Figure 16. Overview of the Research Process followed and activities performed over Phase 1 and 2 to find answers to the main Research Questions*

Research Phase 1 closed with the formulation of a new research hypothesis: the Scaling Framework. The 'Scaling Framework' is meant to be an exploration tool guiding the design process as a theoretical research hypothesis. **Throughout the framework, the scaling process will be unfolded and mapped out, and new paths and insights discovered iterative**ly along with this graduation project. The framework consists of two parts: the process of scaling unfolded through 'crucial' steps and the building blocks or criteria to scale, those key factors that are essential to consider when scaling. As illustrated in Figure 16, a bridge will be drawn now to pass from theoretical toward empirical research studying the practice and the context of Designscapes initiatives. In Research Phase 2, different context mapping activities and design methods will be employed to unfold the scaling process of SI and uncover the main challenges these initiatives face over the journey. Indeed, the goal of this graduation project is not only investigating how SI scale-out, but in the end providing urban innovators a (design) tool which enable them to overcome their scaling challenges and achieve their impact goals. For this reason, the context of scaling of Designscapes initiatives will be explored; specific qualitative methods and other design activities will be used to dive deeper and deeper into the scaling processes and main challenges.




# 2

*In this second Research Phase, various qualitative research methods and design activities will be used to collect, analyze, and synthesize data with the intention of exploring the users' context of Designscapes initiatives. By looking at how Designscapes initiatives replicate from one context to another, which strategies and approaches they use, what they scale and what are their main challenges. Therefore, answers to the main research questions will be gathered and the theoretical scaling framework will be iterated according to those empirical findings. Once the context is fully mapped out, more concrete challenges will be defined and 'Scaling Scenarios' sketched with the knowledge acquired. Mapping the scaling context and challenges of Designscapes initiatives will allow to identify design opportunities for intervention informing further research questions and design decisions.*

*This research phase will close with a collections of insights leading to re-framing the theoretical concept of 'replication'.*

*Figure 17. Structure overview of Research Phase 2, as reported in the following chapters*

Chapter 06

# Unfolding and Mapping the Scaling Journeys of Designscapes initiatives

*Within this Chapter, a variety of design research methods will be used to learn about 'scaling' in the context of Designscapes initiatives and uncover opportunities for intervention. The previous theoretical understandings informed the formulation of specific research questions which led the empirical studies conducted at this point. The Chapter is organized following an empirical research process:*

*Collecting & Analyzing*
*First, the methods used to collect and analyze the data will be introduced with their main goals.*

*Mapping and Synthesizing*
*Then, the results and findings from the data collected will be synthesized into 'scenarios' and 'themes. In this way, it will be possible to better grasp the meaning of the information and make sense of the data. The visual mapping exercise functions as a reflection turning data into valuable insights. The insights will be used to iterate the research hypothesis presented as 'Scaling Framework' and will inform the next design decisions.*



# 6.1 Getting to know Designscapes urban innovators

In this phase, the scaling framework proposed as research hypotheses will be explored in the context of Designscapes and its participants. Social Innovations can be framed as programs, services, products, organizational models – or more subtly, as ways of working, principles or ideas (Davis, 2014). Therefore, I first need to frame the Designscapes initiatives according to that and their scaling goals. To do so, I will use the 5HW Method (van Boeijen et al., 2013) as a starting point to investigate and get to know the project user. Hence, the following questions will be addressed:

- Who are they?
- Where are they scaling?
- What is their network of stakeholders? Who do they collaborate with?
- What are they scaling?
- Why are they scaling? What are their scaling goals?
- How are they scaling? Which strategies are they adopting?
- How are they structured in terms of organization?

**Participants**
Among the ten initiatives participating in the program, 6 of them took part in the research phase and activities organized; not all participated in each activity conducted; the participation was instead more sporadic.

## ... through Document Analysis

To get a first overview of the Cases, an analysis of their 'internal documents' and application form has been conducted, which helped to start mapping the initiatives and clusters them, according to differences and similarities of their scaling approach and type of organization.

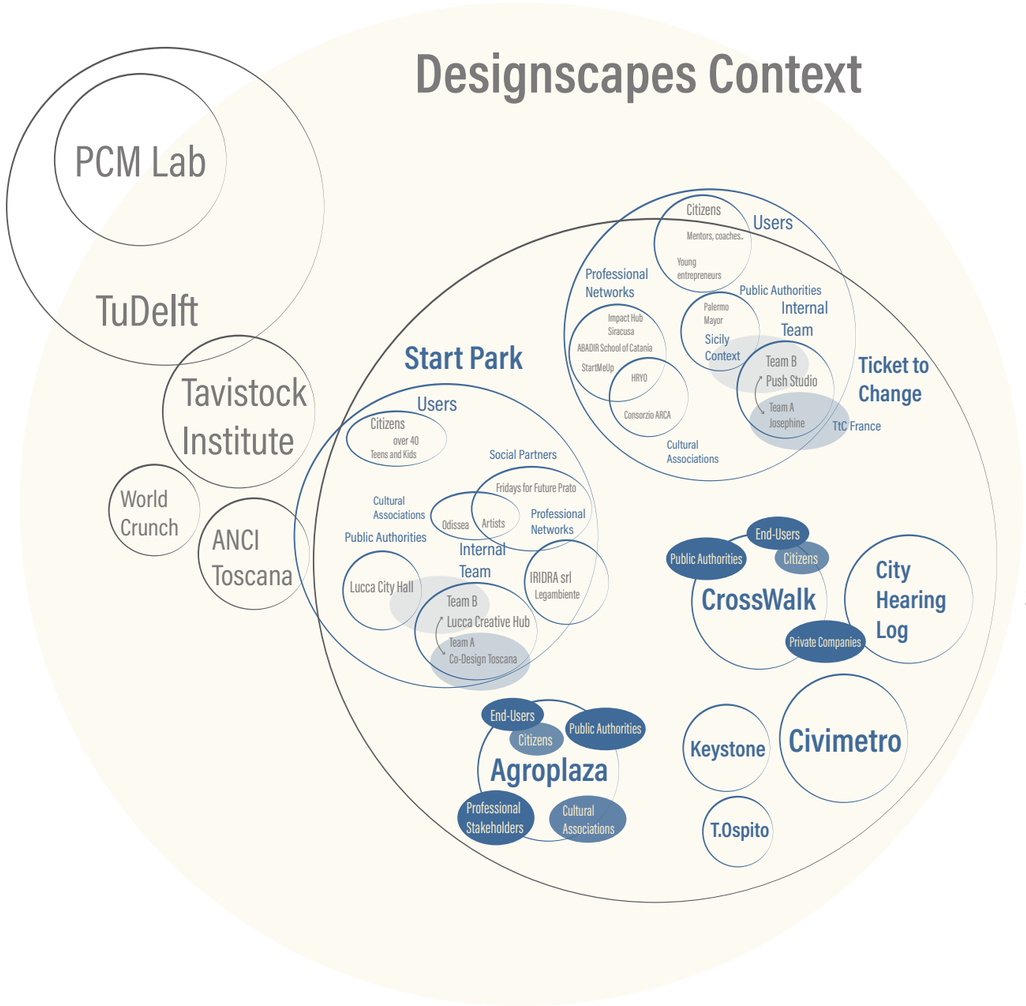



*Figure 18. Stakeholders Map of the Designscapes Program. The visual illustrates a snapshot of the main stakeholders involved in this project and the Designscapes initiatives that took part in some of the activities conducted in this phase. The map also shows that the 'ecosystem of networks' Designscapes innovators is embedded in those data from the interviews.*

## ... through Online Questionnaires

After an initial mapping of the initiative and a very general understanding of the Designscapes Program participants (Figure 18), some short questionnaires have been developed and shared with the Designscapes Community. The goal was to get some answers and insights that could trigger conversation and easy topics to start with lore during the next interviews. However, only two initiatives responded to online forms.

More about structure and process can be found in Appendix C.

## ... through Semi-Structured (Zoom) Interviews

A series of semi-structured interviews have been planned and conducted to have first real contact with the initiatives. In addition to the urban innovators, other experts of the Designscapes Consortium have been interviewed as well. In total, eight semi-structured interviews have been conducted at this stage. The semi-structured interviews have been held on Zoom and planned for an average duration of 30-40 minutes each.

Semi-structured interviews follow a more flexible structure; for this reason, the method has been chosen to collect an initial set of data about the initiatives scaling process. Moreover, this gives the possibility to dive deeper into specific latent topics and provide the freedom to be guided by unexpected paths and insights raising during the talk. Indeed, since the goal is to understand more about the context and approaches followed, the intention was to be led by their expertise and learn as much as possible from their experiences.
The following main topics have been addressed during the interviews:

- Understanding their (local) context;

To map their network of stakeholders and derive the main contextual factors that influence, enable, or undermine the scaling process.

- Uncover main challenges;

To spot some opportunities for design interventions and eventually map their processes, plan and strategies adopted.

- Addressing the internal organization structure and dynamics of the team to understand the internal culture better.

The interview guides and more details about structure processes can be found in Appendix C. While the full collection of insights and interviews recording is kept in the internal documents (available only upon request for confidential issues).

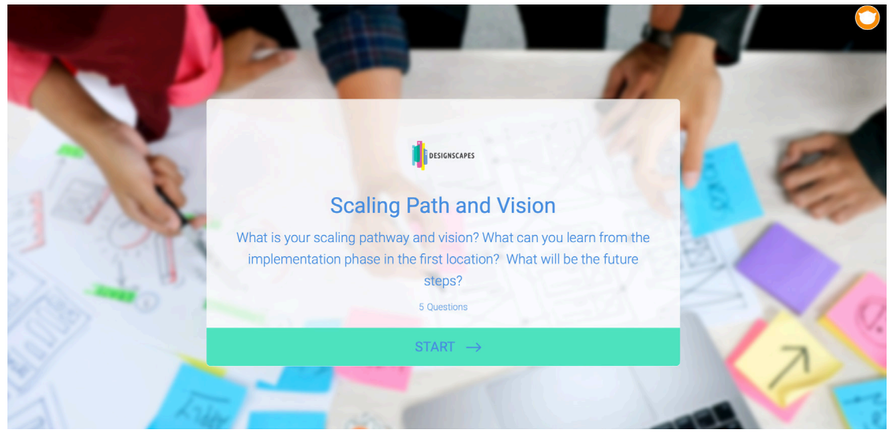



*Figure 19. Screenshot of one of the Online Questionnaires shared with Designscapes initiatives. The questionnaire is designed using JotForm platfrom.*

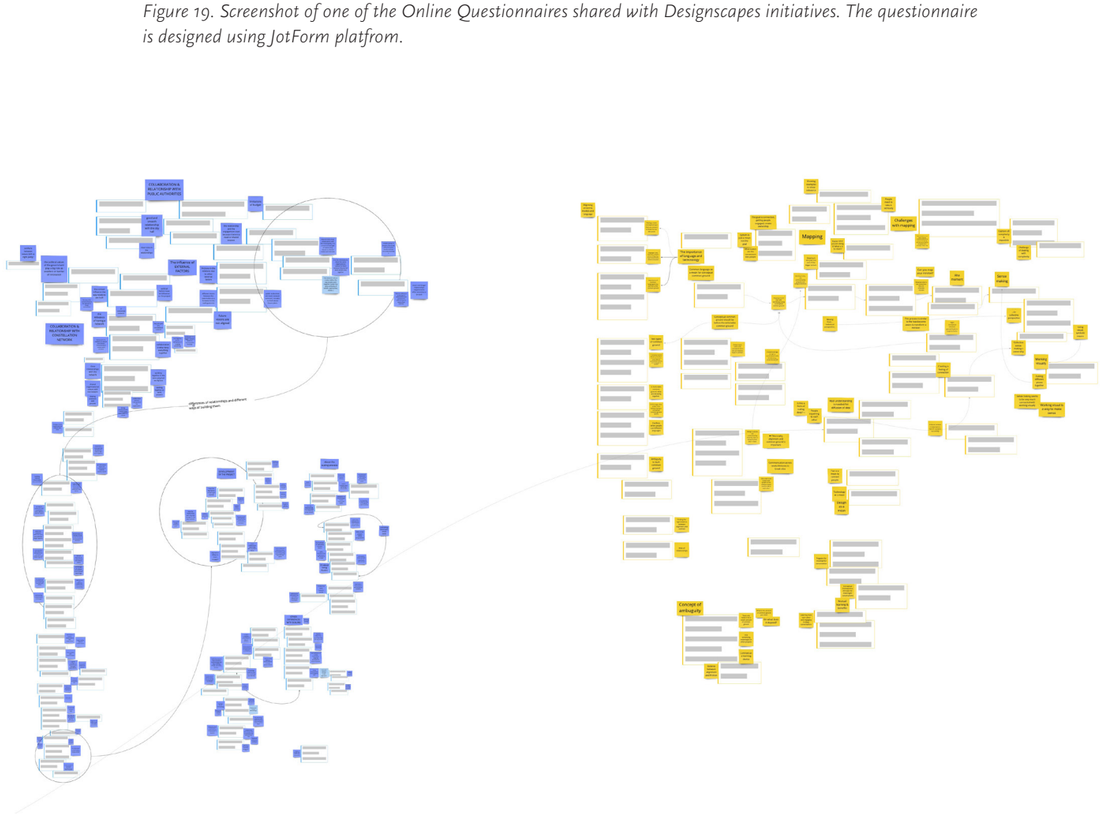


*Figure 20. Screenshot of Miro board where data retrieved from the semi-structured interviews have been collected, and analyzed. On the left, the interview's data conducted with Elisa de los Reyes part of Agroplaza KIRIKINO project; On the right side, the interview's data carried with Aldo de Moor, researcher and part of the Designscapes Project.*





## ... a Reflective Session and the Designscapes 'Training Modules'

The collaboration with the Designscapes Project allowed me to take advantage of the regular Community Meetings and other Training Modules and Sessions to understand the initiatives better and gain more insights. An example is the 'Reflective Session' (Figure 21) held by one of the TuDelft researchers (Alberto Magni). As a result of this session, several challenges these initiatives face have been mapped and later clustered into 'themes' (see Figure 32 in Chapter 6.3).

As shown in Figure 20, after collecting the data from the different research activities, those have been clustered all together and analyzed (in Miro Board) using the Thematic Analysis Methodology.


*Figure 21. Screenshot of the Miro Board set-up of the Reflective Session carried with Designscapes initiatives.*

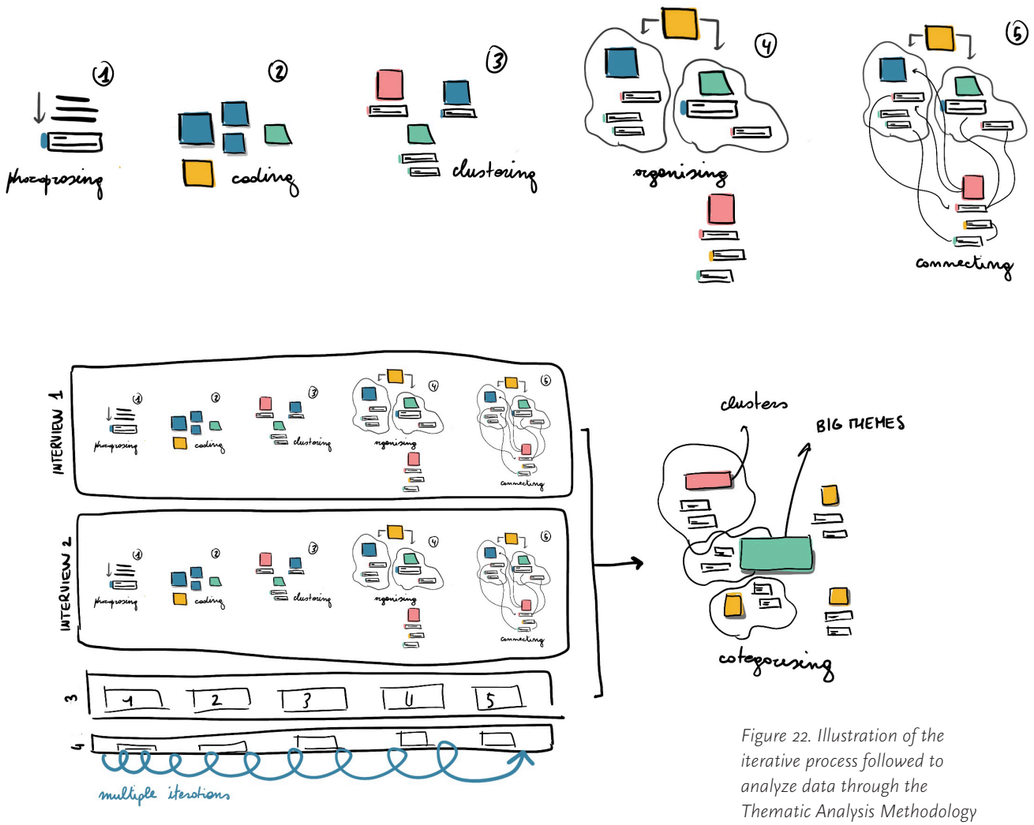



*Figure 22. Illustration of the iterative process followed to analyze data through the Thematic Analysis Methodology*

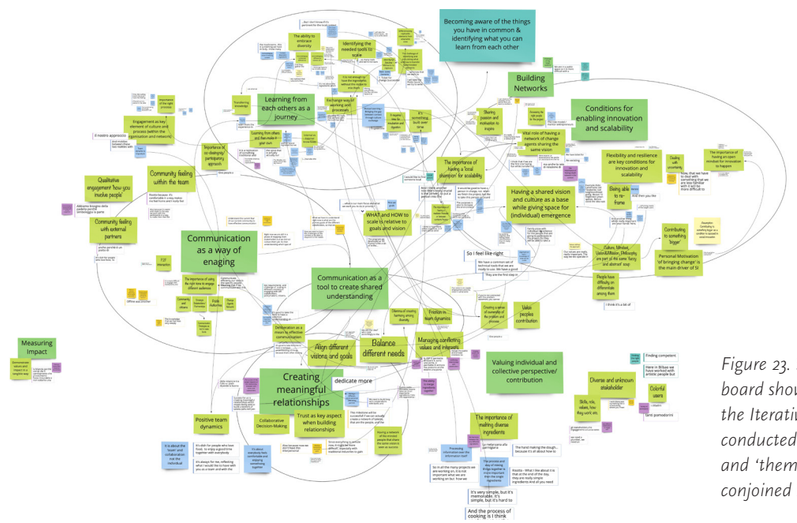



*Figure 23. Screenshot of Miro board showing the results of the Iterative thematic analysis conducted. A series of patterns and 'themes' resulted from the conjoined investigation.*

## 'Thematic' Analysis

**Methodology**
As data collection analysis, the Thematic Analysis (Gibbs, 2007) has been chosen as a methodology because it ensures data are analyzed systematically and thoroughly. The scope of this type of analysis is to translate chaotic information to patterns and themes informing next research and design decisions. This analysis will follow an iterative process (Figure 22) because of the research project's exploratory and broad scope, especially at the initial diverging phase of the design process. The triangulation approach (Denzin, 1970) will be adopted to add validity to the analysis. Along with the project, data from different (qualitative) sources will be added to the analysis process, and another researcher will be involved in the study and analysis process to enrich the lenses scope of the themes.

**Structure & Process**
Most of the interviews and other research activities have been recorded and transcribed throughout Zoom settings. The raw data have been first paraphrased and then coded iteratively. The coding has been done manually through a digital tool: Miro. Digital post-it notes with different colours have been used to differentiate categories, clusters and sub-clusters.

As shown in Figure 22, the data analysis followed a long process of first collecting the raw data transcribed, paraphrasing and then coding it. The different codes generated have been clustered (iteratively) and then organized in bigger 'themes'. Connections and relations have been created between themes and clusters to give more meaning and depth to the data. In this way, a systematic perspective and lens have been adopted. In the end, all the data have been combined and clustered together to identify common patterns and themes (Figure 23). Indeed, this type of analysis has not been carried only at this stage of the research; for each interview and participatory session held with the Designscapes initiatives, the steps pictured in Figure 22 have been applied, and the resulting clusters have been readjusted iteratively along the process. Once an extensive amount of data has been collected and the first analysis conducted, a second analysis has been done, following the triangulation method previously mentioned.

# 6.2 Results & Findings

*This chapter highlights the differences and similarities between the initiatives, their scaling goals, approaches and strategies. It is structured following the 5HW Questions to organize and map the data collected. In the end, the data mapped will be presented using the 'scenario-making' technique; hence, scaling scenarios will be drawn in the form of Designscapes initiatives' persona. The main scope is to make sense of the data and empathize with the concept of scaling, in order to spot design opportunities. These scenarios will be particularly beneficial during the Design Phase, when a concept will be developed, to decide the main target user of the design outcome.*

## Mapping Designscapes Initiatives' Scaling Context

### What are they scaling?

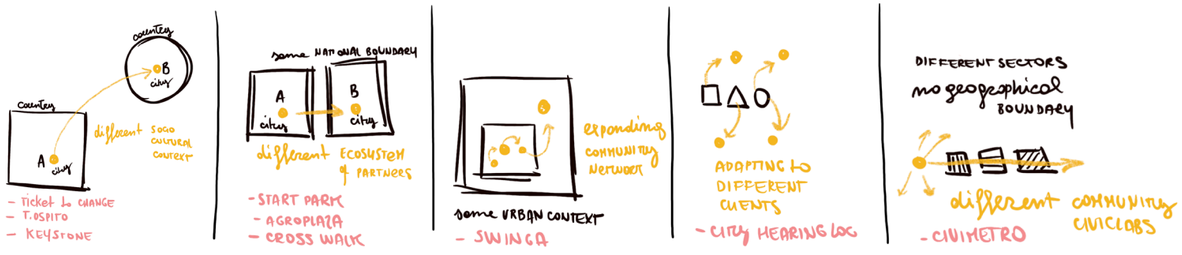
A clear distinction can be made regarding the type of innovation that they are trying to scale:

- Product/ Service Innovation
- Organizational Innovation

### Where & in which 'dimension' are they scaling?

Another difference between the initiatives is the 'dimension of scale'. As illustrated in the sketches (Figure 24), some of them replicate in a different country. In contrast, others replicate in a diverse neighborhood of the same city or across sector domains by intervening on the project solution. For those reasons, the impact, in terms of the number of people reached with the innovation, changes considerably, and the strategies that will be adopted could also be different.

*Figure 24. An illustration of the different types of scale dimensions adopted by the Designscapes initiatives analyzed*




*Assumption 1*

**The diversified dimensions of scaling and scaling destinations will entail new challenges and require the innovators to adopt different strategies.**

***How do they choose where to scale?***

When scaling and replicating their initiative, SI tends to choose the context because of similar context conditions (e.g., same user demand, same social problem, similar socio-cultural aspects...).

*'The locations have been decided on the base of the target group concentration. First, we identified who the users we want to address are then we mapped where we can reach them, for instance, nearby shopping centres or near schools where the concentration of crowds and people is bigger.'*
[Filip Kovalovský , CEO of Crosswalk]

*'We are going to scale in a similar socio-cultural context within the same region...'*
[Start Park project]

Other times, the choice is strategic and driven by connections and partnerships the innovator has with the context.
*'Our partners like Narus are set in Copenaghen; therefore, the choice of the context and location was a strategic choice.'*
[Stefano Tamascelli, CEO and Founder of XTeam Software Solutions, City Hearing Log project]

### Why are they scaling?

***What are the main driving forces that motivate SI to scale-out?***

The Personal Motivation 'of bringing change' in the overall society and the local community is the main driving force urging these urban innovators to start a project.
*Unlock positive visions of future self in Sicily through social and environmental entrepreneurship.*
[Giulia Sala, Project Manager at Ticket to Change Sicily]

*'The entire motive is to inspire these people and encourage them to go back to these original places... Their growth will contribute to the growth of much more people in those rural areas so that also the small villages will be able to be economically independent compared to the big urban areas...'*
[Chinmay Vadnere, CEO of the Jagriti Yatra Program]

*Create more resilient urban parks thanks to co-design processes which involve local communities. We aim to build aware communities resilient to CC using GBI to this aim and not only as a simple infrastructure.*
[Rita Duina, Start Park project]

While the 'external' driving force that motivates them to scale is the presence of pressing global issues and social/local needs, furthermore, if there is demand and (market) opportunity, urban innovators will feel more confident initiating 'a systemic change' and bring value to the community.

*'Civimetro started because these civic labs have the necessity of making visible their impact as a public institution [...] Our wish is that other people and partners independently from us can implement Civimetro on their own...'*
[CivicWise Team, Civimetro initiative]

*'Our mission is to adopt the technology to serve different customer requests, we are digital tailors...'*
[Stefano Tamascelli, City Hearing Log project]

*'They had seen the interest of digital solutions for agriculture in other parts of the world. And this is what made us start thinking and talking about how we can adapt this to Mexico...'*
[Diana Popa, Extensio]

## How are they scaling?

***How do they scale differently from each other?***
Some commonalities but also differences have been found regarding scaling approaches and strategies adopted by the Designscapes initiatives. Indeed, as also shown by theoretical studies (Avelino et al., 2019; Cangiano et al., 2017), strategies depend mainly on the goals and other contextual factors, such as resources, networks, community needs and demand. Sometimes, the scaling approach adopted reflect the initiatives' internal organizational culture. This could mean that scaling and how to scale may be also influenced by the (organizational) culture of the innovators. Bringing me to conclude that what and how to scale is driven and influenced either by internal and external factors.

***Which strategies and approaches are they adopting?***
The scaling strategies derived from theories and presented in Chapter 1.2 have been applied to the context of Designscapes initiatives. The different initiatives have been mapped and clustered following the three main scaling approaches identified in Literature, as pictured in Figure 25. The more the innovation will be open to be disseminated by others the greater might be the impact achieved on the society; hence those strategies and the initiatives have been plotted on the line (from left to right of Figure 25) accordingly.

*'The idea is that at the end, CIVIMETRO could be a guide that everyone, every Civic Lab could implement even without us, without our support... but for now, the guide is still a work in progress, so right now it is a more dependent project by us. But the idea when we will develop it further it will be open for everyone to take it over.'*
[CivicWise Team, Civimetro project]

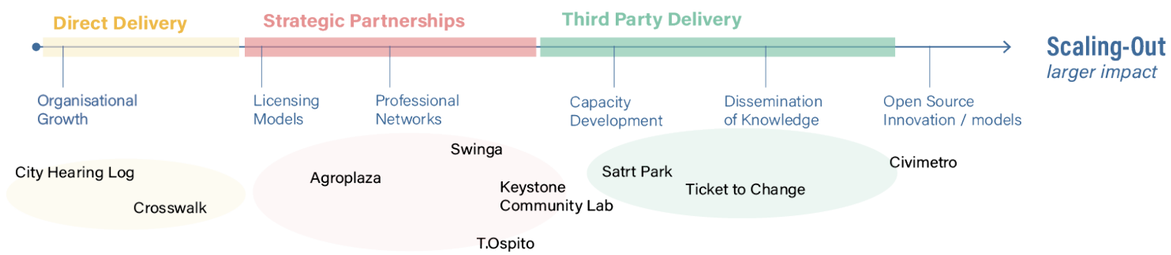
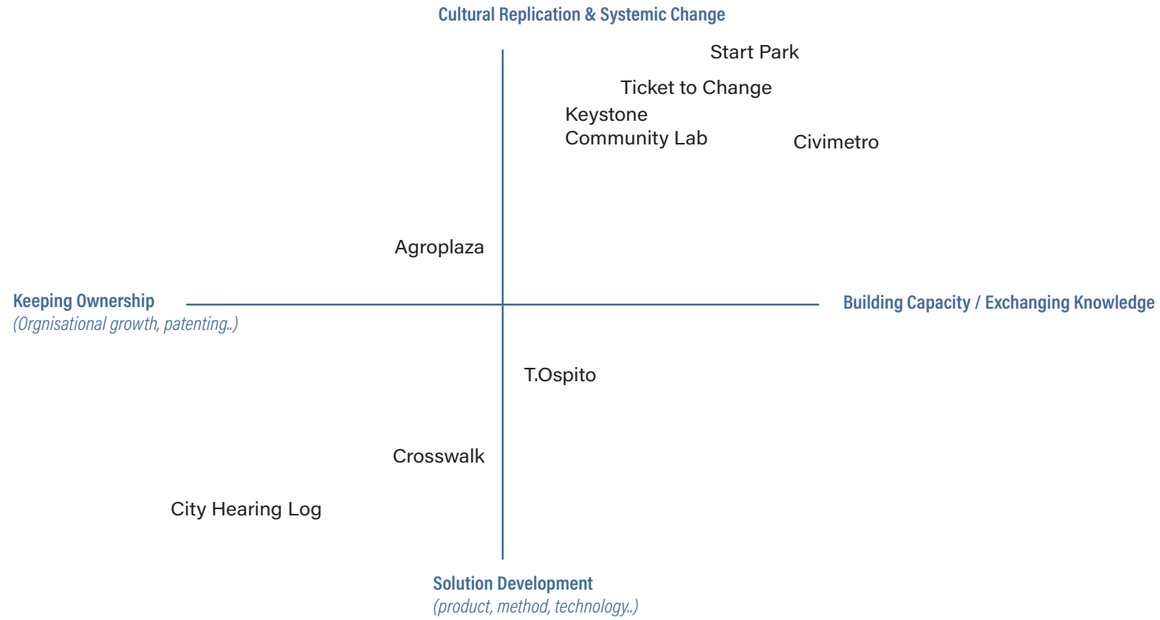



*Figure 25. Mapping Designscapes initiatives according to the scaling strategies derived from literature.*





*Figure 26. Mapping Designscapes initiatives according to what and how they are scaling*




Although, this is only my interpretation of the data derived from the investigation of the initiatives and by studying their way of scaling. Indeed, these urban innovators follow a learning-by-doing approach; they lack knowledge awareness regarding the strategies they are following, what and how they are doing it because they just try-out things and learn, afterwards, from those practical experiences.

The reasoning behind the way I plot the initiatives on Figure 25 is shown in the matrix of Figure 26. This matrix shows that some initiatives are more focused on developing a product-service solution of which they want to keep ownership when replicating; hence these type of initiatives seems to follow the direct delivery strategy (Bradach, 2003), and for this reason categorized as such on Figure 25. Instead, other urban innovators focus on disseminating knowledge & practices and building capacity across networks through collaborative or open-source approaches to achieve a larger impact (e.g. Civimetro, Ticket to Change, Start Park).

# Designscapes Scaling Scenarios

From the previous mapping activity (Figure 25, 26) three scaling scenarios have been drawn to empathize with the data and give meaning to the information retrieved (Manzini and Meroni, 2009). The scaling strategies presented in the Literature (see Chapter 3.2, Figure 10) have been used as a reference and as a term of comparison to draw these scenarios. Therefore, theoretical studies and knowledge have been combined with the data collected about Designscapes initiatives, their scaling approaches and organizational structure.

## Scenario 1

*(City Hearing Log, Agroplaza, Crosswalk)*

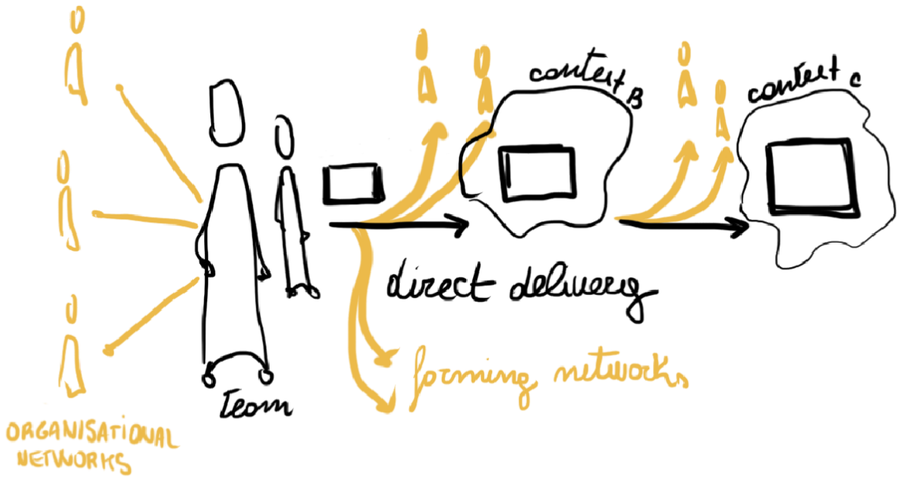



*Figure 28. Scaling Scenario 1, the Direct Delivery approach of Designscapes initiatives.*

In this Scaling Scenario, SI scale-out throughout a 'Direct Delivery' approach; the innovators replicate their initiative from a context to another while maintaining ownership over it. Since the scaling process is fully under control and in the same innovators' hand, the replication will focus on the product-innovation rather than on transferring or building knowledge. Within this scenario, different cases could be delineated. These initiatives related to this scenario have a strong internal organizational culture; some resemble a 'company type', but in a small-scale size (Figure 28 - A). In contrast, others are more 'collaborative type' of initiatives and part of a broader constellation network (Figure 28 - B).





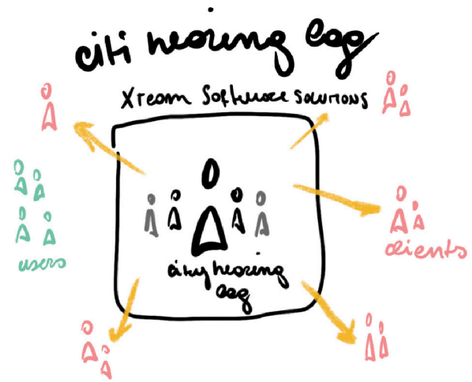



*Figure 28 - A Organizational Culture of City Hearing Log project*

For instance, as in the sketch on the left (Figure 28-A), City Hearing Log project, raised among the X Team Software Solutions, belongs to a more traditional type of company which, differently from most of the Designscapes initiatives, is more business-oriented and is not scaling-out from context to context but mainly scaling-up among business sectors with an endorsable system technology. They adapt their technology to the different clients they collaborate with. Since this initiative falls out of the context focus set at the beginning of this project, it will not be taken into account for the next design activities and will not be the target of the design outcome.

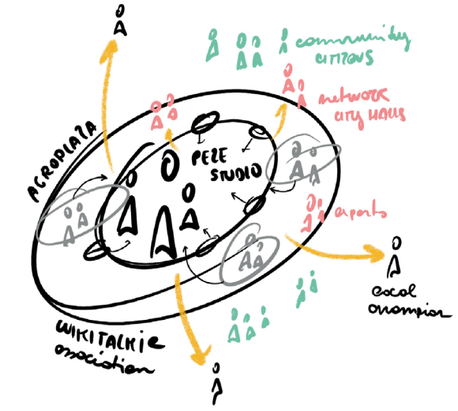



*Figure 28 - B Agroplaza Ecosystem and Constellation Network*

Different is the Agroplaza Project, whose organisation team is Peze Studio. This project is part of a bigger ecosystem of networks (Figure 28-B): WikiTalkie, where different associations and teams collaborate and contribute to the grow of the project. WikiTalkie is a group of multiple cultural associations working on different projects but following the same internal culture and organised according to the Sociocracy governance model.

## Scenario 2

*(Ticket to Change, T.Ospito, Start Park)*

In this scenario, initiatives scale through collaborations and network formation. The strategies and approaches adopted by those types of initiatives rely strongly on forming networks and partnerships with the local actors, community and other stakeholders. The initiative related to this scenario tends to adopt an approach similar to the 'Third Party Delivery' or 'Strategic Partnerships'. The approach differs in the social innovation field because partnerships are not profit-driven but rather work as collaborations throughout (social) networks and word-of-mouth. People come together to collaborate and help each other because they share the same vision toward making change. In this scenario, usually, two teams are involved in the scaling process (Figure 29) and a third person act as an intermediary or 'bridge' between the two contexts. Moreover, these initiatives focus on disseminating knowledge and building capacity, not only the 'product innovation; hence, in this case, culture and knowledge exchange plays a crucial role.

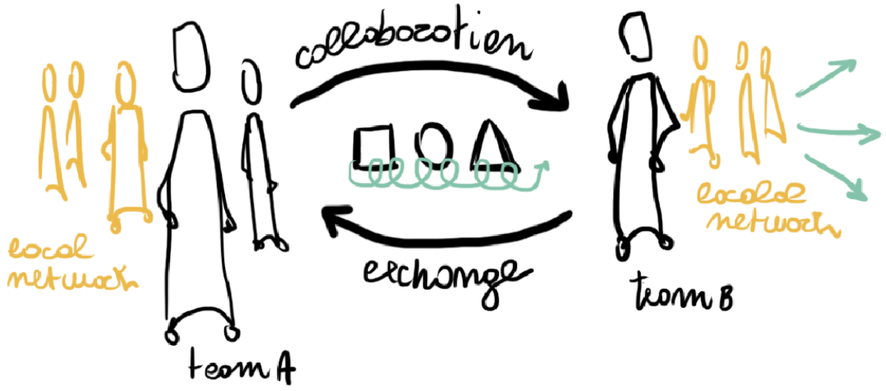



*Figure 29. Scaling Scenario 2, exchange, partnerships and collaborative approaches to scale-out*

*[...] exchange of core values and information to bring back some knowledge on how to get the project and implement it in Sicily context*
[Giulia Sala, Project Manager at Push Studio and part of the Ticket to Change project]

Moreover, those type of initiatives are usually part of or embedded in a strong ecosystem and network of relations (Figure 29 A-B). It is an advantage that allows them to leverage others' people resources and existing connections and make use of previous gained learnings and experiences that will be applied to the new projects.

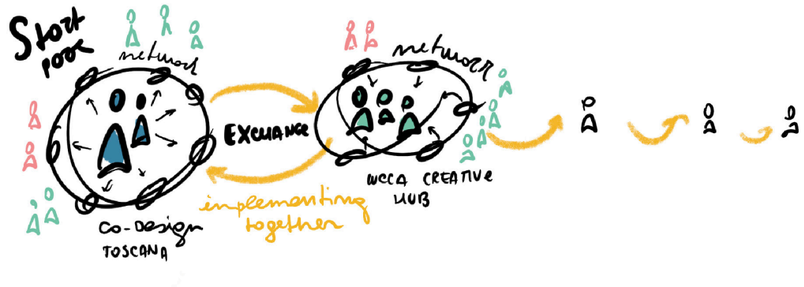



*Figure 29 - A Start Park Scaling Approach*

For example, Start Park project is scaling-out through collaboration and exchange between two local teams: Co-Design Toscana, from Context A, is transferring and exchanging knowledge with the local champion Team of Context B, Lucca Creative Hub. Their final goal is disseminating knowledge among the local community to achieve a larger impact.

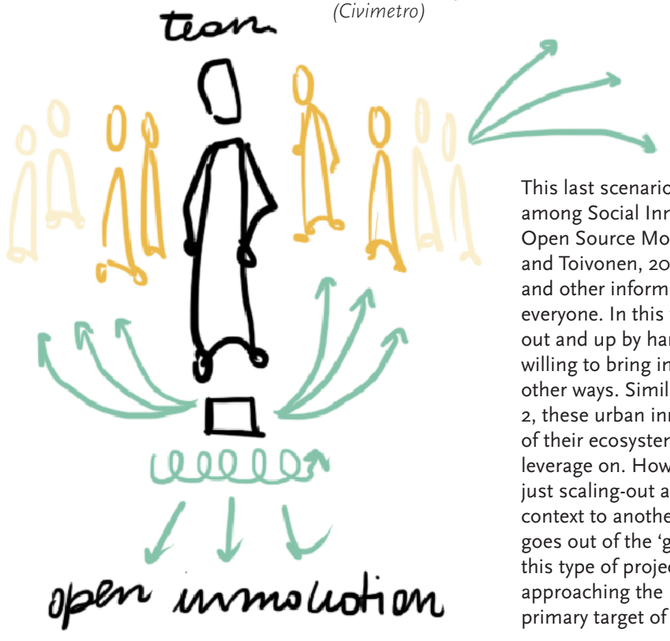





*Figure 29 - B Ticket to Change Scaling Approach*

Ticket to Change is a good example of SI scaling-out throughout generative diffusion, dissemination of knowledge and a third-party delivery approach. The concept of this initiatives started from India, with the Jagriti Yatra Program. Ticket to Change France replicated the same innovative idea and now, through a local champion Team, Push Studio, the project is replicating in Sicily throughout an agreed partnership. Two Teams with a strong local network are collaborating, exchanging culture and knowledge to scale-out and achieve impact.

## Scenario 3
*(Civimetro)*




This last scenario, quite popular and common among Social Innovation projects, scale through Open Source Models (Gryszkiewicz, Lykourentzou and Toivonen, 2015). In this case, the knowledge and other information are made accessible to everyone. In this way the project could be scaled-out and up by hands of many other change drivers willing to bring impact somewhere else or in some other ways. Similarly to the initiatives of Scenario 2, these urban innovators take also advantage of their ecosystem and network of relations to leverage on. However, these initiatives are not just scaling-out and replicating from an urban context to another; since their scaling dimension goes out of the 'geographical (urban) boundaries', this type of project will not be considered when approaching the Design Phase and will not be the primary target of the final solution.

*Figure 29. Scenario 3, scaling through Open Source Models*

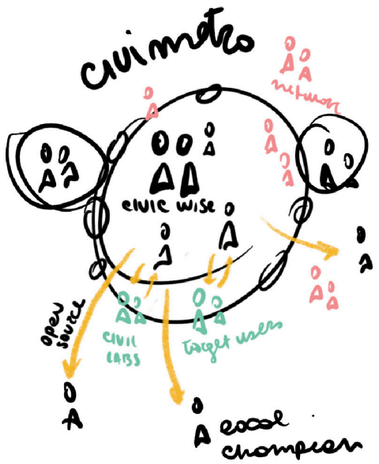



*Figure 29 - A Civimetro constellation Network and Ecosystem*

Among Designscapes initiatives, Civimetro is one example of Open Innovation. Civic Wise, the Team initiating the project is part of a bigger network and ecosystem including of multiple collectives and small companies distributed throughout Europe and Latin America. Despite the international distributed and open network, those collectives are glued together by a strong central organizational culture.

Other than the 'Scenario-Making' technique, storyboards have been also used to empathise with the 'users' and their scaling context, as shown in Figure 30.

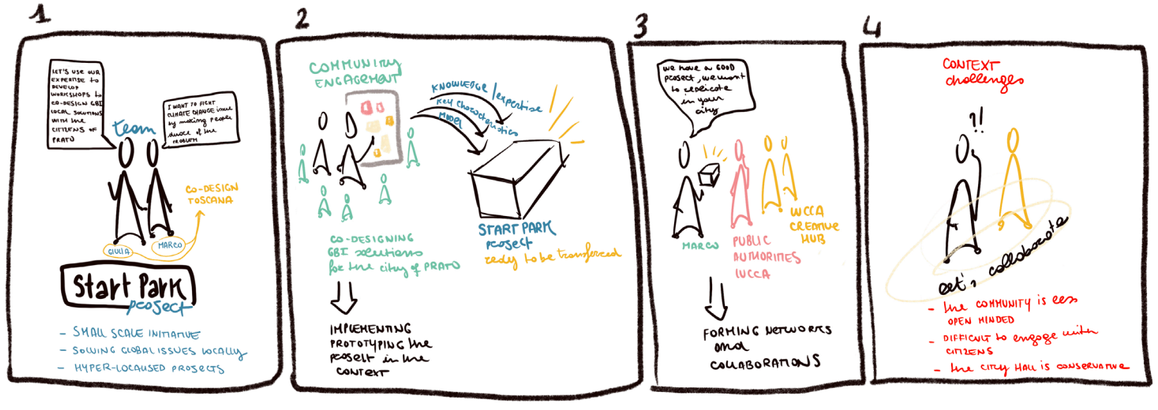



*Figure 30. The Storyboard shows and presents the Start Park initiative and its scaling context and challenges.*

## Reflections toward the next activities

The goal of this chapter was to get an overview of the context and structure of Designscapes initiatives, while simultaneously understand more about the concept of scaling and replicating small-scale hyper-localised initiatives. The Context Mapping activities provided an early understanding of the complexity of the ecosystem those Social Urban Innovators are embedded in and highlighted differences and similarities between the scaling approaches adopted from the various initiatives. These findings helped to draw some Scaling Scenarios; these are like personas that combine various aspects and make a 'prototype one' (Jung et al., 2017). Indeed, the scenarios group together similar scaling principles and strategies and have the potential of giving meaning to data or highlighting insight, such as the correlation between a 'collaborative and open culture' and the willingness of disseminating knowledge to achieve impact or, by contrast, the link between a focus on solution development with a more traditional and business-oriented type of organisational culture. Hence, the insight that **collaboration and networks play a crucial role enabling innovators to replicate culture and disseminate knowledge in order to achieve a larger impact.** These findings led to the formulation of the following assumption which will be further explored in the next research and design activities.

*Assumption*

**To achieve systemic change and a larger impact on society, replicating a solution may not be enough and the exchange of knowledge through a collaborative culture is what is needed for SI to reach their goals.**

Also, from the first round of interviews it has been understood that **multiple elements influence the outcome and the success of implementing and scaling SI. Urban innovators, after having found brilliant ideas, struggle to take root in other places even with the right support and resources** (Cangiano et al., 2017). Although, the underlying causes and reasons of that are still not known and need to be researched on. For these reasons, it has been decided to organize a second round of interviews to explore more about the assumption formulated and dive deeper into some of the insights obtained. The next chapters will present what it has been discovered about the scaling processes, context conditions, the role culture plays, and the challenges of Designscapes initiatives.

# 6.3 Diving Deeper into challenges and scaling processes

## Research Through Generative Exercises and In-Depth Interviews

At this stage, in-depth interviews have been used as a data collection method because it allows for reaching deeper layers (Guion, Diehl and McDonald, 2011; Manzini, 2015). Different initiatives have been contacted and invited to participate in this second round of interviews to understand the scaling challenges' roots. The interviews have been accompanied by some generative exercises (Sanders & Steppers, 2018). Those exercises functioned mainly as 'sensitizers' to prepare the users for the interview, besides being data collection methods themselves.

**Goals of the activities**
This second round of interviews' overall goal was to emphasize the user's context better and collect richer insights into certain underlying aspects not fully covered during the previous interviews, such as the concept of culture. Due to its level of abstractness and complexity, this concept requires different design approaches to be tackled. The generative exercises aimed to map better the complex ecosystem of relations Designscapes initiatives are embedded in, as in Figure 31.
The reasons to focus on exploring networks and the ecosystem of relations relates to the insights gained during Research Phase 1; indeed, 'networks and local partnerships' have been identified as critical factors enabling SI to achieve a larger impact.

*The complete definition of the ecosystem of Designscapes initiatives is presented at the end of RP3, while the role of network will be resumed in the Design Phase*

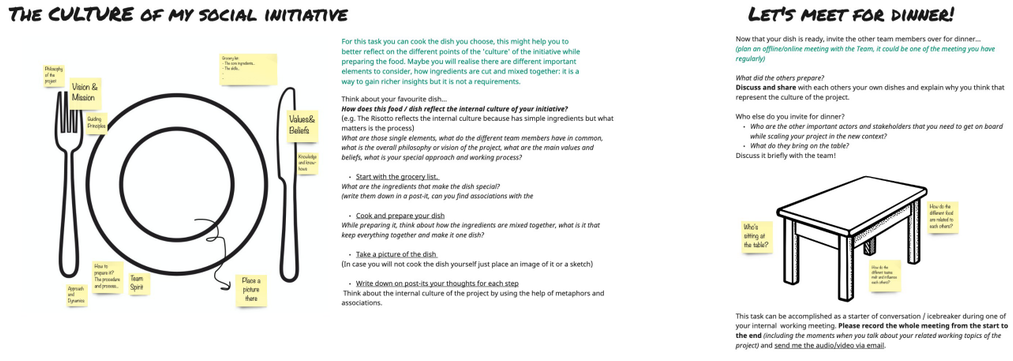



*Figure 31. Screenshot of one part of the several Generative Exercises developed on Miro Board and shared with Designscapes initiative as sensitizing activity to perform before the interviews. This activity make use of the metaphor of 'food' to explore the concept of culture*



## Using metaphors and analogies to do research

### Exploring RQ3 and assumptions about Cultural Replication & Knoweldge Exchange

Some exercises have been structured following the Path of Expression (Sanders & Steppers, 2018); The use of the path of expression helps connect people to meaningful experiences and ideate about the future (see Appendix C). In this way, it is possible to find insights about the relations between goals, aspirations and strategies adopted to scale and reach more tacit layers such as thinking, culture and mindset. Moreover, the generative exercises developed plays with metaphors and uses visuals to trigger and engage with the user. Metaphors have been picked as design element through which carry research. **Different metaphors and visual analogies have been employed for the generative exercises with the intention of making it easier to understand and communicate complex and abstract concepts such as the one of culture.** Indeed, often there are tacit elements which are difficult to express through words, but better to relate with and understand if using metaphors everyone can associate with, like food (Figure 31), planets, nature. The initial idea of using metaphors has been inspired by some examples provided in the 'Convivial Toolbox' (Sanders & Steppers, 2018). **The metaphor will become a recurrent design element through which carry research over the different phases of this project**; more details about the potential of this design element will be presented in Chapter 9.1 of Phase 3.

In this way, **it was possible to dive deeper into more abstract themes and explore the scaling journey of Designscapes initiatives**.
A detailed version of the interview guides, and the generative exercises developed can be found in Appendix C.

By carrying this activity, it has been observed that handing in tasks and exercises in the form of 'online creative tasks' does not work with Designscapes urban innovators due to their busy agenda. Therefore, to have their attention and time, the activity needs to provide them value. For this reason, the next activities will be organized in a more participatory and collaborative manner throughout 'Creative Workshops and Sessions'. While, **the main conclusion of these interviews carried is that choosing the 'right' path to achieve impact is a complex matter.** It will typically involve experimentation and continuous learning (Dees et al., 2004). **Replicating a project to a new context is a long journey along which social innovators face several challenges**. In the next paragraphs, the main challenges of scaling and, more precisely, the one Designscapes are currently facing in their journey will be presented and mapped into 'themes'.

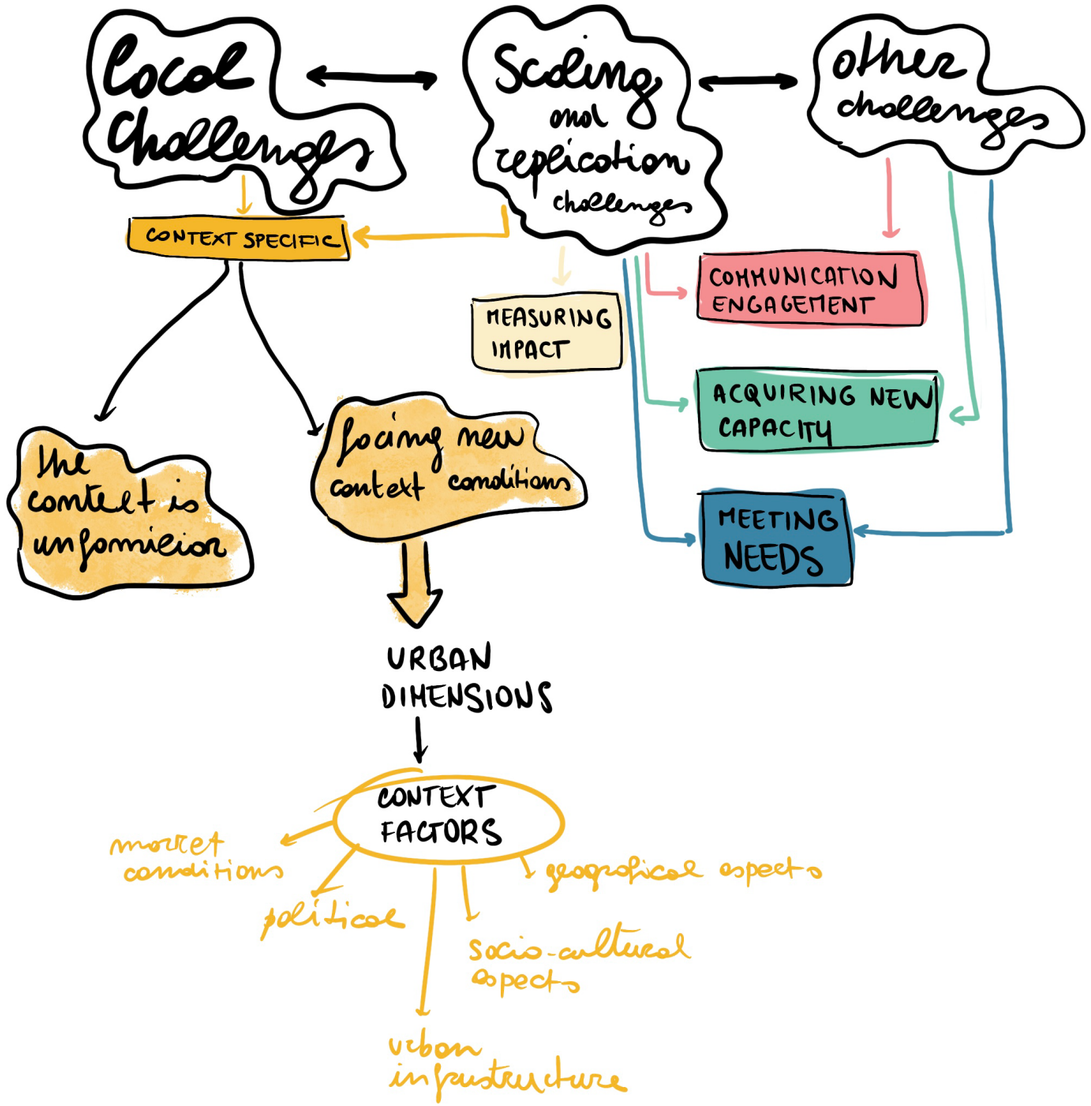



*Figure 32. Overview of the main challenges Designscapes innovators face in their journey*

# 6.3 Results & Findings

## Mapping Designscapes Challenges

During the various activities carried, recurring patterns were found and clustered into 'themes'. Some of the clusters have been categorized as scaling challenges (Figure 32), and summarized in the following themes:

*The themes and challenges identified contribute to the definition of the 'problem space' and will be used to develop one part of the final design outcome*

- Communication & Engagement;
- Build & Acquire (right) capacity (feasibility factor);
- Meeting needs and Align Visions (desirability factor);
- Context-Specific conditions;
- Lack of (financial) resources & Budget (viability factor);

First, a more in-depth and more careful analysis needs to be carried to interpret the challenges identified and then spot the ones relevant for this project's scope; eventually, only some will be taken into account and further explored during the next research and design activities.

As shown in the sketch on the left (Figure 32), there are different type of challenges Designscapes face in their scaling process. However, **the most crucial scaling challenge relates with the fact that these initiatives are hyper-localized project which depend on the local resources and ecosystem they originate from.** Therefore, when replicating in another context they will find **different and unfamiliar conditions**. Those have been clustered into sub-themes or 'dimensions', named as Urban Dimensions, which are presented in Chapter 9.1.

*These research findings will be turned into design outcomes as presented in the Delivery Phase*

Regarding the concept of 'culture' and its role in the scaling process of SI, this is perceived as barrier by the urban innovators especially when it is very different between the two contexts considered. **It is challenging to meet the needs of people with very different values and beliefs or where the social fabric and infrastructure makes things work in a different way.** For this reason the innovation, its features and meanings, could be undermined by those contextual and cultural related factors.

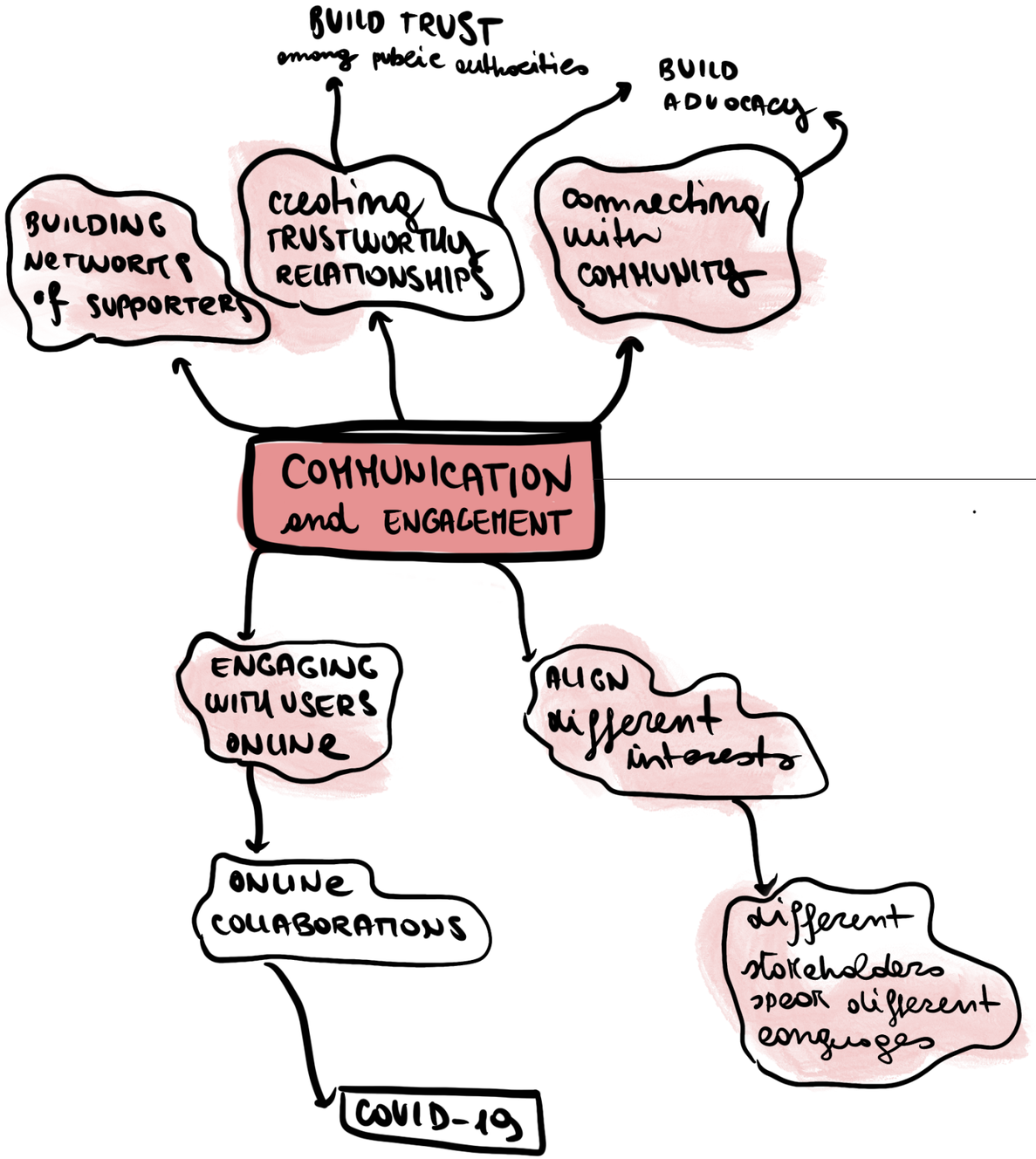



*Figure 32 - A. Zoom-in into the identified 'themes'. Communication and Engagement as a scaling challenge.*

During their scaling journey, urban innovators will have to communicate and engage with different people. For instance, engaging with the citizens to promote their initiative or involve them in early on collaborations to understand their needs; also, they will have to communicate their impact and value to the community and other stakeholders; they will have to build trust among public authorities to get access to funds or gain approvals for specific purposes. Hence, **'Communication and Engagement' is crucial, particularly for SI, which relies significantly on connections, partnerships, and networks to scale.** This 'theme' is central and challenging at the same time for two reasons. On one side, due to the current pandemic situation, initiatives have been forced to shift their communications online; this type of collaboration is not as effective as engaging in a real-life scenario (especially if dealing with less tech-savvy citizens, like elderly or more marginalized communities). On the other side, **it is challenging to communicate and engage with different stakeholders' speaking different languages, but also meeting different needs and aligning diverse interests and visions.**

***What are the challenges urban innovators face when scaling?***

*Understand the current fear of our current community to have effective communication and built trust.*
***Giulia Sala, Ticket to Change***

*'It is more difficult to engage with institutions and local authorities. They are less responsive to certain innovative ideas...'*
***Elisa, Agroplaza***

*'Key requirements and challenge of scaling in different contexts is engaging with different stakeholders, policymakers, citizens, experts... each of them has a different problem that want to be solved, different needs and requests we need to accomplish.'*
***Stefano Tamascelli, City Hearing Log***

*'Communicating efficiently the idea (with the right tone of voice that is good for the different actors) is challenging.'*
***Giulia Sala, Ticket to Change***

*'One of the biggest challenges is to align with different ways of communicating and here is where understanding fails, especially in European Projects where the socio-culture diversity is enhanced.'*
***Silvia Brandalesi, City Hearing Log***

*'Now, that we have to deal with something that we are less familiar with it will be more difficult to communicate gain trust of the people and convince them of our project. On one hand, from the donors that support the project but also from the entrepeneurs... Also because now we don't have this interpersonal relationship that we had in previous projects that was built over years.'*
***Giulia Sala, Ticket to Change***

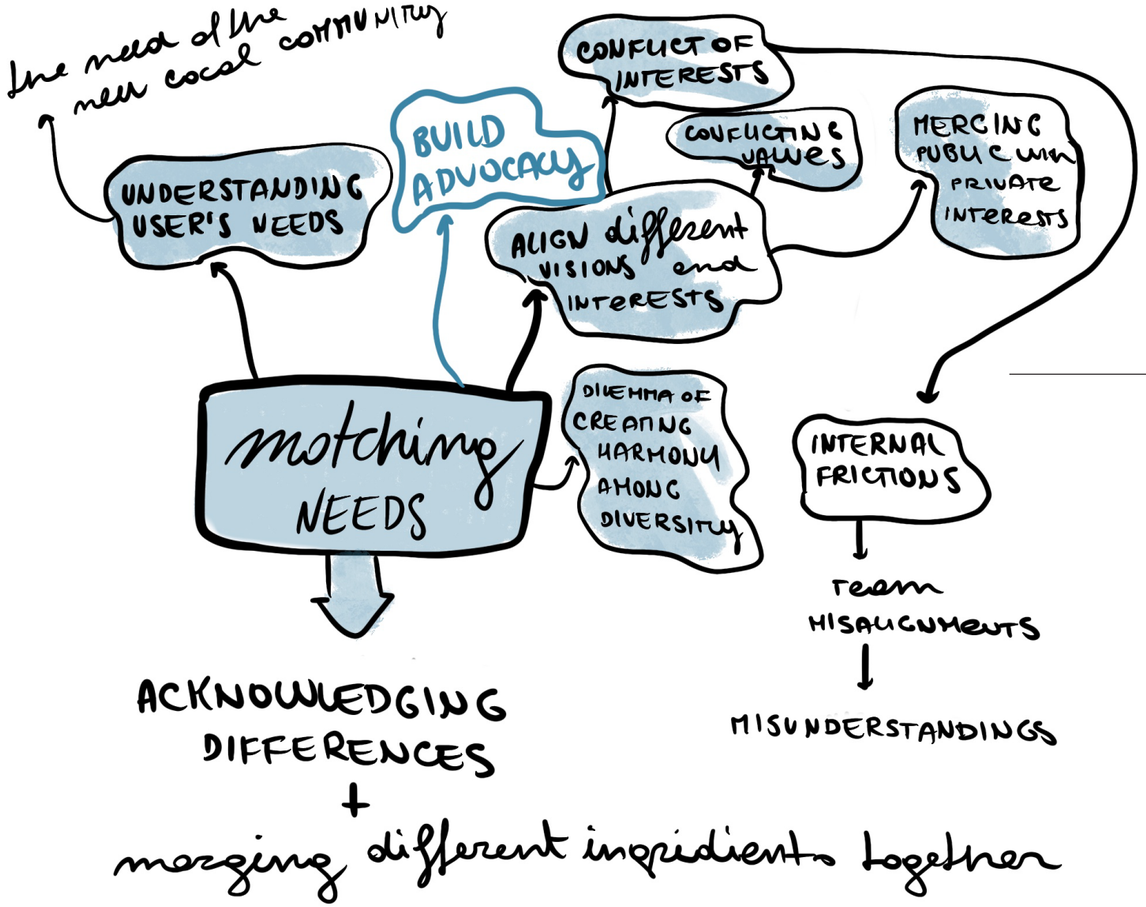



*Figure 32 - B. Zoom-in into the identified 'themes'. The challenge of 'Matching Needs'.*

In this visual (Figure 32 - B), another 'theme' is presented. All the 'themes' identified are somehow connected and correlated with each other. **Any kind of innovation, project or product entering the 'market' has to match the needs of the users or the community to offer something desirable. If desirable, the project will have more chance to be sustainable because it generates demand. In the case of SI, the challenge lies in acknowledging the differences between the people and community needs of the new context and understanding how to align those needs with their interests and other potential stakeholders**, such as the city hall. In conclusion, most of the challenges fall into the importance of **being aware of the differences (of values, needs, interests) between the two contexts of scaling**. Therefore, it will require innovators being able to deal with diversity and merge different ingredients.

***What are the challenges urban innovators face when scaling?***

*'Gli stakeholders che ingaggeremo a Lucca sono estremamente diversi sia per età che per competenze culturali che livello sociale e culturale e non sono nemmeno tutti italiani, è davvero molto ampio.'*
***Marco, Co-Founder of Start Park***

*'Now we need to learn the challenges of the context to be able to respond to the needs and concerns of the community and build a tailored and effective communication.'*
***Elisa, Agroplaza***

*'You need a local understanding of what the problem is there and what the market is there, you need and you need to create a local current culture that work in the specific context.'*
***Diana Popa, Extensio***

*'La ASP ci permette di essere li, sono una porta, ci permette di entrare ma possono anche essere una porta rigida.. qualcosa che ci indirizza dove vogliono andare loro e non dove vogliamo andare noi'*
***Lucca Creative Hub, partners of Start Park project***

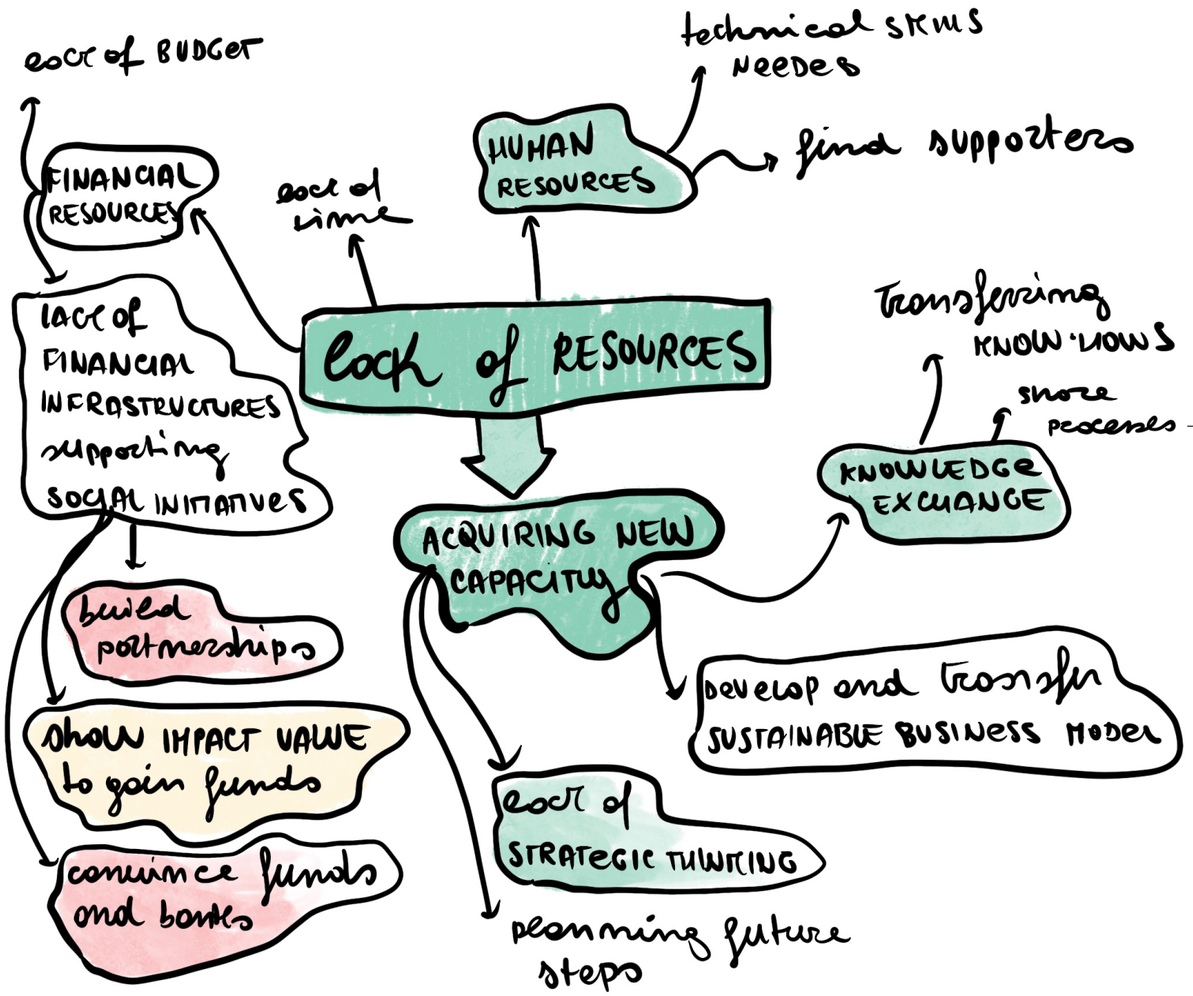



*Figure 32 - C. Zoom-in into the identified 'themes'. The 'lack of resources' when scaling in another context.*

Another big challenge most of these initiatives face lay in a **lack of capabilities and resources to release their potential to grow**, as showed in the sketch (Figure 32-C). The lack of resources is a widespread challenge among Designscapes Social Urban Innovators. **The difficulty in taking root in the new local context is due to the changeability and economic uncertainty, the small scale-size of the project and its social non for profit focus**; as results, these urban innovators often have to **deal with a minimal budget and find other ways to get funded**, for example by specific programs such as Designscapes, or allocated (public) funds. However, most of the time, there is **a lack of proper financial infrastructures** supporting SI to scale, mostly because of **a lack of trust in social projects.** Public authorities which have a more conservative mindset may doubt allocating funds for this type of innovations, or other investors may not see the value in risking to invest in them. In this case, **urban innovators must demonstrate their impact on the overall society and the value generated for each stakeholder.** Although, it is not only challenging having to build trust among public authorities or measure and communicate the impact on other stakeholders. Designscapes initiative **struggle with building up a sustainable business model mainly because of a lack of expertise**; this is essential to ensure early-on entrances to acquire the resources needed to scale.

***What are the challenges urban innovators face when scaling?***

*'Acquiring material in a scale amount. Mass production of products requires different knowledge and distribution than just making a one-off product.'*
***Street Debater project***

*'...when scaling it is essential to transfer know-how with the network of stakeholders'*
***Stefano Tamascelli, City Hearing Log***

*'Our project is about building physical things and we are facing some admin issues.. the enterprise that built our project is local, therefore changing the context is challenging for us.'*
***Elisa, Agroplaza***

*'... we know that we want to transfer, but we don't know yet, or we are learning, how we can transfer it to another organization.'*
***Josephine Bouchez, Ticket to Change France***

*'Replicating the process in other cities. Setting up crowdfunding campaign and an analysis for impact measurament'*
***Rita Duina, Start Park project***

*'Understanding fully the Sicilian context without romanticizing and having clear in mind that the financial resources may be a burden afterall.'*
***Giulia Sala, Ticket to Change Sicily***

*'The challenge of making the 'innovation' simple and accessible for scaling.'*
***Elisa, Agroplaza***

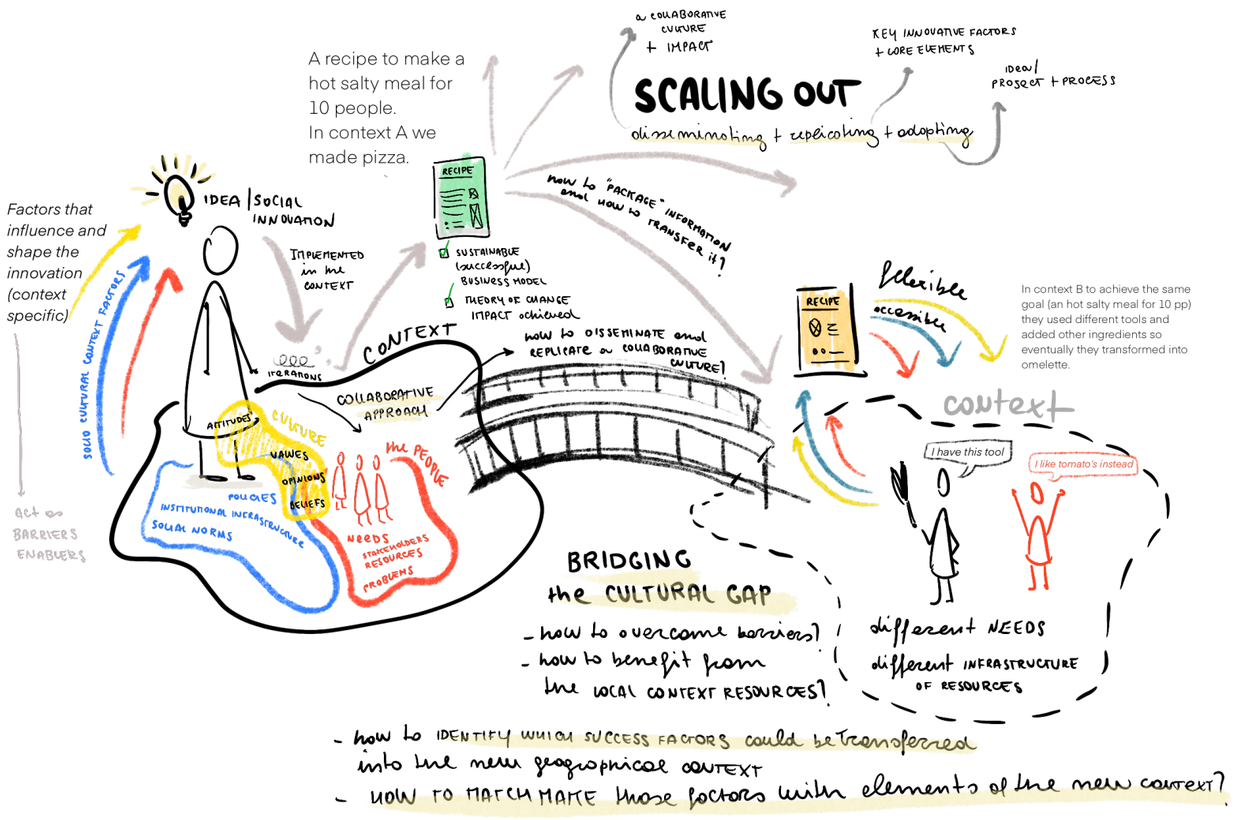



*Figure 33. Visual representative of the reflections and conclusions of the insights and knowledge gained during Research Phase 2.*





# 6.4 Conclusions and Takeaways

## Collection of Insights

When resources are lacking, SI will have to mobilize them by getting support from other local actors. In this case, having networks of relations will be a competitive advantage. It also helps to receive (public) funds.

Peer to Peer connection is what allows SI to build wider networks.

Having an open mindset is a ' must' of SI that want to scale further; however, this open culture should also be shared by the local community to enable innovation.

Inspiring people is essential to drive change and achieve a larger impact.

Designscapes initiatives follow a 'learning-by-doing approach. They work by trying out things and then adjusting them accordingly; hence, a strategic and future-oriented mindset is sometimes lacking among some urban innovators.
*'[...] you make a sprint of the idea to see if it works. '*
[Ticket to Change]

Success for Designscapes initiatives means making something works and learn something out of it.

Most Designscapes initiatives are willing to share knowledge to inspire new local champions and implement the innovation in their local context.

As illustrated in the sketch (Figure 33), with this second round of in-depth interviews it was possible to understand better the factors and aspects influencing the complexity of scaling and the ecosystem these initiatives are embedded in. **Different factors influence the process of scaling when replicating to new contexts**, such as local institutions, the local people, or the local culture. **These context factors may be either challenges or opportunities, but are mostly challenges when the context is 'unfamiliar and unknown'**, which means the context needs to be better understood and explored. In this case, it is crucial to **become aware of the differences and similarities between contexts and take advantage of the local resources when scaling**. In most cases, challenges are related to a **lack of knowledge and capacity due to external forces and context conditions urban innovators have to deal with**.

Independently from the type of scaling pathway one adopts, 'taking a good idea to scale requires a strong strategy and coherent vision, combined with the ability to manage the resources and support, while identifying the key points of leverage as well as the risks and barriers one can encounter' (Cangiano et al., 2017). Therefore, before deciding which scaling strategy is better to adopt, the goals need to be clarified, and barriers and enablers need to be identified. **Understanding which context factors may influence the scaling path is, in fact, the first crucial step to uncover.** This step will be addressed in the next Research Phase through participatory and creative sessions. The goal will be of diving deeper into the contextual factors influencing the Designscapes initiatives' ecosystem and scaling processes, in order to support them capture what to scale.

Unraveling the complexity of scaling by understanding what makes it complex and challenging helped to draw conclusions regarding the concept of 'scale-out and replicate SI'. Hence, **these conclusions led to reframe the theoretical concept of 'replication'**; in practice is more complex than a simple copy-paste of a solution from one place to another because each context has its own socio-cultural characteristics which are diverse and need to be fully undertood.

Chapter 07

# Reframing the Hypothesis of RQ3

*The various research and design activities carried helped to map the context of the Designscapes initiative and gain an initial understanding of their scaling approaches and challenges. With a richer and more complete understanding of what replication means and how it works in 'practice', the theoretical concept of replication (Bradach, 2003; Gabriel, 2014), will be re-framed according to the empirical findings and observations retrieved. Then, the chapter ends with a reflection functioning as bridge between Phase 2 and 3.*



## 7.1 Reframing Replication

*'Nearly every problem has been solved by someone, somewhere. The frustration is that we can't seem to replicate (those solutions) anywhere else.'*

*Bill Clinton, as quoted by Bradach (2003)*

When referring to the social domain, the traditional definition of 'replication' needs to be reviewed and re-framed. Since the urban ecosystem is complex and multiple factors are put in place, SI needs to **learn how to adapt and respond to those influencing (and challenging) factors through iterative learning processes and exchanges of culture and knowledge**.

Next to the re-framing and redefinition of 'replication', with this new understanding and knowledge developed, RQ3 will be elaborated into a more specific and detailed research question, presented in the following paragraphs.

## Implementation with Integrity

**Successful implementation requires learning how to get this intervention to work** reliably in the hands of many different professionals working in different organizational contexts and with other cultures (Bryk, Gomez and Grunow, 2011). It would mean **preserving the benefits a local context could provide without disrupting it but integrating the initiative into its network of stakeholders**. When implementing the initiative in the new context, innovators should integrate that with integrity **without disrupting but preserving their mission, culture, and beliefs and align those with the community's local culture, needs, and values**. As illustrated in the Sketch (Figure 34), replicating to another context could be metaphorically compared to 'making a puzzle', where the SI need to find the 'right' match for the different pieces and in this way eventually match their project with the new context where they are scaling. Indeed, from what has been learnt up to now, replicating does not only mean 'copy and paste' somewhere else, but it could be seen more as **a process of matching the different aspects and elements**, such as needs of the people, interests, visions, own goals and aspirations, cultures and so on.

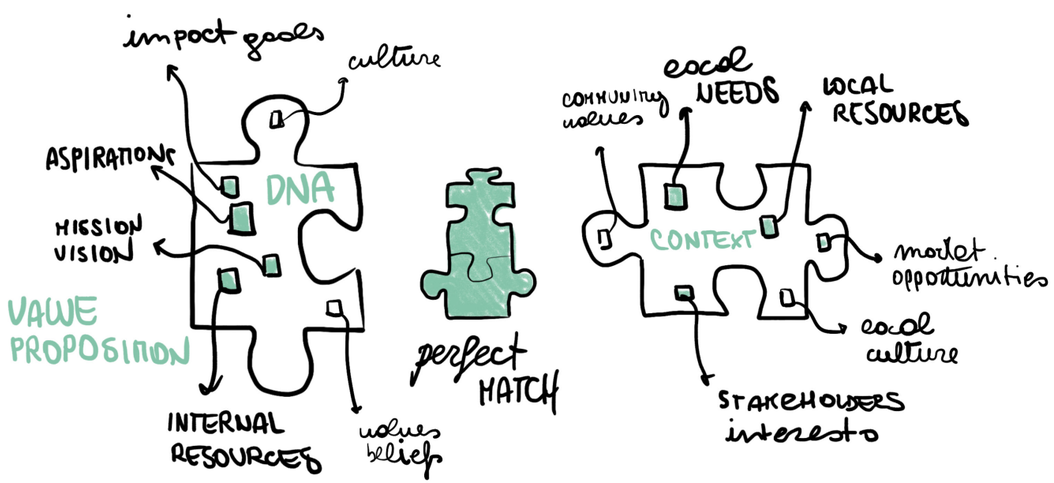



*Figure 34. Metaphorical representation of the re-framed meaning and concept of 'replication' into 'implementation with integrity.*





# 7.2 Reflections toward the next Phase

As a result of this 're-framing', the initial hypothesis formulated with RQ3 ***'Would be cultural replication an effective way of scaling-out SI'***, is rephrased now into a more specific research question:

*Re-framed RQ*

**How can Social Urban Innovators scale and replicate to a new socio-cultural context by implementing their project with 'integrity'?**

This updated research question will be explored during the next Phase throughout Participatory and Creative Sessions with the Designscapes initiatives.

*The ecosystem of Designscapes initiatives and its contextual factors will be further detailed and explored in the next Research Phase*

Furthermore, during the previous activities carried, several challenges have been mapped. Those are the variables influencing scaling SI success. However, among them all, one is the variable that could be identified as most crucial and from which the other ones depend and relate with: the importance context plays in enabling scaling. Therefore, further research activities will be performed to dig deeper into the understanding and exploration of it, with its aspects and factors. Before jumping directly into its 'practical' investigation, some more theoretical knowledge has been consulted (again) to cover some gaps identified, following the praxis set at the beginning of this project (Figure 04, Chapter 02).

## The importance of Context Definition

Context plays a significant role when scaling out. As Gogoi et al. (2014) states, 'the context determines where and how this can be achieved. Therefore, a 'situation' must be well understood within a specific context (PHINEO, 2016). But, ***what does context mean? How can we define it?***

Kersten (2015) defines context as 'a set of circumstances that belong together in which a specific manifestation of a more general problem is experienced'. Ciolfi and Bannon (2011), cited by (Leeuwen, Karnik and Keane, 2011), distinguishes between **four context dimensions: physical, personal, social and cultural**. 'To understand a place and its inhabitants, all these dimensions and their interplay with each other have to be taken into account. **Context is one of the most critical factors in determining a**

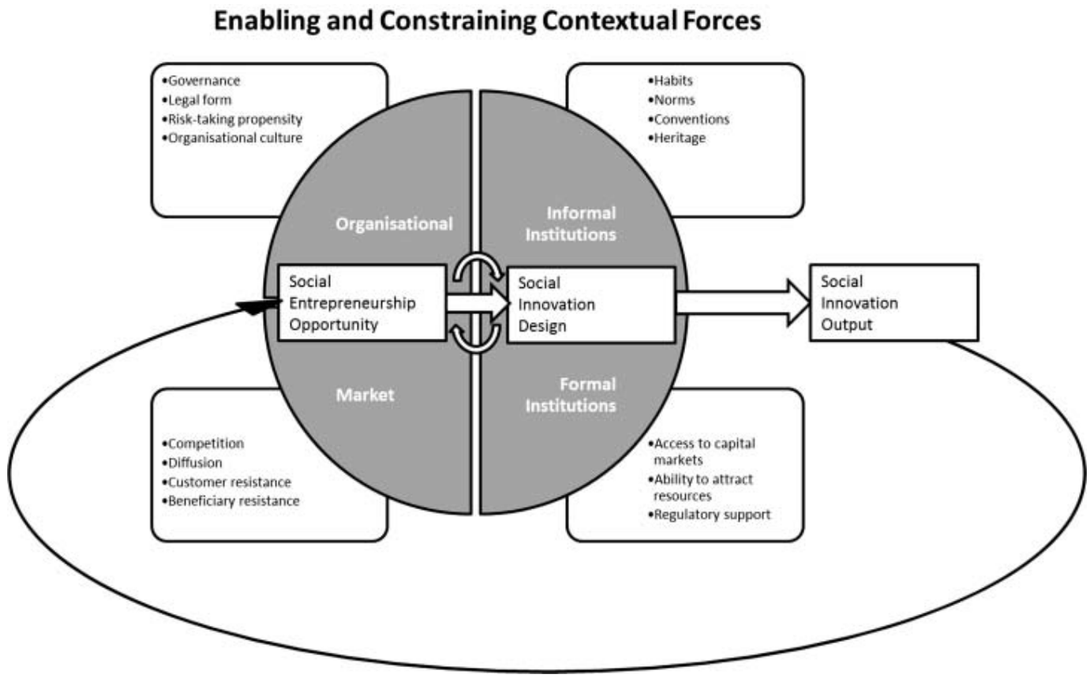



*Figure 35. Enabling and Constraining Contextual forces influences the implementation process of Social Innovations (Newth & Woods, 2014). Image retrieved from http://dx.doi.org/10.1080/19420676.2014.889739*

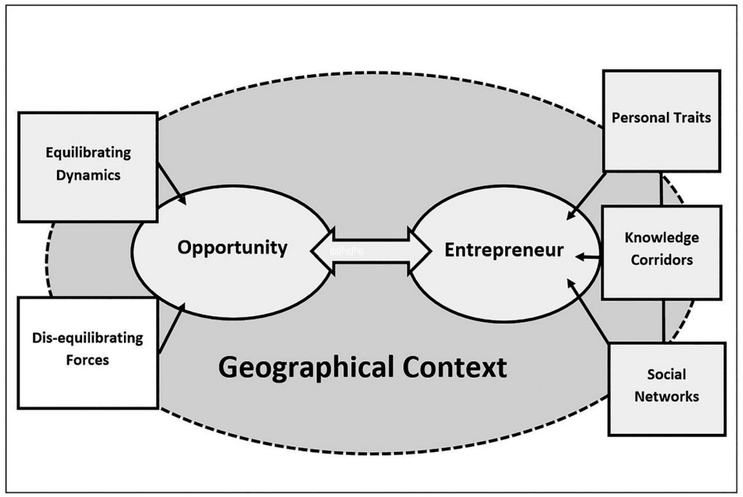



*Figure 36. Entrepreneur–Opportunity Nexus model (Yachin, 2017). Retrieved from http://dx.doi.org/10.1080/15022250.2017.1383936*





**project's outcome** (Krueger, 2013); **it can be seen either as a constraint or a challenge that compels an opportunity to rise**, as explained in the graph of Figure 35.

It is crucial for the case of Designscapes initiatives which are hyper-localized projects deeply connected and embedded in their local context of Origin. In this case, and for the focus of this research project, context is intended at a geographical level as urban context. **These small scale social initiatives are deeply connected with the social and cultural norms, institutional routines, and values of a context and its local stakeholders** (Newth & Woods, 2014).

***Being hyper-localized and context-dependent subvert the capability to replicate, expand, or adapt the innovation somewhere else.***
(Granovetter, 1982 as cited in Verganti, 2008)

Contextual factors are usually perceived as anything from the external world that influences the innovation's scaling process, but **the external factors of the surrounding context are not the only ones to matter**. Indeed, **aspects such as mindset and attitude, organizational culture, capabilities, goals and aspirations of the innovators, the team dynamics play also a crucial role, especially when transferring knowledge and replicating culture**; as shown also in the graph of Figure 36, which illustrates how context factors may become opportunities innovators could leverage on.

Therefore, it would be relevant to dig deeper into the interplay between all these factors to understand better how they are interdependently connected and how they influence each other, this will be the main goal of the next phase. **The context where SI thrive and grow could be defined as a complex ecosystem of interrelations; for this reason, a systemic perspective needs to be adopted, and all those elements need to be mapped**. It is essential to understand all these influencing factors because they will inform the next design decisions: barriers and challenges are opportunities for intervention.

*'Innovation does not happen, scale, or spread in a vacuum; it is the result of dynamic interactions between a variety of institutions and structures, such as markets, political institutions, and culture.'*

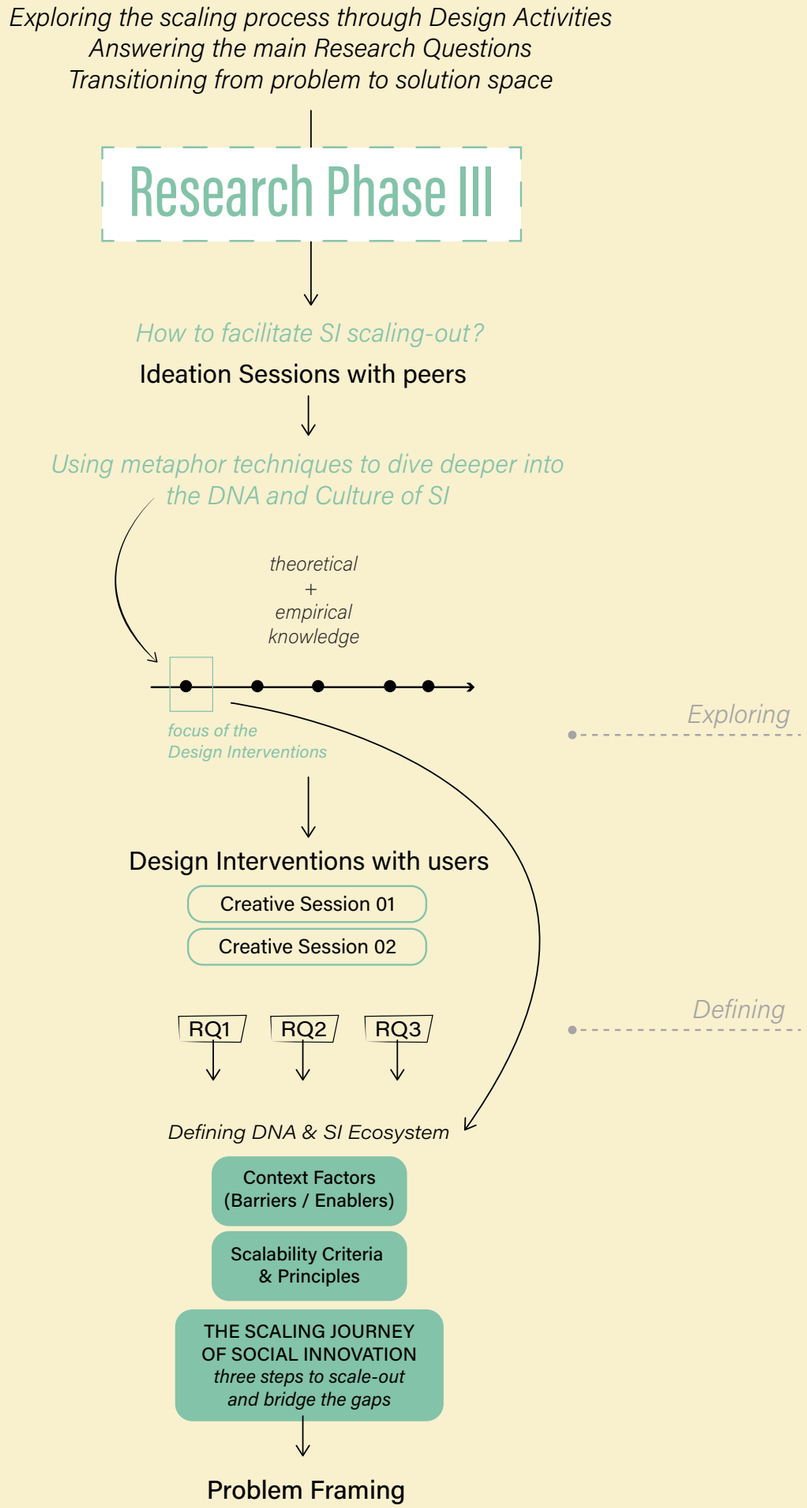
(Acs & Sany, 2009)

**Other Research Questions:**
• ***What are those contextual factors influencing the innovation and scaling process of Designscapes initiatives?***
*What are enablers, and what are barriers?*
*What are the external aspects, and what are the internal ones?*

• ***How do those factors influence each other's and how do they affect the capacity of SI to scale-out in another context?***

• ***What is the role culture play in the context of scaling SI?***
*What is the relation between internal (organizational) culture and the external one of the context?*

In conclusion, to answer the research questions, the context needs to be defined, and its complexity needs to be fully understood. Therefore, in the next Phase various design interventions will be carried with the Designscapes initiatives to dig deeper into the context and culture of theses urban initiatives.




# 3

*Since scaling is quite a complex matter, further research and exploration is necessary. Because of the complexity of the topic, specific tools and design elements are used as research mean and the initiatives have been engaged in a participatory manner in a series of design interventions. On the one hand, the goal is to unfold the scaling journey of SI by looking at how the Design-scapes initiatives do it; on the other hand, the research hypothesis formulated as 'Scaling Framework' will be used as basis with other design elements to support the innovators identify their own culture and acknowledge the context factors influencing their process of scaling. Eventually, the results of the design interventions will be implemented into the 'Scaling Framework' and the scaling process further detailed. Along with the research findings, observations regarding the use of design tools and methods will be also collected to inform next design decisions. One specific design element will be selected and used to dig deeper into the role culture plays when scaling in another context; this element is introduced in chapter 8.*

*This is the last phase of the Research part. In the end, answers to the research questions will be found and the complex ecosystem of Social Innovation and the contextual forces influencing the scaling process presented. All the research findings will help to better frame the problem space and bridge to the Design Phase. However, since research and design go in parallel throughout the project, the explorations will not end with this Phase. Indeed, in the next (Design) Phase, the investigation will proceed with the only difference that it will be more focused on defined design directions, instead of being pure investigation.*

*Figure 37. Structure overview of Research Phase 3*

Chapter 08

# Exploring the Scaling Framework through Design Interventions

*In this chapter, the Scaling Framework previously formulated will be used as a research hypothesis to dive deeper and unfold the scaling journey of Designscapes initiatives, as illustrated in the visual of the process (Figure 38). Designscapes initiatives will be engaged through design interventions and participatory sessions to find richer answers to what is still not well known. The urban innovators will be involved and invited to participate in multiple activities; after each activity, data will be analyzed, and reflections will follow. These interventions will focus mainly on the Scaling Framework's firsts steps: acknowledging contextual differences and capturing what to scale. Indeed, strategies cannot be set without having bridged this knowledge gap first. At the same time, the complex ecosystem of relations and contextual factors influencing the capacity to scale will be uncovered.*

*Capturing the complex system and its elements will help to go deeper into the roots of the problem and discover those barriers hindering the scaling Process. Also, the concept of culture and the related hypothesis will be explored through the use of metaphor techniques to understand better the role culture plays in the context of SI. The overall findings and insights will help to answer the initial research questions and develop an iterated version of the Scaling Framework.*

*Before jumping directly into the design interventions, the value of metaphor will be introduced as the main element used to carry research through design.*



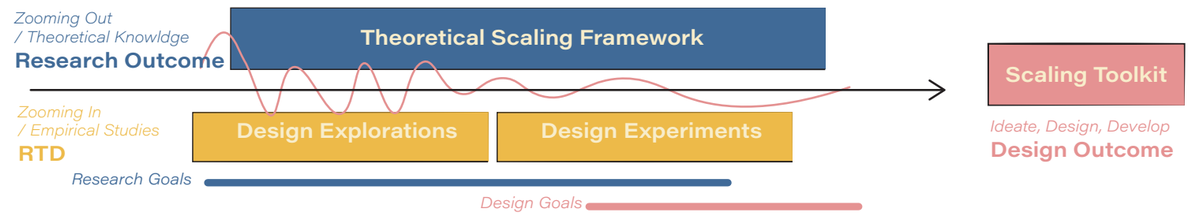



*Figure 38. Graphical representation of the process followed in Research Phase 3 and in the Design Phase. The visual shows the relation between theories and practice and how the research outcomes will lead to the final design outcome.*

# 8.1 RTD elements: the Metaphor Technique

Metaphors and Visual Storytelling will be the design elements used as a constant in this project to carry research with the Designscapes initiatives. These elements will be used during the design interventions to dive deeper into the concept of culture and to unfold the scaling journey of Designscapes initiatives.

The idea of using metaphors, analogies and storytelling techniques has been highlighted during one of the brainstorming sessions carried with design students (the structure, process and results of the session are presented in Appendix D). Among several, the following three insights have been used as references for the development of the following Design Interventions. The main conclusions led the decision to explore further the value and potential of using metaphors to respond to the research goal (Chapter 2.2).

*Insights from the Brainstorming Session carried with design students*

- To understand what and how to implement with 'integrity' and replicate culture is essential to know the contextual background and the reasons behind it. Knowing the background story might help to articulate and transfer culture.
- Involving users in a replication workshop could help to see how different people interpret the same concept, such as culture.
- Using visuals and analogies to articulate abstract concepts.

While functioning as research mean, this element could also accomplish other purposes. Therefore, more research about its values and potential, as design element to conduct research and facilitate innovators to scale, will be conducted. The following 'design questions' have been formulated to explore the potential this design technique could have to do research, the value it could bring to the design interventions, but also as tool to support innovators to scale-out.

- ***Could metaphors facilitate SI dive deeper into tacit layers and articulate the 'culture' to replicate?***

- ***Could using visuals and metaphors help me better explore the concept of culture, and the complex ecosystem of relations SI have to deal with?***

These questions will be explored and addressed during the following design interventions. However, before preparing the interventions, more literature has been consulted regarding metaphors and how this technique has been used for research and design purposes in other projects.





## The value of metaphors according to Literature

According to some design and research studies (Caskin, 2007), metaphors could act as useful tools to understand an unfamiliar situation in terms of a known situation. As such, **metaphors could serve as a tool to make sense of the (unknown) world.** In scaling SI, this could be particularly helpful when replicating into an unfamiliar context where urban innovators have to meet the new local needs, interact and collaborate with unknown stakeholders and probably acquire new knowledge and capacity. **Not only for understanding, but metaphors can also facilitate the communication between different people** who 'speak' other languages or have different perspectives and ways of thinking, mainly **when referring to complex or abstract concepts**. In this case, metaphors will create a sort of common ground everyone could easily relate to. Furthermore, **metaphors help make things visible and have the power to ease collaboration and engage people** (Price et al., 2018; Sanders & Steppers, 2018; van Boeijen et al., 2013); **together with narrative techniques, they can be powerful facilitation and communication tools.**

## Using Metaphors & Visual Storytelling to deal with abstractness

Following the insights retrieved from literature and the discussion with design students, it can be concluded that metaphor could work well to deal with abstractness. This is particularly relevant for this case since the goal is to dig deeper into the complex ecosystem of factors and relations the initiatives are embedded in and understand the role culture plays in that and the scaling process. Moreover, this tool could also work well to enhance the online communication and facilitation of the sessions. For these reasons, metaphors will be used, in the next activities, on one side as a design element to enhance the discovery and dig deeper into the tacit layers of the Designscapes' ecosystem and their culture. On the other side, it will be explored its potential as facilitation tool for online workshops.

The following assumptions have been generated:

**Research and Design Assumptions:**

| | | |
|---|---|---|
| *Research Oriented* ← | *Assumption 1* | **Metaphor techniques may facilitate Social Urban Innovators to capture more abstract and tacit elements lying underneath the surface, such as, for example, culture.** |
| | *Assumption 2* | **Metaphors could help because they make the 'unknown' somehow more tangible, hence easier to grasp.** |
| *Design Oriented* ← | *Assumption 3* | **The metaphor and visual hints could work as a useful facilitator tool to support Social Urban Innovators in their scaling process.** |

However, the way this element will be used in the various research activities will evolve according to the insights and observation that will be collected. A specific metaphor will be chosen as main 'theme', and accordingly, a storytelling developed as a setting for the sessions. In this way, the power and the value of this technique will be explored while using it in the activity.

# 8.2 The Pizza Workshop: *a Design Intervention*

## Goals and Research Questions

**The goal is to uncover the contextual factors influencing the capacity to scale**; hence, the metaphor of 'food' and the analogy of scaling with the 'cooking process' is used in the following design interventions, which I called as 'Pizza Workshop', an online creative session. According to the Scaling Framework developed, **when replicating to another context, SI needs to capture the core elements to scale and match those with the local conditions by developing strategies. The core elements could be associated with the core ingredients of a recipe**, which cannot lack. Those ingredients will be mixed, according to the recipe, with the local ingredients (the local resources), so the session's goal is to understand what those ingredients are, how they will be different or related, and **how everything is mixed together: the strategy adopted**.

The Scaling Framework, presented as multi-steps process (Chapter 5.1), will function as a hypothesis to find answers to the research questions, while diving deeper into the context and scaling process of Designscapes initiatives.

Through the Pizza Workshop, urban innovators will capture the core elements and characteristics of their initiative and understanding how those are influenced by external factors of the complex ecosystem they are part of. **The hypothesis is that by acknowledging and capturing those crucial internal and external factors affecting the innovation to scale, it will be possible to map and find what needs to be scaled.** Therefore, by carrying this activity, answers to RQ2 and RQ3 will be possibly found.

**Research Sub-Questions:**

- ***What are those context factors influencing the innovation and scaling process of SI?***
  - *What are enablers, and what are barriers?*
  - *What are the external and internal aspects that matter most when replicating?*

- ***How do those factors influence each other's and how do they affect the capacity of SI to scale-out in another context?***

- ***What is the role culture play in the context of scaling SI?***
  - *What is the relation between internal culture and the external one of the context?*





**Setup of the Creative Session**
The same urban innovators contacted for the interviews were invited to participate in this Participatory Creative Workshop. In the end, the teams of Ticket to Change and Start Park initiatives took part in the session, with a total of three participants per session. Both sessions have been held online, through a Zoom Call and carried on the digital board of Miro.

## Structure & Process

The Creative Workshop has been structured in a 'fun' way to keep people more engaged in an online setting and structured using the food metaphor. This metaphorical and storytelling setting responds to two main functions: on one side as research means, and on the other as a facilitation tool to help the participants dive deeper into more 'hidden' layers and support the dialogues and discussion when talking about 'fuzzy' and abstract concepts. It has been researched (Price et al., 2018; Sanders & Stappers, 2018; van Boeijen et al., 2013) that metaphors, storytelling and narrative techniques are effective communication tool and powerful way to connect and engage with people.

The session started with an introduction and icebreaker exercise. The icebreaker used the 'analogy technique' (Heijne and van der Meer, 2019) to make people feel at ease and getting used to thinking per metaphors. Afterwards, participants were invited to start mapping what should be scaled; those 'ingredients' were mapped in a matrix grid framed as 'Grocery List', as showed in Figure 39-A. It is a first step to acknowledge what needs to be preserved and what will need to be changed when replicating in the new context. In this way, I could retrieve some more insights regarding what is crucial for scaling SI and potential factors influencing this process. To dive deeper into understanding the differences and similarities between the two contexts and the different elements affecting the process of scaling, the 'analogy technique' and the 'role play' methods have been used because of their characteristic of sparking 'out of the box' thinking (Heijne & van der Meer, 2019; Sanders & Stappers, 2018; van Boeijen et al., 2013), but also to foster an interactive and collaborative environment.

As pictured in Figure 39-B, participants were asked to think about analogies and use the images to capture what to scale. After acknowledging what they have and what they need, they will metaphorically go to the supermarket and get those missing ingredients needed to proceed in the scaling process. At this stage, I asked participants to share out loud why those chosen elements were crucial so that I could dive deeper into more tacit layers to understand the reasons beyond the obvious.

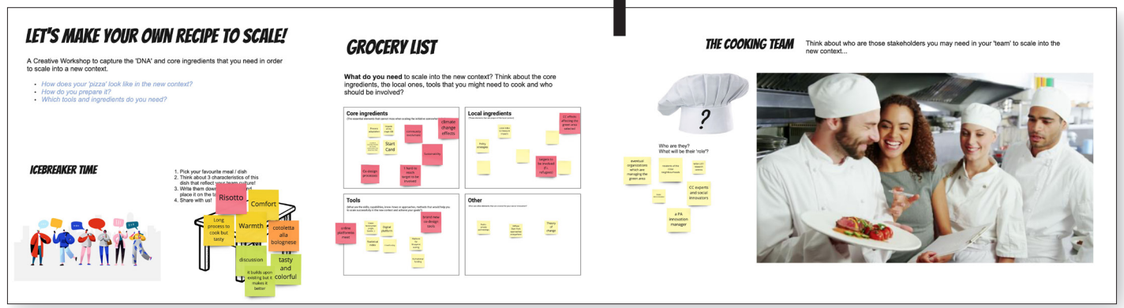



*Figure 39 - A. Screenshot of the Pizza Workshop set-up on Miro board. Here the image shows the Icebreaker and the first steps of the creative session where participants were asked to map the local and core ingredients and the stakeholders involved in the process.*


*Figure 39 - B. Screenshot of the Pizza Workshop set-up on Miro board illustrating the second step of the session: acknowledging the ingredients needed, what should be scaled and resources lacking which need to be mobilized.*

The participants were then split into two teams and asked to map the 'ingredients' of their context which their own pizza as showed in Figure 39-C. This step was crucial for me to understand differences between context conditions, how they could be related with each other, what is the potential influence they have on the innovation and scaling process and whether recurring patterns or common 'dimensions' between the contexts could be identified to draw some more general conclusions. In an open discussion, participants started comparing and acknowledging differences and similarities between the two context, arguing what influence what and what is crucial. In the end, this led them to collectively think about how to make the project work in the new context (Figure 39-D). Through this last step, participants could capture the core elements of the project and the initiative's culture while aligning on the same visions and missions. This was insightful to understand how the Designscapes initiative perceives culture and how it plays a role in the scaling process.

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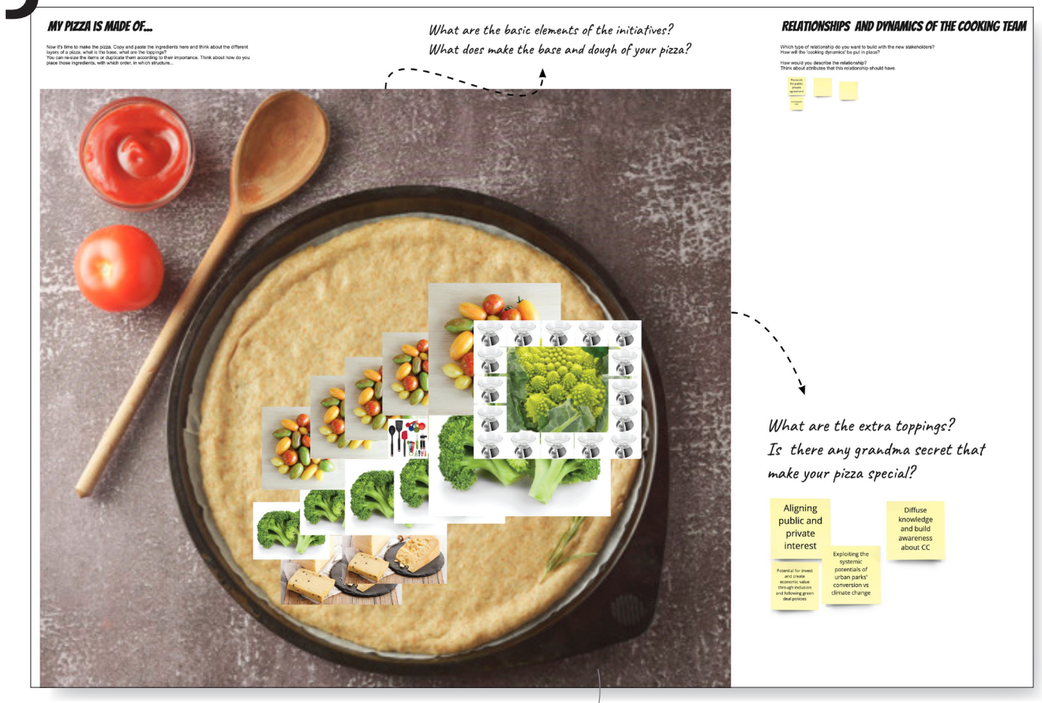
*Figure 39 - C. Screenshot of the Pizza Workshop set-up on Miro board. This step is about capturing the DNA of the initiative, the core element to scale, the internal culture and other external factors playing a role in the scaling process.*



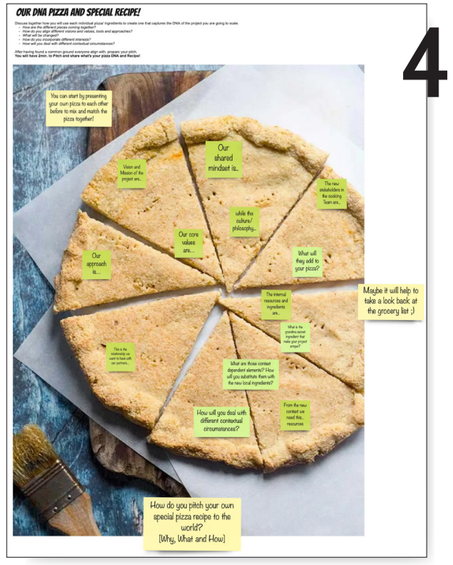




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*Figure 39 - D. Screenshot of the Pizza Workshop set-up on Miro board. Last step of the session is about collectively aligning on what to scale and start thinking about strategies on how to scale.*

# 8.3 Results & Findings

*The results and findings of the Creative Workshops led to an iteration of the 'Scaling Framework' and contributed to the (re)framing of the problem space. This chapter presents the main results of the two sessions carried.*

## Answering the Questions

***What are those context factors influencing the innovation and scaling process of SI?***
While trying to map the complex ecosystem of Designscapes initiatives and capturing those contextual factors that could influence the process, it came out that there are several factors of the 'external' context influencing the capacity to scale. It is interesting that those factors are not 'barriers' per se, but they are perceived as such when they are different or unknown; when something is unfamiliar and unknown, it is naturally perceived as a threat. However, diversity could also turn into an opportunity. Those differences need to be acknowledged to make fair use of the local resources offered.

*'I think that we also need to realize the existing differences and valorize them as much as we can. The thing that we are going to find in Sicily, we have to be mindful of the differences in the ingredients that we have on the table.'*
[Giulia Sala, Ticket to Change Sicily]

***What are the key factors and core elements that would help urban innovators scaling in the new context?***
Being part of a connected network of relationships is a competitive advantage. It helps the innovators leverage and expands the initiative in the new context. It is a way to acquire resources or access more funds through strategic partnerships and know the local community and its culture.

*'Having a partner that is local and part of the community, like a gatekeeper as a partner to deal with the new context.'*
[Rita Duina, Start Park project]

Besides that, building a strong network of relations means finding potential 'local champions' and actors willing to take over the project and diffuse it in multiple other locations to achieve a larger impact. Therefore, it is vital to inspire and motivate others who could share the same visions and values.

***What is the relation between internal (organizational) culture and the external one of the context? What is the role culture play in the context of scaling SI?***
During the session, it has been observed that among the Designscapes initiative, there is not always a proper acknowledged and defined internal organizational culture. Indeed, when referring to that, participants did not know what 'internal culture' meant, and everyone had very different interpretations of it. However, most Designscapes innovators share a collaborative culture and an open mindset. They are willing to learn and open to collaborate and engage with the local community. Therefore, having an open mindset and sharing a culture of collaboration will enable innovators to scale across contexts.

*'[...] maybe this is more our vision and the mindset and culture is .... the importance of adaptation in the local context [...] the shared mindset we have is the openness to learn from experience and listen to the new context.'*
[Hanna Rasper, Ticket to Change Sicily]

*'Having flexible processes and methodologies.'*
[Marco, Start Park project]

***How are Designscapes going to replicate their initiative in the new context?***
Similar patterns have been identified among the initiative regarding the 'steps' or approaches adopted to scale. Most of the Designscapes initiatives adopt a learning-by-doing approach. However, during the sessions, this approach has been unfolded and translated into crucial steps the innovators plan to follow to proceed in their process:
- **Understanding the context before to define what and how to scale**
- **Adapting the strategy to goals, vision and context conditions.**

In addition to those, a great insight has been retrieved regarding their way of scaling throughout mutual learning, culture & knowledge exchange. One of the initiatives pointed out the importance of learning from previous experiences and using that knowledge to scale in the new context by transferring and disseminating specific know-how. Hence, some initiatives are not only focused on replicating the project itself, but they are willing to diffuse knowledge and build capabilities to achieve a larger impact. It has also been highlighted the importance of being open to learning and being flexible to adapt, change and iterate because scaling is a cyclical process.

*'Understanding fully the tools and the ingredients that they have is going to be the first step for us even before starting making the pizza.'*

*'... we know that we want to transfer, but we don't know yet, or we are learning, how we can transfer it to another organization.'*

*'Learn from the experience in France and to adapt the learnings in the Sicilian context.'*

*'And then you readjust, and then you do all over again.'*

[Push Studio Team, Ticket to Change Sicily]

## Potential and advantages of using metaphors

***How have the Designscapes innovators' perceived metaphor, and what do they think about this tool?***

During the sessions, metaphor techniques demonstrated to be an excellent facilitation and communication tool, **helping turn abstract concepts into something more tangible,** hence easier to grasp or communicate. However, careful attention needs to be put on the way they are used. According to the feedbacks, the way the metaphor was used in the session made it difficult to go back to concrete levels and tangible results.
*'It's nice to go into this metaphorical word, but in the end, we need to bring it down to earth again.'*
[Josephine Bouchez, Ticket to Change France]

The advantages of using metaphor techniques:

**1. It fosters engagement and makes communication easier.**
Beyond a screen, it kept the attention high along with the whole session and generated a more personal and intimate interaction between the people involved.
*'Since it was fun and playful, I did not feel it was 1.30h of the workshop. Compared to others were in the end, you lose engagement and get easily distracted (especially in remote).'*
[Giulia Sala, Ticket to Change]

**2. It creates a safe and playful environment,** where participants feel at ease to express mutual appreciation, engage in open discussion and interact with each other at a deeper level.
*It was cool to have this type of workshop that is functional to the project, but at the same time, it gives us the chance to understand other more personal parts of ourselves.*
[Hannah Rasper, Ticket to Change]

**3. It empowers users translating challenges into something tangible and accessible.** Using such playful metaphors allowed them to perceive the challenges and problems more lightly, opening up the perspective that nothing is impossible.
*'Having these metaphors with food made us think about this problem, the challenges of the project from a different perspective. That is a bit more light.'*
[Hannah Rasper, Ticket to Change]

*'It makes challenges more approachable and feels at ease when talking about complex topics.'* [Giulia Sala, Ticket to Change]

Because of the insights derived, I decided to explore this design element and use it not only for research purposes but also as design tool to accomplish the design goal. The results raised the idea of **using metaphors as a sort of storytelling technique to navigate the users through their scaling process, empower and facilitate them overcoming the challenges faced along the path**. While, in this phase metaphor has been used mainly as a research tool, it will be integrated and experimented as part of the concept prototype in the Design Phase.





# 8.4 Conclusions & Takeaways

## Scaling as a cooking process

On one side, the intervention intended to explore more in-depth the complex ecosystem Designscapes are embedded in; on the other hand, it aimed to explore and capture the role culture plays in this context. **The metaphor has been used as exploration mean and design element facilitating the urban innovators to dive deeper and unravel the relations between those contextual factors influencing scale**.

While reflecting on the insights collected and following the metaphorical storyline, it can be concluded that scaling is like a cooking process, as illustrated in Figure 40. The initiatives follows three main stages when scaling, similar to what has been hypothesized in the Scaling Framework. However, something new has been discovered and highlighted to pass from Step 1 to 2 and 2 to 3, SI need to bridge two 'gaps', which could be pictured as main scaling challenges to overcome in order to implement the project in a new contexts.

**PROBLEM FRAMING: Bridging the Gaps**
Let's imagine the first step as the grandma that wants to transfer her recipe to the grandsons; in this case, it is **a knowledge gap that will need to be bridged. This 'cognitive' gap is the first Social Urban Innovators will encounter on their path**. The challenge consists of being able to transfer what has been learnt from the implementation of the project in the first place (the core elements of the innovation and the success factors) so that the key learnings can be applied to the implementation in the new context or transferred to who will be in charge of that. In addition, **this challenge require the urban innovators to understand what should be scaled; in a certain way is about replicating a learning process while learning something new** of the new context. Then, mix all those 'key ingredients' together to create the perfect 'match' or 'recipes' to scale, in the form of a strategy.

At this stage, as visualized in Figure 40, the ingredients will be collected (acknowledged and captured), **'culture' and knowledge will be exchanged and processed**. The second step corresponds to the 'cooking' moment where **all the ingredients captured will be mixed to generate an 'adapted' version of the original recipe, which suit the local resources, contextual conditions and people's needs**. At this moment, strategies to scale will be developed, and in this way the innovators will be able to bridge the second gap: the context gap. In this case, the challenge consists of **understanding how to make the project work in the new context**, 'cooking' something that fits with the 'local' ingredients and 'tastes' of the people.

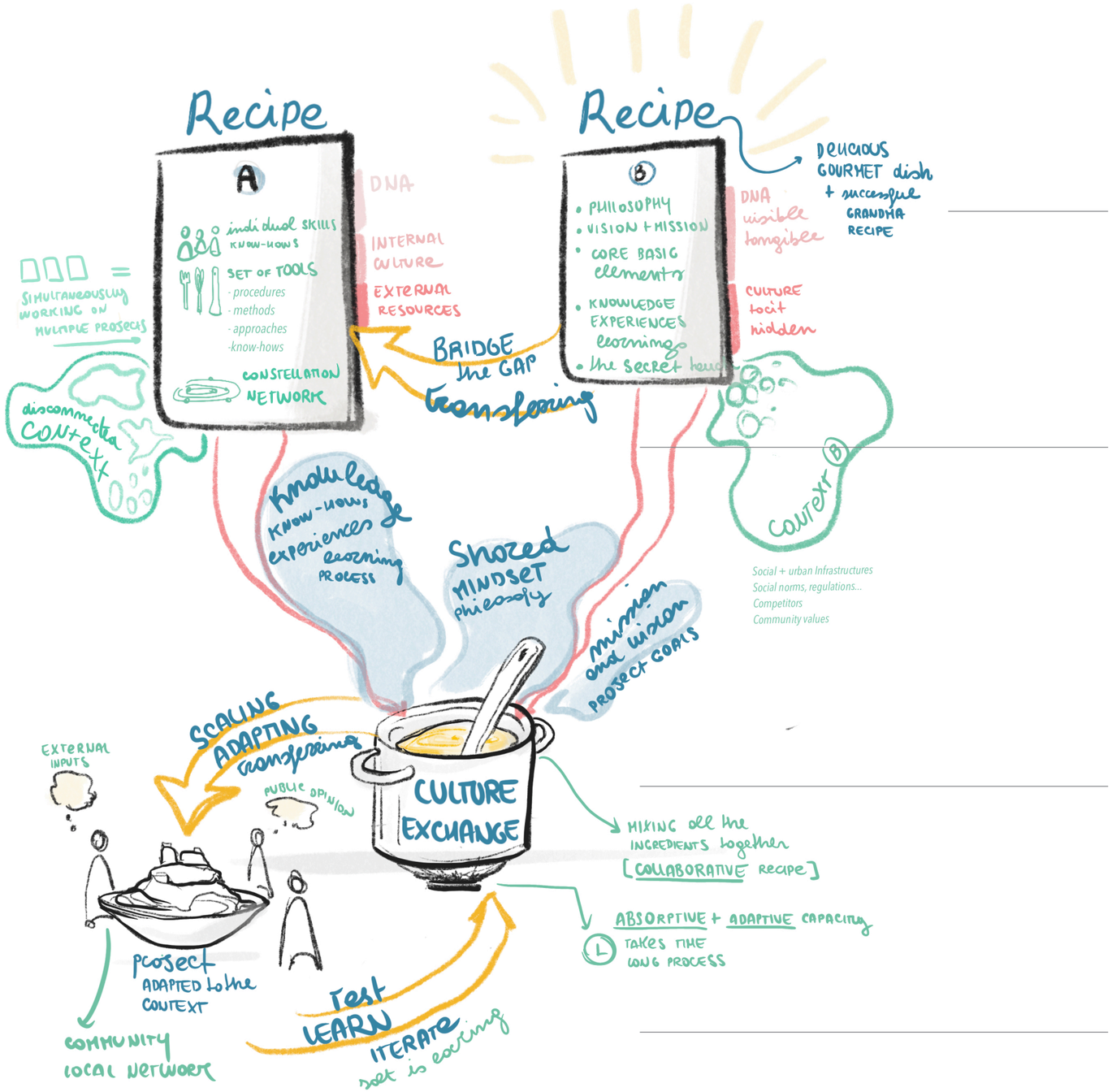



*Figure 40. Conclusions and insights resulted from the intervention. The process of scaling visualized following the metaphor of 'cooking'.*

*'We know how certain things are working in Sicily. We know certain things about the context now is about massaging the situation..'*
(Giulia Sala, Ticket to Change Sicily)

## 1 Acknowledging & Capturing

### What to scale

*DNA, Culture, Key success ingredients, context conditions...*

*'The program we developed at TfC France is like a set of knifes... depending on what impact/ goals we want to achieve then we have to choose what is worth of scaling and replication. Not everything need to be transferred.'*
(Josephine Bouchez)

## 2 Articulating & Transferring

*'... we know that we want to transfer, but we don't know yet, or we are learning, how we can transfer it to another organization.'*
(Ticket to Change)

*Maybe this is more our vision and the mindset and culture is .... the importance of adaptation in the local context.*
(Hannah Rasper, Ticket to Change)

## 3 Exchange Knowledge & Culture

*It is a collaborative and learning process where all the ingredients need to be mixed together*

*It's not about the ingredients which look simple, the know-how to make something efficient in fact for inspiring is hard to do.*
(Hannah Rasper, Ticket to Change)

## 4 Adapting, Learning & Iterating

*Implementing the project in the new context is a continual adaptation and evolving process*

*'...then we adapt to what you tasted in season your product very nicely. Then going and loops and do it all over again. Start 'remoulding''*
(Giulia Sala, Ticket to Change)

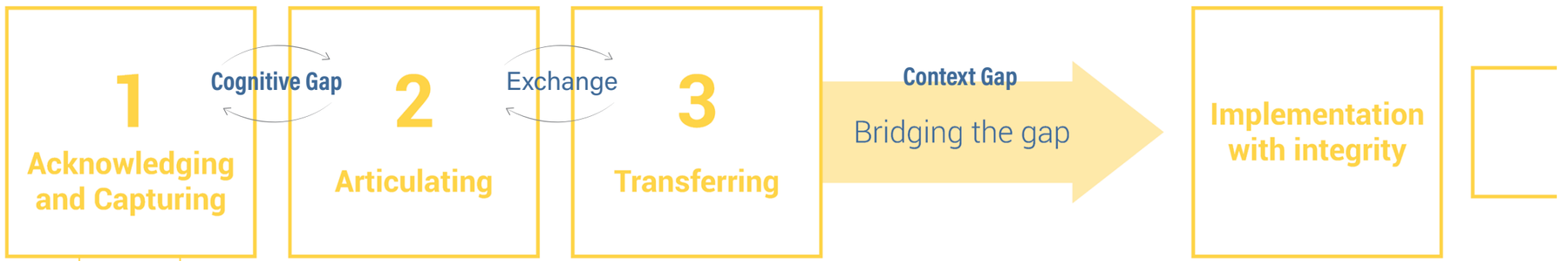



*Figure 41. Iteration of the Scaling Framework as result of the insights collected during the Pizza Workshops.*

The insights of the 'Pizza Workshops', as summarized in Figure 40, have been implemented, through a reflective approach, in the 'Scaling Framework' as picture in the iteration of Figure 41.

In conclusion, scaling SI is **an exchange process** where multiple complex ecosystems and factors come together and melt with each other. **The challenge Designscapes innovators face is understanding those (different) ecosystems and then finding an effective way to merge them or bridge the gaps presented along the process**. As said, scaling is like a cooking process, and as such, ***everyone can cook, but everyone will cook differently***, and every time in a different way. Indeed, SI is deeply rooted in a complex ecosystem of interrelated factors that influence the overall result and process. Capturing the 'formula' to scale, meant as identifying the successful ingredients that could fit the new context conditions, is not enough because deciding what to scale does not tell how to do it. It is not only about the single ingredients' 'per se', but what matters is how those ingredients are mixed and 'cooked' together, the process and strategies adopted to get the result wanted. On one side, it is about **understanding this complex ecosystem of relations and factors influencing the innovation** (presented in Chapter 9.1); on the other, once captured, it will be about **finding 'effective strategies' to bridge those gaps and generate the desired impact** (presented in Chapter 9.2)**.**

*The conclusions from the interventions led to a better understanding of the 'problem space' and more specifically what makes scaling such a complex process. The next Chapters will present these various factors influencing the process of scaling SI, and their role in hindering or enabling the capacity to do so. While, at the end of Chapter 9, the Scaling Framework will be iterated one last time before bridging toward the Design Phase.*

Chapter 09

# Defining the Problem Space of Scaling SI

*This Chapter will first explain all the elements and 'ingredients' that are part of the problem space and crucial to consider when scaling-out SI. Then it presents the final version of the Scaling Framework as the research outcome of this part of the project, which combines all the research findings and insights retrieved over the three phases. The chapter ends with framing the problem space, in this way a bridge will be made between the research and the design phase. However, this is not the end of research because more explorations will also be conducted during the design phase to experiment the 'Scaling Framework' further and use that to develop the final design outcome of the project.*



# 9.1 Capturing DNA & Ecosystem

## *The Crucial Factors influencing Scaling SI*

Since the scaling potential depends much on the local institutional cultures and practices as much as on trans-local relations, **a socio-cultural and systemic perspective is necessary to comprehend the possibilities and particularities of the contexts in which scaling pathways enfold**. It will allow for a reflection on the conditions that could be transferred from a place to another and the factors enabling or impeding these processes (Mulgan et al., 2007; Acs and Sany, 2009). According to the Scaling Framework (Figure 41), **the first step toward replication is 'acknowledging and capturing what to scale'**. To capture what to scale, Social Urban Innovators need to look inside and outside, **acknowledging all the factors influencing the innovation and scaling process**. This means **capturing the DNA of the project and understanding the complex ecosystem** surrounding it.

## The relation between DNA and its Ecosystem

Capturing the DNA means taking an inside perspective to identify the critical features of the intervention and its deeper meanings and looking at the contextual circumstances influencing the implementation process (Mortati & Villari, 2014). Cultural norms, values and governmental policy influence the likelihood of scaling to the next context — in this case, the ecosystem of relations (Visser et al., 2005) the initiative is embedded in and interacts with plays a significant role in scaling the innovation somewhere else (Keskin, 2015). An analogy has been drawn between the biological concept of a living organism's DNA and the initiatives. According to the scientific definition, DNA has the role

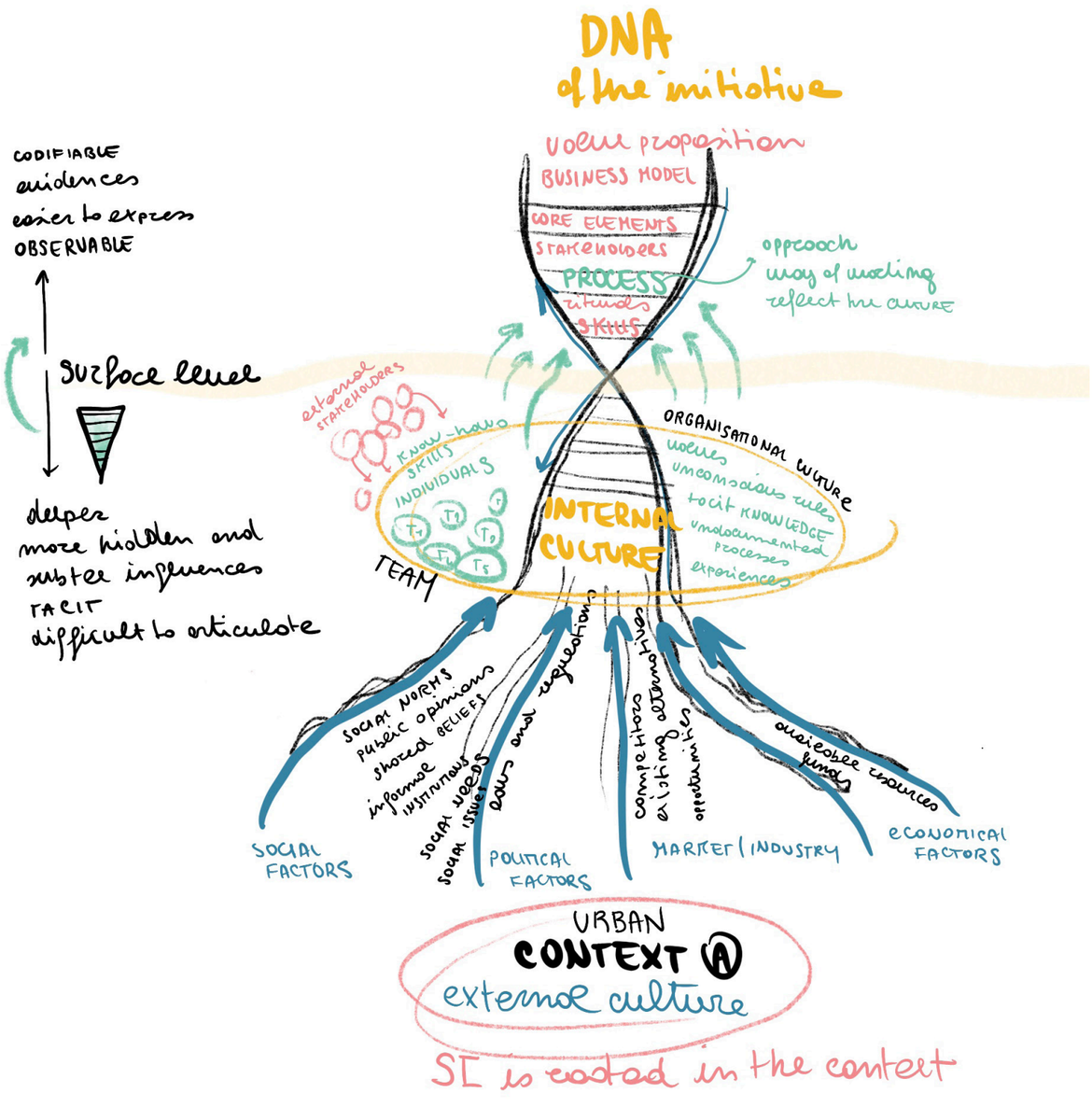



*Figure 42. The sketch illustrates how the ecosystem and DNA of the initiative are interconnected and it highlights the external conditions that influence the internal culture and aspects of the innovation.*

of replicating and storing genetic information. So, it is the archive, the hardware. The DNA allows an organism to exist and makes it unique; however, **the DNA is just a tiny part of a bigger ecosystem**. It is essential to zoom in with the microscope and then zoom-out to see **how everything is put in a relationship and how each part influences the other**. Only in this way will it be possible to understand the organism and its whole system thoroughly because the DNA is just a static tiny part of a bigger plan, the living organism that interacts with external factors. Those will influence how the organism acts and behave in a specific context scenario. Something similar happens with the Social Innovations. Moreover, the DNA is usually the remote part of an organism, reflected through visible traits and characteristics. For instance, in the SI case, those aspects could be the product offered and the innovation features, business model, value proposition, vision, and mission statement. **Some of these characteristics are the DNA's inheritance and cannot change, while others will vary according to the external environment.** A change of context will consequently activate changes in certain aspects of the organism, as Darwin explained in its theory of evolution, 'On the Origin of Species' (1859). Similarly, SI evolves and adapts by responding to the community's specific needs and local resources available. To some extent, the concept of DNA could be compared to what in the marketing field is called 'unique selling proposition' (USP), or what, in the design domain, is named 'Value Proposition': the added value to what is offered, the benefits and values generated for the users and other stakeholders. However, in the context of scaling SI, it is more complicated than that.

*'[...] we try to write down what is our secret sauce [TfC France] to transfer it...'*
Josephine Bouchez

*This paragraph presented the complex relationships between DNA and Ecosystem, the external and internal factors influencing the process of scaling SI. Indeed, context and cultural conditions and the inner traits of the initiative are interconnected and interdependent from each other, and they could either play the role of enablers or barriers when scaling-out SI. The following paragraphs will present the crucial enablers and barriers identified while researching the context of Designscapes initiatives. These enablers and barriers are categorized as external conditions, the Urban Dimensions, and internal aspects, the Urban Innovator's Traits.*

*These research findings will be translated into a design tool; turning challenges into a facilitating tool enabling the capacity to scale of Social Innovators. It will enable them capture 'What to Scale'.*

## The ecosystem of Designscapes initiatives

# The Urban Dimensions & Context Gaps

The Design Interventions (Chapter 08) aimed to dive deeper and capturing the contextual factors influencing the capacity to scale. Those insights have been combined with the main scaling challenges presented in Chapter 06 (pp.86-93), and translated here as 'Urban Dimensions' (Concilio & Tosoni, 2019) **the contextual factors influencing scaling**. Those dimensions are clustered in the following categories:

**The Political Arena**
It can be described as **the space of political discourse and the local context's institutional capacity to support innovation processes** (Concilio & Tosoni, 2019). In this case, we refer to the type of institutional infrastructure, the laws and regulations preventing innovations from taking root in the territory. When scaling in a new country or city, SI may face differences in the government structure and laws, bringing to readjust and review certain features and aspects of the innovation to align with those new rules. For instance, when scaling into a new urban context, urban innovators need to gain the city hall's approval to take root in the place (e.g. increasing safety in the urban streets through its lighting system, building urban parks and GBI infrastructures, etc.). They will also have to interact with the local community, and engage with citizens (e.g. raising awareness and building resilient communities, organize outdoor citizens activities/labs).

**Socio-Cultural Aspects**
Social Urban Innovators should **be aware of the cultural roots and activities carried in a specific area** and, when adapting to the local context, take advantage of those trends, values, needs and beliefs. For instance, by interacting with the local cultural associations or looking at the social activities present in the area, it will be easier to understand the needs and culture of the people living there.
'What makes a difference is the mindset of the people and stakeholders you need to engage with.'
Filip, Crosswalk

*'[...] the role of spirituality in India is different in the European context.'*
Giulia Sala, Ticket to Change

**Economic Matters and Market Conditions**
Apart from the **lack of a proper financial infrastructure** sustaining SI projects, hence the difficulty of getting funds, another factor influencing the scaling process is **the 'readiness' of the market to accept the innovation**. An urban context with a mature entrepreneurial culture will facilitate the expansion of SI throughout the needed infrastructure, allocating funding programs and knowledge centres to educate and disseminate a particular innovation culture. However, a thriving market system could also be a 'double-edged sword', meaning more competitions and alternatives to compete with.

**Geographical and Urban Characteristics**
These refer to the architecture of a city or the physical assets a project could depend on, such as the presence of green parks and rivers, the need of railway infrastructure, the presence of an active neighborhood close to the hospital. If this is the case, it will be vital for SI to replicate in contexts with similar geographical characteristics or re-frame and change the innovation itself.

More about this part, with examples and quotes, can be found in Appendix C.

*These will also be translated and included in the final design proposal as facilitating tool together with the 'Urban Dimensions'. However, this focuses on enabling innovators articulate 'How to Scale'.*

## The DNA of Designscapes initiatives

# The Urban Innovators Traits & Cognitive (Knowledge) Gaps

Challenges are not only due to external context factors osculating the scaling process of SI. As understood from the previous research activities, **a challenge is also linked with a lack of skills and capabilities**. **Scaling does not only mean bridging a contextual gap but a cognitive too, defined as an internal knowledge gap**. **To overcome the gaps and challenges identified, Social Urban Innovators will need to develop specific competencies**. Some of those crucial competencies are summarized in the following paragraphs and presented as common traits enabling Social Urban Innovators to succeed in their scaling journey.

**Going into the 'unknown' and adjusting to an 'unfamiliar' context.**
Scaling into a new context requires the innovators to **synthesize different cultural and local nuances and continually iterate and re-frame processes and strategies** upon those. It means also **understanding the values and needs of the local community.** Therefore, it would be essential to develop 'Soft Skills', such as the ability to match needs with aspirations and **mediating among the different interests each stakeholder entails**. Moreover, innovators need to present a curious, proactive and flexible attitude (Yee, Raijmakers and Ichikawa, 2019).

**Communication & Engagement: building networks with the local community.**
SI needs to engage with the local community to familiarize themselves with the new context and build their scaling path. Hence, they need to **be capable of dialogue with various stakeholders** (from the mayor to the citizen) and, at the same time, presenting inter-relational skills such as active listening (Haxeltine et al., 2017). It is essential to understand and match the people and stakeholders' needs or **collaborate and align different visions** (Scott, 2018).

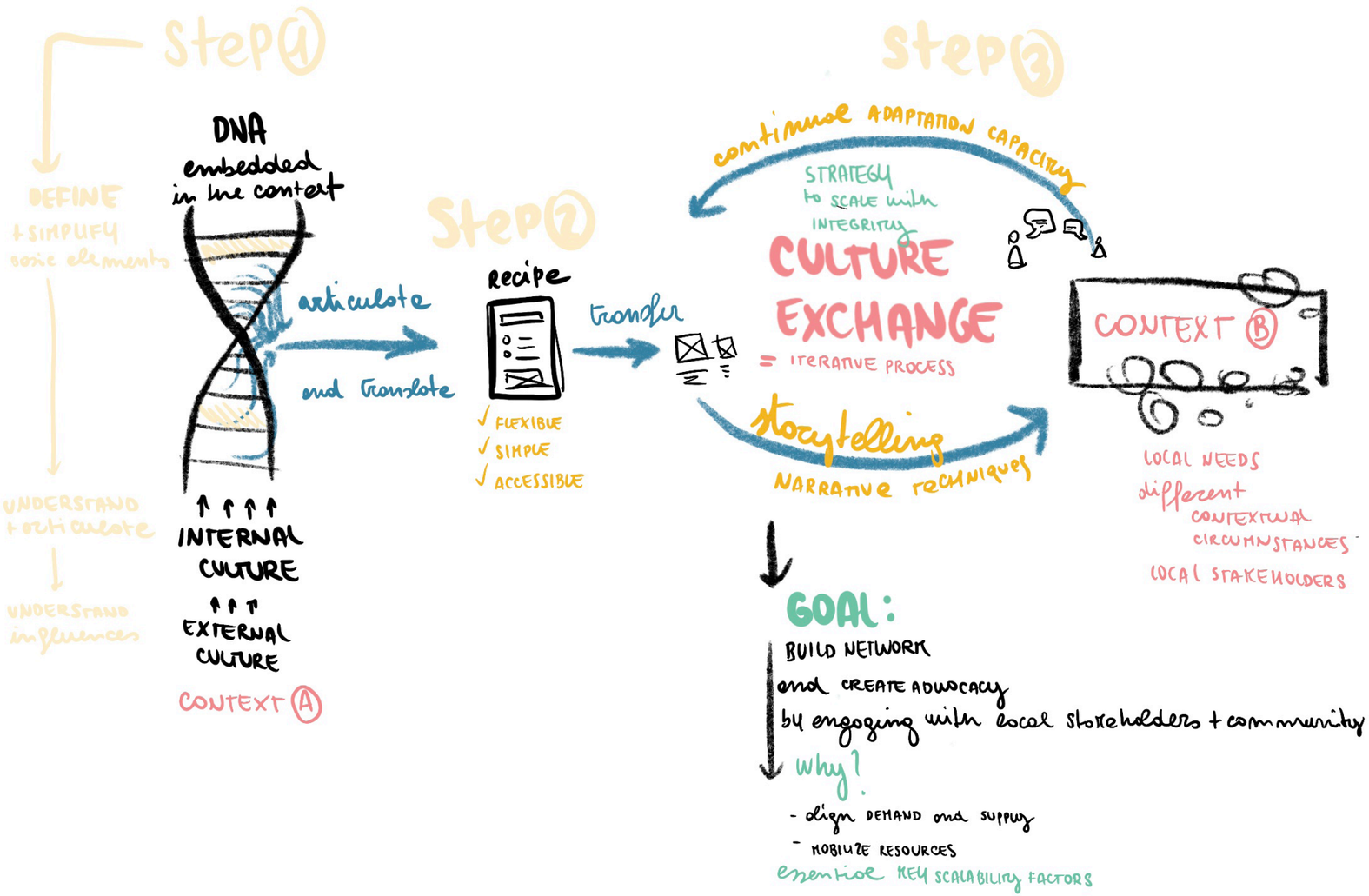



*Figure 43. A visual reflecting what has been learn during the design interventions and activities carried with the initiatives regarding the scaling process and the concept of 'cultural replication', in this case, re-framed as 'cultural exchange' and mutual learning process.*

**Mutual Learning and Cultural Exchange**
Scaling is not an individual task but rather a **collaborative process** of knowledge and culture exchange, as shown in the visual of Figure 43. **Network formation and community engagement happen throughout those moments of interaction**. For the innovators, this means being 'connected' rather than being 'owner of knowledge'. Besides a culture of collaboration, a shared open mindset should be diffused to enable the innovation to scale. Having an open mindset and attitude is vital for learning and adapting and being open to sharing and exchanging knowledge with others to achieve systemic change and social impact.

*'And when we talk about trust and collaboration is actually, it's very important that the collaborators need to have some resources and informations, which can be exchanged'*
Chuan Li, Designscapes Project – WDC World Design Capital Valencia

**Adapting, learning and iterating: a formula to scale**
Scaling, in general, requires two essential capacities. As Heger and Boman (2015) stated, 'the role of **absorptive capacity** is an important dynamic capability for an actor's success in carrying out innovation processes'. The absorptive capacity can recognize **the value of new information, assimilate it with existing knowledge and apply it to create new capabilities** (Ruoslahti, 2020). The other essential ingredient of this 'formula' is the **adaptive capacity**, the ability to iterate and adapt accordingly to what has been learnt and based on the external context scenario. It means being open to feedback and flexible for adaptation processes.

- Continual Learning Process & Peer to Peer Learning
- Exchange of values, knowledge and experiences
- Sharing the passion for motivating and inspiring others

*The collection of these research findings and list of insights will be translated into a part of the design outcome (presented in Chapter 12.2, p.210)*


*Figure 44. Brainstorming and Mind-mapping the insights gained as regards the meaning and concepts related to the process of Scaling-Out.*





# 9.2 Articulating Effective Ways of Scaling SI

RQ3

**Would be cultural replication an effective way of scaling-out to multiple contexts?**

## The Role of Culture in Scaling SI

After understanding what the DNA is and how different aspects shape this, it is essential to find ways to articulate them explicitly and then embed this in the internal processes of the organization or founding team (Gabriel, 2014). When growing social innovation, form and culture need to change; during this adaptation phase, SI will modify their organizations, processes, and resources to survive and successfully scale in the new environment (Keskin, 2015). In Phase 1, the meaning of culture has been explained, through theories and literature, as a vast concept. With a better understanding of the scaling context and process of SI, **culture could be defined explicitly as images of the expression of knowledge generated through multiple individuals' exchange and interaction**. Referring to the Designscapes initiatives, the concept of culture could be differentiated between external culture, which shapes a project from outside (e.g. urban and socio-cultural context factors) and internal culture, shaping the mission and vision of the initiative from inside and refers to the team or organization. Those two types of culture cannot be separated: one influence the other. **The internal organizational culture is in a continual mutation and adaptation state according to the external context's changing**, the bigger system. When the two systems come in contact, an exchange of culture may happen between the interacting parts.

*'Organizations are ongoing, iterated patterns of relationships between people'*

(Stacey, 2006, p.39)

*Answering RQ3 and re-framing the initial hypothesis and assumptions about the concept of culture in the scaling process*

At the end of Chapter 7 the concept of 'replication' and the initial hypothesis of RQ3 were re-framed into the concept of ***'Implementation wit Integrity'*** and a research assumption was elaborated. With the new knowledge gained about the role of culture in the scaling context of the Designscapes initiative, it can be confirmed that **culture cannot just be replicated**. Instead, as the concept of 'implementation with integrity' explains, **SI needs to learn from the context and consequently adapt to that**. Therefore, it would be more correct to talk of **an exchange of culture. By learning and adapting to the socio-cultural conditions and local needs, in a sort of continual trade-off, SI will be able to scale-out effectively in the new place.**

## Scaling Effectively

***What is an effective way of scaling?***

*'Effective scaling is a key measure of successful innovation'*
— Linn 2014

**An optimum scale partly depends on economic matters** such as financial models and a way of sustaining the initiative over time. It is also **a matter of culture** (knowledge and beliefs of the innovators or values shared by the community) **and partly a matter of relationships** the initiative can create to expand (Mulgan et al., 2007).
As observed during the various research activities, most Designscapes urban innovators have a hands-on and entrepreneurial attitude because they just try-out things and iterate on failures or successes: they learn 'on the go'. However, this could not always be considered an effective way of scaling because it takes time, energy, and risk. According to Literature and theories about scaling (PHINEO, 2016; Gabriel, 2014; NESTA, 2017; Dees et al., 2004), it is ideal first to assess the potential to scale and set a vision & mission of what are the goals and outcomes to be achieved, before to directly jump into the field with no plans and no strategies. Moreover, all businesses are constantly **challenged by limited resources**, which is even more true in social enterprises. Therefore, **it would be relevant to find out the most effective scaling method using the few resources available to generate the most significant impact.** An effective way of doing so is explained by Richard Koch (1997) as the 'Pareto rule' or better known as the 80/20 rule. According to this rule, a significant part of the outcomes (80%) results only from a smaller portion (20%) of the effort and activities employed. Let's suppose to shift this 'theory of management' to the field of scaling social initiatives; according to that, **social innovators should focus on scaling only what is of vital importance by identifying the 'minimum critical elements'** (Bradach, 2003) **that will generate the same outcomes and impact desired:** 'to be strategic is to concentrate on what is important' (Richard Koch (1997) in Jena, 2006). Apart from this general rule, another theory has been consulted to understand 'how SI could scale effectively' in multiple (diverse) contexts; this is explained in the following paragraph.





## Context Variation by Design Theory

**Interview with an expert**
The 'Context Variation by Design Theory' (CVD) has been considered to determine how SI could scale effectively across diverse contexts. Therefore, an academic researcher and expert have been interviewed, Wouter Kersten, who carried his PhD Thesis 'What Leonardo could mean to us now. Systematic variation 21st-century style, applied to large-scale societal issues' (2020) about designing for multiple diverse contexts through systematic variation and the CVD Theory. The discussion and overall insights gained from the interview provided a better understanding of the CVD Theory and led to the redefinition of 'effective way of scaling' concerning the hypothesis posed by the RQ3. The insights also contributed to the development of the scaling framework**'**, such as the importance of identifying the key elements to replicate and squeeze the initiative at its core by diving deeper into the DNA layers (according to what has been explained in Chapter 9.1, Figure 42).

**Theoretical Findings & Conclusions**
According to the Context Variation by Design theory (Kersten et al., 2015), **diversity of context should be perceived as an opportunity for scalin**g. It means that, instead of early simplification and late variation, the dynamic should be reversed: early 'systematic variation' (Kersten, 2020) so that the solution could be easily scaled and adapted in multiple diverse contexts. Indeed, 'key requirements in one context might be still desirable for others as well' (Kersten, 2020). **When replicating in new contexts, urban innovators should simplify their 'solution' to satisfy the minimum requirements necessary to achieve a particular goal.** The 'recipe model' for replication should be simple, which means defining the elements at a fundamental level— **squeezing those ingredients at a level where they will not be context-specific anymore so that the innovation would be adaptable in many different contexts.**

*'Diversity is what gives richness and reflects reality'*
(Kersten, 2020)

Similarly, Dees (2004) define 'successful models as those that, with few modifications and adaptations, can be rescaled and replicated in a variety of different social contexts to address a similar problem'.

To conclude, sometimes i**t is not worth replicating the whole solution into the new context, maybe just a part of it,** such as those critical elements that are **just enough to achieve a specific goal and generate the desired impact**. Most of the time, these social entrepreneurs and innovators do not have enough funds and budget to scale; hence it will be easier if not everything will be exploited, but only 'scaling something that could work' (Gabriel, 2014) in the new context with the local resources offered. Thus, it is essential to understand the key characteristics that should not change to generate the effects desired and what, instead, will change to respond to the new conditions and needs present in the new context.

*These crucial steps and actions SI need to consider when scaling-out have been detailed and mapped over the Framework of the Scaling Process, as presented in the next paragraphs.*

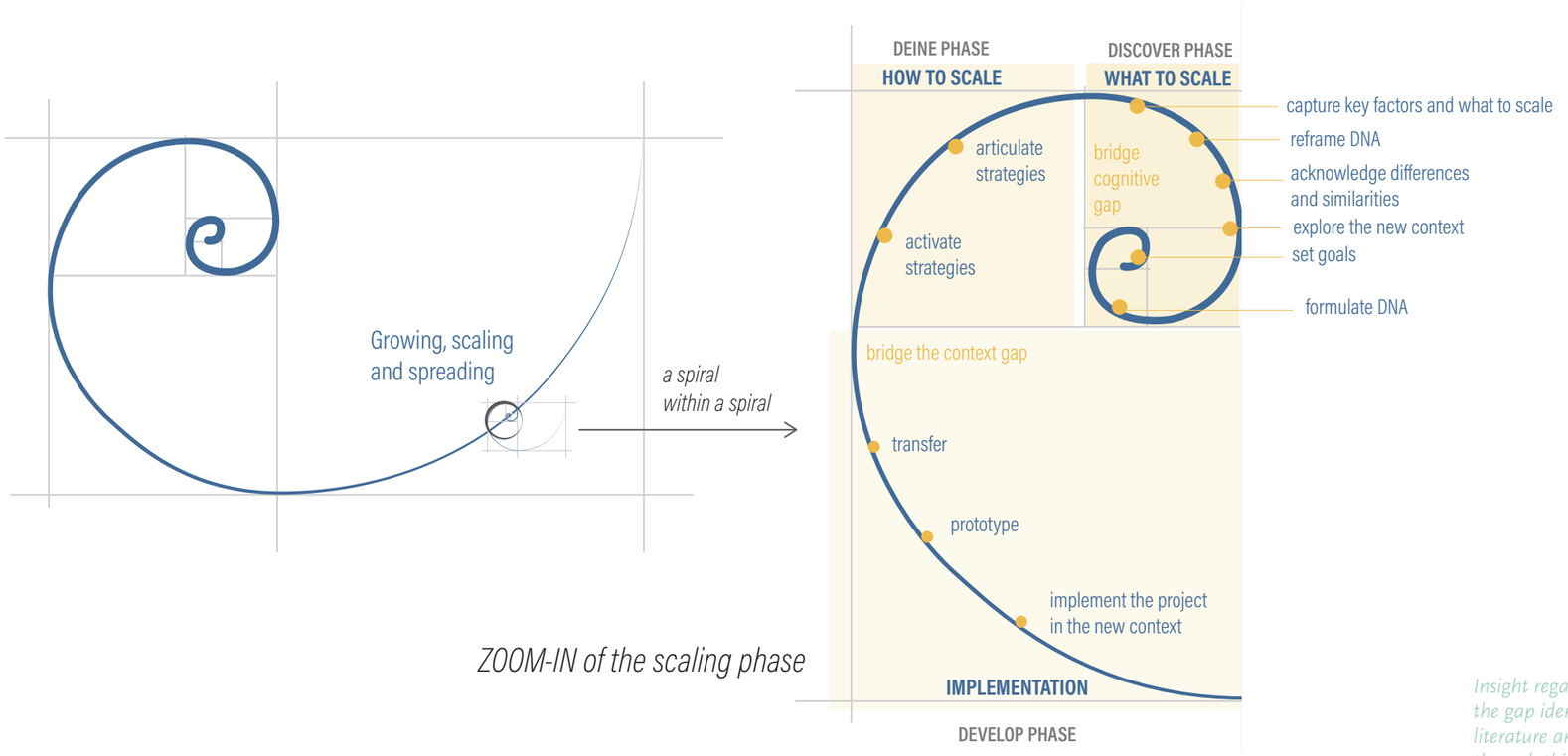



*Figure 45. Zoom-in into the implementation and scaling phases of the Social Innovation process as presented by Murray et al. (2010). This zoom-in highlights how design could be still relevant and helpful beyond the implementation stage of the Social Innovation Process.*

# 9.3 Presenting the Scaling Framework as Research Outcome

*The Scaling Framework has been iterated multiple times according to the new insights gained over time. This chapter presents the result of those iterations and highlights how theories and practice come together into this final version. In addition to the steps unfolded over the scaling process, the framework also includes principles and criteria to scale-out SI, which will also be presented in this chapter.*

## The relevance of Design Processes for Scaling SI

### Reflecting on the contribution of design beyond the implementation stage and to guide the scaling process

*Insight regarding the gap identified in literature and tackled through this project: demonstrating the applicability of the design process to the scaling stage and its relevance beyond the implementation phase.*

The Social Innovation Process is described theoretically by Murray et al. (2010) through the Fibonacci's Spiral, as presented in Research Phase 1. This Spiral has some unique characteristics; starting with a square of size one and successively building on new rooms, this curve could go on spiralling inward forever as well as outward. The Spiral is used to explain the idea of scaling SI (endlessly) to impact a more significant amount of people to achieve a systemic change. Besides, it arises from a property of growth called self-similarity or scaling - the tendency to grow in size and maintain the same shape. Now, let us imagine to zoom in the scaling stage, as illustrated in Figure 45. During the three research phases conducted, the scaling process has been unfolded as a multi-step process; thanks to the various design activities carried it was possible to map the process and detail that into 'multiple' steps and stages, and it has been concluded that **scaling is like a learning process where social innovators have to learn What and How to Scale from one context to another**. For this reason and because of **the value of design in supporting capacity building, meaning that it functions as a framework guiding a particular thinking process, design demonstrates to be helpful and relevant to support the scaling process of Social Innovators**, even beyond the implementations stage. Indeed, the design process works independently from the domain or stage of application.

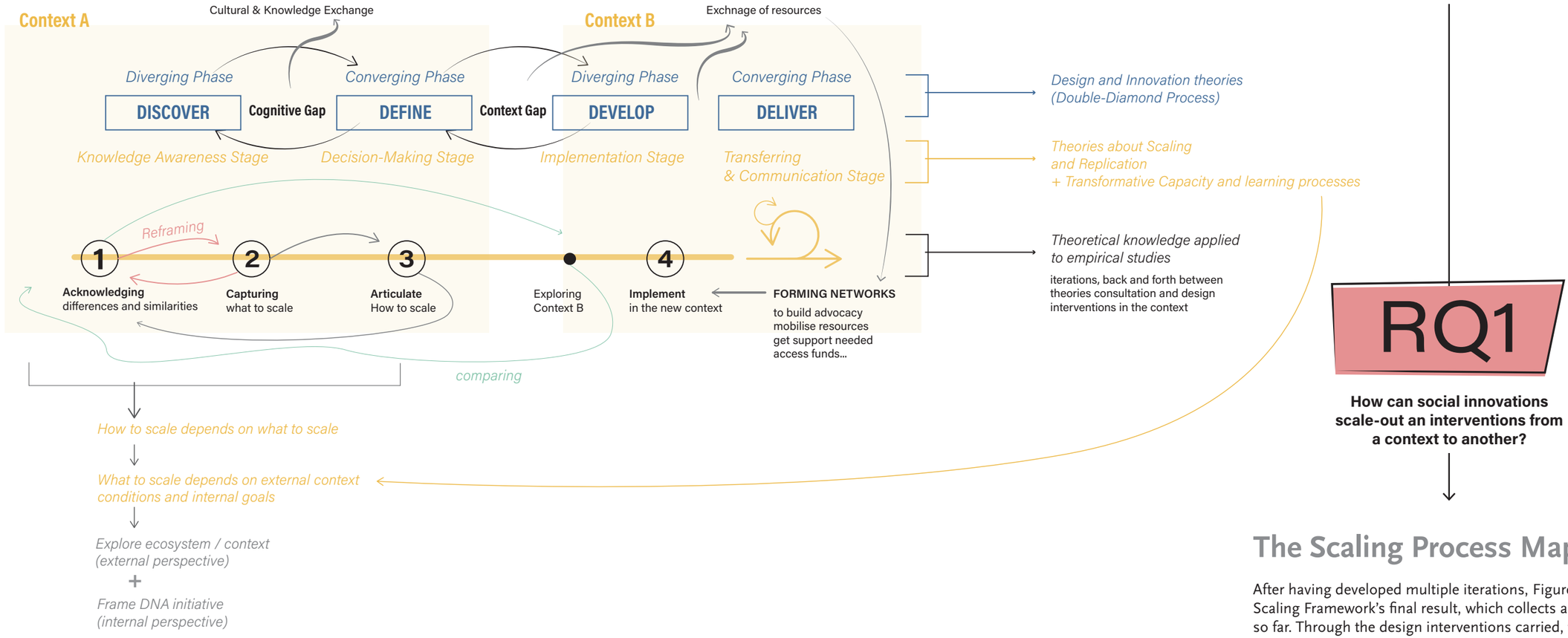



*Figure 46. Unfolding the Scaling Process of SI through this last iteration of the Scaling Framework resulting from the combination of theoretical and empirical knowledge.*

## The Scaling Process Map of SI

After having developed multiple iterations, Figure 46 represents the Scaling Framework's final result, which collects all the insights retrieved so far. Through the design interventions carried, the complexity of the process and how scaling works in the context of Designscapes initiatives has been grasped. In this way, **the scaling process has been unfolded and mapped over four main stages: Knowledge awareness, Decision-making, Implementation and Transferring. The Scaling Stages could be compared to the design process's stages: discover, define, develop and deliver. Therefore, design could be used to guide the scaling process of SI.** Even though the steps have been presented linearly in the map, the actual process is highly iterative, and the innovators will go back and forth over those stages, as illustrated in Figure 46.
Moreover, along the process, there are multiple moments of exchange; those are 'mutual learning' moments, social interactions or collaborations where knowledge and culture are exchanged. Indeed, innovators look back at their knowledge background and experiences to make decisions about the next steps; they proceed on the next step and acquire new knowledge, for instance, by getting to know the local needs of the community, so they go back to their initial project proposal, they re-frame it, iterate it and so forth. Therefore, the scaling process

requires the innovators to have an open mindset, being flexible and open for collaborations. Those attitudes have been identified as 'absorptive' and 'adaptive' capacity and could be acquired through experience and collaborations. Hence, **the importance of those moments of exchange enabling innovators to scale**.

- Successful implementation depends on the way several ingredients and factors are mixed.
- Transferring knowledge is not a one-way path. Therefore, the transfer should be a synonym for active collaboration and peer-to-peer learning between the two parties, instead of passive transfer from one 'party' to another.
- Moments of exchange enable SI to form networks with local actors but also to activate strategic partnerships

*'But I think those are the ingredients that we have from our side on the table, and using them in making this project can be the best, most efficient way to create the product.'*
Giulia Sala, Ticket to Change Sicily

In addition to those enabling aspects, as learnt in research phase 2, SI faces several challenges when scaling out to new contexts, and most of the time, in the case of hyper-localized projects, what make those challenges as such is the fact that the new context of scale is unfamiliar and unknown. Therefore, along the journey, **SI will have to face two main gaps when scaling and replicating a project in another context: the cognitive (knowledge) gap and the context gap** (this is detailed in the paragraphs presenting the problem statement defined, chapter 9.4).

***How can SI overcome the gaps and implement the project in the new context?***

## Step 1 + 2

**Acknowledging and Capturing 'What to scale' to bridge the Cognitive Gap**

Before deciding what will be scaled, different actions and activities need to be performed. First of all, it is essential to acknowledge the differences and similarities of the two context and then look at those factors that enabled the innovation to implement in the first place successfully. Understanding the factors that have made the pilot a success and reasons for any failures will help determine what to look for in the new context or avoid other pitfalls by using the learnings and experiences acquired. By understanding the new context conditions and people's needs, SI will define the core elements of the initiative that should be replicated and instead be re-framed to adapt to the new scenario. Understanding the 'core' of the innovation will make it easier to avoid extra costs and efforts to develop an effective strategy to scale (Gabriel, 2014).

*'[...] to filter out what is good to transfer and what is not to be effective.'*
Josephine Bouchez, Ticket to Change France

*'So, the lack of the same economic and social fabric that we find in Paris, in France, is very different than we see here [Sicily].'*
Giulia Sala, Ticket to Change Sicily

## Step 3

**Translate 'What' into 'How' by Articulating strategies to scale, and bridge the Context Gap**

The first steps will inform the decision-making process of Step 3, where SI will need to decide how to scale and develop strategies. Developing a model or strategy that could be implemented at a low cost and with few resources needed enables scale faster and more effectively. The strategy should be planned with goals in mind and aim to help the SI overcome the challenges and bridge the gaps. Moreover, by acknowledging and mapping out all those factors (internal and external, enablers and barriers), the urban innovators will capture capabilities and resources lacking but necessary for scaling that need to be mobilized through local support.

*'The program we developed at TfC France is like a set of knives... depending on what impact/ goals we want to achieve, then we have to choose what is worth scaling and replication. Not everything needs to be transferred... '*
Josephine Bouchez

## Step 4

**Transferring as an exchange activity throughout network formation to implement effectively and with integrity**

So, eventually are back and forth, comparing the two context factors and conditions, understanding what could work, and accordingly informing decisions on what to scale. Deciding what to scale and transfer based on community needs and local resources through a continual learning and adaptation cycle and exchange. Exchange of knowledge and resources could be activated through strategic partnerships, collaborations and network formation.

In the end, there is not one single solution possible. SI will face several different challenges along the path and need to find strategies to overcome them and bridge the gaps, but this process map intends to guide and facilitate them to do so.

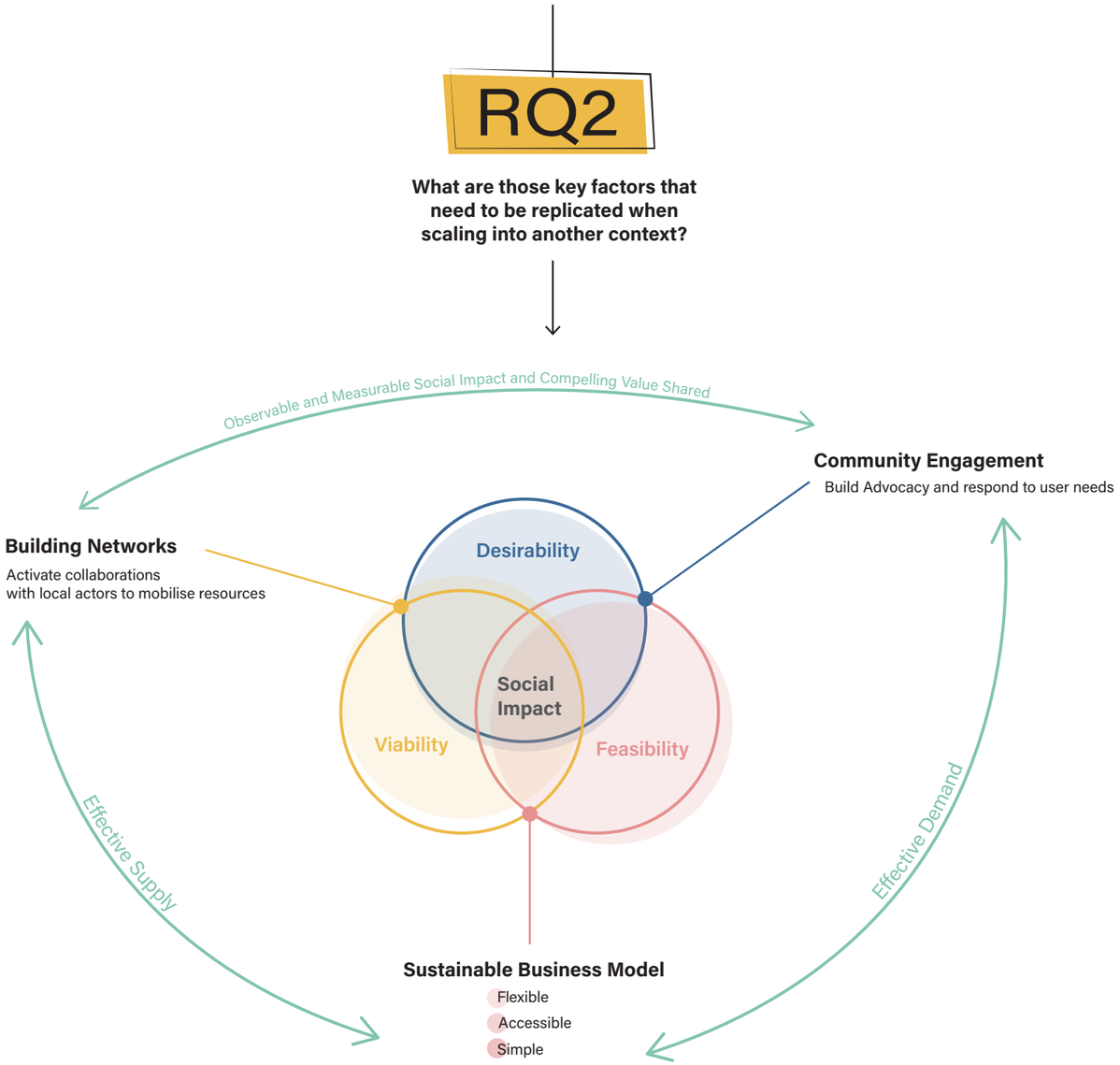



*Figure 47. The Scaling Framework presented through the Scalability Criteria and Principle of SI*

## Scalability Criteria & Principle of SI

*'[..] understand if the key ingredients of this company can be adapted to new context [...] So there are many criteria we consider.'*
German Zubìa, Connovo

With the knowledge acquired from the theoretical and empirical research conducted up to this point, it can be concluded that SI willing to scale in multiple contexts needs to **identify the core factors of their initiative that are most effectively transferable and necessary** to preserve the essence of it. Jeffrey L. Bradach (2003) defines them as the '***minimum critical specification***', **the fewest elements needed to produce the desired impact**. Therefore, Social Urban Innovators need to **capture their initiative's DNA** and ask themselves, 'what are those key features that generate the effects desired and might be effectively transferable to new locations'. Although we cannot draw key common factors since those change from case to case, there are standard scalability criteria that every SI need to keep in mind. Those have been summarized and presented as a 'Framework' in Figure 46. Adding to the general criteria to achieve Social Impact as presented in Research Phase 1 (Figure 15, Chapter 5.2), other principles have been identified.
To achieve a desirable and viable solution, **SI needs to align demand and supply** (Mulgan et al., 2007); Effective Demand is the willingness of stakeholders and target users to invest and adopt the innovation. In comparison, Effective Supply is achieved when the initiative demonstrates to work at reasonable costs and without needing special additional skills or resources. Besides, **the initiative should be relevant beyond the initial context of origin, and it needs to be able to generate tangible and measurable social impact** (Verloop & Hülen, 2014). Offering a 'shared value' (Porter and Kramer, 2011) among the community and society may help attract strategic partnerships and build trust among public authorities.
In conclusion, **to have a 'solution/innovation' that is desirable, feasible and viable, in the context of Social Urban Innovations, the following principles and criteria need to be taken into account: community engagement, network formation and a sustainable business model** (Figure 47). Eventually, it is a vicious circle, where each element influences the other. For instance, building networks means activating collaborations that could mobilize resources, while community engagement helps build advocacy, generating demand (NESTA, 2017). The network and relations the initiative can form with local governments and other local stakeholders may foster or hinder long-term performances (NESTA, 2017). An organization usually builds their knowledge stocks from internal and external resources; hence, they must build useful relational capabilities to acquire external knowledge and diffuse internal expertise within the team (Collins and Hitt, 2006) or in exchange with other parties.

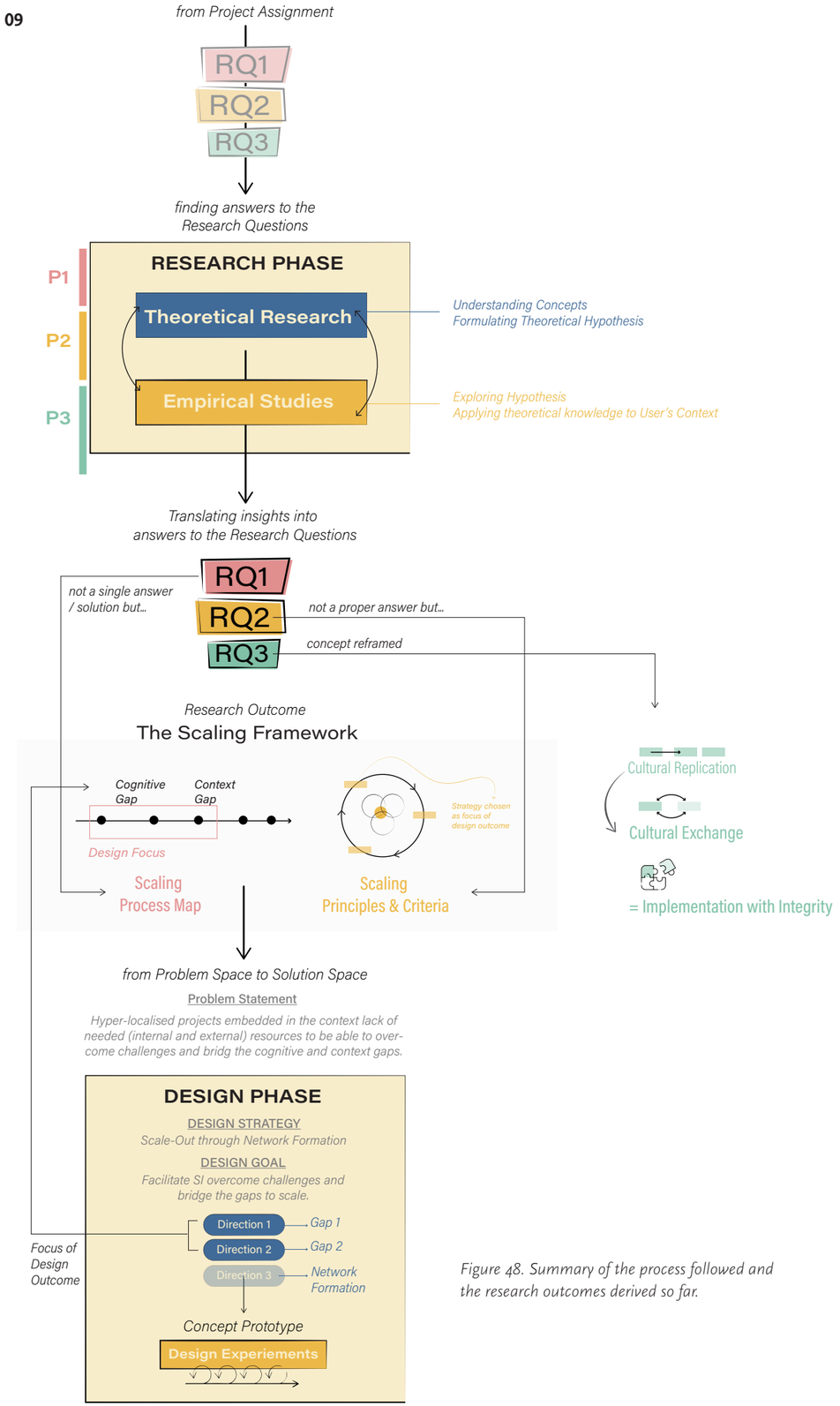



*Figure 48. Summary of the process followed and the research outcomes derived so far.*





# 9.4 A bridge from Problem Space to Solution Space

*Most of this project focused on the research part, where the topic of 'Scaling SI' has been deeply explored. Indeed, because of the research approach followed (Research Through Design elements), where 90% was problem framing and just 10% problem-solving, a great part of this project was dedicated to exploring the research questions while studying scaling in the context of Designscapes initiatives, to unravel the complexity of the topic and go to the root of the problem of Scaling SI.*
*Therefore, the Research Part concludes with a shift from the 'Problem Space to the Solution Space' as we move from the research to the design phase. Here, all the ingredients come together to formulate the problem statement (Figure 49), and then they will be translated into a redefined design goal.*

## Conclusions and Reflections of the Research Part

This project's research has been led by three main Research Questions as defined in the Project Assignment (Chapter 1.4), which have been answered at the end of Phase 3 by mixing and matching all the insights collected through theoretical and empirical studies. While finding answers to those questions, insights have been collected through several design activities. Those findings led to the re-framing of the initial Brief and the formulation of new assumptions and hypothesis to explore; for instance, 'cultural replication' has been re-framed into 'Implementation with Integrity'. In the end, the main 'ingredients' forming 'the problem space' of scaling SI has been discovered and unfolded. As a result, the 'Scaling Framework' has been finalized, including 'Principles & Criteria' (Figure 47) and the 'Scaling Process Map' (Figure 46).

*Research Outcome*

In response to the research goal, **the Scaling Framework functions as visual guidance, empowering social innovators to proceed with confidence in their journey**. Hence, **the Process Map of the framework presents the crucial steps of scaling, which intend to guide and navigate social initiatives implementing effectively in new contexts and achieve a larger impact.**

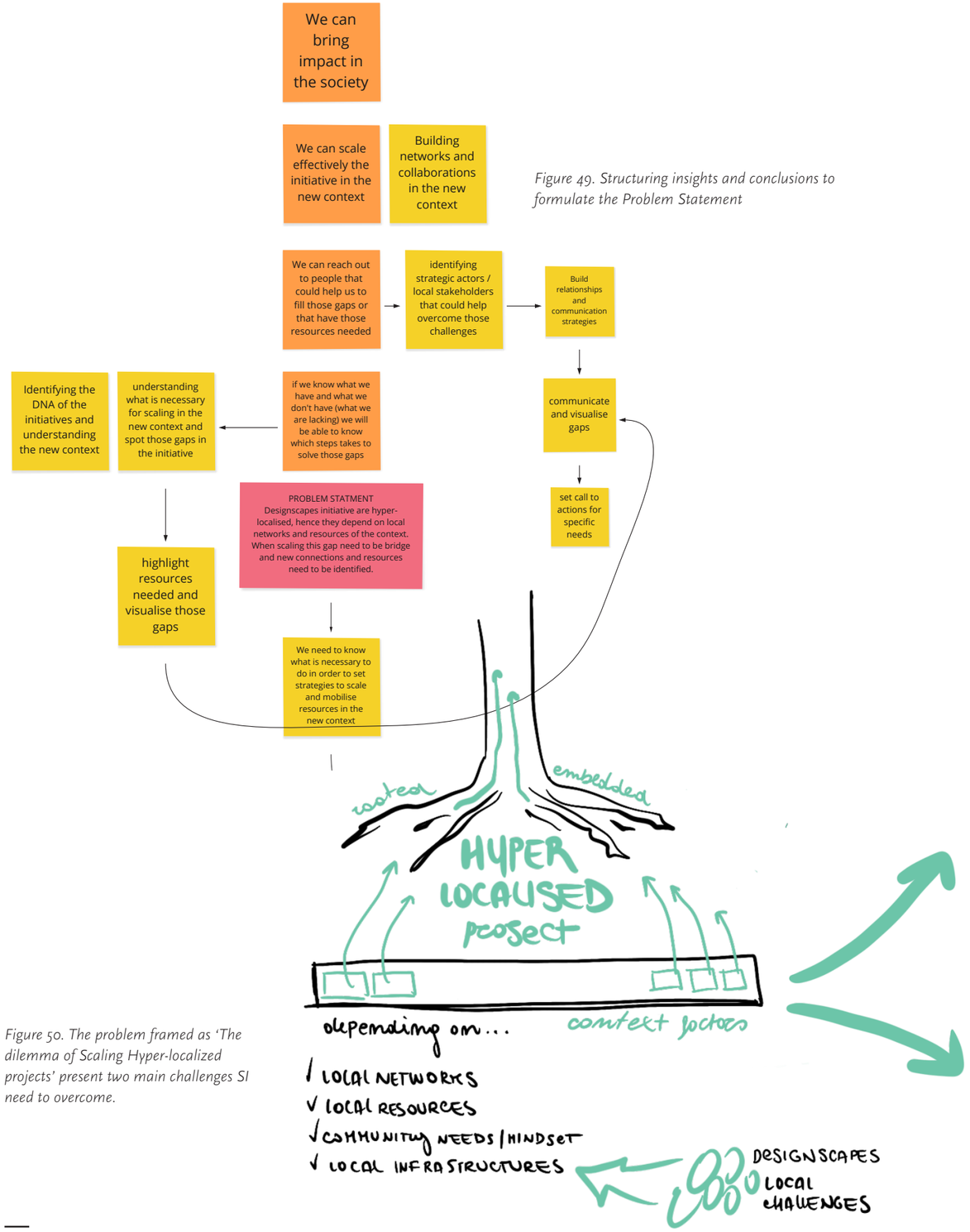



*Figure 49. Structuring insights and conclusions to formulate the Problem Statement*

*Figure 50. The problem framed as 'The dilemma of Scaling Hyper-localized projects' present two main challenges SI need to overcome.*





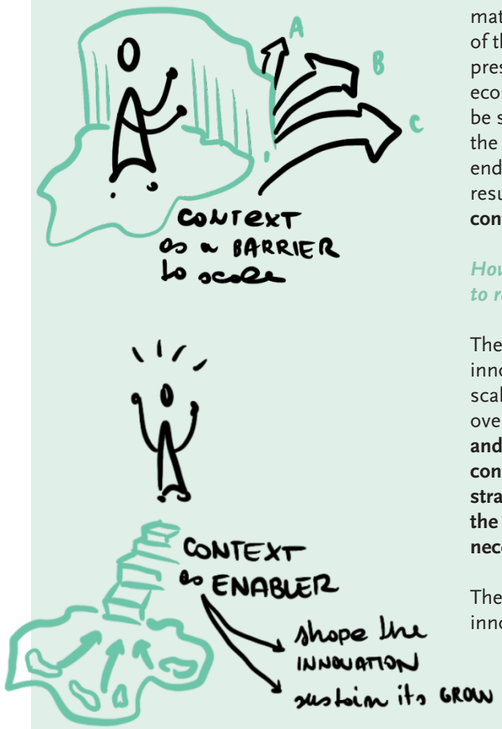
*In the second part of the project, the research outcomes will inform the development of a Tool-Box to support Social Urban Innovators in their scaling process, as sketched in Figure 51. However, it needs to be mindful that the solution and design goal presented will focus only on a specific part of the 'Scaling Framework' formulated (see Figure 46, in Chapter 9.3).*

# Problem Statement

## The Dilemma of Scaling Hyper-localized Projects

**Unfolding Problem Space and...**

While going to the root of the problem and unfolding the scaling process of SI, several challenges have been identified. Most of the identified challenges fall into **the 'dilemma' of scaling hyper-localized projects**. Indeed, because of the high dependency on the 'context' and the embeddedness within a specific socio-cultural ecosystem, as illustrated in Figure 50, multiple interdependent factors influence the capacity to scale. When replicating a project somewhere else, social urban innovators need to overcome the 'obstacles' posted by particular external conditions or internal lacks. They have to balance and find a match between their own goals and aspirations with the local needs of the people and the local resources available. Since the new context presents new conditions, offers other resources, and has a different ecosystem of relations, SI lacks the knowledge regarding what should be scaled to succeed in an 'unknown and unfamiliar' context; they lack the resources needed and the capacity to mobilize them. So, in the end, they need to find other ways and develop strategies for that. As a result, **Social Innovators need to bridge two main gaps: cognitive and contextual, capturing WHAT to Scale and articulate HOW to do so.**




***How has theoretical knowledge been combined with empirical insights to re-framed the problem space? Where do these two gaps come from?***

The theoretical understanding of the scaling process, where first innovators need to understand what to scale and then decide how to scale (Murray et al., 2010), has been translated as two challenges to overcome. **What to scale correspond to the challenge of acknowledging and understanding differences and similarities of internal and contextual conditions**, defined as the Cognitive Gap. **While setting strategies to scale to implement in the new unknown context entails the challenge of meeting local needs and mobilizing the resources necessary**, this gap is defined as the Contextual Gap.

The theoretical understanding of the scaling process, where first innovators need to understand what to scale and then decide how to

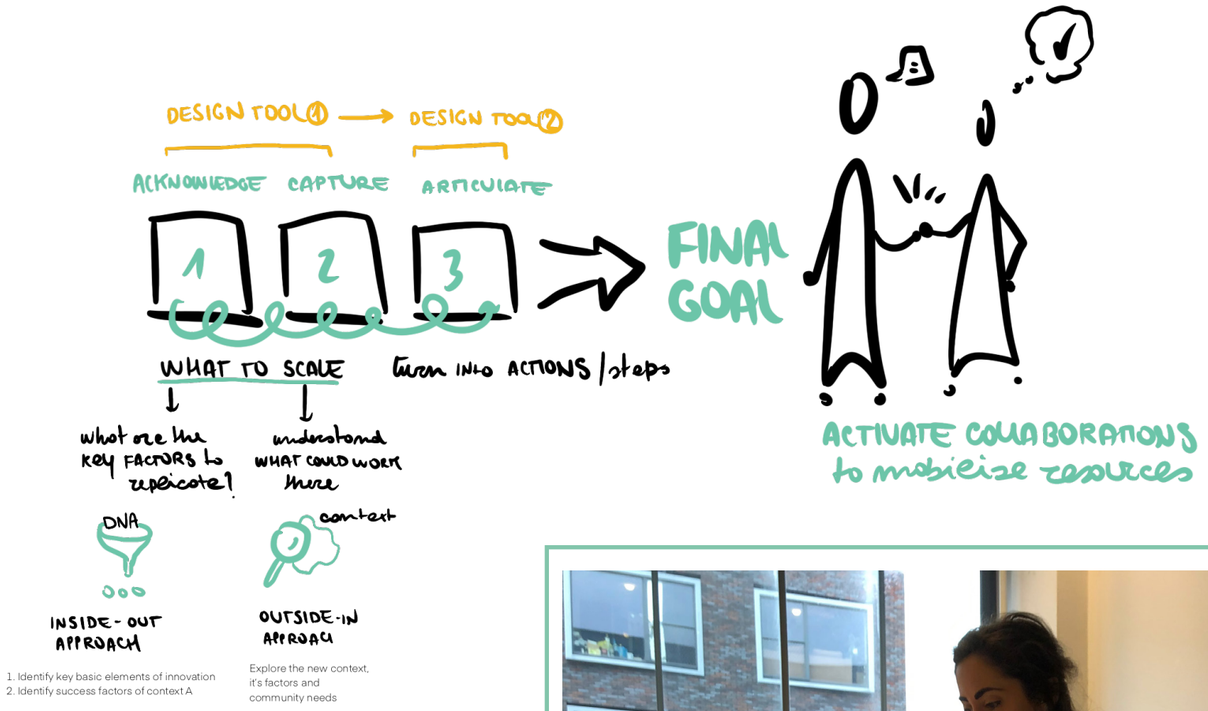
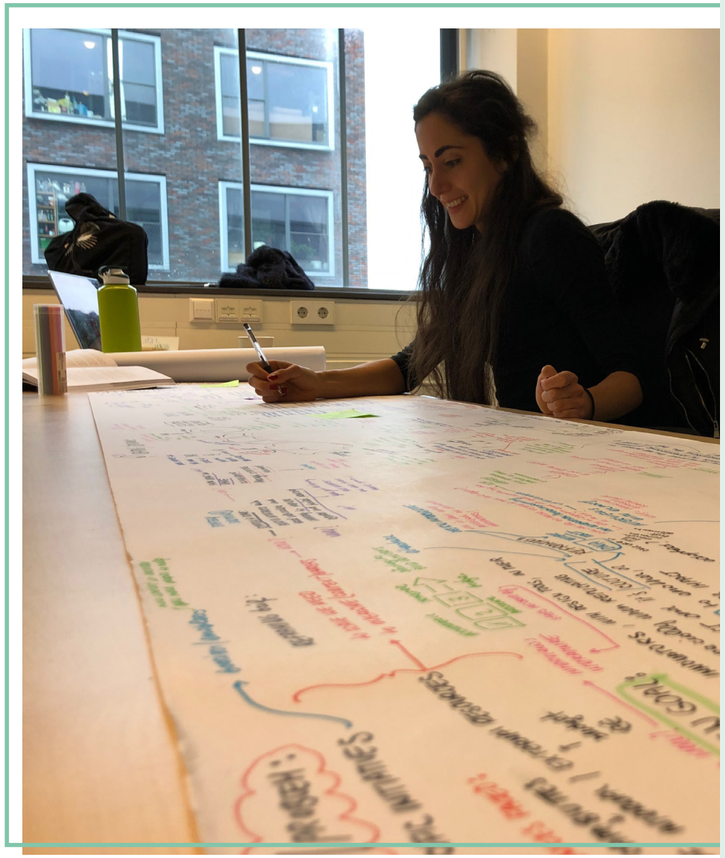



*Figure 51. Elaborating on how the Scaling Framework (outcome of the research) will lead to the development of a design goal and design directions.*







scale (Murray et al., 2010), has been translated as two challenges to overcome: what to scale correspond to the challenge of acknowledging and understanding, hence defined as Cognitive Gap. While, setting strategies to scale entails the challenge of implementing in the new unknown context, hence meeting people needs and resources available; this gap is defined as Contextual Gap.

**... moving toward the Solution Space**

Because of those challenges and the fact that 'collaboration' is an essential aspect of SI, **'network formation' has been identified as a suitable strategy to scale-out and achieve social impact**. It is a viable, feasible, and desirable solution to bridge the gaps, implement effectively and with integrity (as explained in Chapter 9.2 and 7.1) in the new context. Indeed, Social Urban Innovators need to understand what they lack and the resources necessary and then activate strategic collaborations to get the support required. Forming local networks will allow them to familiarise with the new context, mobilize resources and build advocacy. Since Network formation has been identified as a crucial enabling factor to scale-out SI and implements the innovation effectively, this will be the main focus of the following Design Phase.

*'Making contact with the local associations helped us to get to know the place better. [...] we have to discover the activities of the neighbourhood and the nature of the associations present there [..] as support ... if there are things similar to what we propose and through that then we can reach citizens and users.'*
[Martina and Ginevra, T.Ospito]

In conclusion, the research phase of the project led to uncovering the root of the problem Designscapes Initiatives face when scaling out: **lack of proper knowledge and resources to bridge the cognitive and context gaps caused by socio-cultural embeddedness and hyper-localism of the project.** With these conclusions and outcomes, the next Phase design tools will be experimented to respond to the challenge presented here. Eventually, a design outcome will be developed, enabling SI to overcome challenges in order to be able to scale and achieve impact. **The solution will focus on facilitating and supporting SI, through design tools, capturing what and how to scale with the final goal of forming local networks to implement effectively and with integrity.**

*Figure 52. Retracing (with pen and paper) the process followed and mapping the insights collected so far as a reflection moment to bridge from the research part and outcomes to the design phase*

# DESIGN PHASE

*The problem space closed the research part and opened up the door for more specific design opportunities. Indeed, with such a deep and complete understanding of the topic and its 'problem space', it is now possible to look back at the project goal initially defined and re-frame it according to the new knowledge acquired. Re-framing allows one to look at the challenge from a different perspective and enables one to move toward the solution space, where design concepts and prototypes can be created based on the research findings.*

*This Phase will focus on translating the research outcomes and conclusions into a 'design solution'; hence, the (theoretical) Scaling Framework, previously used as exploration means driving the research, will be employed in this part as an experimentation tool that will help to develop the final results of the project. Although this Phase is design-oriented, research will still play a role until the end of the project (Delivery Phase). This approach will allow keeping iterating through the process. Indeed, in this Phase, other design interventions will be organized, insights derived and used to keep detailing the framework and the (design) Concept. By contrast, these interventions will be set-up as experiments where specific 'design artefacts and tools' will be employed and evaluated with the Designscapes initiatives before developing the final design outcome.*

Chapter 10

# *Cycle 01*
# From Design Goal to the Concept Prototype

*This Chapter presents the redefined Design Goal, Strategy and Mission responding to the problem statement previously formulated. The Design Goal will be translated into Design Directions and Requirements to follow when developing the concept prototype. The Design Direction are formulated based on the research outcome: the 'Scaling Framework'. At the end of the chapter a Concept Prototype is presented which aims to facilitate SI overcoming the identified challenges of scaling and achieve impact. The design directions helped to develop the concept prototype, which will be further explored and experimented through interventions and participatory sessions.*



## 10.1 Design Goal, Vision & Mission

**Initial Project Goal:**
Support social urban innovators, with design tools, in their scaling journey, mostly when replicating a hyper-localized project and its culture from the initial context to another or multiple ones to achieve social impact.

**Re-framed Design Goal:**

**Develop a Tool-Box/ Framework which enables Social Urban Innovators capturing what is needed for scaling and translates those (knowledge) gaps and (external) 'barriers' into actionable steps and strategies.**

### Re-framed Design Question

***'How can I facilitate SI developing impact-driven strategies to bridge the gaps and scale-out effectively in multiple contexts?'***

***Why re-framing the goal?***
Because of the better understanding of the problem and the identified scaling challenges (bridging the context and cognitive gap), the design goal has been re-framed and scoped it down to respond to the problem statement as formulated.

Problem as Defined
*derived from research findings*

Role of Design
*Turning research insights into actionable 'solutions'*

***How does the design goal tackle the problem?***
The **cognitive gap** relates to a lack of knowledge in dealing with unfamiliar and unknown conditions; this gap could be bridged by providing SI with the needed tools to capture what to scale. In this case, **design tools are relevant to create knowledge**, facilitate innovators reflecting about what is not known or to trigger new reflections and ease

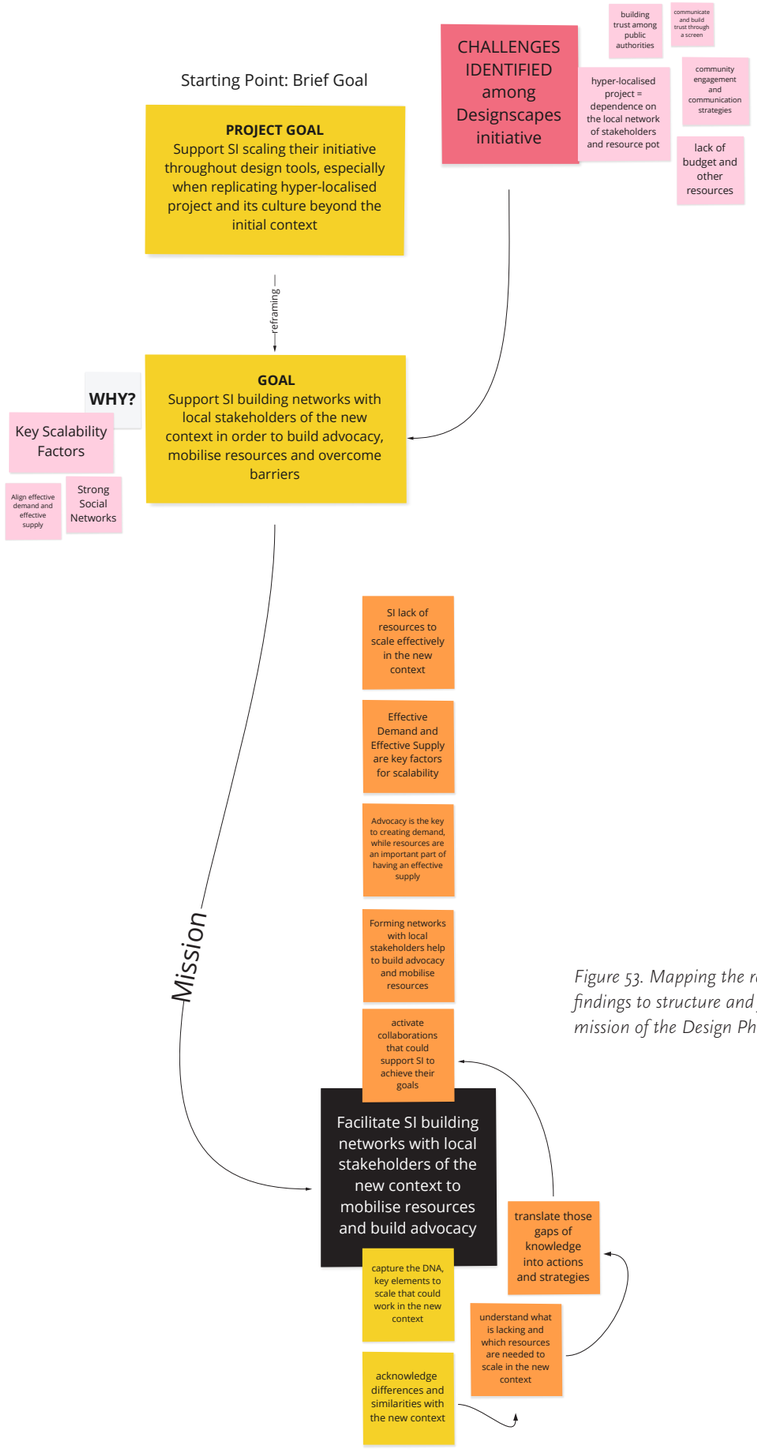



*Figure 53. Mapping the research conclusions and findings to structure and formulate goals, vision and mission of the Design Phase.*





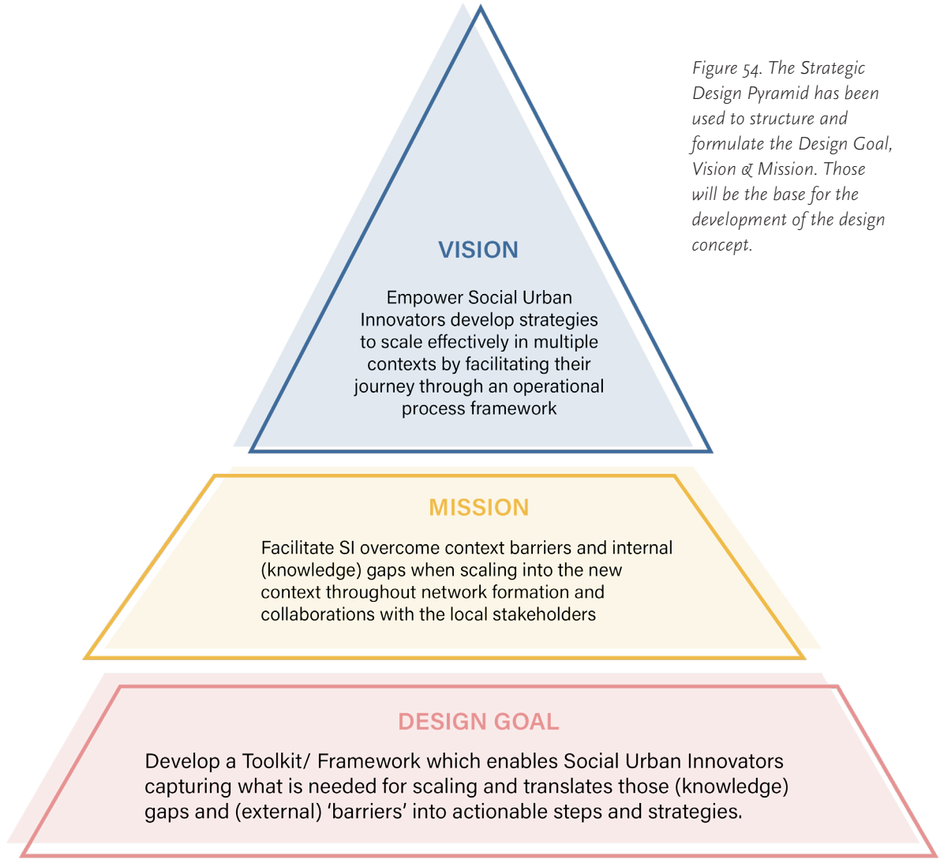
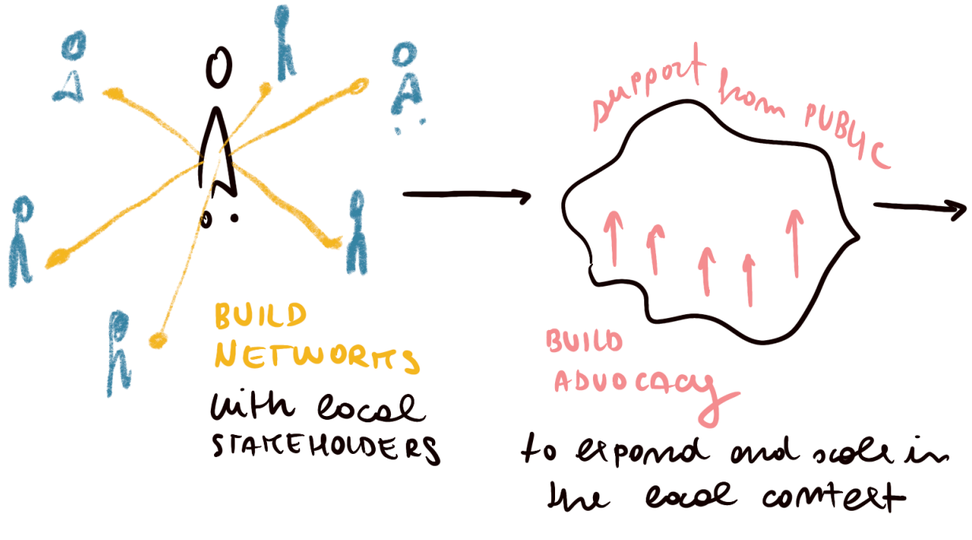
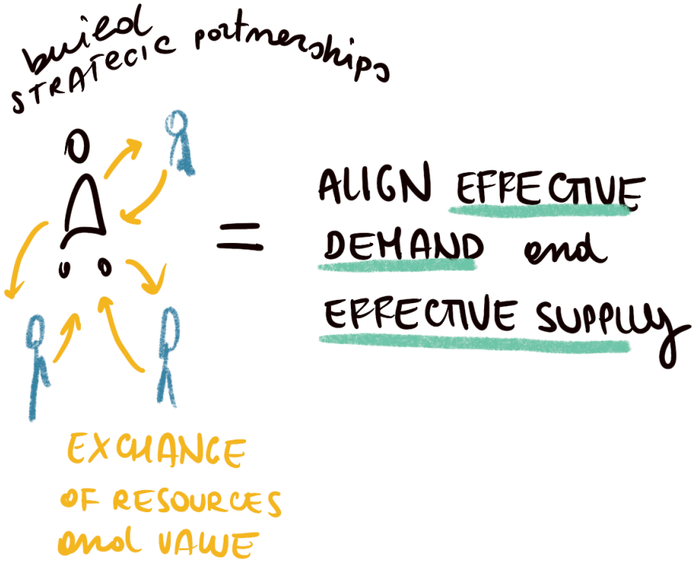



*Figure 54. The Strategic Design Pyramid has been used to structure and formulate the Design Goal, Vision & Mission. Those will be the base for the development of the design concept.*

a change of perspective about certain challenges aspects; Once acquiring that knowledge awareness, the **context gap** needs to be bridged to implement the project in the new context (as detailed in the Scaling Process Map in Figure 46). To bridge this gap, resources will need to be mobilized; hence strategies and actions need to be activated to implement effectively in the new context. In this case, other tools will be developed to support SI to plan those strategies. Again, design processes demonstrate to be valuable to empower innovators take actions and develop new strategies and approaches to respond to the considered contextual challenges.

The Design Goal will focus on a specific part of the Scaling Framework and the process as mapped. Indeed, due to the limit of time given for this project, the scope needs to be narrowed, and a decision needs to be taken regarding the direction to follow when developing the outcome. For this reason, the goal, vision and mission will focus on a specific scaling strategy that is viable and desirable. The strategy chosen is presented in the following paragraphs.




# 10.2 Scaling Strategy & Design Directions

## Network Formation as a Strategy to Scale-Out

### A viable and desirable strategy for effective implementation

As elaborated in the Scaling Framework, one of the Criteria and Principle to Scale-Out SI is through Network Formation. **Building networks has been identified as a viable and desirable strategy to scale-out effectively** during the research phase. Since the design goal aims to support SI to overcome challenges and bridge the gaps, and because the main challenge consists of a lack of knowledge and resources when scaling to 'unfamiliar' contexts, exchange of knowledge, strategic partnerships and collaborations with local actors is what urban innovators should aim for when replicating their projects. In this way, they will be able **to mobilize the resources necessary and fulfill the knowledge gaps,** as illustrated in Figure 55.

*Figure 55. The visual illustrates why 'Network Formation' could be an effective strategy to scale-out SI. Building Networks allow aligning effective demand and effective supply, which, as depicted in the framework of 'Principles of Scaling SI', is a crucial criterion for achieving Social Impact.*

***Why aiming for network formation as a strategy to scale-out effectively?*** Social innovations do not have the money to invent a new wheel or develop new technologies; instead, **they use the existing resources offered by a specific context and combine them in innovative ways to respond to social needs and ultimately achieve positive social change** (Avelino et al., 2019). Therefore, **they rely very much on their circle of local stakeholders and supporters to exchange resources needed** (Mortati and Villari, 2014). Therefore, partner-up and collaborate with the local actors of the new context will give the urban innovator access to the resources needed to **recreate an ecosystem of relations** that could help the project succeed in the original place.

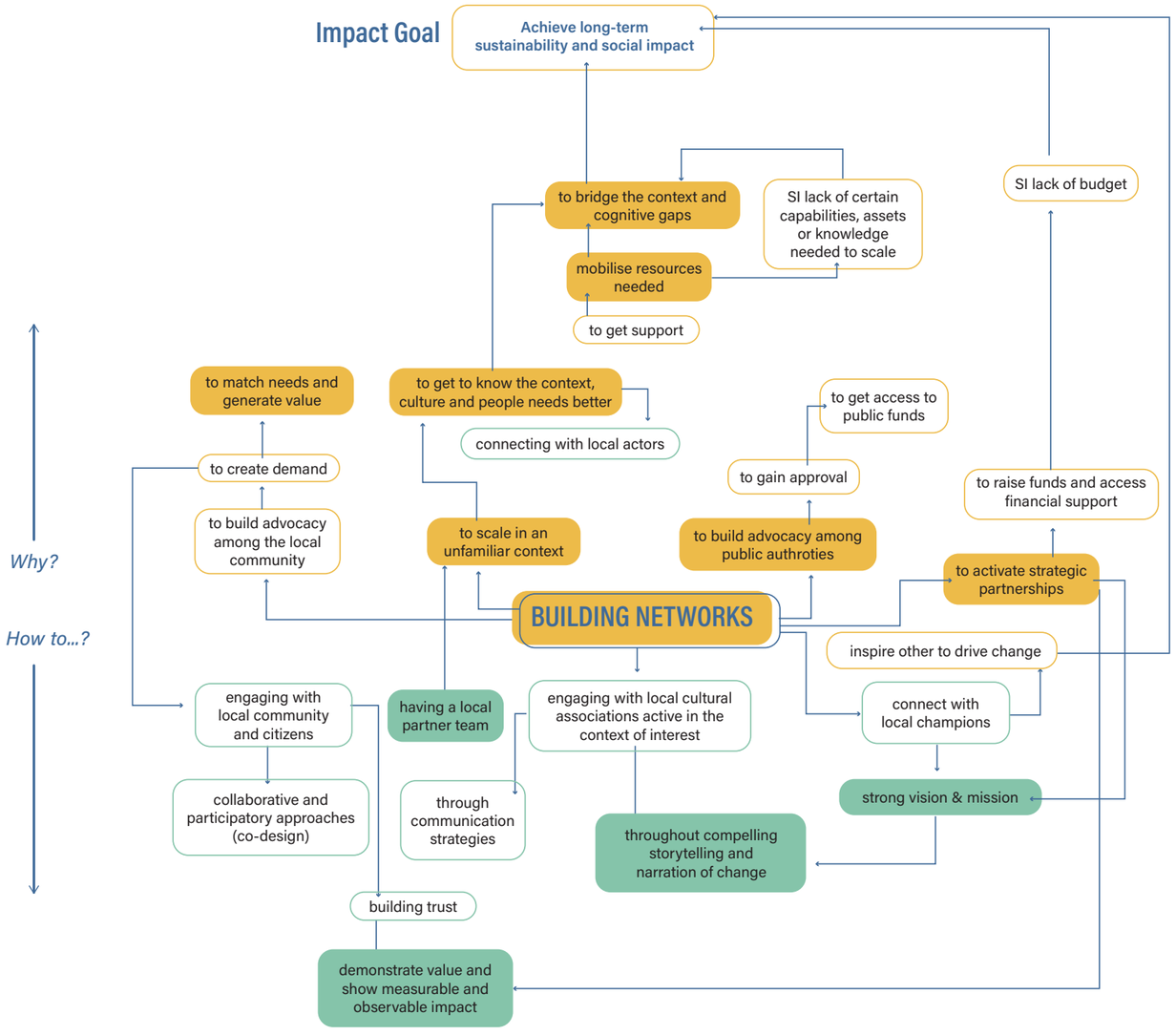



*Figure 56. The Building Blocks to Form (local) Networks. Through the Laddering Technique, this diagram shows why 'network formation' is crucial to scale-out effectively, what is relevant for and how it could be triggered.*

## The relevance of building networks

Addressing **wicked societal problems requires collaboration** across many different community networks and actors (de Moor, 2018). Indeed, a key success factor for scaling SI is having a strong and extensive 'constellation network' of local supporters. **Networks are essential when expanding and disseminating a project in a new context or community;** they unlock resources and help build advocacy (Haxeltine et al., 2017; Mulgan et al., 2007). Networks demonstrate to be relevant to identify, adapt, and successfully scale interventions and extend human capabilities to pursue shared interests (Cangiano et al., 2017; Kersten et al., 2015;).

## The Building Blocks and Strategies to foster network formation

***What conditions could enable Social Urban Innovators to scale-out through network formation and foster an exchange of culture & knowledge?***

*Where they come from?*

The following 'principles', derived from literature and the empirical research activities carried during the previous phases, propose **strategies or actions SI could follow when willing to form local networks and activate strategic collaborations**. These principles and building blocks are detailed in the diagram on the left, Figure 56.

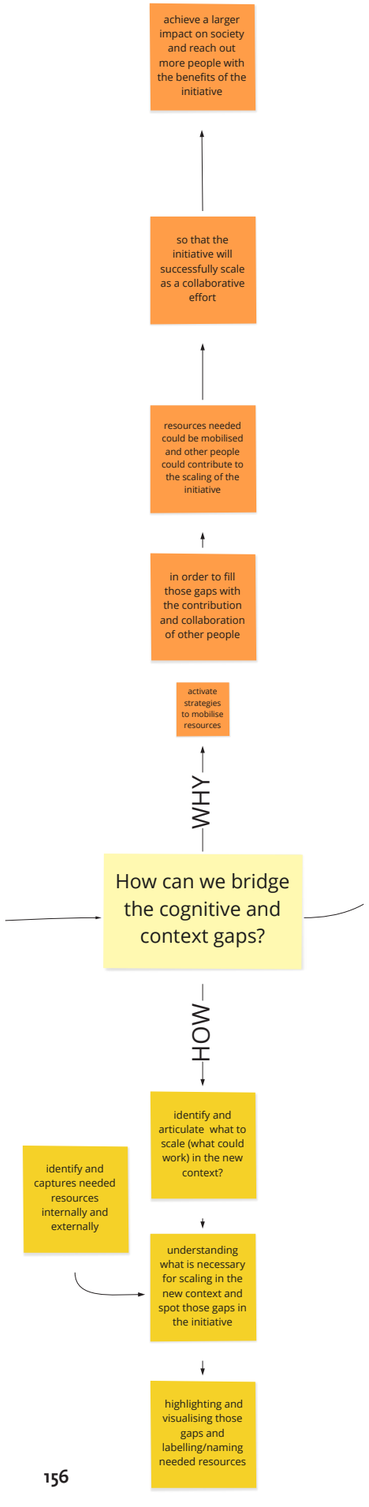
• **Communication Strategies and Storytelling Techniques**
Language is crucial— it is vital to use the 'right' tone and communication style for different audiences, for example, positioning a project through the lens of 'policy' and pragmatically focusing on immediate benefits when speaking with a front-line practitioner.

• **Collaborative and Participatory Approaches**
A strategy could be to involve the users and stakeholders along the process and co-create with them to generate a lasting legacy (Meroni et al., 2011)

• **Inspire through Strong leadership and a Strategic Vision**
A leader's attitude, which articulates the need for change by sharing his passion and motivations, will inspire others to follow the same path. Leadership is also vital for mobilizing people and resources when necessary to ensure project legacy (Burns et al., 2006, pp. 20-23) in Yee and White, 2016). Moreover, they must be linked to a clear shared vision (Heapy and McManus (2011) in Yee and White, 2016). Developing a vision and strategy is also one of the critical first steps to develop scaling strategies.

*How will they be used for the project?*

Together with the research findings of Chapter 9.1, these strategies will be translated into a set of Action Cards, as part of the Design Outcome, to facilitate Urban Innovators overcome their scaling challenges over the journey. Those are presented and detailed in the Delivery Phase.




# Design Directions

A design direction helps in moving toward a desired state and goal. Based on the Scaling Framework elaborated, the crucial steps and challenges of scaling, the following directions have been formulated:

## Design Direction 1

***'How can I facilitate SI capturing what is needed to overcome challenges and bridge the gaps when scaling-out?'***

Before setting strategies, the first step of the scaling process is defining what to scale. Indeed, as explained in the previous Research Phase (see Chapter 9.2), an effective way of scaling would be to identify those few minimum critical elements that are worth replicating and could work in the new context, despite different potential conditions.

## Design Direction 2

***'How can I facilitate SI translate challenges into actionable steps and effective strategies?'***

According to the steps identified in the 'Scaling Process Map', it is crucial to set goals and articulate strategies on 'how to scale' to bridge the gaps and get to the final impact goal desired. Strategies should be effective because they help SI achieve their goals by using the minimal resources required and minimum efforts but still achieving the most significant impact. For this reason, this second direction focuses on turning challenges into opportunities.

## Design Direction 3

***'How can I support SI in activating strategic collaborations and form networks in the new context to scale-out effectively?'***

We identified that 'Network Formation' is an effective way of scaling out, hence the final goal of this graduation project: facilitating SI overcome challenges and scale effectively through network formation. Indeed, to bridge the gaps and scale-out is essential to connect with local actors to help mobilize the resources needed and get to know the new local context.

*Figure 57. Starting from the Design Goal and Problem Statement, the Laddering Technique has been used to conceptualize and resonate about the design directions formulated.*





*Design Focus of the project*

*Recommendations and design opportunities*

Those are the design directions that could be followed to support SI in their scaling process and eventually achieve the social impact set. However, due to the limit of time, I will mainly **focus on developing outcomes for the first two directions corresponding to the first three steps of the Scaling Process: Acknowledging & Capturing 'what to scale' and Articulating strategies on 'How to scale'**, while the last step, activating strategies to form networks will be left as a recommendation and open opportunity for further projects.

# Design Criteria & Requirements

The previous section explained the design directions identified as opportunities to develop a design outcome supporting Social Urban Innovators to proceed in their scaling journey and achieve social impact through network formation. To do so, design tools and methods will be employed and developed. Indeed, **my role as a designer is designing the 'infrastructure' to enable something to happen, in this case, allowing SI to overcome the challenges and scale-out.**

Therefore, I elaborated a series of requirements and criteria to follow when developing the concept prototype. In the end, this list of requirements will also be used as an evaluation guideline to assess the 'performance' of the concept prototype designed. These design requirements are aligned with the design goal and directions defined.

The framework/Tool-Box to develop should be impact-driven, which means that, in the end, it should support Social Urban Innovators achieve social impact. Therefore, the outcome should fulfil the following design criteria and requirements:

## An Operational Framework;

The framework should provide guidance and support SI proceed in their scaling journey.

## An Actionable Tool-Box;

The Tool-Box should take the form of an 'activity' enabling users to overcome the challenges, bridge the gaps and replicate the project in the new context.

- It should be driven by impact goals;
- It should facilitate Social Innovators to develop strategies to scale and enable them to take actions to overcome the challenges;
- It should aim for an effective scaling method (if you forgot what 'scaling effectively' means, check Chapter 9.2).

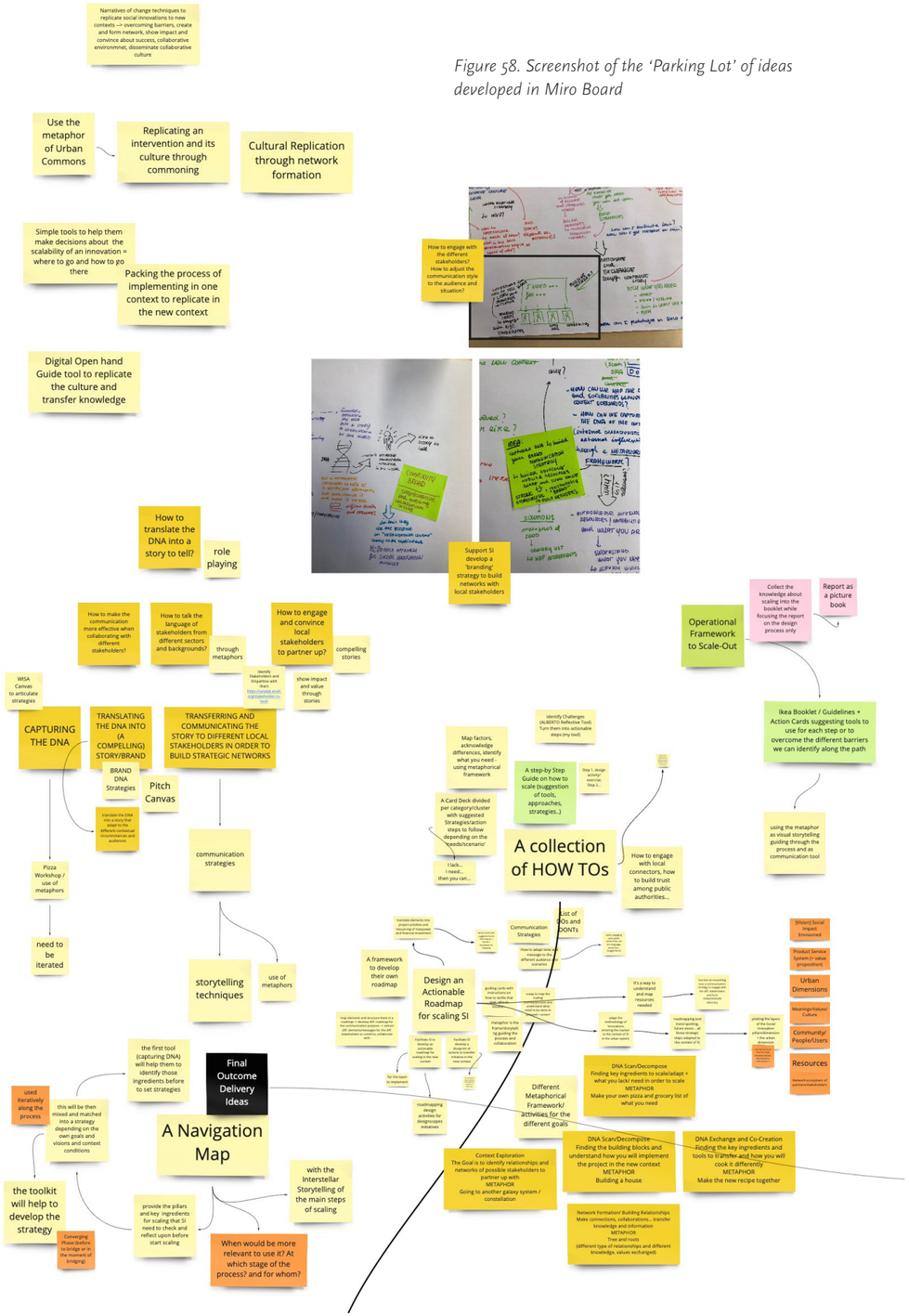



*Figure 58. Screenshot of the 'Parking Lot' of ideas developed in Miro Board*

# 10.3 Ideating the Concept Prototype

## *A (design) Tool-Box to Scale SI*

*Now that a more precise direction has been defined and informed by previous research, a leap needs to be made from the research part towards design. The goal, current situation and the problems are clear, but how can I move from the design goal and strategy defined toward designing a concept prototype? Different ideation approaches will be adopted, and new ideas generated to answer this question and respond to the design directions formulated. At the end of the Chapter, the ideas are made tangible throughout the design of a concept prototype. This prototype will be explored and experimented with the initiatives through design interventions and activities.*

## Ideation Approaches

Different design methods have been used and presented in the following paragraphs to ideate the re-framed Design Goal and Design Directions. Following the design requirements and criteria previously explained, the following questions have been formulated and will lead to the ideation phase.

**Research Questions**
How can I support SI with design tools, scaling their initiative effectively from one context to another?

**Design Questions:**

- ***How should a tool be structured to facilitate SI acknowledging and capturing the key elements to scale and the necessary conditions to look for in the new context?***

- ***How should a tool be structured to facilitate SI to identify resources needed in the new context and articulate strategies?***

- ***How should the tool be structured in a way that is operational and prompts actions?***

The ideation has a double scope: on one side is aiming to generate ideas about the concept prototype to develop, which will end up being a Tool-Box for scaling SI. On the other side, the intentions are to create ideas on setting up the design intervention and experiments to explore the prototype with the initiatives.

It needs to be said that the ideation phase was not a single moment in the overall process. Many ideas have been generated and iterated along the process and saved in a 'Parking Lot' on Miro Board (Figure 58). Some of those were ideas regarding the scaling process, designing the interventions in the previous phase, and ideas for the design outcome, such as the concept prototype developed.
At this stage, to move from the directions to the concept prototype, some creativity techniques mentioned in the Delft Design Guide (van Boeijen et al., 2013) were used to trigger ideas. **Creativity techniques are useful tools that can be used as inspiration or starting points to generate many ideas.** For example, the 'Back-Casting Method' (Robinson (1982) in Van Kerkhof, Hisschemoller and Spanjersberg, 2002) has been used to unfold various opportunities to reach the goal set. Several 'How to' questions have been formulated to inspire and trigger a self-ideation brainstorm (van Boeijen et al., 2013). Also, techniques from (Heijne & van der Meer, 2019) have been used to understand each design goal's core-problem and frame it in a how-to question to generate ideas, some of which also helped the previous formulation of the Design Goal. Other similar techniques from the book, such as H2's, brain-writing 5W1H, the ladder of abstraction and brain sketching, were used too, not only in this ideation phase but also in the conceptualization and actual prototyping phase. Other than an individual brainstorming session, ideation sessions with 'peers' have been organized with the intention of co-designing ideas for the concept prototype and the design experiments (presented later in Chapter 11.2).

See Appendix D for snippets of the ideation process and more details of the following sessions carried with 'peers'.

## Participatory & Co-Design Sessions with 'peers.'

Some of the ideas and design elements used in the Design Interventions of Phase 3 (Chapter 8.1 and 8.2) will be further explored in the following Co-Design Sessions. For instance, the idea of using metaphors and storytelling techniques will be iterated and further co-developed with 'peers'.

Three Participatory Session have been set-up (Figure 59) as test-bed generating insights to inform further RTD interventions. In these sessions, a mix of Master students from the Industrial Design Engineering faculty of TU Delft and other non-design practitioners participated. All the sessions respond to the same overall goal but with different settings; indeed, each session have been restructured and iterated, over time, according to the feedback received.

### Design Goal of the Session

***How could metaphor and storytelling techniques be used to explore the formulated design directions and facilitate SI proceed in their scaling process?***

At the end of each activity, reflections and discussion were raised where valuable insights and critical points have been generated and summarized in the following conclusions.

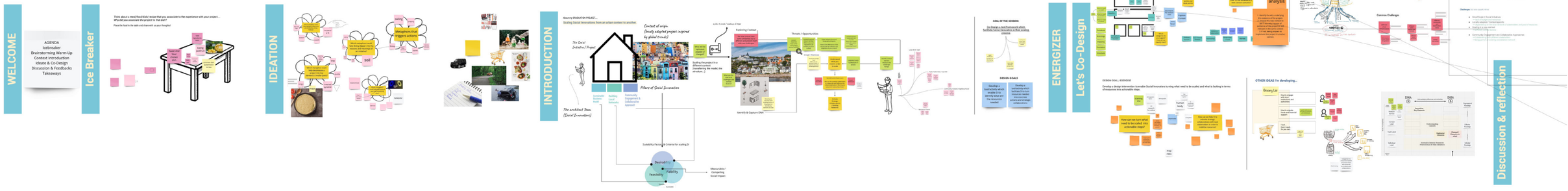



*Figure 59. Screenshot of the Miro Board set-up of the Co-Design Session 03 carried with 'peers'*

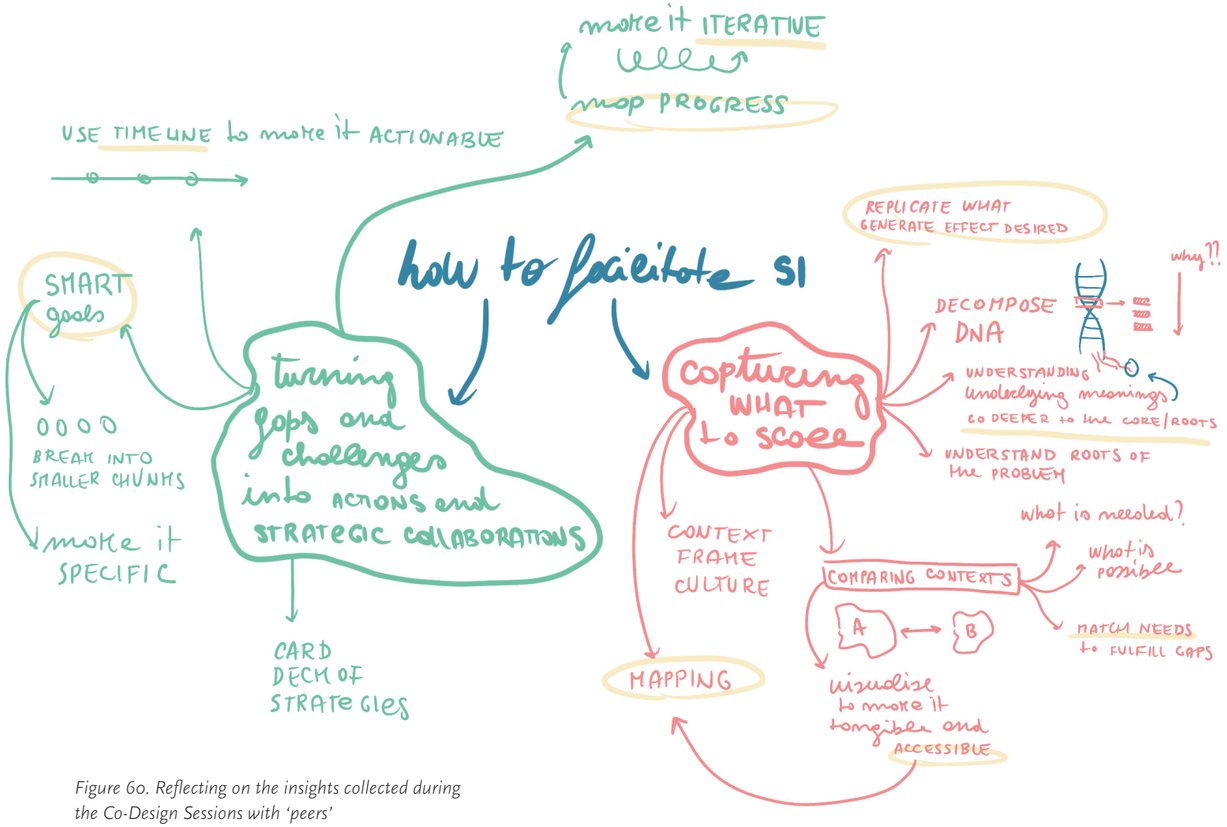



*Figure 60. Reflecting on the insights collected during the Co-Design Sessions with 'peers'*

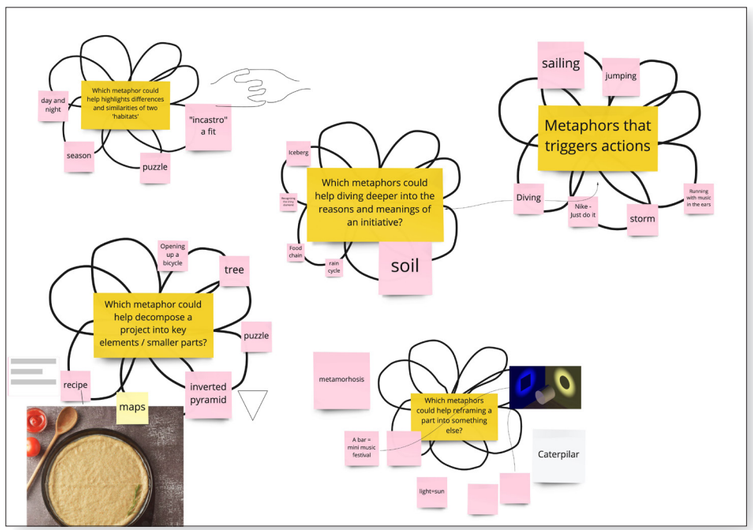



*Figure 61. Screenshot of part of the Session 03 carried with design students. The Flower Association Technique has been used to brainstorm potential metaphors to serve different purposes.*





## Conclusions & Reflections

Many ideas and useful feedback points have been generated during the sessions, and the most interesting insights have been summarized in Figure 60. **The sessions' results will be used to develop the prototype of the tool** that will be further explored with Designscapes initiatives.

It came out that, when comparing contexts, it would be relevant to **visualize differences and similarities to make them more tangible and accessible**. Moreover, when **scanning the DNA and exploring the new context**, it could be **crucial to go deeper into the roots and meanings**. In this way, the innovators may grasp a better understanding and richer insights of why the project worked out well in a specific context; so that those same conditions could be searched for or recreated in the new contexts to generate the effects and impact desired.

*'If you know exactly why you're doing something, then you can adjust the different elements. When you try to do something for people in different contexts is it's very risky that you only see the surface, and you don't know what's underneath it, especially if you're not from that context.'*
(Gal)

*'Look for the origin of the challenge in the context, maybe like if you go back and try to understand why this is a challenge. You can even find a new opportunity.'*
(Alexandra Serbana)

Regarding the use of metaphors and storytelling techniques, advantages and disadvantages have been discussed. In conclusion, **metaphors are an excellent creative tool that might inspire and trigger users to dive deeper to reach more meaningful insights. Moreover, they have the advantage of easing understandings and enhance engagement.** However, particular attention needs to be put on how they are used because they could also keep conversations on an abstract level. According to some participants, it would be more relevant to **use them as facilitation or instruction guidelines.** Several ideas have been generated regarding which metaphor to use and which could fit better the purposes set, as mapped in Figure 61.

All in all, it has been concluded that every analogy could be useful if it fits the overall storytelling, but a preferential one would be having it related with an 'ecosystem' due to the complex infrastructure of relations SI deal with. Therefore, when choosing a metaphor, the content should lead to the container's choice, not the other way around.

*'First, think about the structure and skeleton and then find the right metaphor for it.'*
(Martina Pozzoni)

As results of the sessions and in regard of the goals set, the following assumption has been formulated:

| | |
|---|---|
| *Design Assumption* | **Metaphors could function as storytelling guidance to navigate social urban innovators throughout their scaling process.** |

In conclusions, **the sessions functioned as a test bench to prototype ideas and get feedback about using metaphors** to prompt and ease the scaling process of SI. The results will inform the development of a concept prototype which will be explored and further experimented with the actual users in the next design interventions.

# 10.4 Designing & Prototyping The Concept

*A (design) Tool-Box to Scale SI*

*With the ideas generated during the ideation phase and the knowledge gained from research, some prototype concepts, in the form of tools and activities, have been designed. Those will be explored as 'design experiments' with different Designscapes initiatives. For the conceptualization and design of the prototypes, Direction 1 and 2 have been taken into account. These directions focus on the first three steps of the scaling process, as identified in the Framework, and aims to enable Social urban innovators to overcome the challenges while bridging the gaps and scale-out their project in another context. To facilitate the users proceed in those steps of the process, metaphors will be adopted and integrated into the concept prototype. A series of experiments will then be set-up to investigate the effectiveness of this design element and the tool developed to respond to the design goal and the design requirements formulated.*

## The use of metaphors in the Concept Prototype

### Using metaphors as storytelling & facilitation tool

According to the insights gained from the 'Pizza Workshops' (Chapter 8.3), **metaphors make it easy to engage in an online setting and enhance communication** between participants; also, **metaphors facilitate conversations about abstract concepts** because they help make those thoughts more tangible. Moreover, metaphors may **foster a collaborative environment** and have the capacity of turning struggles and problems into something more 'light and fun'; hence they could empower the users to take actions and overcome challenges. However, this one is an assumption that will need to be further validated during the next experiments.

By considering the values and advantages identified about using metaphors, I formulated the following design question:

***• How can I use metaphors and storytelling in the concept prototype?***

From this question and the insights, I developed the following Concept Direction.





*Concept Direction* **Using metaphors and visual storytelling as a facilitation tool to navigate SI throughout their scaling journey.**

***• How can I use metaphors and storytelling as a facilitation tool to navigate the users through the scaling process?***

Starting from the above concept direction and to respond to the design question formulated, the metaphor of an interstellar journey has been created and developed in a sort of storytelling framework with the scope of **guiding the user through the scaling process**. The idea of selecting the 'interstellar' theme as a metaphor to use came out during the discussion with design students during one of the Co-Design Sessions presented before. After having ideated about various types of metaphorical themes that could fit the purposes, the theme of galaxies has been chosen because it works well with the storytelling of the scaling journey: it presents relevant analogies with the ecosystem of the social initiatives.

The design of the prototype will be inspired and based on this metaphorical theme (as showed in Figure 64), and appropriate storytelling developed (Figure 67).

## Concept Prototype

Following the Design Goal, Directions and the Design Requirements. I conceptualized and developed two activities, which respond accordingly to Direction 1 and 2. The idea is to create **a Tool-Box that is actionable, impact-driven and facilitates SI capture to scale and articulate strategies on how to scale from a context to another.** For those reasons, **two activities** have been developed: capturing what to scale and the other to decide how to scale. Those two activities will be organised in a workshop setting and experimented with through a series of Design Interventions with the initiatives. The metaphor will be integrated into the two activities (as shown in the sketches of Figure 64), functioning as storytelling, and employed during the Design Interventions as a facilitation tool to navigate the users in the process.

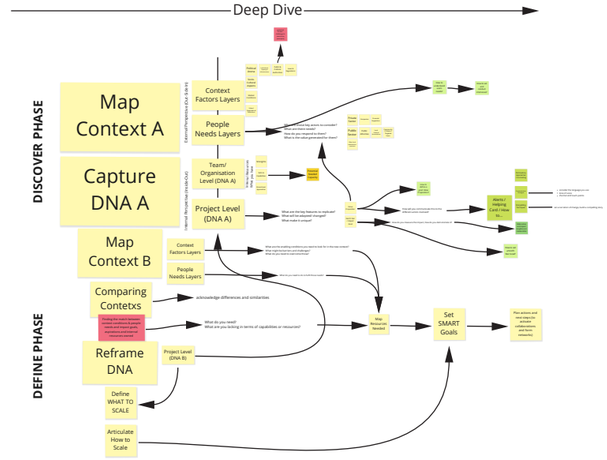



*Figure 62. Structuring the process of the Tool-Box activities based on the steps as mapped on the Scaling Framework*

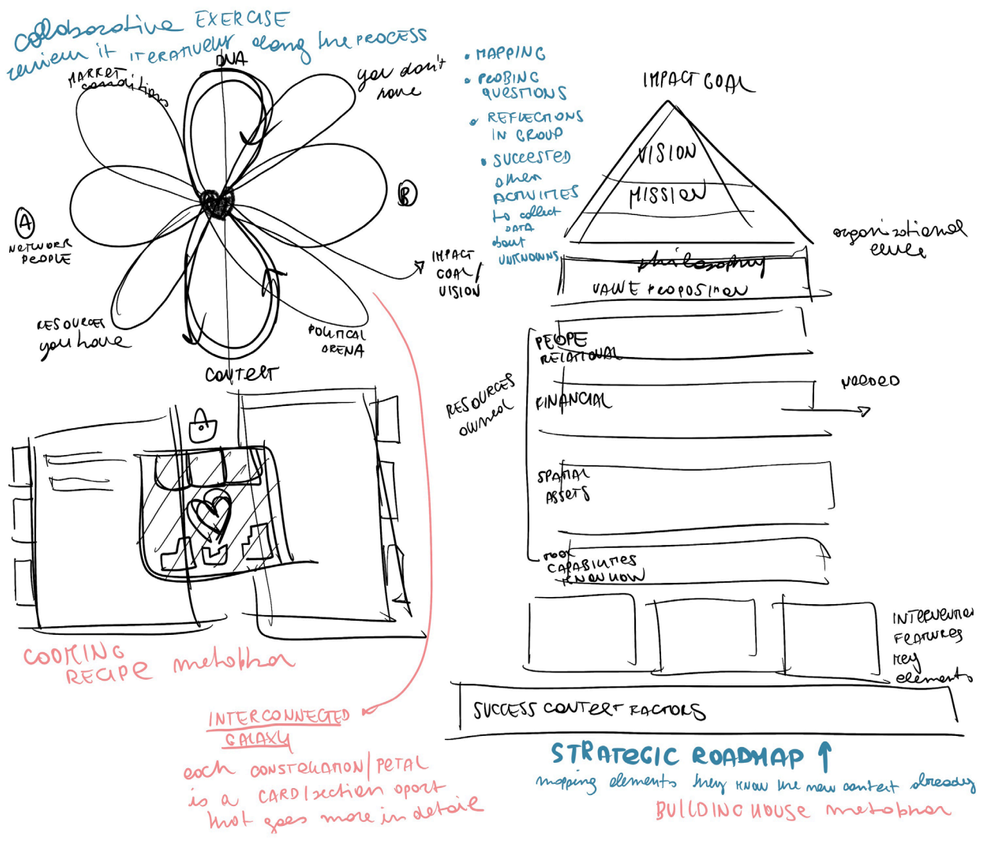



*Figure 63. First sketches and ideas for the Concept Prototype*



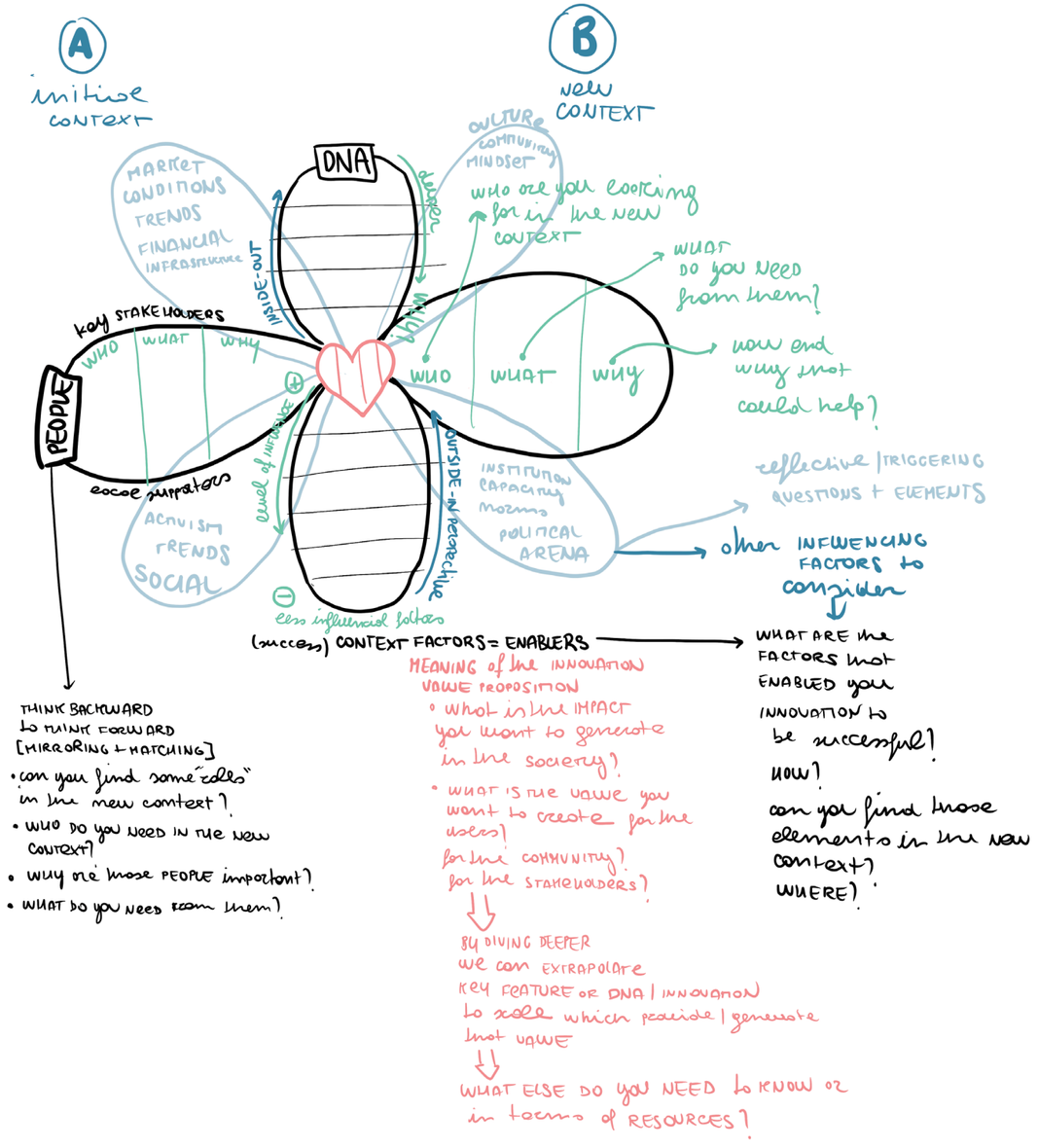


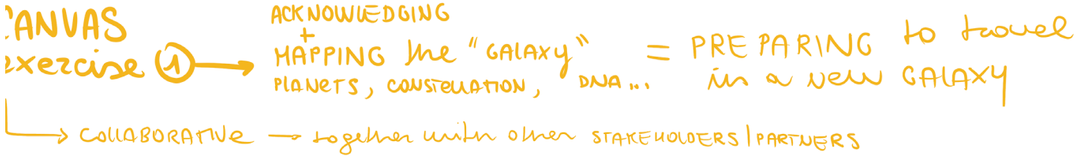
## Insights and theories informing the design of the prototype

According to the requirements and criteria set, the Tool-Box that will be developed need to be impact-driven. It means that **it should facilitate SI develop strategies toward the Impact Goal** they want to achieve. Moreover, **it needs to be operational to enable them to proceed in the process.** Therefore, the **Strategic Roadmap** (Simonse, 2017) methodology has been used and **adapted to the case to facilitate SI develop strategies with vision and mission in mind** (see Figure 63). Besides, the prototype Tool-Box has been inspired by the 'strategic back-casting methodology' proposed by Robinson (1982) in (Van Kerkhof, Hisschemoller and Spanjersberg, 2002); following this method, users first think about the future vision desired (or impact goal) and then plan the steps and actions to get there.

For this reason, in one of the activities developed, much emphasis has been put on defining the value proposition, the effects SI wants to generate for the community and their impact goal (or North Star) to achieve in the long term. These goals and motivations will drive the users to set strategies and articulate the steps to follow to proceed in the scaling process. This part of the prototype (that will be referred to as Activity 2 in the next Chapter) respond to Design Direction 2, linked with the third step of the scaling process: **define how to scale-out by articulating strategies to form networks** and implement them in the new location. Additionally, **the tool should be actionable to support SI in overcoming the challenges** (external and internal barriers). Following the Design Direction 1, the other part of the prototype (Activity 1) will facilitate SI **capture what to scale, by identifying the minimum critical elements that should be replicated** to generate impact and reach the goals. Hence, other design methods and tools will be explored and employed to respond to these goals. For example, **the Laddering Technique** (Kischkewitz, 2006) will be explored during the first intervention (experiment 01) **to facilitate the users diving deeper into the tacit layers of the DNA** and capture the key elements that should be replicated to produce the effects desired, while preserving the core values and meaning of the project. In the third intervention (experiment 03), the **'Path of Expression' method** (Sanders & Steppers, 2018) **will be used to facilitate users acknowledging differences and similarities between contexts**. As mapped in the process steps of Figure 62, this will be done by first looking at the past (implementation in Context A), reflecting on those key factors that enabled the users to succeed; secondly, they will look at the present scenario (scaling in Context B) by exploring the new local conditions. Eventually, they will think about the 'future', what will be replicated (based on the new local conditions and success factors identified), how they will adjust, adapt or re-frame their DNA to scale effectively.

The prototype and activities have been conceptualized by combining the knowledge acquired in regards of the scaling process and its crucial steps (as formulated in the Framework) with design theories, methods and tools. Therefore, **the framework functioned as theoretical foundation helping the development of the design concept and prototype; while, design has been used as 'solution' providing facilitation tools that could be adopted to enable social innovators proceed in their scaling journey**, and in particular to overcome the challenges present along the path.
In conclusion, different ideas, research insights and existing design tools have been combined to create those activities. **The two activities are part of a Tool-Box that support SI scale-out through network formation**. The activities have been set-up as a workshop in an online setting (on Miro Board), and they will be explored and experimented through Design Interventions with the Designscapes initiatives. The Design Experiments are presented in the next Chapter.



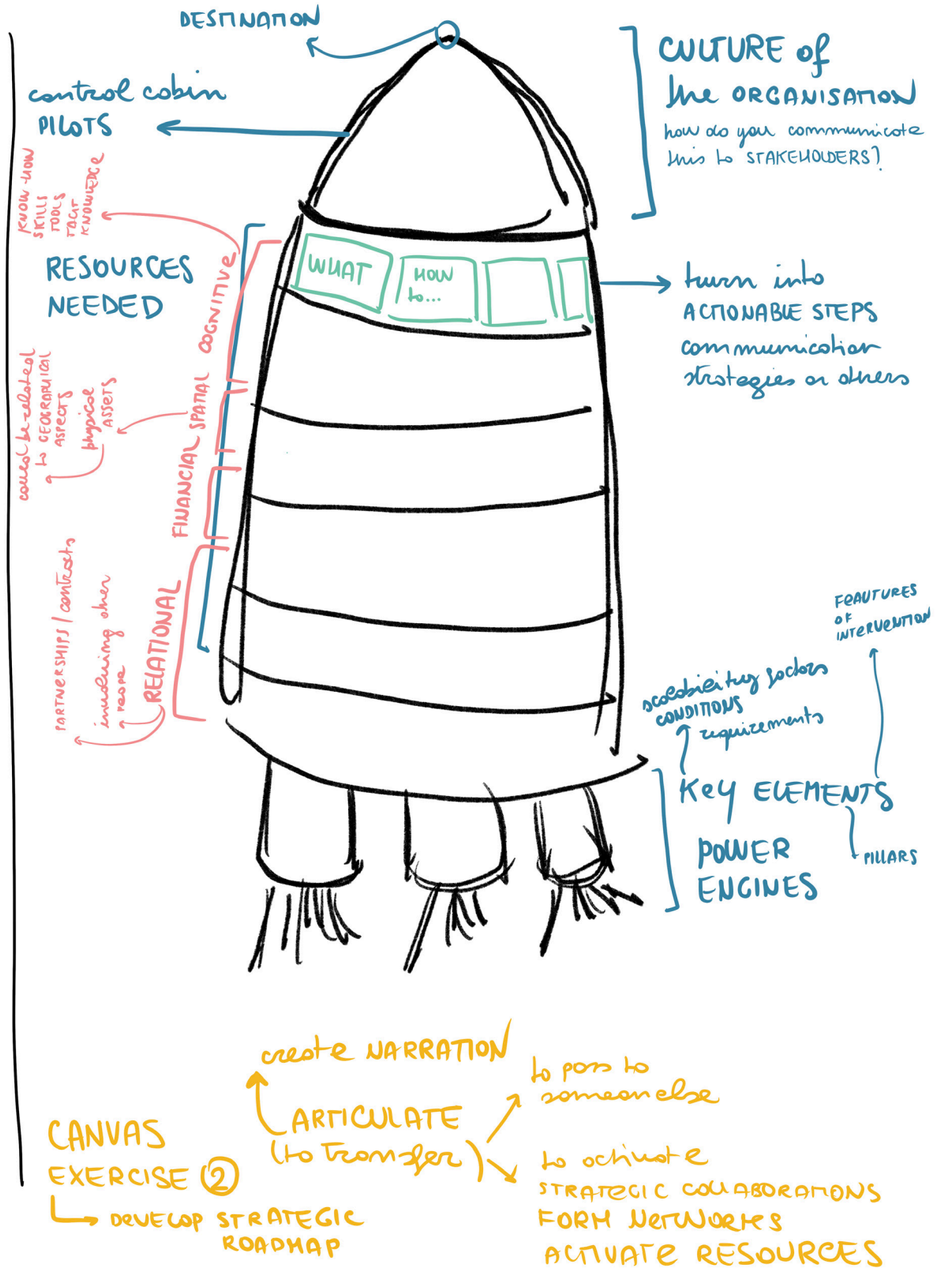




*Figure 64. Final sketches of the two activities of the Concept Prototype. The prototype has been developed and designed on Miro, so that it could be experimented through a creative workshops with the initiatives.*

Chapter 11

# *Cycle 02*
# From the Concept Prototype to the Final Tool-Box

*The Concept Prototype will be 'experimented' with users through design interventions.*
*In this Chapter, each design intervention's set-up, process, goals, and outcomes will be presented, and at the end of each, the main insights, reflections and design decisions will be highlighted. At the end of this phase, conclusions and general considerations will be drawn before to finalize the design outcome that will be delivered to the users.*



## 11.1 Setting the Design Experiments of the Prototype

The activities of the prototype developed in the previous Chapter will be explored through a series of iterative Design Interventions in the form of experiments. These Design Experiments aim to explore Design Directions 1 and 2 throughout those activities conceptualized. Over the process, the prototype of the activities and the experiment set-up will be iterated according to the insights resulting from each intervention.

**The goal of the experiments is to understand the relevance and validity of the Concept Prototype developed and its effectiveness in responding to the design goals set.** However, this design phase does not focus only on designing and validating the prototypes; **the (design) activities developed will also be used to gather more insights regarding the scaling journey of Designscapes initiatives**. The Concept Prototype has been elaborated based on the Scaling Framework, following the crucial steps of the scaling process, with the goal of **turning the research outcome into an operational and actionable framework through the (design) activities** developed. This prototype mainly functioned as proposed 'solution' responding to the Design Goal. However, throughout the design experiments still research insights will be gathered to respond to specific questions, while unfolding the scaling journey and detailing the 'Scaling Framework'.

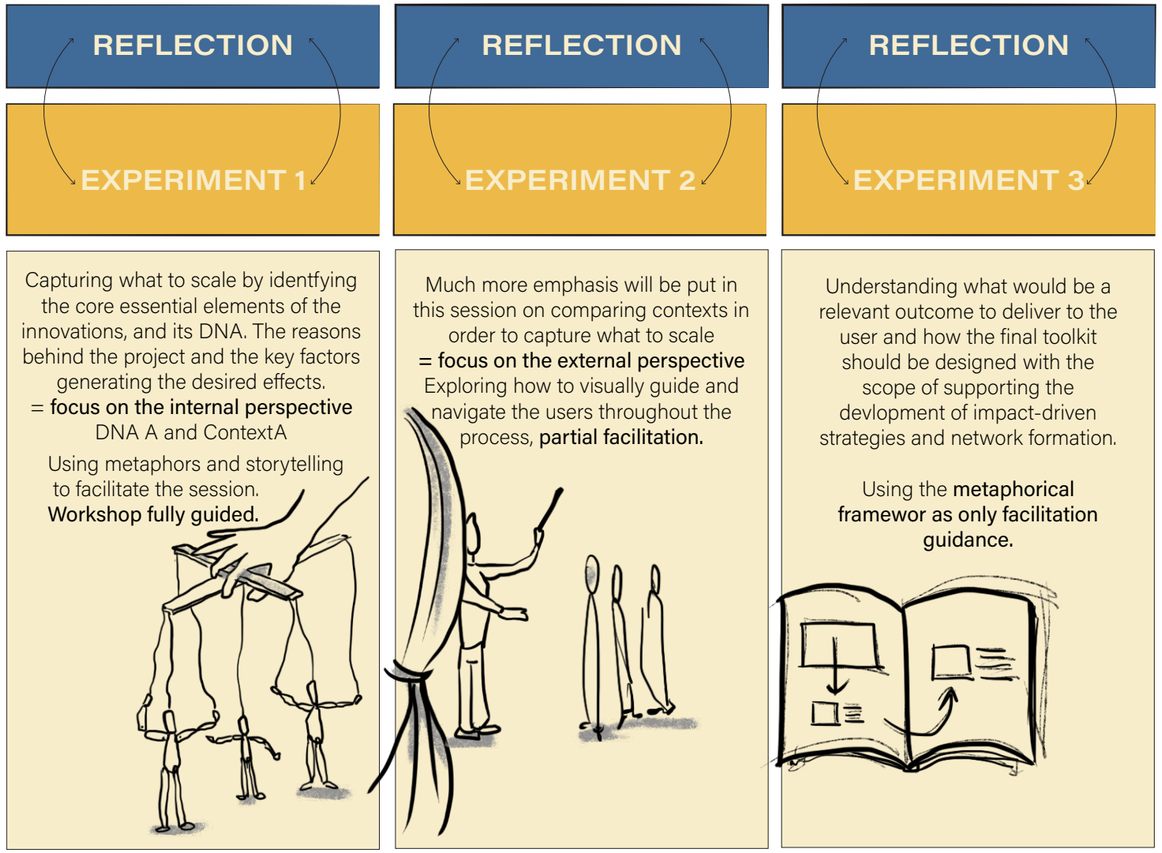



*Figure 65. The visual table shows the 'modus operandi' followed in this cycle, where experiments have been carried, and the conclusions and reflections of each will inform the next iterations. The visual highlights also the main goals and focus of each experiment.*

# The use of metaphors in the Design Experiments

## Using metaphorical storytelling to facilitate the activities

The metaphor technique has been employed to design the activities of the Concept Prototype, as sketched in Figure 64. The design was inspired by the analogy with the 'interstellar' theme. The same theme will be employed to develop the setting of the Design Experiments. Indeed, metaphors proved to be **a good facilitation tool**, especially to ease communication in an online setting. For this reason **the interventions will follow the metaphorical storytelling of 'Scaling as an Interstellar Journey' to guide the participants through the process and activities developed**. However, the way the metaphorical storytelling will be used as facilitation tool and guideline during the interventions will be different, evolving and changing according to the insights that will be derived.

Figure 65 shows how the three interventions will be set-up in different ways according to the purposes. The first intervention will focus on exploring and gathering (research) insights about the scaling journey. Hence, it will be relevant to be still present as a researcher triggering and steering the participants to obtain more specific insights. While the more the focus will shift toward the design goal, developing a design outcome, the more the presence as a researcher and facilitator guiding the users through the session will decrease. In this way, it will be possible to **understand whether metaphorical storytelling could replace the presence of a facilitator guiding the users through the process**.

To summarise, different design methods and techniques (such as the laddering technique, storytelling, storyboard, metaphors, Back-Casting method, Roadmapping methodology, SMART Goals...) will be explored to see what could be more effective in facilitating SI to proceed in their scaling journey and achieve their impact goals. Different facilitation modes will be set up, and various initiatives at different scaling stages will be invited to explore the prototype in different scaling scenarios. Ideally, the outcome could be designed with diversity in mind, **aiming to design for a diverse array of context scenarios, in the sense that the final results could be still relevant and valuable independently from the scaling stage or type of initiative using it**. Moreover, the following experiments intend to keep exploring the 'Scaling Framework' formulated, diving deeper into the scaling process's steps and unfolding the scaling journey of Designscapes innovators.

# 11.2 The Interstellar Journey Workshop
## *a Design Intervention*

**Activity 1 - Acknowledge and Capture DNA**
The first activity's scope is to identify and capture the core meanings behind the innovation, the value proposition, the key features of the project, and the success factors of the context influencing the overall DNA. In addition to this, exploring the new context conditions will also be a critical part before articulating what should be scaled. By carrying this activity, SI will bridge the gaps, match goals with needs, and then scroll effectively in the new context.

**RQ** ***How should be the design tool structured to facilitate better urban innovators acknowledging and capturing the core elements of what to scale in the new context?***

*Does the 'Abstraction Laddering technique' help urban innovators capture their project's core elements and deeper meanings?*

**DQ** *How can I better use metaphorical narration to probe and trigger urban innovators capturing what to scale?*

*How can metaphor and visual storytelling be better used to guide urban innovators through the s and activity? Can it function as facilitator guidance?*

*Does the visual canvas support urban innovators in capturing what should be scaled?*

**Activity 2 - Map resources needed and Articulate Strategies**
The second activity aims to support SI mapping what they need (in terms of resources) and articulating what they need to do (in terms of strategies and next steps) to activate potential collaborations with the local stakeholders.

**RQ** ***How can a strategic roadmap activity be structured to facilitate better the innovators mapping resources needed and planning the next steps?***

*Does the previous exercise help urban innovators to identify and articulate the resources needed to bridge the gap?*

*How does mapping resources need help urban innovators to identify potential strategies to activate?*

**DQ** *How can I design the activity in a way that is actionable and operational?*

*How does the visual template facilitate the activity?*
*How can we design it in a way that does not require an external facilitator?*





**Additional Goals and Assumptions to explore:**
- the prototype navigates users in their mapping process through a metaphorical and visual framework
- it helps them acknowledge resources needed and make sense of data
- it supports them capture deeper and abstract thoughts by making things more tangible through the use of metaphors
- it uses the advantage of metaphors and storytelling techniques to ease the understanding and communication between the people using it
- it activates strategies and collaborations
- it triggers cross-functional dialogues

## Set up and Data Collection Method

Multiple initiatives were contacted to participate in the interventions. In this way, it was possible to gain a more holistic perspective and see how the tool's relevance would change when used by different users. In the first intervention, two members of the 'Ticket to Change' project took part in the session. All the sessions were held online and carried out communicating through Zoom, while the activities were organized interactively using Miro Board (Figure 67, 68, 69). In this way, the activity could be easily structured in a visually appealing template looking form and be experienced in the first person by the participants. A collaborative setting for the use of the tool has been put in place to give the participants a chance to discuss and reflect together. Participants could then write down on post-its those thoughts and insights and map them over the canvases of the activities. Moreover, my presence as a researcher and facilitator allowed me to intervene and provide further explanations if needed or probe the participants to dive deeper when performing the activities.

Observations, video recording and feedback interviews will be used as data collection methods.

## Evaluation Set Up

The design criteria and requirements have been used to formulate the evaluation form and questions (Appendix E) addressed during the feedback interview and reflections. After each intervention, I will answer those questions tackled, while the conclusions and main takeaways from the three experiments will be presented together at the end of the chapter.

## Limitations of the Session and Tool

**1. Time-Bound**
Due to the limit of time available, the intervention has been squeezed into 1.15h; this could be too little for the activities as they are designed because they may require more time to be accomplished entirely. Consequently, some parts were skipped to give more space for the final feedback interview and discussion.

**2. Usage Scenario**
The tool/ activity has been designed and developed with the idea of being used during the initial stage of the scaling process (referring to Figure 46). However, some of the Designscapes initiatives are already ahead and at a more mature stage of their scaling process; this could bias the results and be taken into account when analyzing the interventions.

**3. Limitation to Design**
Since this project was performed during COVID-19, the overall tool have been developed and explored in an online setting and format due to the remote working situation.

# Design Intervention – Experiment 01

## Structure and Process

**Getting ready!**
To get ready for the session, I sent the participants a short inspiring guide (Figure 66) in the form of a 'storyboard' (van Boeijen et al., 2013); the intention is to explore whether the narration technique could function well as an instruction guideline, informing the users about the scaling process and the Tool-Box developed (the full template of the guide is in Appendix E).

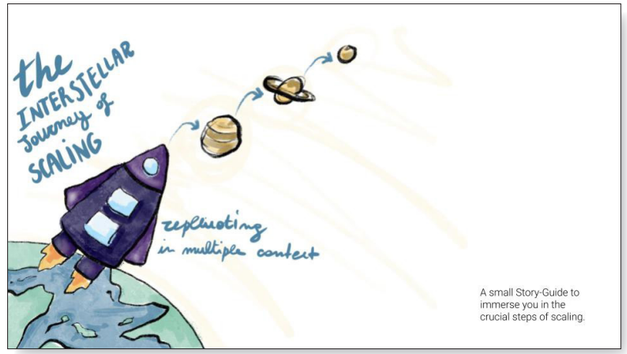



*Figure 66. Cover slide of the 'short guide' sent out to the participants before the session: This guide illustrates the scaling process as elaborated in the Framework throughout a 'storyboard' and metaphorical narration.*

**Introduction**
**Using the metaphor to explain the Scaling Framework**.
To introduce the Tool-Box activities to the users and the session's goal, I started with a short narration using the metaphor of the 'Interstellar Journey' (see Figure 67). Through this metaphor, I explained the crucial steps and criteria to scale-out effectively through network formation. The use of the metaphor helped to enhance the understanding of the concepts explained and to create engagement in the online setting. After the general introduction, users are guided through each step of the activity. Then, they are given time to explore, discuss and perform each task. The objective is to test whether the visual hints and how the template was designed would provide enough clarity to the users on performing the activity autonomously. Although, in this session, I was there facilitating and guiding them.

**Activity 1 - Acknowledge and Capture DNA**
The first part of the intervention is designed to guide the participants in acknowledging and capturing what to scale in the new context (Figure 68). In this case, participants were suggested to start from the DNA' analysis', where they were given the possibility to choose whether starting from the Inside-Out Perspective (top-down), capturing first the core innovation features and values of the innovation; or with the Outside-In Perspective (bottom-up), looking first at the context / 'habitat' of the project to identify those influencing factors that helped the project thrive. In that regard, the gravitational orbits, which represent the Urban Dimensions (as presented in Chapter 9.2), helped the initiatives to map the contextual factors influencing the implementation and scaling process.

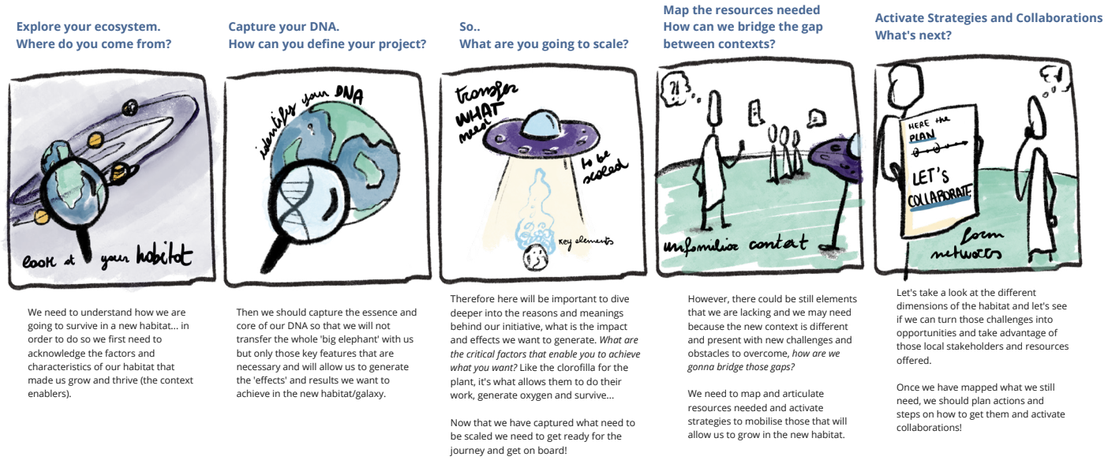



*Figure 67. Introduction to the session, explaining the concept prototype and the scaling steps through a metaphorical storytelling.*

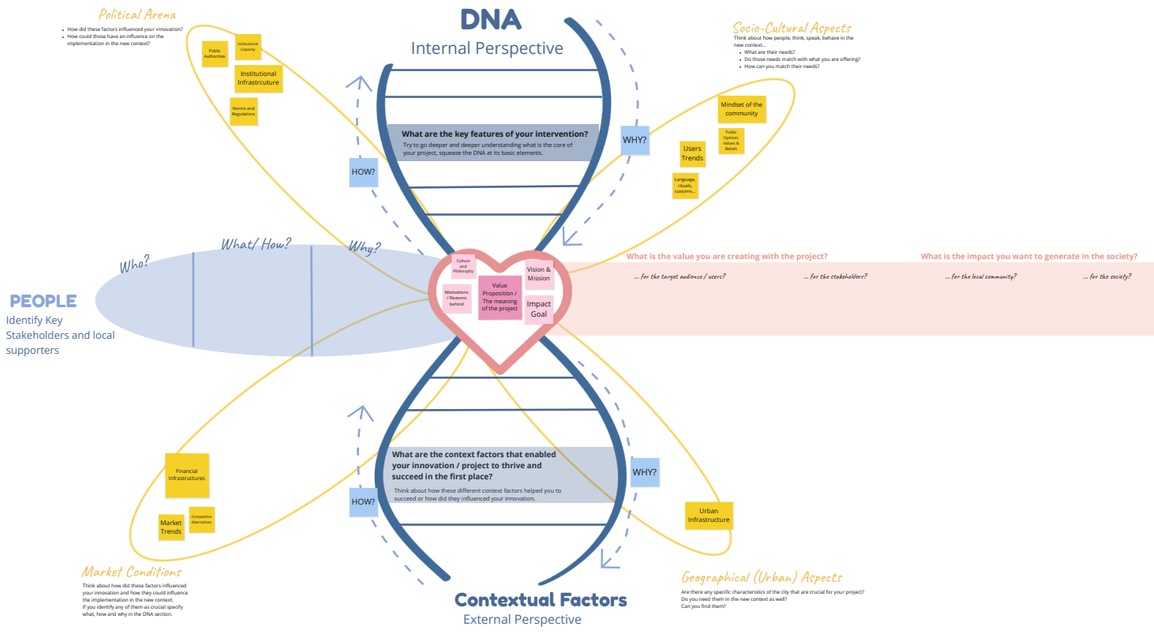



*Figure 68. Screenshot of Activity 1 of the Prototype as developed on the digital Miro Board for the first design experiment*

**Activity 2 - Map resources needed and Articulate Strategies**
The first activity aimed to support SI identify what to scale, while this second activity seeks to bridge the gap when scaling in the new context and help SI develop strategies to do so. However, as derived from theoretical research, strategies depend on visions and goals; hence, participants are first asked to think about their 'North Star', the final destination and driving forces. Then they would recall the key factors to scale, those captured in the previous activity. By first looking forward (where they want to go) and then backward (where they come from and what they bring with them), hypothetically, users will be able to bridge the gaps, define what they need and set strategies to mobilise the resources and achieve goals. Participants were asked to reflect on resources needed and what needed to be done by setting SMART Goals so that the context and cognitive gap could be bridged (the next step would be activating networks and collaborations with the local partners).

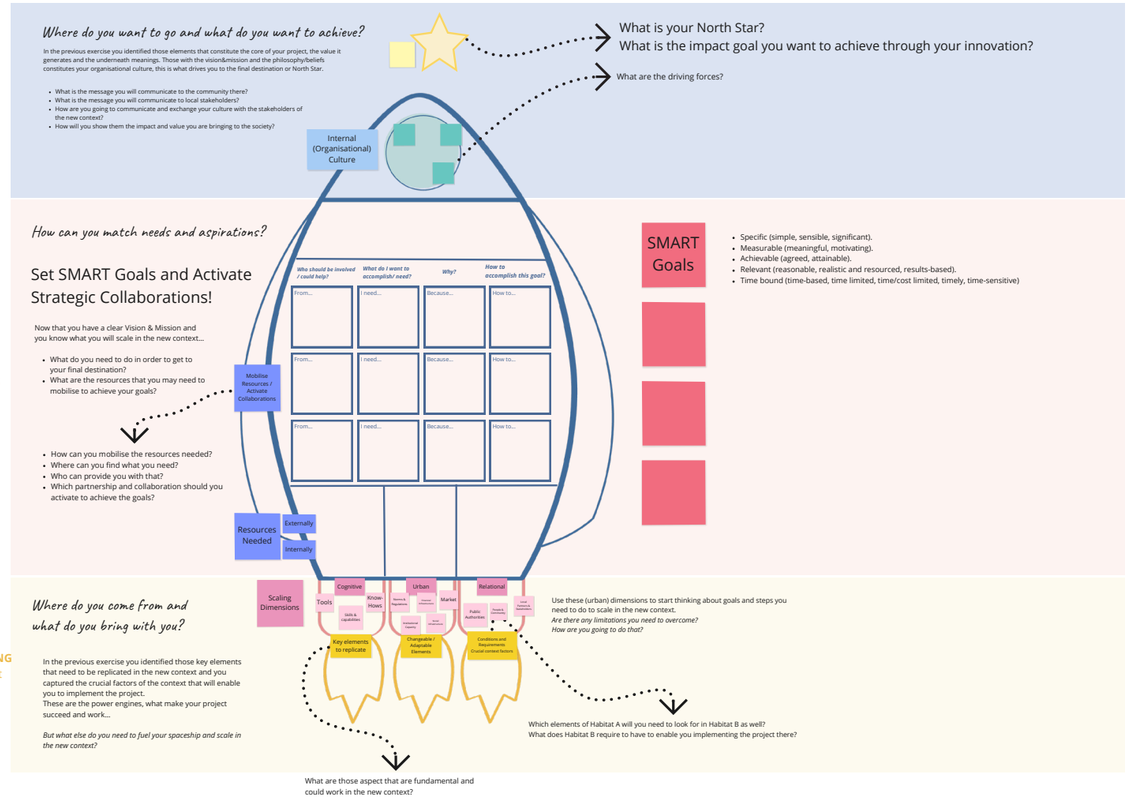



*Figure 69. Screenshot of Activity 2 of the Prototype as developed on the digital Miro Board for the first design experiment*





# Results & Findings

## Answering the questions

The session was successful for the insights found, although not all the answers were necessarily positive, and not all questions have been extensively answered. Here the insights are presented for each research question.

***Does the 'Abstraction Laddering technique' help urban innovators capture their project's core elements and deeper meanings?***
The laddering technique was useful for getting to deeper layers of the DNA. It was meaningful for the users because it helped them reflect on new aspects not considered before.

*'In our case, we should also scale our expectations because as much as it's going to be interesting for CC. We're still talking about a regional context. Not a national one. So if we compare ourselves with their numbers, we can be like, I don't know, how do you feel, but to feel inferior somehow while I don't think it's something that we should compare ourselves with those terms.'*
(Hannah Rasper, Ticket to Change)

The probing questions related to the 'Urban Dimensions' and functioning as triggers helped motivate discussion within the Team members. The collaborative discussions worked well as a moment of reflection to dive deeper into the layers of the project's DNA. This practice brought the innovators to come up with new insights regarding what should be scaled and replicated in the new context.

*'[..] Having a moment To reflect on the process and see how far you've come is interesting.'*
(Giulia Sala, Ticket to Change)

***How would the use of this technique be different without the 'help' of a facilitator?***
It needs to be said that this technique functioned well mostly because of my presence as a facilitator; Indeed, I could probe the participants to go deeper, asking 'why' and 'why', and steer them in different directions. In a setting without the facilitator presence, more written and step-by-step instructions should be provided.

***How should be the design tool structured to facilitate urban innovators capturing the core elements of what to scale in the new context?***
According to what has been observed during the intervention, the users need to be fully guided over the exercises and tasks, especially when going more in-depth into more tacit layers. Therefore, to help SI capture what to scale, the tool and the activity should provide enough guidance prompting the users through visual probes, questions and examples. Indeed, participants did not like when too much freedom was given to them.

*'But to have the possibility to see progress and to go back and to have this visually. That would be awesome.'*
(Hannah Rasper, Ticket to Change)

***Does the first activity help urban innovators to identify and articulate the resources needed to bridge the gap?***
The first activity was considered valuable from the previous conclusions because it helped to reach more in-depth insights, which led the innovators to develop new strategies and plan further actions. However, this question's answer could be biased because the initiative participating in this session already had clear goals and strategies planned. So, for them, it was easy to pass from capturing the DNA and what to scale (activity 1) to articulate resources needed and strategies (activity 2). For this reason, this question will need to be addressed again with initiatives at an earlier stage of the scaling process to evaluate the validity of the results obtained.

***How does mapping resources need help urban innovators to identify potential strategies to activate?***
It was useful for the participants to map people's needs and discuss the different aspects openly and collaboratively; thinking about those needs helped them articulate the next steps and actions.

*'We identified some parts regarding the stakeholders' needs, but we very vaguely why today; reflecting on these made us more aware of certain things of the project that now I think we will Act on it differently.'*
(Giulia Sala, Ticket to Change)

***How can a strategic roadmap activity be structured to facilitate better urban innovators mapping resources needed and from those plan next steps?***
The strategic roadmap methodology and the timeline feature were the most appreciated sections of the overall session. Those were relevant for setting goals, planning actions and develop strategies accordingly. However, according to the feedback received, activity 2 should be re-structured to make it more functional and straightforward for the user to perform.

*'I didn't get the switch between the needs and then putting it type, breaking it down into these four pillars.'*
(Hannah Rasper, Ticket to Change)

***How can I design the activity in a way that is actionable and operational?***
*Does the visual canvas support urban innovators in capturing what should be scaled?*

The timeline aspect of the activity, where concrete goals and actions could be mapped, made the overall tool actionable and operational. Moreover, visualizing thoughts and ideas by mapping them out helps make those tangible and actionable.

*'[..] public sector, you give us money because it can be returned in taxes. It's something that popped up in this canvas. Maybe it was there, but it's really visible now'*
(Giulia Sala, Ticket to Change)

The visual design of the two activities prompted the users to proceed in the process. It triggered active reflections, collaborative discussions and concrete actions, in the sense that tangible takeaways and steps were planned at the end of the session. While reflecting and doing the activity, participants co-created storytelling ready to be 'exported'. The creation of 'storytelling' was sparked by the use of metaphors. This outcome can be easily shared, at a later stage, with the community and stakeholders that will be involved in the scaling journey. Therefore, metaphors and visuals may help to activate collaborations and build advocacy about innovation.

*'We have many ideas in our mind. But when they are on paper, they can be shared differently. And from these, you can export certain output or certain storytelling that you want to say.'*
(Giulia Sala, Ticket to Change)





# Reflection towards the next iteration

## Conclusions & Main Takeaways

Overall, the activity turned out to function more as a reflective tool because the participants involved were at a more mature stage of the scaling process; for them, it was more like a review moment of things already discussed and planned. Nonetheless, the initiative found the tool and the activity relevant because it allowed the emergence of meaningful insights. After all, they felt empowered and confident in proceeding with their process. The second activity has been perceived valuable to be used also in other occasions and scenarios. It means that part of the tool could be generalized for other purposes, out of this project scope. However, this would need further research. Also, it triggers a reflective question of whether this would be advantageous for the Tool-Box or not. On the other hand, it would be ideal if the tool, in the end, could be beneficial for different types of initiatives willing to scale their innovations.

*'I think it can be really helpful. So for different other projects, not necessarily only in the scalability phase because I think that, in this case, especially in the first part, we were talking about scalability. But the second part, I would say that we can imagine it for any type of project, even a brand new one when you have an idea...'*
(Giulia Sala, Ticket to Change)

- **Users like to be guided and need reassurance**. They have knowledge and skills but **lack the self-confidence to put those skills into practice**; having someone telling them 'you are doing good' boosts their capacity and faith. It could be perceived as a way of '**empowering**' the users proceeding on their scaling journey with confidence.

According to the feedback received, users would not use the canvas and Tool-Box independently without previously experiencing it with a facilitator's guide. It was also observed that, when left on their own, participants felt the urge to call my attention for more guidance. It could either mean that the design, the structure, cues and visual probes used were not clear enough, but it could also be a natural reaction of the user willing to have more support and reassurance since they knew I was there.

- The canvas should be structured following a more logical and straightforward hierarchy, and **the activity navigation needs to be more consistent and user-friendly**.

Being present as facilitator and researcher intervening during the activity could undermine the validity of the results, especially concerning the tool's navigation and usability. It was not easy to be present as a researcher and facilitator, but let go of control and avoid steering them on doing what I was expecting them to do. Therefore, in the next experiment, less facilitation guidance will expand the exploration and gain more reliable conclusions.

Moreover, the session's time was too short to explore all the parts of the activity and the goals set. The time constraint was indeed a limitation.

The above conclusions and reflections brought to formulate new questions:

- *Does the structure on its own, the visual hints, the instructions, the probing questions and the metaphorical framework could function as guidance and facilitation?*
- *How should those be designed to be easy to follow and effective?*

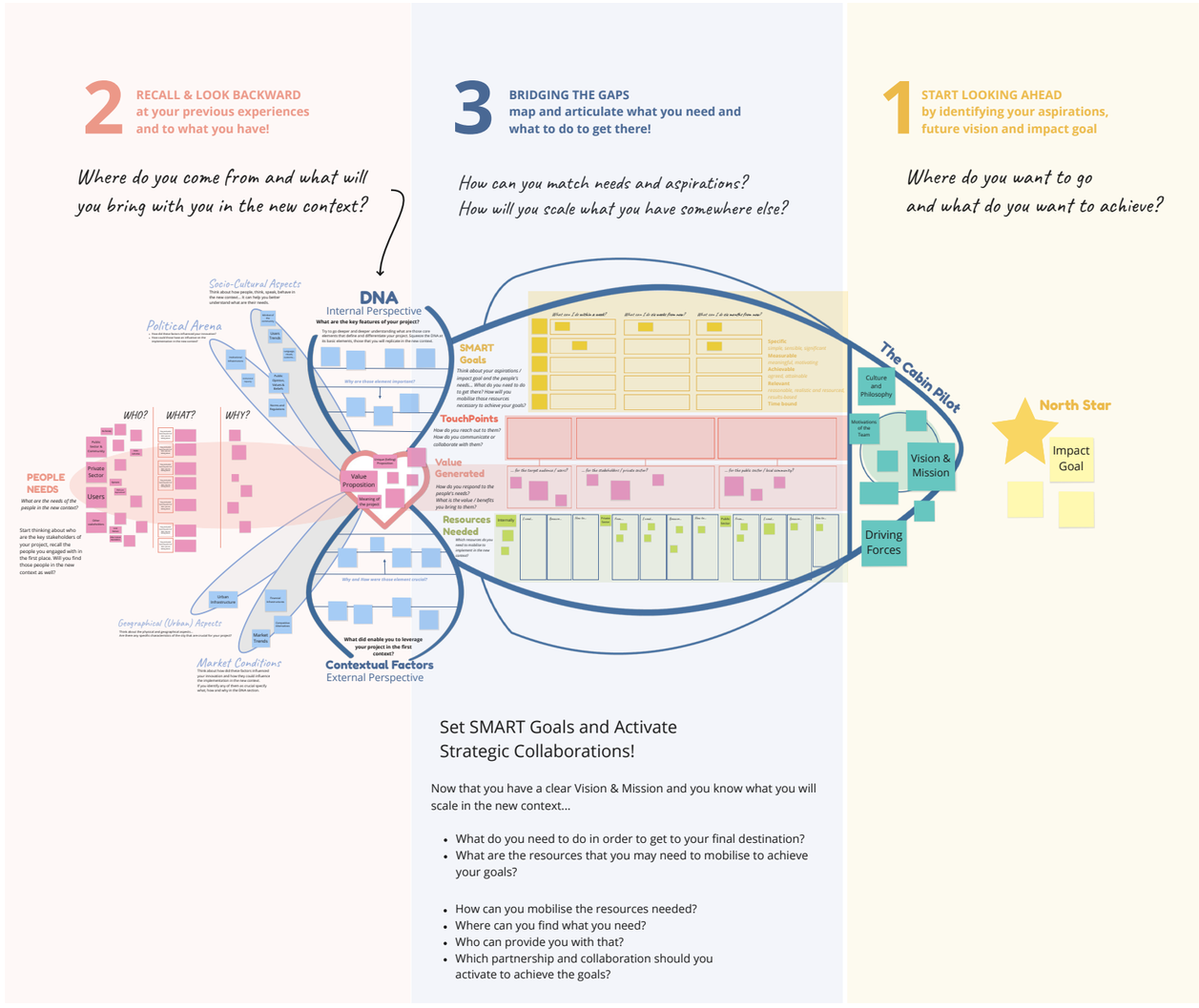



*Figure 70. Screenshot of the second iteration of the Prototype as developed on Miro Board for the second experiment. Activity 1 and 2 of the Prototype have been combined in one single 'canvas'.*

## Design Intervention – Experiment 02

For the second experiment, only one team member of the Start Park initiative took part in the session. Thus, since dialogues and collaborative discussions could not be triggered, the session has been carried differently and focused on evaluating the tool's usability and navigation. The first experiment triggered more questions, and according to those new goals were formulated.

**RQ** ***How do the outcomes change when the tool is used by different social initiatives at different scaling stages?***

*Does mapping the resources needed to facilitate articulate strategies and next steps?*

*Does capturing the impact goal and the core elements of what to scale facilitate mapping the resources needed?*

*Does capturing the value to be generated and mapping people's needs spark SI to set goals and activate strategic collaborations?*

*How are the metaphorical framework and visual structure perceived by different users? Does it facilitate the process and its understandings?*

**DQ** *How should the design activity be structured when little guidance from a facilitator is involved?*

*How to make the instructions understandable and easy to follow without the need of a facilitator?*

*How to better make use of visual hints to probe SI dive deeper into the activity?*

## Iterating the design of the Experiment & the Prototype

*What did it change in the design of the intervention and activities of the prototype?*

According to the feedback received, the following changes to the tool have been made. The two canvases corresponding to the two activities have been combined in one (as shown in Figure 70), intending to explore whether a different structure and navigation would change the results and experience considerably. Then, more space and emphasis has been given to the exercise of mapping people's needs and a section focused on the touch-points and channel of communication was added. During the previous intervention, reflecting on people's needs triggered the innovators to set concrete goals and actions. From a theoretical perspective, the users' and community needs are fundamental to consider when scaling to generate demand and enhance the project's desirability.

Regarding the workshop, less facilitation guidance was provided from my side (I took a step back, observing without intervening too much). Therefore, more focus was put on the design and structure of the activity, and more freedom was given to the participant to explore the canvas on its own. To evaluate the process and the usability of the tool, I asked the participant to think out loud along the process. At the end of the activity, a feedback interview was held, and more specific questions were addressed.

# Results & Findings

## Answering the questions

***How do the outcomes change when the tool is used by different social initiatives at different scaling stages?***
This second iteration's results and insights were similar to the previous one, although a different initiative was involved and a different structure explored. In both cases, the activity has been perceived as relevant and meaningful as a reflecting and converging tool, facilitating the user to plan actions and strategies. Even though the structure was different, the core activities and the tool's scope was still effective and relevant.
*'...in realtà è un buono strumento per fare sintesi su quello che... minima spesa, massima resa!'* (Rita Duina, Start Park)

*'... in reality it is a good tool to summarize what ... minimum expense, maximum yield!'*

***Does capturing the impact goal and the core elements of what to scale facilitate mapping the resources needed?***
It could not be directly said if capturing the DNA, its core elements and the impact goal facilitate the user to proceed with the second activity. As happened in the previous intervention, the initiative already had clearly defined what they will scale, their impact goal and value proposition.
*'Questo mi viene facile perchè abbiamo già individuato dei pilastri del progetto, una specie di set di elementi che non può mancare.'*
(Rita Duina, Start Park)

*'This comes easy to me because we have already identified some pillars of the project, a kind of set of elements that cannot be missing.'*

On the other hand, capturing what to scale by writing it down on post-its made it tangible. It triggered new reflections and yielded empowerment on the user.

***Does capturing the value proposition and mapping people's needs spark SI to set goals and activate strategic collaborations?***
The exercise of mapping people's needs and defining the value proposition triggered the user to set goals. According to the user, setting goals is an excellent way to start planning actions and building strategies.
*'[...] mi è sembrato molto interessante, mi è venuta voglia di fare questo esercizio rispetto alla scansione temporale che proponi e poi perchè di solito più o meno, personalmente parto sempre dagli obiettivi, quindi mi è venuto..'*
(Rita Duina, Start Park)

*'...it seemed very interesting to me, I felt like doing this exercise with respect to the time frame you propose and then because usually more or less, personally I always start from the objectives, so I came up with it ..*

It was highlighted multiple times that mapping out things 'visually' make ideas tangible and accessible; hence, they trigger concrete actions and collaborative discussions.
**• Reflecting and mapping data help generate knowledge and facilitates the development of goals and strategies.**

***How to better make use of visual hints to probe SI dive deeper into the activity?***
The design of the tool and the visual hints used need to follow a more logical and consistent flow (e.g., using hierarchy, from up to down, from left to right) to navigate the users better through the activity's process.
*'[...] poi anche perchè era in alto quindi può essere pure un fatto di ordine.'*
(Rita Duina, Start Park)

*'[...] then also because it was at the top so it can also be a matter of order.'*





*How are the metaphorical framework and visual structure perceived by different users? Does it facilitate the process and its understandings?*
***How should the design activity be structured when little guidance from a facilitator is involved?***
***How to make the instructions understandable and easy to follow without the need of a facilitator?***

The user appreciated the canvas's visual appearance and the connection with the metaphor because it made the overall activity more engaging and understandable. However, participants noticed a dissonance and disconnection between the structure and process of the activity, with the storyboard's narration. Therefore, it could be more relevant and useful if the storytelling would be used more as a step-by-step instruction guiding the users through the activity. In this way, the directions could be more explicit and easy to digest, and a facilitator would not be needed.

*'I also liked the metaphor on which you decided to play a little .. the story is very well marked, but what disturbed me is the fact that this storytelling was not so respected in the structure of the instrument ...'*
(Rita Duina, Start Park)

# Design Intervention – Experiment 03

## Toward the Design Outcome...

| | |
|---|---|
| **RQ** | ***Which strategies are Designscapes initiatives adopting to mobilise resources?***<br>***How are they forming networks with local stakeholders of the new context?***<br>***How are they overcoming context challenges?***<br><br>*Does comparing the two contexts, acknowledging differences and similarities, help SI capture what to scale (replicate, adapt, or change the DNA)?* |
| **DQ** | *How can I make the tool simple to be used without the need for an external facilitator?*<br><br>*How can I make it more accessible for a non-design oriented type of users?* |

## Set-Up and Data Collection Method

For this session, an initiative (T.Ospito) at an earlier stage of the scaling process has been invited to participate in the intervention. Two members of the team participated in this experiment.

At the end of the session, an evaluation-feedback interview has been carried following the questions of the mind-map of Figure 71.

## Structure & Process

For this session, no facilitation was provided, and the tool has been structured, through step-by-step instructions, to guide the users to perform the activity on their own. This time the structure follows the narration's storyline, which functions as an instruction guide (Figure 72). The canvas has been split again into two parts, as it was in the first intervention, but some features have been drastically changed. In this intervention, more focus has been put on the comparisons between contexts and the people needs, as showed in Figure 72 where the two planets are connected to the middle with the DNA. In this way, I could evaluate whether comparing contexts would facilitate SI defining what is better to scale in the new context.
Regarding the second activity, only small changes have been done to make the structure and process more understandable (Figure 73).

*Figure 71. Mind-map used as guide for the feedback interview*


*Assumption*

**By first mapping what was successful in the original context and then looking for similarities in the new one, SI will be facilitated to map what is needed to be scaled. In this way, the DNA and Value Proposition is open to be re-framed and iterated based on contextual factors, people's needs and resources available in the new context to eventually capture what could work there.**

**The INTERSTELLAR JOURNEY of Scaling:** *Replicating to new urban contexts.*


### *Explore your Habitat & Ecosystem*

You grew up in a certain habitat and ecosystem. There are specific conditions of this habitat that helped you survive and thrive, maybe the terrain, the type of air, the vegetation or other living organism...

So, a first crucial step when replicating is understanding what are those context enablers, those factors which helped you grow and you will need to find in the new planet too.


### *Acknowledge differences & similarities*

Once having identified what are the conditions that you might need to scale and succeed, you will have to understand what will be different in the new 'planet' by acknowledging differences and similarities and prepare to bridge those 'gaps'.

- *How are you going to adapt to the new habitat?*
- *Which conditions do you need to look for?*
- *How can you recreate a thriving ecosystem?*


### *Capture what to scale ...*

Once acknowledged the enabling factors and context conditions, as well as the needs of the people, you will need to prepare for the journey.
*But what are you going to bring with you?* You don' have a lot of space and capacity in your spaceship, you need to identify the minimum critical elements with which you can generate the effects desired, in the new place.

- *What are those unique element that make your project what it is and what is the value will you generate?*
- *What, instead, will change and be adopted?*

TO BE CONTINUED...

## **INSTRUCTIONS:** Step-by-Step

Start looking at your current habitat and map those factors that enabled you to succeed and implement the project in the first place.

- *What are those context characteristics?*
- *Which context factors did help you succeed and grow?*
- *Are those factors crucial? Do you depend on them?*
- *What were enablers and what were barriers instead?*

Look at the different Urban Dimension, placed on the orbits, and think how those will influence your scaling process!

People are essential when scaling Social Innovation, you need to engage with the community, build networks and advocacy to be able to scale and grow.
1. Map the key stakeholders and the target audience;
2. Reflect about their needs and the value you generate for them.

Then compare Context A with the new Context B where you are going to scale. Copy and Paste the factors that won't change and reflect on what will be different instead.

- *What will be the challenges and obstacles of the new context conditions?*
- *How will those influence your DNA and the scaling process?*
- *Which factors will help you to scale in the new context?*

Start reflecting about how you are going to overcome those challenges and what will change in your initiative.

- *How will adopt to the new habitat?*

As last, go to the middle of the canvas... it's time to capture the DNA and what you are going to scale!

Some elements will be replicated as they are, but others may change. What? How? Think of the context factors mapped previously and how those will influence your DNA. Then reflect on how you are going to adapt your initiative to the new conditions.

*Start from the top of the DNA and then go deeper, capturing the core elements and meanings before to think about changes.*

*Once you have finished with this first activity you mapped and captured the essential elements that will allow you to proceed in the scaling process and reflect on how to do that by building strategies and plan the next steps!*

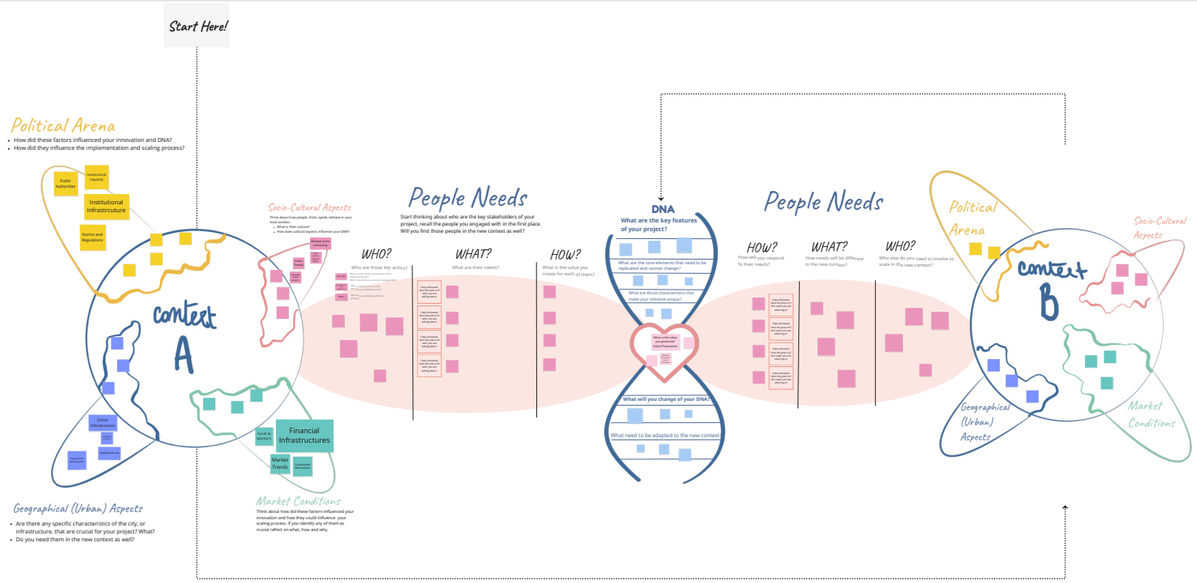



*Figure 72. Screenshot of the workshop set-up in Miro Board. The image shows the step-by-step instructions following the storyboard and underneath Activity 1 is presented.*

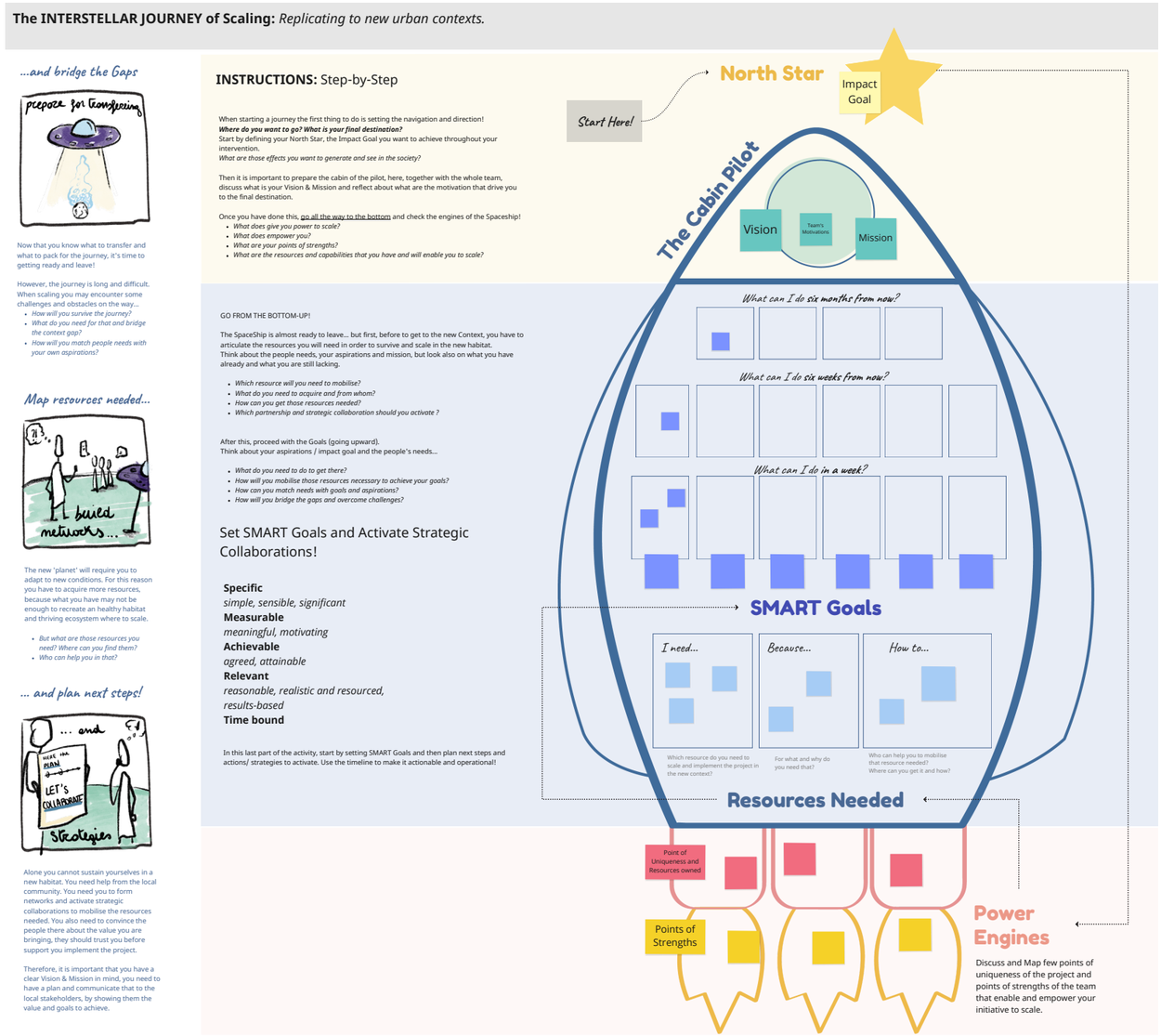



*Figure 73. Screenshot of Activity 2 as set-up in the digital Workshop on Miro Board.*





# Results & Findings

## Answering the questions

***How are they forming networks with local stakeholders of the new context?***
***How are they overcoming context challenges?***
***Which strategies are they adopting to mobilize resources?***
Forming networks is either a challenge and a 'solution' to scale out effectively in a new and unfamiliar context. Indeed, having a local partner network to count on is considered a competitive advantage for SI; it enables resource mobilization and makes it easy to know the context. For instance, engaging with the cultural associations of the area could be beneficial to get to know the culture better and reach out to the target.
*'First plan and design an ideal 'journey' and then prototype and test in the context by collaborating with users/ actors.'* (Martina Monelli, T.Ospito)

'The sustainability of the service innovation proposed will depend on local business associations' (Ginevra, T.Ospito)

The strategy of forming networks and local partnerships is quite common and generally adopted by Designscapes initiatives. In particular, scaling out through local champions, as explained in the Scaling Scenario 2 (see Chapter 6.2): two teams collaborate to implement and scale the project from a context to another, the two groups belonging to the two different contexts are connected by an intermediary figure, who usually hold the big picture (like a Project manager).

*'The team is divided between the two contexts and then there is a figure in the middle (the bridger) between the two teams'*
(Martina Monelli, T.Ospito)

However, forming new networks and relations in an unknown and unfamiliar context could be challenging too.

***Does comparing the two contexts and acknowledging differences and similarities help SI capture what to replicate, adapt, or change the DNA?***
According to the users, thinking about the first implementation and overcoming challenges helped to understand how to proceed in the new context. It does not give answers but enables users to set the right questions and turn those into actions, for instance, by translating similar operations and strategies adopted before, which could be replicated for the implementation in Context B.

- **Reflecting on what is known and what was successful make what is still unknown less 'challenging'.**

***Do the Urban Dimensions present help SI acknowledging differences & similarities and capturing what to scale?***
Considering some of the context conditions, such as the user trends, help SI turn challenges into opportunities, and it allowed them to re-frame the project in a way that could still work within the new constraints; in the case of the T.Ospito initiative, the Team had to deal with the lock-down due to the Covid-19 situation. Moreover, the participants suggested that could be relevant, when exploring the conditions of Context B, to include a section where assumptions and goal can be mapped too; especially in the case when the initiative is at an earlier stage of the journey and still need to carry on activities to get to know the new context. During the exercise, users mapped out assumptions regarding Context B as 'next goals' to perform and validate in collaboration with the other partnering team.

*'Before the 'WHO, WHAT' maybe you can add a sort of intermediate phase .. that is what we need for the WHAT (what need to be done) which, however, was a bit outlined in phase two.'*
(Ginevra, T.Ospito)

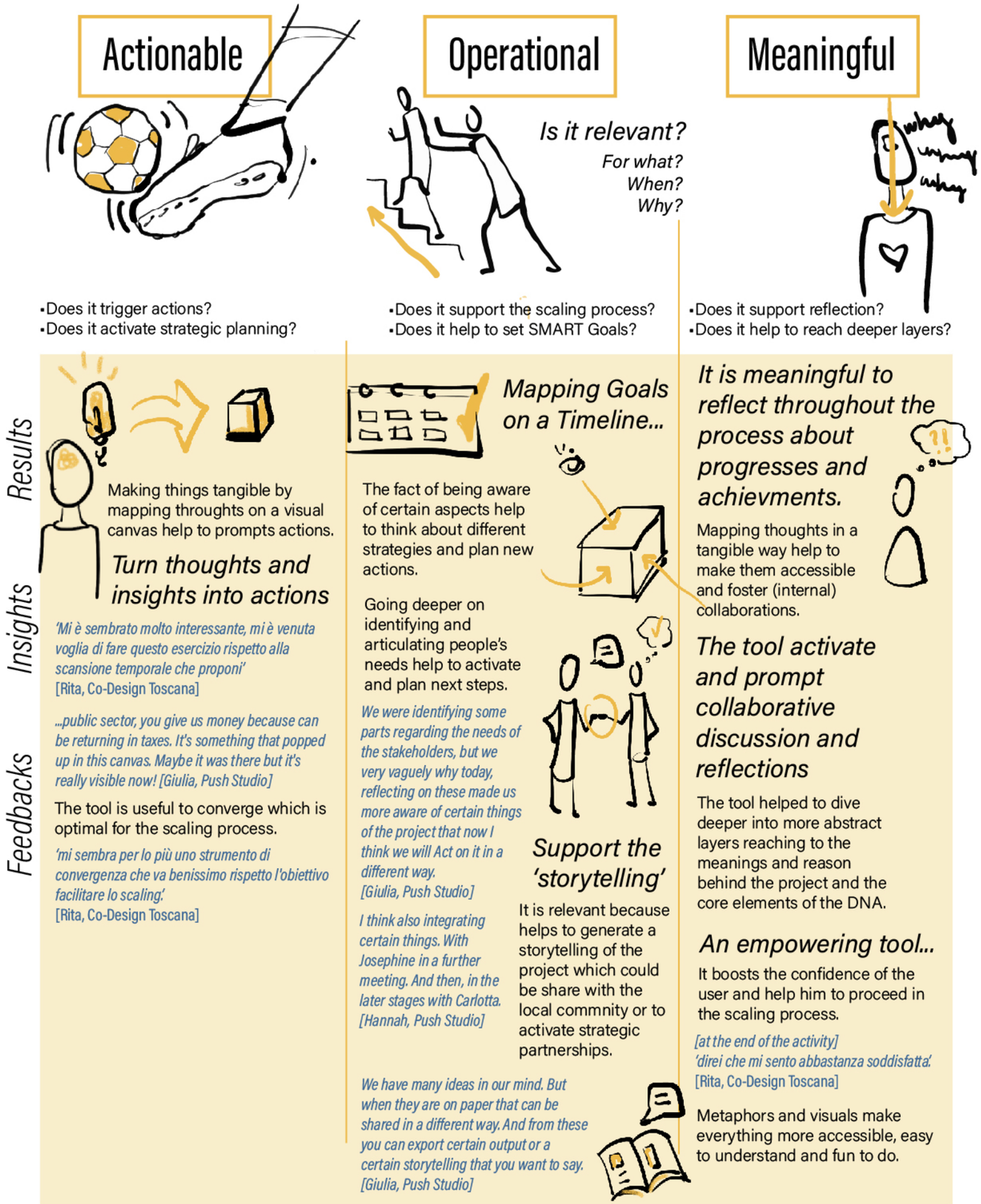



*Figure 74. The insights of the cross-evaluation turned into a list of desirability aspects regarding the prototype tools*

# 11.3 Evaluating the Interventions

*The Evaluation Form (Appendix E) and the list of Design Criteria and Requirements have been used to carry a cross-evaluation between the three experiments. This analysis intends to evaluate the desirability, viability and feasibility of the activities developed as prototype to inform the development of a design outcome supporting SI to scale. Because of the insights regarding the relevance of the activities and the use of the metaphor, the prototype will be developed further in the next stage. The conclusions and takeaways of this evaluation led to the final stage of this graduation project: developing and implementing a Tool-Box to scale SI from a context to another.*

## Cross Evaluation of the Interventions

### Evaluating the Desirability of the Tool

***Is the tool actionable?***
*Does it facilitate SI developing strategies and plan actions?*
**• Mapping thoughts in a tangible way makes them accessible, easy to be shared, discussed, and consequently actionable.**
During the activity and the feedback's interview, all the participants empathized that putting thoughts on paper' led them to get new insights and develop knowledge regarding what should be scaled. It also helped reflecting about the challenges from a different perspectives; hence by re-framing the 'problems' they discovered other ways and strategies that could be planned to proceed in the process.

**• Reflecting and mapping data help generate knowledge and facilitates developing goals, strategies and planning actions.**

***Does it spark strategic collaborations?***
**• The tool sparks collaborative discussion, reflections and a strategic decision-making process.**
In all the sessions, participants shared the willingness to use the tool again in collaboration with other stakeholders or team members to share insights and making decisions together. The activities can help to align the same visions and missions.
*'I think also integrating certain things with Josephine in a further meeting. And then, and also to use these in the later stages with Carlotta.'*
(Giulia Sala, Ticket to Change)

*'It would be interesting to show all these schemes made also to the rest of the Team, it could help us to have a global vision of how T. Ospito is moving ...'*
(Martina Monelli)

**• The tool enhances mutual understandings among the participants involved especially in regard of more tacit and abstract concepts.**

**• Metaphors facilitate collaborative discussions in an online setting;**

***Is the tool operational?***
The timeline aspect makes the tool operational because it triggered SI to set concrete goals, plan actions and next steps. By matching context conditions, people's needs and resources available with personal strengths, goals, and aspirations, SI could more effectively bridge the gaps, overcome challenges, and proceed on their scaling pathway.
**• Reflecting on what is known and what was successful makes what is still unknown less 'challenging', potentially more approachable.**

*'I find it a useful exercise, in fact it would be natural for me to ask you .. can I get the results of what I wrote .. because in any case this is a tool for synthesis in the end I would say ...'*

***Is the tool relevant?***
Participants showed enthusiasm and interest in using the tool again with other team members and stakeholders.
*'Io lo trovo un esercizio utile, infatti mi verrebbe naturale chiederti.. posso avere i risultati di quello che ho scritto.. perché comunque questo è uno strumento per la sintesi alla fine direi...'*
(Rita, Start Park)

**• It is relevant to be used iteratively along the scaling journey to keep track of progress. It provides the users with an overview of the steps taken: where they are and where they are going.**

**• The tool is relevant because it supports converging on what needs to be done to bridge the gaps before starting the implementation phase.**

**• It is relevant because it facilitates the development of a 'narration' and storytelling. Generating a narration of change helps SI build advocacy and engage with the community or local actors. This could be an effective strategy to form networks when scaling-out in new contexts.**

**• The activity helps ease communication and cooperation with different stakeholders by turning ideas into something tangible and accessible for sharing.**

*'It would also be interesting to use the tool to interact with the various local associations ... to use this tool to make our ideas more tangible to communicate to other stakeholders.'*

*'Sarebbe anche interessante usare il tool per confrontarsi con le varie associazioni locali... usare questo tool to make our ideas more tangible to communicate to other stakeholders.'*
(Ginevra, T.Ospito)

*Which parts were more relevant?*
Setting SMART Goals and plotting them on a timeline was considered by the participants the most relevant and valuable part of the tool. They like the actionable and operational aspect of activity 2. They also found inspiring the urban dimensions, structured as gravitational forces and orbits in the activity. Those dimensions probe the users to think about the different context conditions that could osculate or enable the implementation process.
*'I like the urban dimension, I think those are relevant to consider, and we did not cover them during the session, such a pity...'*
(Rita, Start Park)

*At which stage of the scaling process could the tool be more useful?*
Depending on the scaling scenario, the two exercises of capturing 'What to Scale' and articulating 'How to Scale' to achieve impact goals could be either relevant for diverging at an early stage of the process and converging at a later stage. In either case, it facilitates diving deeper toward richer insights, triggers reflection, and helps to generate storytelling to share with other stakeholders.

***Is the tool meaningful?***
*Does it probe reflection?*
**• The tool is meaningful because it contributes to increasing awareness, which triggers more in-depth and collaborative reflections.**
**• The tool is meaningful because it boosts confidence and empowers the users to proceed in their process.**

## Evaluating Viability and Feasibility of the Tool

**Usability of the Activities and Facilitation Guidance**

The three interventions explored different facilitation modes to understand how, in the end, the Tool-Box should be structured and delivered to the user. From this analysis, it came out that users like having someone guiding them through the activity, especially when the tool is used for the first time. Moreover, experiencing the tool in a collaborative workshop set-up enhances the likelihood the user will adopt it, increasing the desirability level. So the question: *'how to show the value of the tool to the user, attract and convince them to use it without the need of organizing a facilitated workshop?'*

On the other hand, the necessity to have more guidance could be related to the fact that the activities were still in their prototype stage and need to be further improved, structured and detailed to be feasible and viable. In conclusion, **the tool needs to provide clear instructions and straightforward guidance,** nonetheless the metaphorical narration made the overall activity and process more approachable and easy to engage with. Moreover, to develop a Tool-Box that could be used by diverse users, particular attention needs to be put on the use of words and **avoid specific (design) jargons**. For instance, the North Star's meaning was not clear to everyone, and it was not clear the distinction between North Star, Vision& Mission and Impact Goal. The same applies to 'value proposition and unique selling proposition'. Moreover, some terms could be interpreted differently by different people, especially abstract concepts such as 'culture, philosophy, values & beliefs'. In those cases, the use of metaphors could help to generate understanding.
*'la nostra stella polare è... sono un pò il nostro Value Proposition..'*
(Martin Monelli, T.Ospito)

*'I am literate about what a value proposition is but I feel less confident about the USP, perhaps it is not a clear language to everyone .. it all depends on the end users of the tool ...'*
(Rita Duina, Start Park)

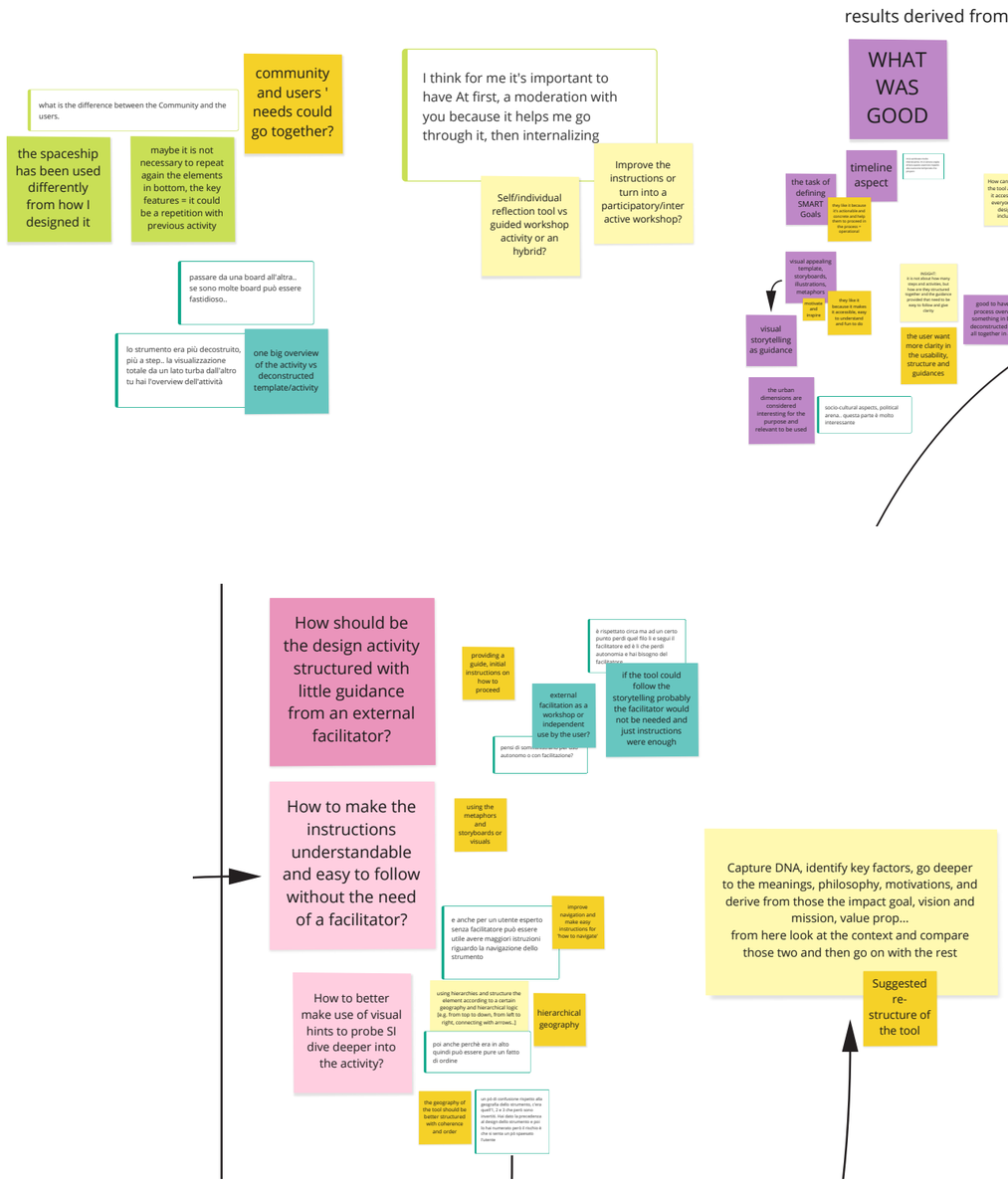



*Figure 75. Joint analysis of the insights regarding the tool activities collected during the three interventions*

*'Motivations and philosophy are probably a bit the same thing ..'*
(Rita Duina, Start Park)

*'However the concepts are all explained in detail so that should make things easier and more accessible.'*
(Martina Monelli, T.Ospito)

*'[..] maybe in the form of a question or it would help me better if it were put down in the sense of strengths and uniqueness.'* (Rita, Start Park)
Regarding the ease of the two activities, during the three interventions different structures and designs have been explored and experimented to understand which could be more user-friendly. In conclusion, users require clear step-by-step instructions and everything need to be fully detailed and well structured.

• The geography of the elements and activities should be structured in a straightforward way, for instance, through visual probes and hierarchies.

*'the numbering confuses me a little, I can't understand the order..'*
(Rita Duina, Start Park)

• There should be more coherency between the storytelling and the structure of the activity.

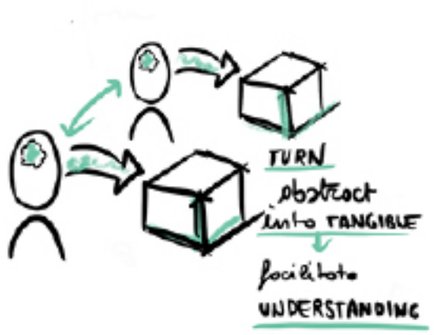
*'However conceptually I see them allied and connected ... first you understand who the people are and then how to get to them and what you need to do.'* (Martina Monelli, T.Ospito)

• The two activities of the Tool-Box should be better connected, to be perceived less as separate 'canvases' and more as one whole 'tool'.
*'... bind the two canvases more as one helps the other.'*
(Ginevra, T.Ospito)

## Reasons to integrate Metaphors and Visual Storytelling in the final Tool-Box design

***How do metaphors and storytelling techniques ease the navigation of the tool, support the facilitation of the process and guide SI in their scaling journey?***

The results from the analysis and evaluation highlighted multiple benefits regarding the use of the metaphorical storytelling as guidance during the experiments of the prototype. Therefore, those conclusions and insights, captured in Figure 76, led to the decision of integrating the metaphor and visual storytelling technique in the final Tool-Box as main facilitation and communication tool guiding the users in the journey.




*We have many ideas in our mind. But when they are on paper that can be shared in a different way. And from these you can export certain output or a certain storytelling that you want to say (Giulia)*


*We have many ideas in our mind. But when they are on paper that can be shared in a different way. And from these you can export certain output or a certain storytelling that you want to say (Giulia)*


*'It was relevant because sometimes, reflecting on goals you achieved already make you feel you are moving forward.. it's good to have a moment relfect on the process and see how far you've come.' (Giulia Sala)*


*For a metaphor. I think it's also very nice to have all these abstract buzzwords, and in a framework that is like accessible (Hanna)*

Metaphors work as communication and facilitation tool which makes the activity more accessible and easy to understand


*I enjoy it because it's, it was really like easy and fun to put our head around it. (Hannah)*

*... it's really fun to do it. And it's very refreshing and not not the normal (Giulia)*

The visual template and the use of visual metaphorical storytelling help to make things more fun and entertaining.


*I think also integrating certain things. With Josephine in in a further meeting. And then, and also to use these in the later stages with Carlotta. (Giulia)*

By putting thoughts down on 'paper', into something tangible enable collaborative dialogues and activate strategic planning

*Figure 76. The values of using metaphors as a communication and facilitation tool in the final Tool-Box design.*

# 11.4 From Concept Validation to the Design Outcome

## Reflections & Recommendations

*Design Directions 1 and 2 have been explored throughout the prototype developed and experimented during the design interventions. According to the insights and feedback collected at the end of each session, the prototype and its two activities have been iterated and evolved along the process. Lastly, a cross-evaluation of the three experiments has been performed to assess and evaluate the relevance and validity of the Tool-Box according to the criteria set (actionable, operational, impact-driven, meaningful, see Appendix E for the full Evaluation Form).*

In conclusion, **the two activities developed are relevant for multiple scaling processes and could work for different scaling scenarios** (check the three scenarios drawn in Chapter 6.2). Indeed, the tools can be used iteratively along the scaling journey, meaning that **it is relevant at different stages of the scaling process**. Therefore, the final Tool-Box could be designed to be 'flexible', accommodating these different scenarios and usages. However, more users tests need to be conducted to understand how those activities could be structured to facilitate the use in different 'scenarios'. Therefore, the next step would be implementing the design of the tools and pack everything together in a Tool-Box, shifting in this way from the concept prototype used in the interventions for carrying research and experimentations toward the design outcome. Also, attention needs to be put on how users will be attracted to the final Tool-Box and how this will be showcased and 'sold' to the urban innovators without the need of setting up a facilitated workshop.

From these reflections, further design questions have been formulated:

- ***How to design the final Tool-Box in a way that is accessible for different users and flexible to be used in different scaling scenarios?***
- *How much flexible, structured, specific or targeted the tool should be?*
- *Would it be more relevant to set-up an activity as a snapshot workshop or as an iterative and progress tool?*
- *Would it make sense to keep the two activities separate and design them differently for the different purposes and usage scenarios?*
- *Would it make sense to develop slightly different canvases for the different scenarios or provide one workshop offering different ways of completion users are free to explore?*

- ***How to make the final Tool-Box desirable and user-friendly even without facilitation guidance?***

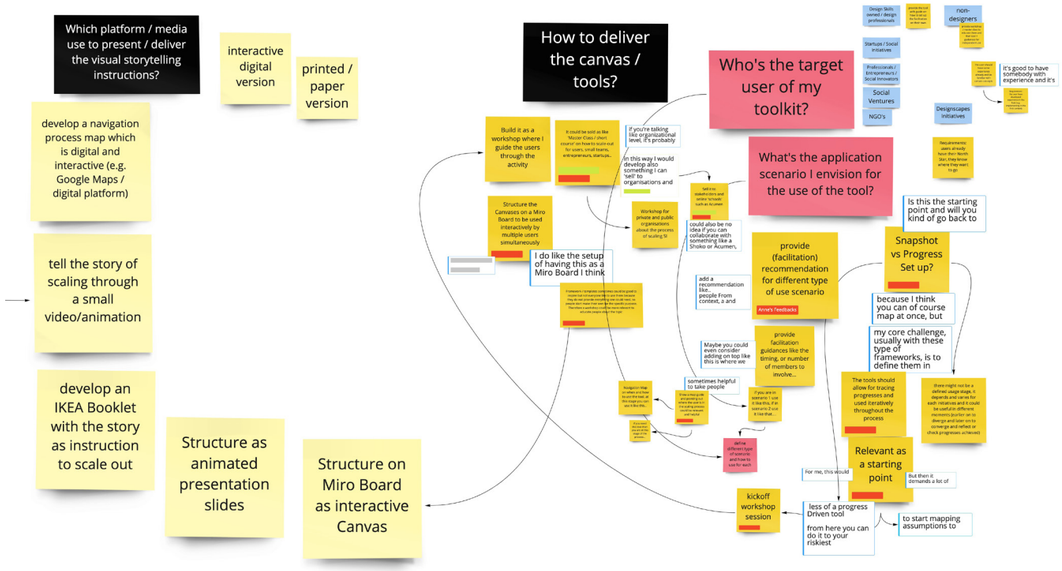



*Figure 77. Screenshot of the conclusions and ideas mapped during the discussions carried with experts about 'How to translate the concept prototype and the two activities developed into a Tool-Box that could be easily packed and valuable when delivered to the user'.*

***• How should the tool be delivered to the users?***
*• Should it be structured as an interactive workshop with external facilitation or as a Tool-Box with step-by-step instructions and a potential self-facilitation guide?*

***• How to set-up the Tool-Box as a self-facilitated workshop that provides enough guidance to be performed by the users on their own?***
***• How to convince users about the activities' validity and attract first-time users?***

Some practitioners, design experts and design students have been involved in further co-reflection and validation sessions to find answers and discuss the above questions. The main takeaways and conclusions are presented in the next paragraphs and mapped in Figure 77 and 78.





# Co-Reflecting, Ideating and Validating with (design) experts

After conducting the last design experiment, the prototype activities were iterated again, according to feedbacks received. This iteration has been used as the starting point for the reflection and discussion with other experts and designers.

The sessions concluded that **the tool is desirable because of its 'flexibility' and 'accessibility'**, but *how to maintain these characteristics when packing the activities into a Tool-Box and delivering it to the users?*

Indeed, the prototype activities suit different types of initiatives and scaling scenarios, and they can be performed iteratively. This characteristic is particularly desirable since the scaling process is not linear but highly iterative. **The tool and two activities provide freedom to the users and allow them to go back and forth on the process, diverge, converge, and reflect on the progress achieved.** For instance, the first activity of capturing the DNA and understanding the core elements of the project could be set up as a (diverging) exercise to conduct at an early stage of the process. However, it has also been understood that the DNA should be iterated along the path, especially when starting exploring the new context conditions and people's needs. Therefore, the Tool-Box can be structured to be used progressively, allowing SI to iterate the DNA, re-frame it and readjust it according to the new context conditions and resources available. On the other hand, if used at a later stage of the process, the overall Tool-Box will function more as a converging and reflecting tool. In this case, more emphasis will be put on the strategic road-map activity, which will allow SI to build strategies and activate further collaborations.

According to the experts, the two activities should not be packed as 'single-static canvases' because they do not provide enough freedom and flexibility for the users.
*'Framework/templates sometimes could be good to inspire, but not everyone likes to use them because they do not provide everything one could need, so people start to make their own for the specific purpose.'*
(Anne, Enviu)

Also, the tool has been perceived to be a relevant starting point to let the 'ball roll': users can start mapping their thoughts, assumptions, and if they find the activity useful and valuable, they can consider spending more time on it, going deeper or using it progressively over their scaling journey.
*'For me, this would work quite nicely as like a kickoff workshop session. [...] from here, you can do it to your riskiest assumption mapping. Pointing out the value proposition as a starting point, then testing it [..] Going back to your value proposition and eventually compare the two contexts.'*
(Anne, Enviu)

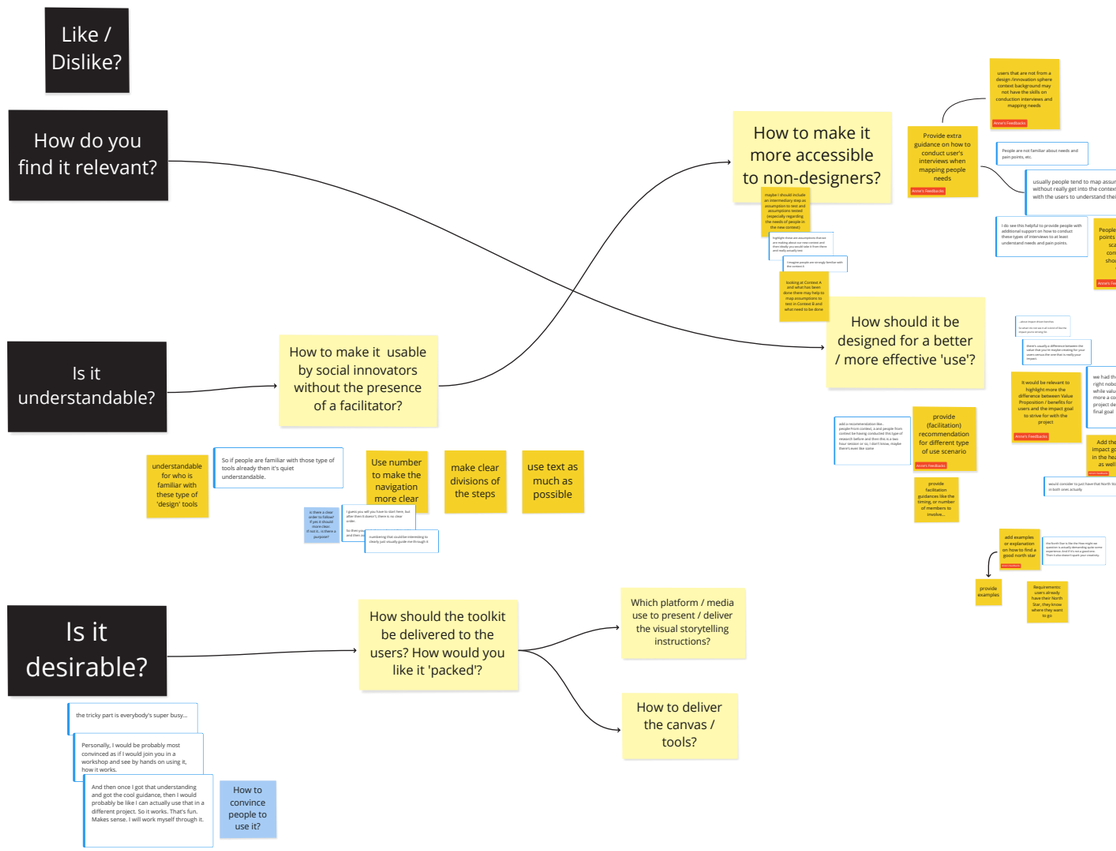



*Figure 78. Screenshot of the insights derived from the validation session of the concept prototype carried with design experts and practitioners.*

Therefore, it would be relevant to **pack the tool's activities into the Tool-Box and translate this into an interactive and flexible kick-off workshop** that provide various recommendations and facilitation guidance. The more flexible and open to be tailored to everyone's wishes, the more relevant and desirable it will be.

During the experiments, the initiatives empathized with the wish to have full guidance when performing the activities, and it was appreciated the presence of an external facilitator guiding them and making the session more interactive. Hence, the second challenging dilemma is *'how to recreate such an interactive and flexible set-up that provides enough structure and guidance so that the users do not feel lost when performing the activities on their own?'*
**Clear instructions and full guidance need to be provided, informing the users how to use the tool in the different possible scenarios** while giving them the freedom to choose what will be ideal for them according to needs and goals. As showed in Figure 78, practitioners suggested organizing the Tool-Box in a digital board, such as in Miro, to allow users to keep track of their progress easily.
*'I do like the setup of having this as a Miro Board; I think it is quite straightforward. It's quite nicely organized, so having this as a framework and canvas could work.'*
(Anne, Enviu)

**The Tool-Box will be organized and set-up as a workshop in Miro Board;** design experts suggested to **use the Scaling Process Map as a navigation tool during the workshop to make it interactive and user friendly.** In this way, the map will show the user where they are in the process and how to proceed based on the 'stage' they are.
*'Maybe you could even consider adding on top like this is where we are, like you, where we are in the process.'*
(Anne, Enviu)

**The Workshop will provide clear instructions and facilitation recommendations; the metaphorical storytelling will be used to make these more engaging and attractive.** Indeed, according to what has been validated, the metaphor technique is a good communication tool which is attractive and engaging.

More ideas resulted from this validation and ideation session can be found in Appendix E.

The next phase focuses on packing all the different pieces and insights gathered into the final design outcome, ready to be delivered to the user.

Chapter 12

# *Cycle 03*
# Implementing the Design Proposal

*The previous phase described the main findings of this research project and its contribution to the design theory. In this last phase, all the insights will be summarized into a desirable, viable and feasible outcome to deliver to the user. Everything will be packed together and presented as a Design Tool-Box valuable for Designscapes initiatives and other SI willing to scale and achieve impact.*

*The following questions will lead to the final results of this project:*

- *How can the various research and design outcomes be packed together into a Tool-Box delivered to the users?*
- *How can the Tool-Box's value be showed to attract and convince first-time users?*
- *How can we better distribute information and communicate the relevance of the Tool-Box? Which touch-points could be used to reach out to the users?*

*This phase will close-up with conclusions and discussion, future recommendations and general reflections.*



*packing and deliver the outcomes to the users*

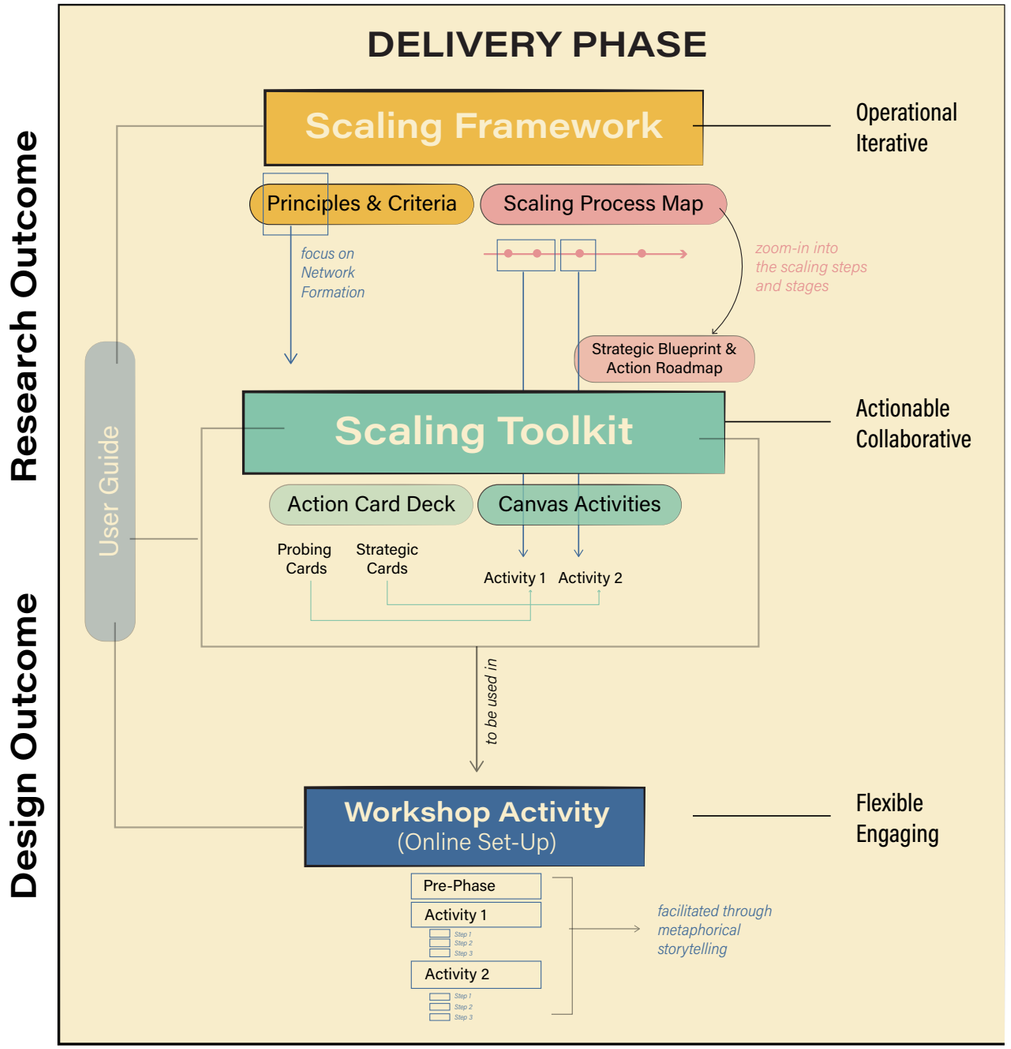



*Figure 79. Visual summary of the final results of this graduation project*

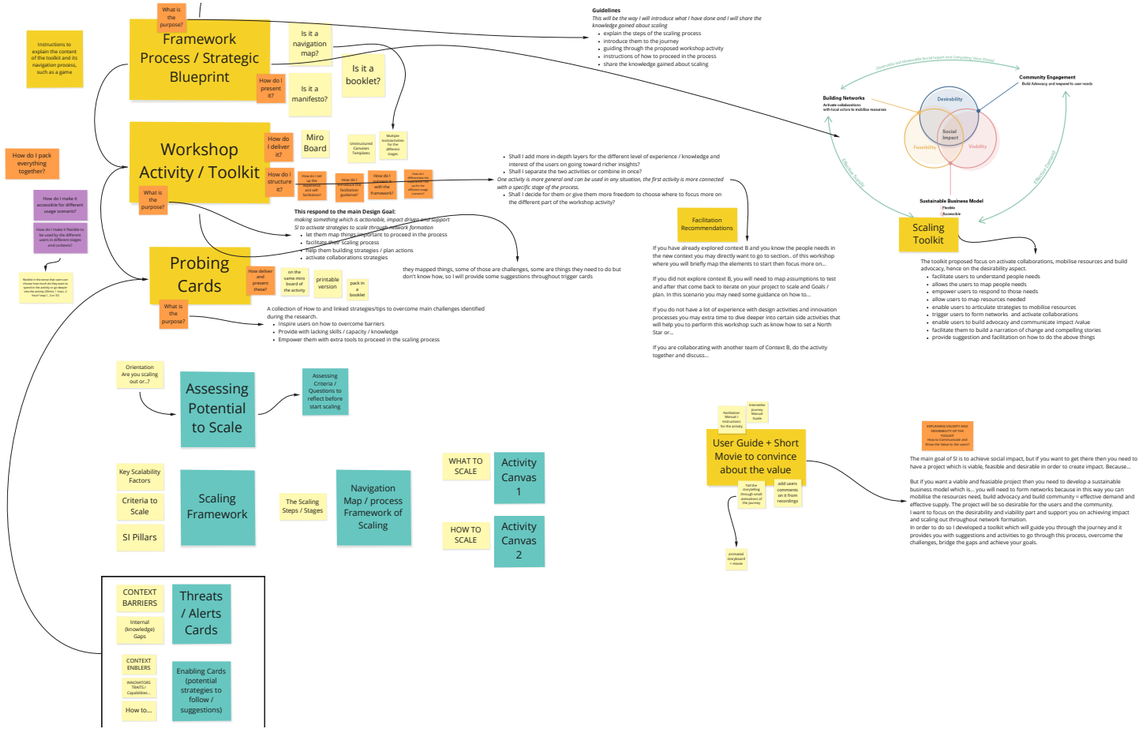



*Figure 80. Structuring and packing all the various elements into the final Tool-Box for the users*

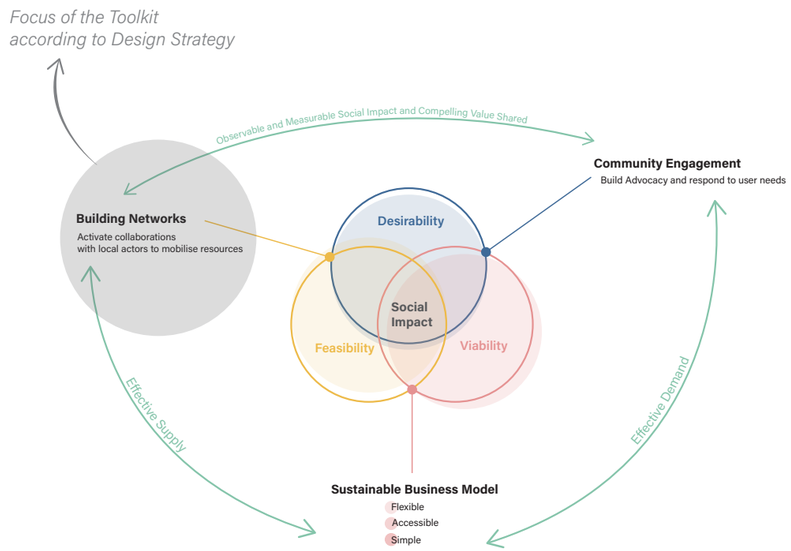
# 12.1 The Scaling Framework used as theoretical foundation of the Tool-Box

The Scaling Framework, proposed during the Research Phase as a hypothesis and used to explore the scaling journey of Designscapes initiatives, will be used in this phase as theoretical foundation of the design outcome. It means that **the Framework has been used to inform design decisions** and works as the theoretical explanation of those choices. **The Framework provides a bigger picture of what scaling SI innovation entails; it gives the general overview and core ingredients any SI need to consider when scaling-out their projects across contexts.** Instead, **the activities** (the ones developed as Concept Prototype in the previous Phase), and the other elements part of the Tool-Box, **zoom-in into a specific part of the framework and make the scaling steps actionable so that Social Innovators could overcome their challenges**. The goal is to support Social Urban Innovators overcoming challenges and bridge the gaps to scale-out through network formation; as mentioned in the previous Design Phase, Building Networks has been identified as a desirable and viable strategy (check the reasons in Chapter 10.2).

**The Framework** will be also part of the Tool-Box and delivered to the Urban Innovators as **navigation tool empowering Social Urban Innovators proceed with confidence in their scaling journey**. It does so by providing them with **the Scalability Criteria and Principles of SI** and **the Scaling Process Map**, as summarized in the visual 'manifesto' of Figure 81. The former are the pillars identified as essential ingredients to consider when scaling; a balance between those aspects will allow urban innovators to reach social impact. On the other hand, the Scaling Process Map's intent is the one of (visually) navigating the user through the process and stages of scaling, as showed in Figure 82. This Process Map will be used in the Tool-Box to accompany the users throughout the activities and guide them along the journey. The stages of this scaling map have been detailed in t**he Strategic Blueprint and Action Road-map**, as showed in Figure 82; this additional blueprint aims to **make the process more feasible by suggesting activities and actions** the urban innovators should follow at each of the scaling steps. The reason to provide a more detailed action map relates with the design goal of facilitating the users proceeding in their process, so that the Scaling Process Map results being actionable and operational. Moreover, the fact that **the process is visualized** helps triggering actions. Indeed, according to some insights, '*making things tangible helps to make them actionable*'. Also, it has been acknowledged that users need a point of references, which ensure them they are proceeding toward a 'good'

# The Scaling Framework

## Scalability Criteria & Principle of SI




## The Scaling Process Map

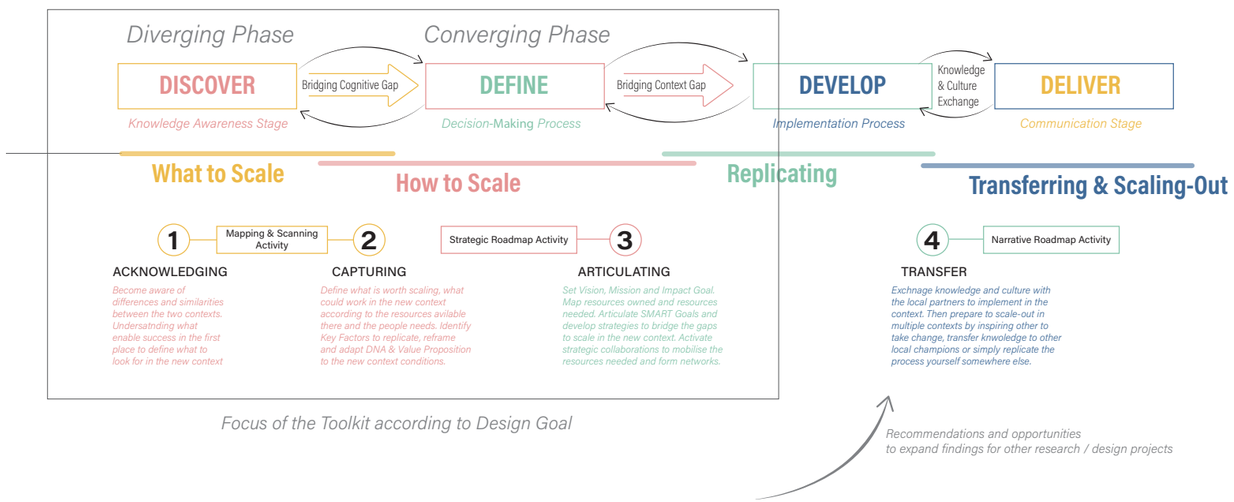



*Figure 81. The Scaling Framework 'manifesto' of the Tool-Box including the Scalability Criteria and the Process Map developed to guide SI through their journey*

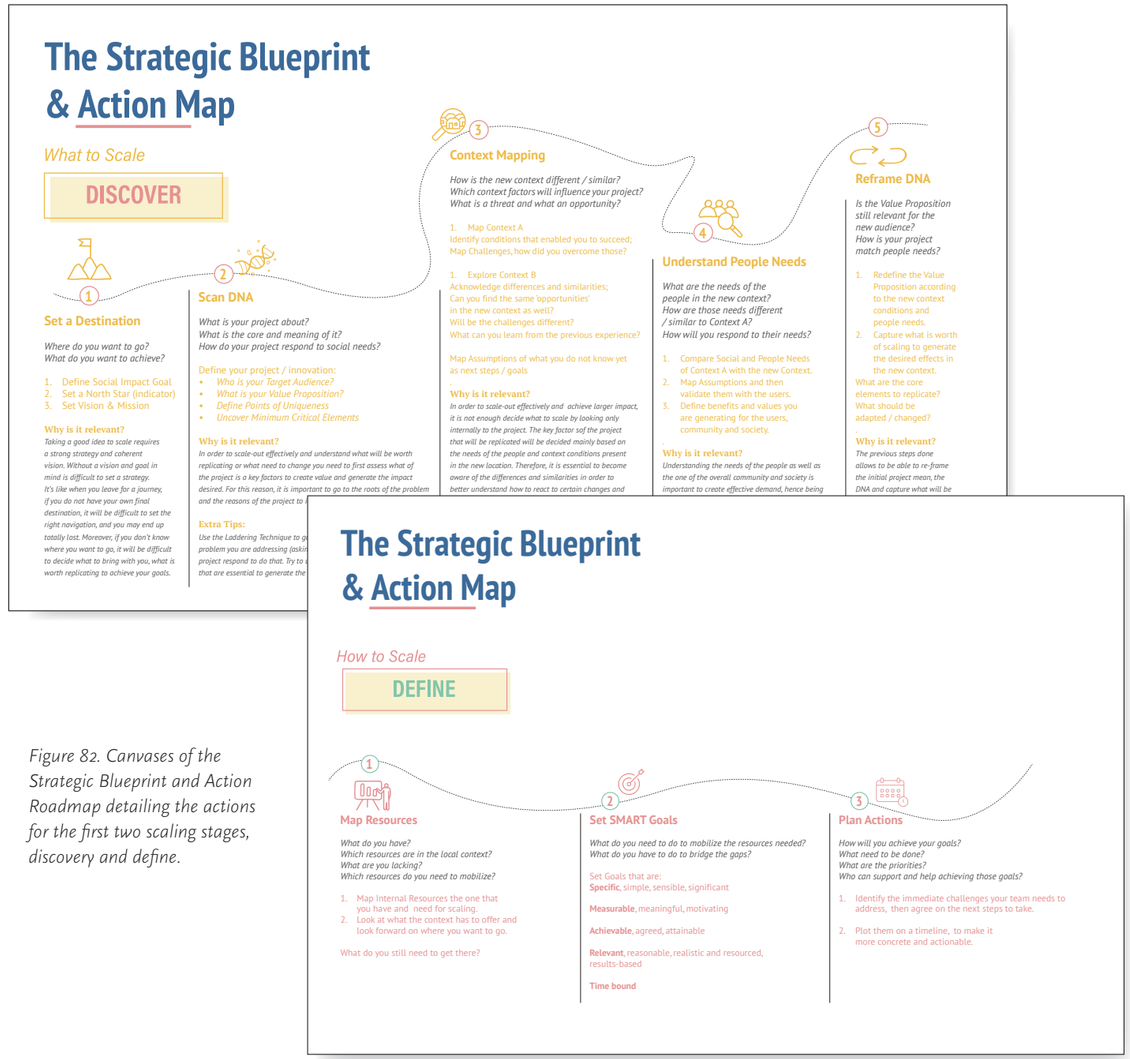



*Figure 82. Canvases of the Strategic Blueprint and Action Roadmap detailing the actions for the first two scaling stages, discovery and define.*

direction. Therefore, this action map, along with the process map, will support SI in **taking concrete actions and developing strategies to scale-out in other urban contexts.**

*The rest of the Road-map is presented in the User Guide and divided into stages according to the ones shown in the process map.*

# 12.2 The Scaling Tool-Box for SI

*A Tool-Box to bridge Gaps and Scale-Out through Network Formation*

## The Scope of the Tool-Box

### Why this Tool-Box?

Social Urban Innovators face several challenges along their path; those have been represented as two main gaps to be bridged when scaling to a new context: the cognitive / knowledge gap and the context one. Moreover, SI feels often lost on their journey and demand guidance to achieve their long-term impact goals. Besides the scaling framework, which offers guidance and empowers users to proceed with confidence in their scaling process, **the Tool-Box provides the needed tools for Social Urban Innovators to bridge the gaps and develop strategies to achieve their impact goals.** Based on the re-framed design goal of '*How to facilitate SI capturing what to scale and support them articulating strategies to scale-out and achieve goals?*' This Tool-Box is a first step towards answering this question.

### What is the Tool-Box about?

**The Tool-Box facilitates SI to overcome the cognitive and context gaps when scaling to another context.** For this reason, it focuses on the first three steps of the scaling process:

1. **Capturing** what to scale by acknowledging differences and similarities.
2. **Matching** needs and map resources needed to bridge the gaps.
3. **Articulating** what is necessary and translating those resources needed in 'call to actions' and strategies to form networks and local collaborations.

Therefore, the Tool-Box aims to empower Social Urban Innovators scaling-out effectively throughout network formation, and **it is the first step to achieve long-term impact goals.**

## Envisioned Users and Requirements

### Who does the Tool-Box target?

The Tool has been designed and tailored to the context framed at the beginning of this research project: the one of Designscapes. Therefore, the **potential Target Users of this Tool-Box are Social Urban Innovators replicating a small-scale hyper-localized project from one urban context to another.** Specifically, those urban innovators belong to Scaling Scenario 1 and 2 as defined in Research Phase 2 (Chapter 6.2). However, the Tool-Box could be still relevant for other types of Social Innovators because of its flexible aspect, but more research needs to be carried to validate the relevance for a more general audience.

**List of Requirements:**

- The tool focuses on scaling-out social initiatives;
- The scaling context is already defined;
- SI is replicating to a new urban context;

*The dimension of scale could vary whether the users are moving in a different city, region or country or within the same urban context but a different community or neighborhood.*

- The user has developed experience in the field by implementing the project in the first place. The Tool-Box requires the user to be familiar with the innovation process' (Murray et al., 2010) and concepts such as the Theory of Change, Impact Goal, Value Proposition, Vision & Mission.

Moreover, they should have some acquaintances with design activities as well. Despite the guidance and instructions that will be provided and the attempt to make it simple, intuitive and accessible to different users, it is a design tool that follows design processes. Hence, some familiarity with those could help in performing the activities better, speeding it up the process or going deeper.

## Structure of the Tool-Box

### What does this Tool-Box include?

- The **Scaling Framework**, which forms the theoretical background and motivation of the overall Tool-Box;
- A set of **Action Cards** containing the following:

### The Probing Cards

This set of probing cards functions as **a source of reflection and aims to trigger the users' inspiration when mapping and compare the two context conditions during Activity 1** of the tool. Indeed, these cards present a set of examples of **contextual factors that could potentially influence the capacity to scale**. These cards are named as 'gravitational forces' to follow the metaphorical storytelling of the tool (the 'Interstellar Journey', as conceptualized and experimented in the Design Phase, Chapter 10.4), which could either hinder or enable the scaling process of SI.

The cards are subdivided per color theme corresponding to the different Urban Dimensions identified during the Research Phase and presented in Chapter 9.1. There is a 'cover' card per each dimension, describing the category (Figure 83). Each dimension contains sub-clusters; as in the example of Figure 84, the Political factors influencing social urban innovations could be related to the following sub-topics: Public Authorities, Institution Capacity, Regulations. Then, there will be specific examples (Figure 85) presented as 'enablers or barriers' of scaling. These examples have been derived while unfolding and investigating the scaling journey of Designscapes initiatives.

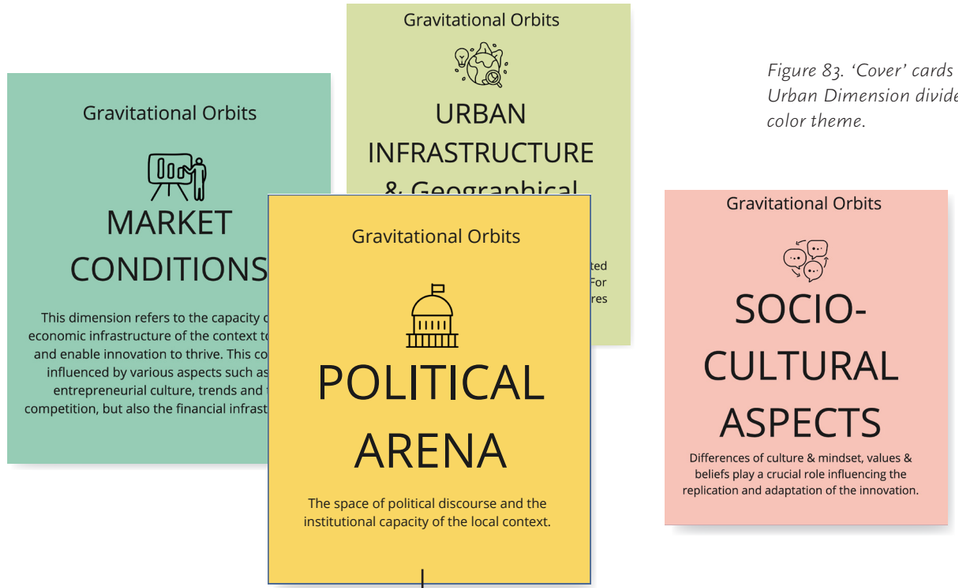



*Figure 83. 'Cover' cards of each Urban Dimension divided per color theme.*

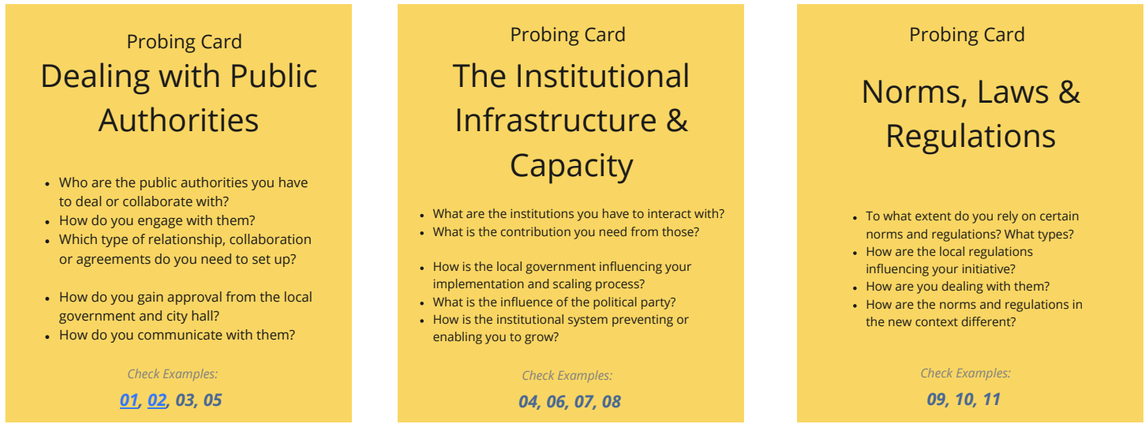



*Figure 84. Sub-clusters of the 'Political Arena' Dimension*


Those 'forces' are then linked to the Strategic Cards (Figure 86), functioning as 'defense/attack' that the users could use as a source of inspiration to tackle the challenges they will face along their journey.

## The Strategic Cards

This set of cards are linked with the 'Probing Cards'; **the strategic cards are actionable, suggesting approaches to tackle the challenges innovators may find on their way when replicating a project.** As learnt from research, SI faces several challenges, and they have to overcome lots of obstacles related to a mixture of external factors (context conditions) and internal capabilities lack (Chapter 9.1). For instance, the urban innovators will have to interact and engage with the municipality of the local context to build advocacy and get approval which allows them to implement the innovation smoothly. However, interacting with those type of authorities may be challenging because of the different perspectives and needs everyone has. Therefore, in this specific case, aligning interests and visions, building trust, or setting proper communication strategies are skills and approaches the innovator will need to develop. For these reasons, the Strategic Cards have been created and come here at hand, helping SI tackle those challenges by providing them with possible **strategies and suggestions of 'How to'.**

There are two types of cards (Figure 86); the dark blue one is 'How to' suggestions, which are the main identified challenges SI face; while, the light blues are the suggested strategies. The cards are linked with each other's, and multiple approaches are proposed to tackle each challenge.

More details about the development of these cards and the research insights informing them can be found in Appendix C.
While the complete set of Cards can be found in the deliverables (in attach to the report).

*Figure 85. Examples of 'Gravitational Forces'; the contextual factors belonging to the 'Political Arena' category*


*Figure 86. Examples of Strategic Cards*

- Two (**Canvas) Activities**; these are activity 1 and 2 that have been explored and iterated along with the design experiments (Chapter 11.2) and then validated with other experts to develop the final version of them (these are presented in details in the User Guide and showcased in the Poster of the project). The two activities proposed focus on the first three steps of the scaling process, with the scope of facilitating SI bridge the two gaps to replicate and implement in the new context. More about these can be found in the User Guide.

- The **metaphorical visual storytelling** of the 'Interstellar Journey of Scaling' has been created as a communication and facilitation tool to navigate the users throughout the process. A visual storyboard (Figure 87) is used to guide the steps of the Workshop Activity and the same metaphorical themes is applied to all the elements of the Tool-Box. In this way, the Tool-Box results more engaging, attractive and accessible, hence desirable and feasible.





## Scaling as an Interstellar Journey

*The metaphorical and storytelling framework*


*Figure 87. Visual Storyboard used to guide SI using the Tool-Box and performing the Activities in a workshop Set-Up*

**The overall Tool-Box and the activities designed are supposed to be used in a Workshop Set-Up**. Therefore, according to the insights and feedback received during the Design Interventions and the Validation Sessions (Chapter 11), an online workshop activity on Miro has been set-up. The Workshop results being flexible, responding to different needs and scaling scenarios of the users. The users will self-facilitate themselves in performing the exercises; thus, step-by-step facilitation guidance has been structured in Miro Board to guide the Social Innovators using the Tool-Box in the (online) workshop. In support of this, metaphorical storytelling will facilitate communication working as engaging instructions.

***How can we better distribute information and communicate the relevance of the Tool-Box?***
***Which touch-points could be used to reach out to the users?***

- A **User Guide**, informative of the Tool-Box and the related topic of 'Scaling-Out' Social Innovations, will be provided to the initiatives as **preparation before using the Tool** in an online Workshop Set-Up. This Guide will be distributed digitally to inform and attract the user using the Tool-Box. It will be handy for 'first-time' users who need some preparation before using the Tool-Box activities; however, once the user gets acquainted with the Tool-Box, the guide and instructions will no longer be necessary. **The Guide will also provide recommendations and facilitation guidance on how the users can set-up their workshop activity.** The Tool-Box is flexible; it responds to different needs, and it can be relevant for different scaling scenarios. Therefore, additional instructions and recommendations will be provided in regards.

**ACTIONABLE**

It empower users to take actions develop strategies to Scale. It helps setting SMART Goals, plan next steps and activate strategic collaborations.

**OPERATIONAL**

It navigates the users along the journey, facilitating them to proceed with confidence in their own process.

**FLEXIBLE**

It responds to different purposes and needs, and it can be used by different social initiatives at different stages of their scaling process.

**ITERATIVE**

Since scaling is a cyclical and iterative process, the Toolkit too follows this iterative Path. It allows the users to go back and forth and keep track of progresses along the journey.

**COLLABORATIVE**

It opens up collaborative discussions and reflections within the Team Members. In addition, it triggers collaborations and communication with external stakeholders and local partners.

**ENGAGING**

With the use of a metaphorical framework and storytelling the Toolkit results to be interactive, engaging. It facilitate the users to go through the challenges in a fun and easy way.

*Figure 88. The values and characteristics of the Tool-Box according to the Designscapes initiatives' feedback and insights*

*'I think I would like to show the results of this activity to the other Team Members as a discussion point to plan next steps, and also to then structure a GNATT chart about long-term planning.'*

*Martina Monelli, Social Innovator & Service Designer*

*'It helped us having a big overview of how our initiative [T.Ospito] is moving and where is it going!'*

*Ginevra Romagnoli, Social Innovator*

*'I think is a good converging tool for the stage where we are right now with the project [Start Park].'*

*Rita Duina, Social Innovator*

*'It also good to have this as a moment of reflection on the process and see how far you've come.'*

*Giulia Sala, Social Urban Innovator and Project Manager*

*'It would be super interesting to use this tool to meet with the local cultural associations... so that we could make our ideas more tangible and feasible to be communicated to other stakeholders.'*

*Martina Monelli, Social Innovator & Service Designer*

*'... it's really fun to do it and very refreshing! I enjoy it because it was really easy and engaging.'*

*Hannah Rasber, Social Innovator*

# The Validity of the Tool-Box

## How is the Tool-Box proposed viable, desirable and feasible?

As explained in the evaluation in Chapter 11.3, the Tool-Box is desirable and relevant because responds to various needs and purposes of different types of users and scaling scenarios. It helps the users and it facilitates them to proceed with confidence in their scaling journey (operational). It is beneficial because **it allows for reflecting**, but it mainly t**riggers concrete actions and goals** to activate strategic collaborations with the local actors. It has also been proven to be **attractive thanks to its 'fun and light' setting**; the use of metaphors and storytelling have been appreciated because they make the whole process **accessible and the challenges easier to approach, encouraging users to keep going**. The overall Tool-Box also helps to **make abstract thoughts tangible, hence easier to turn into concrete goals and strategies**. While the shift of perspective and the inspiration provided by the 'Action Cards' enhance reflection and allows for better (and often unexpected) results and insights. It is viable and feasible because it has been designed to be accessible to different users. It has been structured into a Workshop Set-Up, providing full guidance and step-by-step instructions that make it **user-friendly and easy to follow**. **It is flexible** because the Tool-Box responds to different user's needs, purposes, scenarios and scaling stages, but also in the sense that could be adapted to other formats or medium according to the necessity. It is, in fact, **easy to share** among the community of Social Innovators.

# Characteristics and Values of the Tool-Box

The Scaling Framework and the Tool-Box developed proved to be actionable, operational and impact-driven; hence, it fulfills the design criteria and requirements set in the Design Phase (Chapter 10.2). Moreover, according to the insights retrieved during the design interventions, the Tool-Box presents the additional characteristics, as reported in Figure 88, on the left side.

# 12.3 The Workshop Activity

As mentioned previously, to make the Tool-Box accessible and flexible for the users, a Workshop Activity has been set-up on the Miro Board. The digital setting created on Miro is interactive and **fully guided throughout step-by-step instructions so that users do not require an external facilitator presence to perform the given activities**. The structure of this workshop set-up followed some iterations. Multiple prototypes have been generated to test the navigation experience.

## Final Tests & Iterations

Two tests have been run with interaction design students and UI-UX design practitioners to improve the usability and user-experience of the Workshop. The reasons to carry these tests with designers is because of their capacity to provide on-point and critical feedbacks and because of their expertise in the field of UI-UX. Moreover, since the actual 'Canvas Activities' and the use of the metaphors and storytelling has extensively experimented with the target users, there was no urgency and necessity to test these final parts with them. However, it would be recommended to validate the resulted Workshop Set-Up with the Designscapes initiatives or other potential target users as a next step.

The first user test was run with a UI-UX design practitioner. This first iteration of the Workshop Set-Up was the one that brought more changes into the overall setting, the structure and its design, but also on the way information was distributed among different channels. For instance, from here, the idea of developing a User Guide 'booklet' apart, to provide the users with the needed information before to start using the Tool-Box on a workshop set-up.

The various materials have been redistributed in the Miro Board and separated into dedicated spaces/boards, as showed in Figure 90. For instance, much more space and emphasis were put on the preparation phase. The preparation is a crucial phase to go through before using the tool because it allows the users understanding better the goals and reach more complete results in the end. This phase is also crucial because it enables the users to 'personalize' how they will use the Tool-Box according to their purposes and scaling scenario. Another relevant feedback received regards using the 'Scaling Process Map' as a navigation and orientation tool throughout the overall activities. Therefore, this tool will appear after each step of the various activities showing the users where they are and how they are moving in the process map. Also, more in-between breaks with suggested energizers have been implemented along with the activities, as it could be in a real facilitated workshop setting.

The second test has been run with students; from this test, only smaller changes have been made to the workshop activity, such as the reformulation of sentences, the visual design aspects and further details. After several iterations, the final version resulted is presented in





the next paragraph. More information could be found in the User Guide and a PDF of the overall setting is included in the deliverables in attach. While, details about the tests run, iterations and the old versions of the set-up can be found in Appendix F.

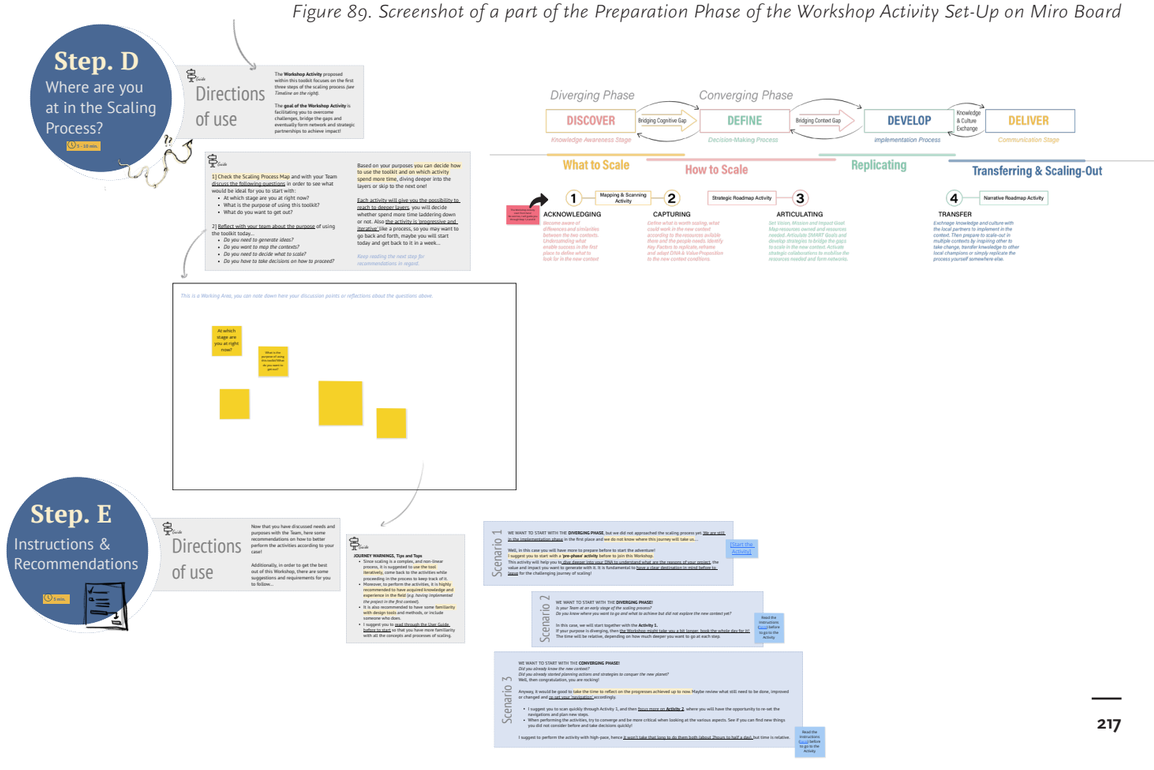
## Structure of the (online) Workshop

### Using the Tool-Box in a Workshop Set-Up

Since the Workshop will be self-facilitated by the users, the Set-Up and **the activities need to be self-explanatory, providing full guidance and clear instructions**. Thus, **the use of metaphorical storytelling makes the workshop user-friendly, more accessible, and engaging**.

This Workshop features two critical scaling stages (diverging and converging) and three crucial steps (acknowledging, capturing and articulating). Before starting the activities, recommendations will be given to perform them differently according to the user's case scenario, needs, purposes, and scaling stage. In Step D of Figure 89, the Scaling Process Map is used to help the users understand their scaling process. Here they will be asked to discuss the stage they are at and their purposes for using the Tool-Box; in this case, a working space with post-its is provided to enhance discussion, reflection and collaboration. In Step E, three different scenarios have been drawn with additional recommendations and suggestions for the workshop activity.

*Figure 89. Screenshot of a part of the Preparation Phase of the Workshop Activity Set-Up on Miro Board*



## Preparation Phase

Before starting performing the activities, the users will prepare for the Workshop through the introductory phase, including a general description of the Tool-Box, its goals and purposes. This Phase provides also facilitation recommendation to the user on how setting-up the Workshop Activity (Step D and E). The preparation also includes an Activity 0, as sort of 'preparation homework', which needs to be performed before start Activity 1 in case the innovators are at a very early stage of their scaling process.

## The Tool-Box

Including the Set of Cards, Activity 1 and Activity 2.

Regarding **Activity 1**, it is crucial to create a uniform understanding of Context A and the initiative's DNA (Step 1 of Activity 1). The same 'mapping exercise' will be performed, but this time by looking at Context B, the new context where to scale (Step 2, Activity 1). Along with these two steps, the Probing Cards are suggested to be used as inspiration triggering reflections in regards of potential barriers SI could encounter on their way, influencing their process. After having compared the two context ecosystems and conditions, knowledge awareness will be gained; users will then be able to proceed with capturing What to Scale, by defining or re-framing the internal DNA of the initiative, the core elements of the innovation and the Value Proposition (Step 3, Activity 1).

The first activity will be followed by the 'roadmap exercise' (**Activity 2**), where the main goal is to decide 'how to scale' and articulate strategies to activate collaborations and form networks. First, users will be asked to recall their final destination, the impact goal they want to achieve (Step 1); according to the research insights, it is fundamental to have a clear vision shared among the team members. Then, in step 2, they will map internal strengths and resources owned while reflecting on the resources lacking that they will need to mobilize to implement the project effectively. Step 3, indeed, will require them to map what is still required, and according to those set SMART Goals and activate strategies to mobilize resources through local networks and strategic collaborations.

*Figure 90. Overview of the Workshop Activity Set-Up on Miro Board.*

Chapter 13

# Closing the Project





## 13.1 Final Conclusions

During the Research Phase, the scaling journey of Social Innovation has been unfolded and analyzed through different lenses, combining a theoretical and empirical perspective. The lenses were set by the three main research questions defined at the beginning of the project **The theoretical findings of scaling SI led to the formulation of a research hypothesis: the Scaling Framework.** This framework has been used to explore more and **dig deeper into the scaling process and challenges of the initiatives** involved in the research. Indeed, empirical research has been conducted by investigating and **learning from the practice and experience of the Designscapes Urban Innovators** replicating their project from a context to another.

The topic of 'scaling SI' has been explored through multiple design elements, and different aspects have been analyzed during the research process. In this way, it was possible to uncover internal and external (contextual and cognitive) aspects influencing the capacity to scale. The re-frame of the 'problem', captured as the 'dilemma of scaling hyper-localized projects', led to identifying a design opportunity explored during the Design Phase. The explorations and the experiments conducted using different design tools brought to developing the final results of this project packed and delivered as a 'Design Tool-Box to scale-out Social Innovations'. This **Tool-Box support the users to overcome the scaling challenges and empower them to proceed with confidence in their scaling journey**. The Tool-Box includes different elements that resulted from the combination of theoretical and empirical insights. For instance, the main challenges identified during research helped to (re)formulate the design goal and the design directions. Those led to the ideation of the concept prototype: the two activities contained in the final Tool-Box. The (contextual & cognitive) barriers and enablers, together with the building block strategies to scale through Network Formation, have been turned into Action Cards to use during the activities and in the workshop set-up.

To sum up, **SI can scale their project from a context to another by capturing what to scale and then defining how to do it.** Firstly they will identify what is worth of replication and what will be adapted considering the new context conditions, local needs and resources. **Once what to scale will be captured, knowledge awareness will be gained; hence they will be able to bridge the cognitive gap**. Secondly, they will **define how to adapt the project to match the local needs and resources with their own goals and internal resources**. To do so, SI will **articulate strategies by setting goals and activating collaborations with local networks**. In this way, they can mobilise the resources necessary, align demand and supply to bridge the context gap and implement effectively in the new place through network formation.

The Tool-Box's final goal is to empower the users to proceed in their scaling journey and build an impact-driven strategy, allowing them to bridge the gaps and scale-out effectively in multiple contexts. Network Formation has been highlighted and enhanced as a potential strategy SI could activate to get to know the new 'unfamiliar' context. However, yet more research needs to be done to prove that the Tool-Box is valid enough in supporting SI replicating through network formation.

## Discussing Limitations

This research project focused mainly on Scaling Social Urban Innovations replicating from a Context A to a Context B, and empirical studies have been conducted mostly with the initiatives participating in the Designscapes Project. Despite the recurring patterns identified, findings cannot be generalized due to the limitations of this small content analysis. Indeed, the majority of findings was based on qualitative data obtained from a limited amount of initiatives. More time dedicated to research would expand the results and validate them with other urban practitioners, either within the Designscapes Program and other Social Innovators. Moreover, it needs to be acknowledged that most of the initiatives that participated in the design interventions were the ones presenting more familiarity with design processes and, therefore, more open to participating in such design activities; more experiments of the tools need to be carried with social innovators who do not present design capacity at all. For now, due to this limitation, familiarity with design processes has been set as a requirement for the usage of the activities. Therefore, validations with a much more diverse array of social initiatives could generalize the results to a broader audience and eventually achieve a complete outcome.

Looking back at this approach, it could have been beneficial, before developing the Tool, to take more time and dive deeper into the analyses of the various aspects discovered and unfolded during the Research Phase. To do so, a  more explorative, varied and confident approach could have been followed. Indeed, due to the short time given and the difficulty on carrying online collaborations with the initiatives, some aspects have been investigated at a superficial level, and only a few have been analyzed and explored deeply. Therefore, this project's outcome and conclusions are not meant to be a closure or an end because much more opportunities and doors are kept open for future research and design projects.

**Limitation to the Design Outcome**
Since this project was performed during COVID-19, the final design ended up in an online format due to the remote working situation. However, the content could be adapted to different formats and platforms based on necessity and demand. It is a suggestion for further implementing the Tool-Box to investigate whether a print version versus a digital one could be more beneficial or if an integration of the two versions would be the most relevant.





# 13.2 Recommendations & Future Research

## About the Research

It can be envisioned that if this research continues to investigate the relevance of design tools and processes in supporting the scaling journey of Social Innovation, the document can expand and achieve richer results. The research scope has been narrowed down to carry it in the given time, and the final 'solution' focused just on one part of the 'Scaling Framework'. Hence, more could be researched regarding the last step of the 'Scaling Process' (activating networks and collaborations) or in regard of the other possible scaling strategies such as 'building advocacy through community engagement'. During the research phase, several directions and design opportunities have been found but not chosen as the final design phase's focus. Hence, I will propose them here for further exploration and future research.

- Exploring deeper the concept of 'cultural exchange' in the context of social innovation;
- The opportunity to explore and focus the research on organizational culture transferability, investigating what does mean organizational culture for a small-scale social initiative;
- Explore how design could support SI transferring tacit knowledge and know-how when scaling the initiative in new contexts or transferring it to someone else;
- Exploring scaling-out through community engagement;
- Supporting Social Urban Innovators measure the social impact they could bring to the community;

- *How to support SI exchange know-how with other local champions when scaling to a new urban context?*
- *How to support SI translate and articulate their internal culture into a tangible recipe and narration of change?*
- *How to use storytelling as a communication strategy to engage and build networks with different local stakeholders?*
- *How to support SI in developing a sustainable business model whose impact could be measured and communicated to the community?*
- *How to scale-out by building advocacy through community engagement?*

Moreover, some questions have been tackled in this project but could be further explored, such as:
- *How to use metaphors to empathize and engage with different local stakeholders?*
- *How to use storytelling techniques as a communication strategy to exchange culture and knowledge with different local stakeholders?*

## About the Design Outcome

The outcome developed is just a starting point toward social impact and aims to be a 'design support' to guide SI through the scaling process. Moreover, it responds to a specific strategy set: network formation; hence, it mainly looked at the desirability and viability aspects of the Framework developed. During the research part, several challenges have been found and could become new design opportunities. Indeed, there is still much that could be explored because Scaling SI is such a broad and complex topic which does not entail just one single solution. Also, the current final result employed specific design tools and explored the relevance of design for specific purposes, but more could be discovered regarding the opportunity design offer to tackle the scaling challenges. For instance, a significant part of this project focused on the use of metaphor and storytelling technique, but this is not the only working option to guide and facilitate users scaling their initiatives.

### Implementing and Improving the Tool-Box

Directions of potential research and design opportunities have been presented. Other than those, there are a few more concrete steps that should be taken regarding the implementation of the Tool-Box. Indeed, in the tool-box, tools and activities have been designed to support the users proceed in the three steps of the Scaling Process (acknowledging, capturing and articulating), but the last step, 'Transferring', has been left out in the final phase; this step has been addressed only during the ideation phase, with the idea of designing a 'Narration Road-map Activity', but nothing concrete has been finally implemented due to the limit of time. Therefore, this would be a first next step to take to make the final result much more complete.

Additionally, further validations to improve some parts of the Tool-Box could also be relevant. For instance, the set of Action Cards require more interventions to be improved. More research should be done to add more 'trigger examples' to the current list of urban factors influencing the capacity to scale and add more suggestions of strategies that could help overcome the contextual barriers. Also, more research and validations can be carried in regards to the format used to organise and deliver the Tool-Box, currently set as Online Workshop on Miro Board. The outcomes of this research could also be developed as online 'Master Class' about Scaling-Out SI, where research outcomes are presented as informative course and the Tool-Box provided to be experienced in a facilitated workshop set-up.

## Contribution to the Design Practice

The limitations and recommendations discussed suggest that the outcome still has opportunities for improvements. The scaling Tool and the other findings resulting from this research contribute to designers directly involved in social innovation processes and practitioners interested in supporting them. The Tool itself can be utilized as a research tool by researchers interested in gathering more data and insights about scaling or as activity initiatives can use in their practice when replicating to new contexts.

Because of the opportunity's niche and gap identified in literature (design processes usually stops at the implementation stage failing to deliver tools supporting scaling to achieve systemic change), this project started with the motivation and intention of exploring the value of design in scaling SI and potentially ease transitions and systemic change. Indeed, it has been concluded that being scaling a learning process where innovators have to learn what and how to adapt their projects to new context conditions, design demonstrate relevant to support this process by building capacity. **Therefore, this project's outcomes and the relevance of the Tool-Box among Designscapes initiatives demonstrated the value and role of design (tools and methods) in building capacity, empowering users and facilitating the innovation and scaling process toward social impact.**

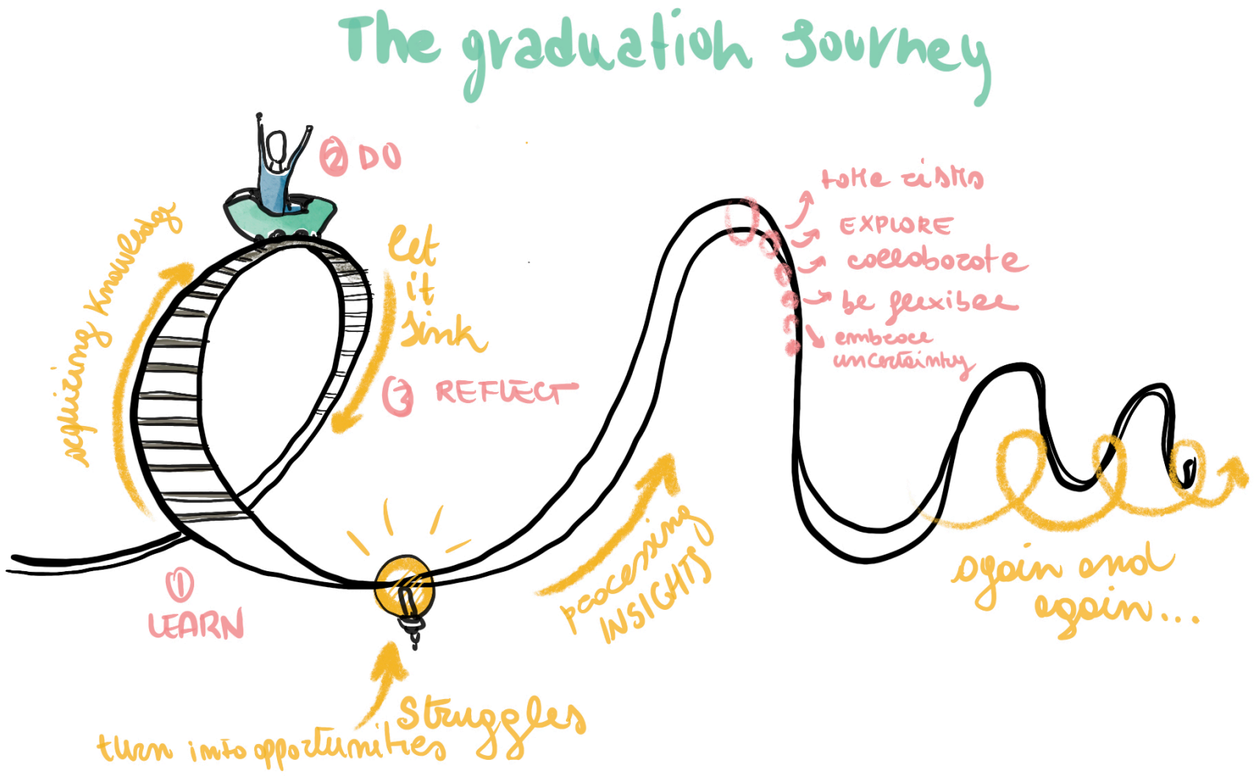
## Contribution to Designscapes project

As part of the opportunities for further use of the Tool developed, there is the opportunity to contribute to the training modules provided by Designscapes Program to the initiatives taking part in it. Considering the necessary adjustments mentioned before, the current Tool can represent a valuable deliverable from the Designscapes program to the urban innovators, and it could be included in their package of tools and knowledge gained from this program. Moreover, a dedicated workshop could be set-up by the Designscapes consortium and then shared throughout the Facebook Community as an activity contributing to their scaling process. It would allow them to experience the Tool and see the value before starting using it independently.

Concluding, the scaling Tool-Box and guidelines together provide examples of how design can be applied to contribute to a more conscious and autonomous self-development of social urban innovators, empowering them overcoming their scaling challenges towards systemic transitions. The new knowledge gained about scaling-out SI through network formation has been translated into an actionable and operational Tool-Box that use metaphors and storytelling techniques to facilitate the users in the process; it is a contribution to the design practice because different theories have been combined in a novel way to produce a relevant outcome. Within the Tool-Box itself, some existing tools have been adopted and adapted, as well as concepts from the field of social innovation; those have been combined with the new knowledge gained from the empirical studies carried, and then translated into a design outcome which contributes to the overall design practice and Designscapes Community.

# 13.3 Final Reflections

*Within this final reflection, some takeaways that can be useful for every design student graduating on a similar topic are listed, and personal thoughts added.*




This graduation project proved that we would never be done learning. While writing these reflections, I am still processing knowledge, realizing how things could have been done differently and doing better the next time. These are all excellent learnings that I will take with me in the following projects.

For me, graduating meant learning to fail and take up risks. Indeed, graduation puts you in front of many challenges, and you need to learn how to manage those difficult moments. However, along the path, I realized that we are never alone and that nothing can be achieved independently. As designers, we have the great capacity of bringing different people together and collaborate or co-create with them.



Alone we cannot go anywhere; we need to acknowledge our limits, collaborate, and learn from others. It is what I learnt in the end by exploring a Participatory Design Approach.

**TIPS:**
- *Don't be afraid of asking for help;*
- *Take up risks and explore by collaborating with others.*

Graduation is like a roller-coaster of ups and downs, and downs are part of this process. I learnt that struggles and 'challenges' are not synonyms of something negative; by embracing and valuing those moments, I could get richer and more meaningful insights. Difficult moments are ordinary, and from a design perspective, the problems are opportunities; you just need to be confident, patient and em-brace that feeling of uncertainty. In the end, you will be able to bring the different pieces of the puzzle together and catch the light at the end of the tunnel.

## Project Management

**Key Learnings:**
- *Structure your plan but be open for unexpected 'surprises', be flexible and adapt to occurring changes on the way;*

- *Plan with explorative questions in mind and not with specific to-do list tasks. In this way, it will help to reflect before jumping into doing something without knowing the reasons.*

- *It could be smart always to take the time to structure goals and processes beforehand; this will make it easier when analyzing the data and concluding it.*

## Collaborating with stakeholders

For my project, I had the opportunity to collaborate and learn from real cases and experts in the field. I acquired knowledge about scaling SI in urban contexts, but I also learned how to deal with non-design practitioners and better communicate with them. Moreover, due to the Covid-19 situation, I learnt how to better engage with users through an online setting and facilitate online sessions.

**TIPS:**
- *If your target user is busy, then be smart and plan to claim their time and ensure yourself a spot in their agenda. When dealing with such busy people, to engage them, do not ask for 'time' but offer value!*

- *Avoid jargons and avoid being too abstract; design thinking is too complex to understand for non-design experts. Make things simple and align with the 'language' and tone of voice of your audience.*

- *Be down to earth. Take the chance to learn from others; do not be the ego designer. Collect the insights and feedback and make use of them to inform your own decisions.*

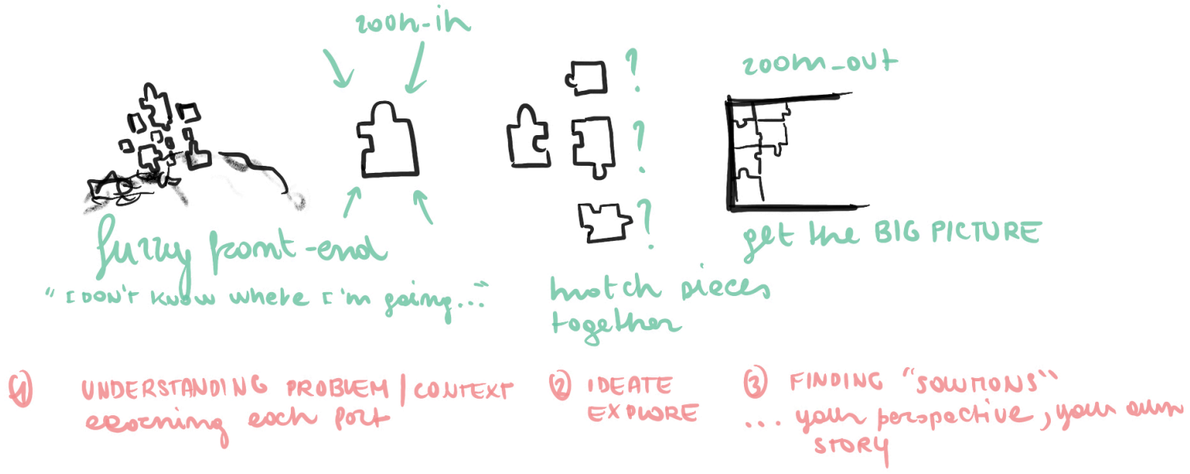



*Figure 91. Observing and reflecting on the process followed during this project and the challenging moments experienced.*

## Personal Reflections

When I first started this project, I did not fully comprehend the complexity of the project and topic that I had taken on; there were many different shifts in thinking and levels to consider, which brought me out of the road'. Because of my curiosity and thirst for learning, I opened up too many research paths simultaneously, posing very open questions that could have been independent research projects. Conclusion: the diverging phase ended up being a bit too broad and out of scope.

While navigating complexity and uncertainty, I felt quite often lost in my process. This because I  was just doing and doing, and then I forgot to stop and reflect. It took me a while to recognize the mis-take, but in the end, I learnt. I learnt the importance of using reflections to observe from the outside, take a step back and get the big picture, and learn how to do it through visuals. While sketching, let-ting information flow from the brain until the hand helped let the knowledge sink and get fresh in-sights.

**Key Learnings:**
*To not lose the way, it is essential to maintain the overall vision, the macro objective beyond the specific 'task'. Like doing a puzzle, you are so focused on only a part of it, a tiny piece, but you do not have to forget to stand and change your perspective to broaden the view. Only in this way it will be possible to go on, putting the pieces together to get to the final big picture.*

On the other hand, I also felt quite often stacked on my journey. By contrast, I posed too much-closed questions that did not give me the chance to explore. Sometimes, I was also trying to find the perfect idea to solve all the problems at once (there is no one solution). Hence, I was building lots of walls on my path, but I learnt how to break them using





design tools and methods. Those occasions helped me start ideating 'options' or discussing ideas and doubts with other people to get out of my own 'bubble'. In the end, it is just a matter of seeing the 'walls' as something else, by shifting perspective!

**Key Learnings:**
• *Problems are opportunities to create new solutions.*

• *Problems are as such only in your mind until you keep looking at them as something threatening, but as soon as you shift your mind, you will see bridges instead of walls.*

• *Sometimes thoughts are noisy in our mind, and they seem chaotic. When you cannot figure out something, it helps to say it out loud. When you are forced to formulate those chaotic thoughts into a logical sentence, they will soon get clearer.*
I also observed the times I most enjoyed the project was when setting up collaborative activities, where I could learn from other experts because of my strong curiosity. I also enjoyed the analysis part and the process of synthesizing, through design, the data collected into something that makes sense and has meaning, something tangible (I like when I can see the efforts taking shape). On the other hand, I struggled most with taking up decisions. I had to learn to kill my 'darlings' to proceed in the process. It was difficult because I tend to be quite attached emotionally to what I do and because everything is so interesting that I wish to carry on multiple 'paths' simultaneously. Eventually, I learnt the value of 'killing' something to make something else better, giving the space to dive deeper into just one path. Also, when you 'kill' something, you are not throwing away what you have done, the knowledge acquired will remain with you, and it is what bring you to the final results and outcomes.

• *Considering what is worth keeping and what does not reflect maturity requires high critical thinking skills.*

When I initially formed the brief, I wanted to do everything! I wanted to pursue participatory methods during the project and follow a very iterative cycle of learning and experimenting in a sort of 'lean startup' approach while also performing a Research-Through Design Approach. Due to the amount of time it took me to comprehend the research and the long time spent researching many different directions, it was difficult to pursue such a high-paced iterative process throughout participatory activities. Through the project, I understood that this was not feasible; therefore, I had to adjust my plan and approach. In the end, I developed and followed my own research and design process, as explained in the Double-Diamond with 'twists', and I created my way of carrying a learning-by-doing approach. Indeed, I soon learnt that what helped me getting the big picture and capturing what I was doing were those moments where I took 'pen and paper' and start sketching my thoughts. I used those as reflective moments to let the knowledge sink and new insights arise. Additionally, I found myself being an intuitive and creative thinker; I communicate easily through visuals and metaphors (two strengths I used a lot on the overall project), but it takes much more time for me to make my choices explicit to others, express, formulate and resonate them. For instance, writing this report became quite a challenge.

Despite the struggles faced, I'm happy and satisfied, not because this project ended, but I'm so glad because I learned, failed and grew from it. I gained new knowledge about scaling Social Innovation, acquired more confidence in pursuing a research and design project independently, and eventually developed new skills. Therefore, I am glad this project allowed me to learn more about myself as a designer and person.

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