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DEVELOPING DESIGN CAPABILITIES IN THIRD SECTOR

Leverage Social Transformations through Designerly Organisational Design Approach

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Products, Strategies and Services

Abstract

The design capability has been considered as an essential and competitive resource to obtain for business companies. The contributions of design, especially the design thinking processes and methods, have been recognised, studied and distributed at *operational*, *tactical* and *strategic* levels in organisations (De Mozota, 1998; Best, 2006; Brown, 2009; Martin, 2009). These different roles of design correspond to the four-order of design (Buchanan, 1992; Golsby-Smith,1996), which has categorised design activities according to the design subjects. And at the fourth level, in which design activities are dealing with organisational, social and cultural issues, the roles of designers are not limited in fostering organisational economic performance, instead, the human-centred and social-oriented aspects of design activities will impel design thinking in impacting new areas and emerging purposes that beyond the conventional business.

The *third sector*, an increasingly growing field - which aims at answering the social needs and challenges by delivering possible high-quality supports and offerings - has shown its potentialities in confronting the social and economic crisis. However, the organisations in this sector, which has been called *Third Sector Organisations (TSOs)* in this research, have also encountered barriers to develop and grown. Design thinking has the potential to provide effective methods and to guide their practical activities to connect with their target communities and to establish new ways of operating and managing themselves.

This doctoral research has carried out a designerly organisational design (Boland & Collopy, 2004; Barry, 2016) approach to explore the design capability building processes in third sector organisations towards fulfilling their social missions and propositions. This research has followed an action research strategy – which connected the theories with practices from building basic theoretical knowledge, collecting and analysing success cases, conducting participatory design actions to formulating three organisational encounters as organisational design outcomes. The research primarily started by reviewing literature in two design fields: 1) organisation(al) design area: the research trends towards a more designerly approach in developing and managing the organisations; and 2) social impact design area: the practices of design intervention on social issues and social-oriented relations. Likewise, the literature review has also been conducted on third

sector organisation (TSO), including its features, the motivations and opportunities to develop its design capabilities. Afterwards, the research has collected successful cases, in which designers have applied their ways of thinking and doing to different organisational activities. Analysis has been done to understand 1) what contributions design and design thinking have provided to third sector organisations observed from the organisational perspective; and 2) the design processes, which established different paradigms to involve different actors, of empowering third sector organisations towards developing the design capabilities. Meanwhile, three participatory design projects have also been used to answer the research questions through reflecting on personal experiences and data. The participatory design activities have strategically adopted a design-led approach in guiding third sectors organisations to build their design capabilities through different paths.

Eventually, the research findings have disclosed 1) five main characteristics of the designerly organisational design approach and 2) three diverse *organisational encounters* that act as promising platforms enabling organisations to develop offerings, to connect with internal and external actors, to (re)form their organisational behaviours, processes and also fundamental assumptions. In these *organisational encounters*, different design paradigms are established, and they might change along the time scale. At the end, several implications are summarised to contribute to conventional business, and suggestions are provided to guide design activities in collaborating with third sector organisations.

As a research initiative, the study contributes to several research areas. Firstly, it advanced the research in organisational design area through conducting a design-driven approach in challenging conventional organisational design elements. Secondly, the research has generated a top-down strategy(ies) in embedding design thinking in third sector organisations. Thirdly, the research has proposed different types of organisational encounters as effective outcomes for building design capabilities in the third sector. Moreover, the maps developed by analysing successful cases and design tools produced in practical projects are also part of the research contributions

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PART ONE

OVERVIEW

Chapter 1 |

Building a Beginning

The first chapter is presenting an overview of the doctoral design research. In this chapter, the fundamental three blocks are introduced to build the scientific basis: the nature of design and design thinking; design management; social impact design. Afterwards, the research focus is identified in the overlap between design management and social impact design, which leads to focus specifically on third sector organisations. With the objective to develop organisational design capabilities, the research has adopted design-driven organisational design approach to explore the possible processes and outcomes to empower third sector organisations.

In order to obtain the answers for research questions, the study has followed action research strategy (Lewin, 1946; Swann, 2002; Zuber-Skerrittto, 2001) collect, interpret and analyse the data. The data collection mainly included two research activities: the case study and participatory design actions. These two types of research activities are not separated but interactive. The case study action was conducted firstly to capture a general and descriptive image on existent design outcomes. Meanwhile, the design project started several months later and has lasted more than two years. These two activities have enabled the research to obtain empirical data in two different approaches, which makes the final findings more comprehensive.

At the end of this chapter, the thesis structure is introduced. The thesis is divided in four main parts: overview, literature review, action research activities and findings and implications.

Chapter one is building a beginning to tell the story of this inquiry journey.

1.1 Research background

1.1.1 Design and Design Thinking

"Design thinking" has become a widely distributed term to mention in various discussions. And numerous definitions have been made to declare different perspectives and focuses. This term is vague and often under arguments. Tim Brown's definition of design thinking is "a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunities." From this definition, also other similar definitions, we could understand that design thinking is a skill that designers are using in their daily activities and this way of thinking, doing and making (Buchanan, 2015) has presented specific values that could rarely create by other disciplines. Therefore, it's necessary to trace back the origin of design theories and practices. I would like to start with one of the most influential definitions of design by Simon (1996) in his book *The Sciences of the Artificial*: "[e]veryone designs who devises courses of action aimed at changing existing situations into preferred ones." This definition has described several features of design science/discipline.

- **Reasons** to make changes – the problems to solve. Designing, one of the human being's natural activities, is taking actions to change, modify, reshape and formulate. And why do we need to make the changes? Because there are problems that we have confronted and we wanted to solve. Thus, design activities are relevant to problem-solving. There's a large number of literature discussing the "problem-solving" property of design (Simon, 1973), and doubtlessly, looking at design from this perspective is one of the useful approaches. If we step back a bit, here comes the question: what is the problem? How do we define or describe a problem? What kinds

of problem? Nelson (1965) has stated that the boundary of design depends on the boundary of problem. How to define "design" starts with how to define a problem. Simon (1973) has illustrated two different types of problems: *ill-structured* problems and *well-structured* problems. In the 1960s, Rittel developed the idea of *wicked problem* borrowed from philosopher Karl Popper, and he also pointed out the ten properties of wicked problem (Rittel, 1972). These ideas have indicated that design activities start with problem definition, which will guide the following steps and how the solution will be like. The similar declaration could also be found in Design Council's Double diamond design process, and they have named the second step as "define", which highlights the importance of defining a design problem and the brief. This property of design is playing a crucial role in applying design thinking approach. Anyone who tries to adopt design thinking in solving their problems should start to question the problem they have in mind by inspecting them in the real contexts. Nowadays, on many occasions, the problems that design thinking could contribute are relatively ill-structured/wicked problems, which are open, complex, interrelated and networked (Thackara, 2005; Dorst, 2015).

- The **subject** of design. In the definition of Simon, there's no particular limitation on the "subject" of design activities. Buchanan (1992) said "the subject matter of design is potentially universe in scope, because design thinking may be applied to any human experience. But in the process of application, the designer must discover or invent a particular subject out of the problems and issue of specific circumstance." Here we could see the initial idea of four orders of design, which has identified four different realms of design activities and results. The conventional understanding of design mainly rests in physical artefacts, e.g. communication materials, industrial products and fashion stuff. It's easy to recognise design profession in dealing with physical

materials, structures and manufactural technologies. But when considering how products function with users and in specific environments, we don't see the relationships, but they do exist and matter. Relationships, interactions and the larger system could open up the possibilities that design and design thinking could be applied and adopted. When applying design thinking to new problems or situations, we need to identify and create the "subject" and figure out the relevant approaches.

- **Imagination** – what ought to be rather than what it is. Design is always linked to creativity and innovation because it brings new ideas and concepts, which is generated by the capability of seeing new possibilities and emerging opportunities. Buchanan (2015) has summarised one perspective to understand design thinking as an Imaginative Act of the Mind based on the work by J. Christopher Jones (1963) who has argued that imagination has advantages to creativity other than logical and systematic methods.

- It is a **process**. Designers have their own thinking process in their design actions and practices, this idea was illustrated by Rowe (1987), Lawson (2006) and Cross (2006). The designerly way of knowing and doing is recognised as a unique process and of high values. It's a process that's not linear or step by step, and not following analytical way; instead, it's a synthesis (Simon, 1945) and strategic actions of inquiry (Dewey, 1938) through personal experience. Martin (2009) has elaborated the idea that design is an *abductive reasoning* process based on works of the American Pragmatist philosophers circle, including James, Dewey and Peirce. The design thinking process belongs to neither of the dominant logic reasoning processes, oppositely, it actively looks for new information, challenges and possibilities. The design thinking reasoning process doesn't lead to efficiency, but unexpected needs and results, and it couldn't

always guarantee the conventional success. Both Cross (2006) and Michlewski (2008) have mentioned that adopting design thinking requires people to accept ambiguity and uncertainty.

- **For whom**? The responsibility of design and the humanistic property of design. Design always has significant values in the cultural and political issues of a community, a city, a country, and the whole world. The origin of design and its principles primarily tend to discuss more on the forms, aesthetics, functionality, satisfaction and economy. But especially nowadays, we have seen our society is filled with issues impacting everyone's life negatively, and these issues are far beyond the conventional judgement and principles. There're much more values that design could and should bring rather than what we have done by now. Design theories and design thinking approach evolve along with the needs of human being and society. The Open letter – stand up for Democracy written by Margolin and Manzini (2017) has reminded us of one of the essential principles of design: for the human rights.

- **Everyone** devises/designs. The definition here highlighted the idea that everyone has the basic capability to design (Manzini, 2015). There's an old Chinese saying: Give a man a fish, and you feed him for a day; Teach a man to fish, and you feed him for a lifetime. If we suppose that everyone is able to "design" at the basic level, we should consider the possibilities to support them in a design process or adopt a design thinking approach when they need or want to change the situation or solve a problem.

1.1.2 Research Trends in Design Management: Managing Design & Designing Management

The design discipline has been developed through learning from theories of other disciplines that exist longer and more sophisticated. Equally, design discipline has been

recognised by other disciplines as a new approach to develop, compared with their traditional approach. For long time, design has been linked to creativity and innovation. As discussed before, the capabilities of imagination and transferring concepts to concrete results have demonstrated its benefits in creating new things that are different and competitive. And this property and advantage of design has been recognised and studied by scholars in business, management and organisation fields (Collins, 2013, Rylander, 2009; Stigliani and Ravasi, 2012), mainly in two different approaches.

In the literature of design management, many theories have brought from management discipline, for example, strategic management, to guide the study and development in the practical adoption of design. Scholars have seen design as a resource for the organisation, and it will bring benefits for specific elements of the organisation. Mozota (2006) has identified different values that design could bring to business and companies by using value chain concept and balance scorecard model (Kaplan & Norton, 1996). Design Council (2007, 2017) has demonstrated the economic value that design has brought for corporations. Verganti (2009) has introduced the power of adopting design in product development process as the driver for innovation. However, this infusing process has limitations to develop design discipline itself in the contexts of management and organisation studies. It has been argued by Cooper and Junginger (2011):

> "A lot of energy was spent on fitting design into the management paradigms and with aligning design processes with those that were established and accepted in management."

And this approach has also blocked the application of design and design thinking at a basic organisational level, e.g. product design, development and manufacture (Thackara,

1997, 2005). Even though in some cases, the design activities have been integrated to brand communication and brand images, the development and evolution process was relatively peripheral and one-off action.

Oppositely, there is another pervading approach in which design and design thinking have influenced and impacted the **conventional** research and action logics and paths in management and organisational disciplines. The emergence of design thinking and the techniques and skills of designers have attracted scholars not only in using design in existing management concepts and models but also in practising the designerly way of thinking and doing: focusing on the process (Rylander, 2009). Chiva and Alegre (2009) have stated:

> "Companies that manage design effectively and efficiently attain better performance than those that do not. Therefore, good design does not emerge by chance or by simply investing in design but rather as the result of a managed process."

This approach could be seen in many recent literatures in design management, especially in the organisational design field. Martin (2009) has described the project-oriented structure though studying design thinking – driven companies. And he also listed the challenges to adopting this designerly way of doing for managers. Blaich and Blaich (1993) has said that design should be integrated into the contexts of brand management and organisational works. Chhatpar (2007) has stated that user-centred method has more benefits in understanding users and creating new markets compared with the analytical research approach in strategic management. Boland and Collopy (2004) have highlighted the experiences and reflections of working with Frank Gehry during his design process.

They have underpinned the idea of establishing "design attitude" (Michlewski, in the organisation. Weick (2004), in the same book, has identified the nature of design was coherent in the sense-making process in organisations. This way of interpreting and adopting design and design thinking also promotes and accelerates the development of design discipline, which requires designers and design researchers to create situated design processes and methods.

1.1.3 Design - the Driver for Social Change

We have seen the design's impacts in industrial revolutions through the long history, and for a decade that we have been talking about design for sustainability, and it's the time now to think about what are the real purpose when we put design in the real world and the society we are in (Papanek, 1984). Design is grounded in human dignity, and human rights are enormous, and they deserve careful exploration. Design is not merely an adornment of cultural life but one of the practical disciplines of responsible action for bringing the high values into concrete reality, allowing us to transform abstract ideas into particular manageable form (Buchanan, 2001). It's increasingly clear that design is no longer just an added value for business in contributing to developing better products, services and experiences; instead, it's leading a new methodology in managing the process of innovation. In social contexts, design practices are providing possibilities to organise complex internal relationships better and to facilitate innovation process towards better services as final offerings.

We are witnessing a social design moment globally. Design for social impact, design for social innovation, social-oriented design and so on are different names of design activities aiming at answering emerging and complex social problems, which are more complicated

than ever in the history. They are localised, small, connected, open, complex, dynamic and networked (Manzini, 2010, Dorst, 2015). The features that they possess require new perspectives and approach to deal with them. The social design activities are not only conducted for achieving sustainability; instead, more significant, these activities are the practical approaches for designers to explore and to experiment their ideas to transform the society to the "preferred" one. From another perspective, the objective of design activities is certainly beyond design for development. Design, with its specific expertise of brokering and communicating, generates and facilitates the interaction between the social sphere and the scientific sphere.

In the social sphere, problem-solving is essential. However, it's even more important and difficult to make sense of the real problems. Moreover, the principles of doing and criteria of judging might be different and vague. We might ask the questions like: What does successful design mean? What will it look like (Amatullo, 2014)? And is design able to created and deliver quality and diversity at the same time (Mulgan, 2014)? Is it possible that design could combine and balance the social needs and competitive requests of the markets? What roles of design could play? What relationships could be formed? And who will be engaged in these design practices? What are the advantages and disadvantages?

Designing in the social sphere requires designers to look for emerging possibilities and to transform narratives and visions of the future or the 'not yet' (Bloch 1995; de Sousa Santos 2006) to tangible and visible scenarios. Design activities have more than one objective and purpose. Due to the complexity, multidisciplinary working teams and new design methods and paradigms will be developed and experimented by practices (Irwin, Kossoff, Tonkinwise & Scupelli, 2015). The problems design need to face are often wicked problems that don't have one right answer. All these features of social problems

and contexts provide broad spaces and scopes to apply design thinking with diverse actors and at various levels of the ecosystem. However, despite highlighting the holistic perspective of design thinking, it's important not to forget that all transformation can't be easily fulfilled without well-designed supporting tools, in which conventional design skills (White et al. 2012) are particularly required.

1.2 Research Focus

Seeing the two design research trends in management towards innovation and social demands through transitions, the research had the initial idea to integrate the two blocks of literature and knowledge for exploring the possibility to apply design management theories to fulfil social missions and for social-oriented demands. This initial idea has been made based on the following considerations:

- Firstly, the research aims at presenting the contributions and values of design thinking and design methods for social needs and the fragile communities. There have been many literature and practical experiences talking about how to put "local communities" or the "fragile/vulnerable groups" in the centre of design actions and interventions (e.g. Human-centred design methods): better understanding of their needs and wants; involve them in the design decision-making process; implementing with them and listening to their feedbacks and so on. And this design approach has been proved successful and influential in numerous bottom-up grassroots activities. However, some difficulties and limitations are merging at the same time. For example, the design strategies in many social projects should consider the economic/business aspect for being sustainable and competitive in the future. Therefore, the **knowledge in design management area** for business and organisational innovation could provide references for exploring in the social contexts. It will be interesting to see

how the knowledge from design management for business could catalyse the social changes to another dimension. What kinds of roles the literature and experiences could play in contributing to more profound social changes through intervening in organisations that are social-oriented? And who are the actors could foster this application process? With all the considerations in mind, I started to narrow down the research to concentrate in adopting design management theories, especially design activities at strategic level, in creating social benefits and impacts.

- As presented before in the research background, infusing design thinking and design approach in management and organisation studies opens possibilities in changing the minds and hands of managers to operate in their daily activities. And especially when the organisations are encountering new challenges or new contexts, there are more spaces for utilising design thinking and design methods as a way to understand and to act. From this perspective, I started to look at the social economy area, which is increasingly growing in the past decades. Organisations in developing the social economy cover quite diverse typologies, and many of them could be grouped as third sector organisations (Deutsch, 1963) or social-oriented organisations (IDEO, 2015). They put the priority on their social-oriented declaration and missions before the business purpose; concurrently, they have made significant success in creating revenues to grow. And this area is still under development and exploration. In my opinion, they are the promising type of organisations where design could also actively contribute. Since the offerings of these organisations are mainly services systems, there's no direct link between design and physical products development. This could provide an opportunity in applying design thinking and design methods in how they develop the service provided to the target communities. Furthermore, the service development process could also impact on the organisational structures and

operational activities. Therefore, in the new contexts of the third sector, the role of design and its impacts on the organisations will be different from those in the business sector? How does the third sector provide new spaces and scenarios in developing design's contributions at the organisational level?

A number of design projects that are organised neither by conventional business companies nor by public institutions have brought significant benefits for the society and common good. The designers have collaborated with national and international organisations in the third sector. Design thinking and design methods have been used in solving the social problems for different objectives and in different ways. it's necessary to observe this emerging phenomena from a systematic and holistic perspective and to understand the hidden opportunities to develop. Compared with business companies, third sector organisations put their target communities more **in the centre** of their activities and decisions. This nature illustrates the strong link with design and design thinking. Meanwhile, this nature also reminds designers of balancing the human's needs and organisational development needs. The relationship between third sector organisations and their target communities are different from that between business companies and their consumers. Therefore, the third sector organisations need to explore new ways to face their internal and external challenges. Design-driven approach might be useful and effective in this scenario.

The research focus is set to explore the **design-led approach** in intervening **third sector organisations (TSOs)** at different management levels and organisational layers. The design-driven approach highlighted the interruptive role of design and design thinking in dealing with management and organisational issues: e.g. innovating the internal working

process; connecting with external actors, balancing social and economic performances and so on.

Figure1.1 | Research focus (elaborated by author)

1.3 Research Questions

The assumption is that designers, through applying design thinking and using design methods, could **contribute to the organisational development process of third sector organisations** (TSOs) at different levels. And the properties of third sector organisations provide **opportunities to develop a designerly way (design-driven approach)** to develop organisational design practices, which will benefit to the organisational offering, operational activities and capability to innovate, and eventually benefit to its target communities/final users. Therefore, in the research, there are three main actors: designers, third sector organisations and the target communities (the vulnerable/fragile communities). Designers could act as brokers (Verganti, 2003) to connect and communicate between the other two, at the same time, to balance their different needs and requirements while shaping the solutions.

Under this assumption, the research aims at understanding:

How to strategically apply design thinking at different organisational levels to intervening third sector organisations (TSOs)' behaviours, for better managing internal development process(es) and connecting with their target communities?

In the research, the design thinking approach is proposing a designerly way of doing. Here, I would like to declare the boundary of design thinking in this research. In social-oriented projects, there are different people conducting design thinking and relevant tools, intendedly or naturally, even though they are not trained as professional designers (Burns *et al.*, 2006). However, in the study here, I would like to concentrate a designer-led design thinking process, in which **trained designers** will play essential roles in applying, distributing and penetrating this way of thinking and doing with other actors.

The research question also emphasises the strategic role of design intervention in organisations. The term strategic design used here treats strategy as the way that people in organisations *do* rather than something they *have* as a plan (Johnson *et al.*, 2007). Since the values of strategic design have been demonstrated and well introduced in the business world, it might be useful to suggest or promote this approach also in the third sector organisations. However, this doesn't mean that the strategic design approach is the only way that design thinking could be applied to solving social problems or in social-oriented projects.

As written in the research question, the design-driven interventions processes will be analysed regarding to the link and connection with organisational changes and transformations. As introduced in the research focus, the third sector organisations might be a promising field to develop design-oriented organisational design theories and practices, all design interventions and the results might imply reflections on organisation

operational behaviours and suggest an alternative way to think what an organisation ought to be.

Afterwards, I would like to elaborate in detail the main research question through splitting it into several specific research questions:

- *What are the contributions that the designerly approach (design thinking and design methods) could generate for third sector organisations (TSOs)? The quality of offerings? The production processes (Gemser and Leenders, 2001; Bertola and Texeira, 2003; Cagan and Vogel, 2001), or the organisational development (Buchanan, 2004)?*

The first question aims at investigating what design thinking and design methods have created for third sector organisations? From improving the quality of their offerings to developing the way they deliver them. What kinds of design results have been generated? And how the processes have been strategically carried on by designers or design-led research teams. Besides, how the design results have changed the third sector organisation itself? Which organisational elements have been improved? The peripheral aspects or the essential aspects? And what are the subsequent influences on the organisation?

- *How do designers manage and organise the design-led process(es)? What are the different paradigms/relationships that designers have built with third sector organisations and their target communities in the co-creation processes?*

There are different ways and approaches that designers are conducting while working in the third sector. The research aims at looking deep into different relationships/paradigms in different situated contexts. Designers might act differently with people inside and outside the organisations to facilitate creation processes according to different purposes and situations. And it's also important to identify what are the design strategies along the practical processes to manage the actions and actors? What kinds of design methods have been used or developed in supporting the processes?

- *How could these design contributions and paradigms enable third sector organisations (TSOs) to build and develop their design capabilities?*

Are the different design paradigms relevant and linked with each other? is it possible to transform from one type to another? If yes, which are the factors for stimulating the transformation? More importantly, how designers are capable of facilitating the transformation? Is the transformation suggesting new ways to think about radical innovation on organisational design? What are the indications for shaping third sector organisations into better ones through building their design capabilities?

1.4 Research Objective

As previously argued, the diffusion of design thinking in organisations, especially the third sector organisations, is still at the beginning stage. And how designers act and facilitate the diffusion process might have different results and impacts on the organisations. And due to the properties of third sector organisations, designers need to form proper and dynamic strategies to conduct the design-driven activities in fulfilling

different organisational requests and demands. Therefore, the objectives of this research could be summarised as:

- Building the basic understanding on the current status of designing thinking impacts for the third sector organisations.

  This research has taken a unique perspective on observing the emerging phenomena – adopting design thinking in the third sector, the very first objective is to capture an updated image on the status and to obtain the data which illustrates what is happening now and what have done by now.

- Elaborating and defining the design-driven approach(es) for shaping and transforming third sector organisations (TSOs).

  The research has concentrated on understanding what are the different design paradigms and strategies to collaborate with diverse third sector organisations. The goal is to explore what this design-driven approach might be: why it is effective and useful for third sector organisations, what are the features, who should be involved and finally what possible organisational changes it could leverage.

- Providing practical experiences and guides to designers for collaborating with third sector organisations.

  This research also aims at providing practical suggestions and instructions for both third sector organisations and designers putting their efforts in this context. The research results intend to provide third sector organisations an alternative way to think, to do and to make to manage their internal and external resources and activities towards the social-oriented missions. At the same time, this research is proposing and

guiding designers in collaborating properly and effectively with third sector organisations.

- Advancing the research in impacting organisational development process by design-driven perspective (design thinking and design methods).

Taking the third sector as a specific research area, the study also has the objective to develop and expand designerly/design-driven approach in organisational development and management innovation in general.

1.5 Research Methodology

The research methods are mainly adopted from qualitative social science research methods, and they are used to identify and generate new concepts and ideas to answer the research questions. The qualitative research methods are selected for conducting this research for these reasons: 1) qualitative research methods are primarily for exploratory research to get a better understanding on the particular topic(s). 2) the research methods include unstructured or semi-structured research techniques to get data. Since this study is investigating in an emerging and under-development area – the third sector, the research techniques used in the research will not be completely-structured. For example, using semi-structured interviews will be able to get more data and make interviewees tell more about the stories beyond the questions. 3) qualitative research methods will pay more attention to every case or project, focusing on its specificity instead of its shared features. The methods will not look at the number of the cases or projects but what data each one of them represents.

According to the research questions and aims presented before, the research methodology is mixed and it has been illustrated below (figure 1.2 & figure 1.3).
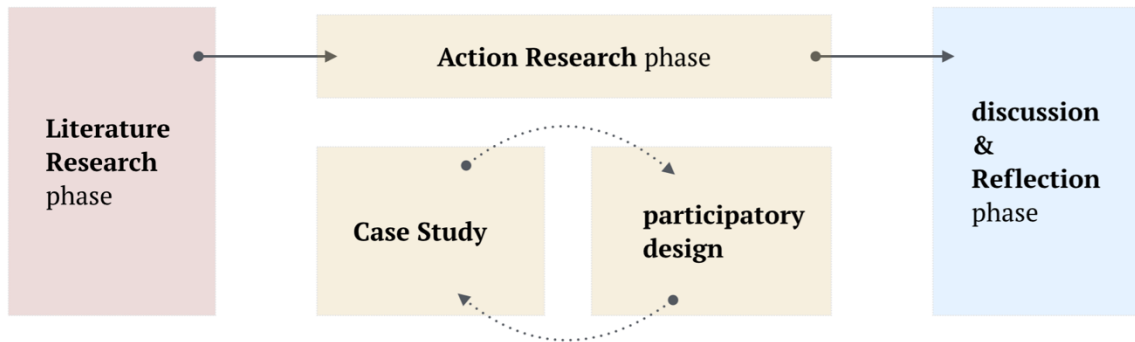
Figure 1.2 | Research methodology (illustrated by author)
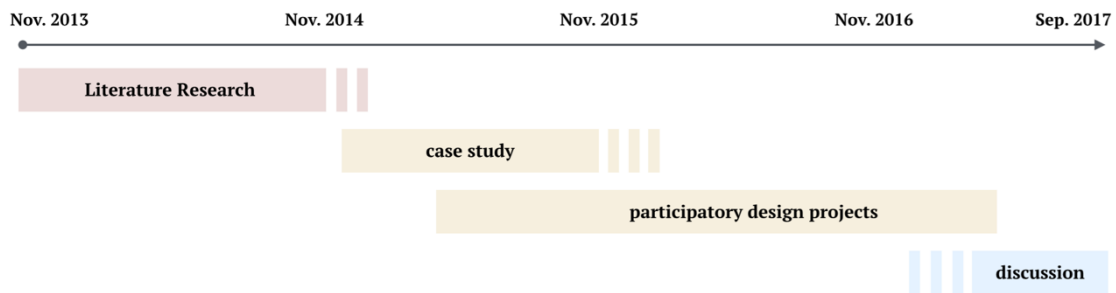
Figure 1.3 | Research Timeline (illustrated by author)

1) Literature review

Regarding the topics and research perspective, the theoretical part is generally converged from three main blocks: 1) design management and organisational design 2) social impact design 3) third sector organisation (TSO).

- Firstly, the theories of four orders of design (Buchanan, 1992; Golsby-Smith, 1996) is the fundamental basis to start the research. As Buchanan said that we are still at the beginning to explore the third and fourth order of design, which design will impact the systematic changes, the organisations and the cultural issues. This leads to open the discussions on organisational design from both organisational

studies and design disciplines (Weick, 2004; Buchanan, 2004; Romme, 2003; Martin, 2009; Junginger, 2008; Barry, 2016). And a link between design management and organisation of design will be examined to understand possible approaches to integrate a "design thinking led" organisational design at the strategic level. These literature reviews will build the theoretical background in developing and distributing a design-led perspective and mindset to conduct organisational activities and operations.

- The second aspect of the literature review is from design for social issues, which comprises different interpretations for a new mindset and approaches to take action in social contexts. The participatory design and co-design methods are adopted by many public sectors and third sectors to solve the social problems better and to fulfil the organisations' social missions. In these design area, there are two different approaches: the "top-down" and "bottom-up". The bottom-up approach, in which a social innovation initial starts from the local communities spontaneously, has been studies by a number of design research groups: DESIS, Nesta, MindLab, IDEO, Frog and so on. And the top-down approach has also been promoted by many design-oriented research institutions: Design Council, Helsinki Design Lab and so on. It's important to understand the features of these two approaches and the contributions they have made.

- Thirdly, literature in third sector organisation will be reviewed to generate a basic but comprehensive understanding of this specific context. The focus will be put on the diverse typologies; the balanced performance between social needs and economic profits and the opportunities to apply design thinking and design methods.

The literature review phase was conducted from the very beginning of the research till the end of the first year, lasted for about 12 months. However, this phase was continuously conducted also after then. New papers and books were often added to building the literature framework and generating implications for the following research steps.

2) Action Research Strategy

Action research was proposed by Lewin (1946) as "proceeding in a spiral of steps, each of which is composed of planning, action and evaluation of the result of the action".

The research has followed an action research strategy to collect data in two different ways.

	Methods	Quantity	Purposes
case study	case collection & selection	20 / 8	To generate a basic understanding of applying design thinking to organisational development in TSOs
	semi-structured interviews (1)	6	To capture real and contested opinions of designers and managers of TSOs in successful cases
participatory design actions	second hand researches	35	To build up knowledge in specific design topics and to get insights
	field researches	3	To understand actors perceptions and to emotionally experiences the contexts and problems
	semi-structured interviews (2)	8	To build an understanding of the project context, and to capture the internal and external actors opinions
	design practices	3	To transform the research data into practical design results for TSOs in situated contexts

Table1.1 | Action Research Strategy (illustrated by author)

a) Case study

The case study method aims at investigating successful design projects worldwide that have led different co-creation processes involving third sector organisations and their target communities (vulnerable groups). The research purpose is to

generate pictures and maps of 1) design outcomes that have been generated in the design-led co-creation processes and how these design results could impact the third sector organisations from the perspective of organisational design; 2) how different design paradigms could empower the third sector organisations and their target communities in actively participating in co-creation processes.

The selection of case study method has been oriented by the following reasons:

- Case study is suitable to obtain the understanding and to generate explanations for complex and complicated phenomena. It's used for exploring answers regarding specific subjects and topics to the question of "How" and "Why" (Anderson, 1993; Yin, 2009). Also, it provides the opportunity to investigate every particular case/project. Therefore, case study method could be used in analysing the different design paradigms in different cases and the organisational changes made by the design results.

- Besides, case study method is helpful to research in the emerging areas and issues where there are few sophisticated theories. This method will be useful to collect data and help to generate findings and implications. For example, the third sector organisations are relatively young and vague compared with business companies and public institutions. And the topic of the design-led organisational design approach is also new in both design research and organisational management research. Therefore, case study method could contribute to collecting latest practical data in these emerging topics and issues.

The first step to start case study is to draw the boundaries of cases. Yin (2009) has stated that that bigger heterogeneity among cases could increase generalisation,

instead, the homogeneity might support internal validity. In this research, the case collection and selection have been carried on twice. The first case selection session has done regarding the criteria: 1) the design process follows a design thinking process and designers are the main actor to lead the projects; 2) the diversity of third sector organisations (considering type, scale, nations and so on); 3) the diversity of topics and social problems (the third sector organisations work on different vulnerable/ fragile groups: poverty, less development, disability, under disaster and so on). The criteria to present the cases are: project name, nations, year, objective, social problems, designers (design team), type of third sector organisations (sponsors), target communities (vulnerable groups), why to involve design, design process (design methods), final results/offering. After making the list, I have selected 8 cases from all of them based on the design outcome, design process and design paradigm. The case selection process has also balanced the similarity and diversities. These 8 cases were analysed and studied in depth. Desk research and semi-structured interviews are contributed to collect the data of every case. At the end of case study phase, two models have been developed, in which the 8 cases have also been mapped. These two maps have presented the answers to the questions raised at the beginning of case study phase. And from the maps, I could also see implications to the nest research phase.

The case study phase mainly lasted for around 14 months, from November 2014 to December 2015. Again, like literature review, different cases were continuously added or eliminated.

b) Participatory Design

The phase of participatory design is a significant step in this research. Participatory research method is often associated with social transition and local community development in the third world (Mc Taggart, 1997; Mardikanto & Soebiato, 2012) and it requires to work closely in real and situated contexts with local communities. This research method allows researchers to collect data, to generate understanding and to make reflective learning through doing by hands in the real situations. Here, I have noticed the needs to apply participatory research actions as part of actions research strategy. The participatory design phase aims at exploring answers by taking actions collaboratively with third sector organisations. It's suitable for this research because:

- The importance of participation and action. Plack, et al., (2005) recognised that "reflection gives meaning to experience; it turns experience into practice, links past and present experiences, and prepares the individual for future practice". The active participation of practitioners is crucial in understanding social problems and making social changes. One of the essential aspects of design thinking is that designers have their own way not only to think but also to do and to make. Learning by doing is how designers act everyday. Participation in real contexts with all the relevant actors in the contexts is coherent with design thinking approach as well. In order to answer the research questions, participating in projects and generating personal experiences and reflections are fundamental activities in this research.

- Practices in real social transformation. The research is seeking in the real world and doing design activities for real changes in the third sector. Compare

with other research methods, participatory design has the priority to contextualise concepts and interventions. The research objective is not to find the right answers for the research questions, but "better" and "proper" ones. The practical design research projects conducted in the research will provide valuable data and useful implications for particular situations and settings. The design actions and supported design tools will provide both practical suggestions and reflections to relevant theories.

- Research for innovation and change. Gustavsen (2005) has written that action research is a suitable driver to make changes and to leverage innovations. This research has the objective to innovate organisational design theories and practices through conducting design thinking approach in third sector organisations. The participatory design phase not only aims at dealing practical problems in third sector organisations but also tries to discover the emerging phenomena practically and to understand the possibilities to make changes in this new area.

Based on these reasons, participatory design activities include three projects that I have participated with my knowledge from previous research steps. All the three design research projects are collaborations with Italian third sector organisations, but in diverse dimensions and on different social issues. The collaborations mainly started from third sector organisations' initial ideas, and the design processes were strategically planned and carried on partly based on the previous learning in literature reviews and case study activity. My participatory action research activities were fully supported by my research unit - Creative Industries Lab of

Politecnico di Milano. The participatory action research phased was conducted for around 30 months, from January 2015 till June 2017.

1.6 Thesis Structure

The thesis consists of four main parts: the overview, literature review, action research and the research results.

The first chapter is the overall introduction of the research, introducing the research background, research focus, research question and methodology and timeline of the doctoral research.

In the second part, literature review has been conducted on design management, organisational design, social impact design and third sector organisations (TSOs). Chapter 2 is the theoretical discussion on the core concepts of organisational design research trends and its links with three-levels theories in design management field. At the end of the research, several promising directions to develop a design-driven approach in organisational design have been elaborated. Chapter 3 starts with literature review on the third sector and the common features and diverse typologies of third sector organisations (TSOs). Then it goes to summarise the history of social impact design, especially introducing the changes of design focus, perspective and relationships/paradigms.

Afterwards, the thesis enters to the third part including chapter 4 and 5 to elaborate the action research process. Chapter 4 is the case studies on the best practices in this field. And at the end, 8 cases are analysed though presented in two maps. The target of the case studies is to find out the organisational contributions of design thinking and the relationships among designers, target communities and third sector organisations (TSOs). This helps to generate understanding for practically conducting designerly organisational

design actions in participatory design projects. The three projects have been presented in Chapter 5, illustrating an experience of research by designing.

The last part is the research result: Chapter 6 proposed the characteristics of designerly organisational design approach and the different types of the outcomes to allow third sector organisations (TSOs) to develop their design capabilities. Chapter 7 stated the contributions and the limitations of the doctoral research.
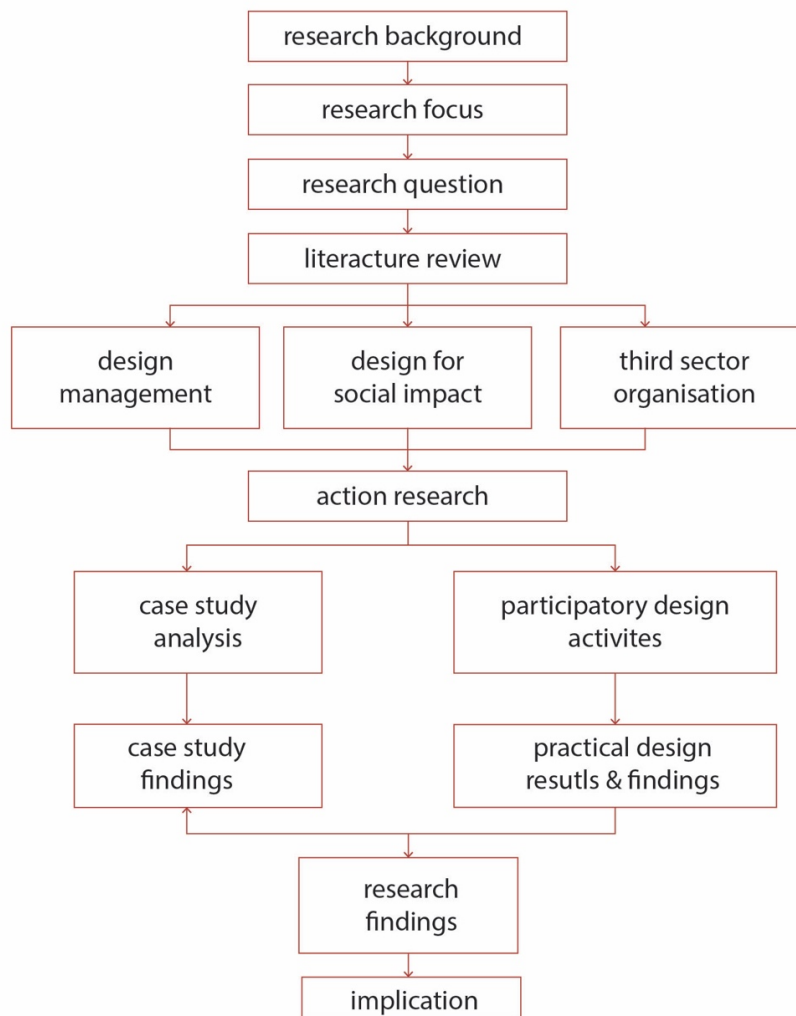
Figure 1.4 | Structure of the thesis (illustrated by author)

LITERATURE REVIEW

Chapter2 |

Designing for Shaping and Managing Organisations

Design, born between arts and science, has been interacting with different disciplines for a long history, and its contributions to others have increasingly been recognised in these years. In Cross' book "designerly way to know", he has stated the development process of design sciences and the role of design methodology is a field of inquiry into other disciplines (Conference on Design Methods, 1963). The ways designers are knowing, acting and reflecting have inspired scholars and practitioners in organisation and management sciences in doing and thinking. There have been several important conferences, like Managing as Designing (2002), the conference on organisation design (New York University). Both of them have looked into the possibilities of implying and embedding designerly ways (design thinking) into managing the organisations, forming an innovative culture, rethinking organisation design and all other related issues.

This chapter is a review on the "impacts" of design thinking (methodology and approaches) on organisation studies, mainly focusing on organisational culture reform and movement. It starts with the question: "why" designerly way is valuable to traditional organisation design. Then it moves to present "what" has been achieved when applying design thinking in different levels of organisations. In the end, it describes several opportunities about "how" to stimulate and facilitate organisational development through design thinking practices.

I never touch structure – it's all about process. You don't put structures into place unless you have the strategy down pat. How can you act intelligently if you don't know what you want to do?

Jay Galbraith (design consultant)

2.1 From Design thinking to Organisational Design

Design thinking (Buchanan, 1992; Martin, 2009 & Brown, 2009), has been highly acknowledged by business companies as one of the most important competences to enhance companies' competitiveness in the market, related to their products, communications, service and experiences. At the same time, how designers think and act is involving increasingly deeper into the internal parts of companies, about how it works and develop, how to form its mind-set, what is the assumption and so on. Design thinking is actively proposing ideas and a new lens to think about these questions.

2.1.1 Expanding the Scope of Design

Buchanan (1992) and Golsby-Smith (1996) have categorised all types of design activities into four levels, and both of them have stated that we are now practically entering the third and fourth levels with emerging needs and goals in different sectors. The capabilities to communicate and express their minds through tangible "evidence" (signs, communication stuff, products, fashion pieces, etc.). The design has been recognised as a particular science discipline and expertise. This is the first and second levels of design that are easier to identify and primarily with visible shapes and forms. Designers created the shapes and forms, then transform them into commercial market to meet specific needs of consumers. As the boundary of problems seen and recognised by designers has continued to grow and enlarge, designers have increasingly stepped into solving new challenges and applied new ways to "design". New projects working on developing innovative working experiences, building better accesses to actively participate in public issues, creating social enterprises to improve the living condition of less developed communities are emerging all over the world. And all these emerging projects have opened new possibilities for designers and design researchers to rethink about their way of "designing": for what reasons/ why to design? What types of design are they

conducting? What is the environment/context of their actions? Who have been and could be involved in these actions?
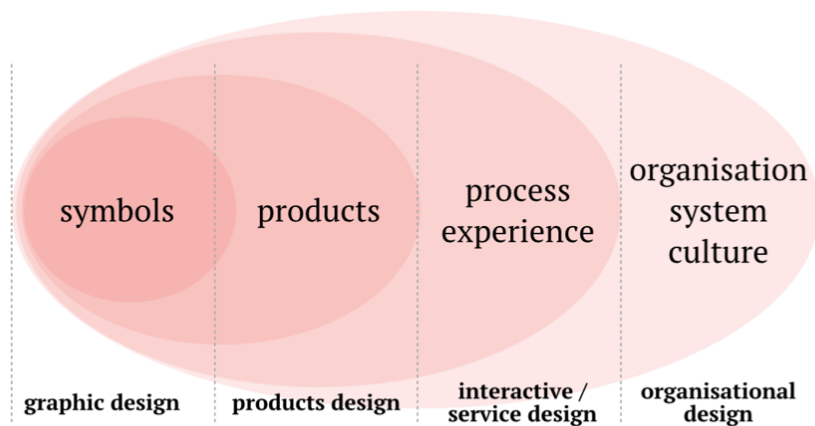
Figure 2.1 | four orders of design (illustrated based on buchanan & Golsby-Smith's theories)

Back in the history, designers worked in organisations (business companies) for solving specific problems that are limited to specific needs with their trained skills and aesthetic sense. Design activities are primarily considered as the function-oriented process, and that's why people could well recognise and accept the first and second levels of design. When a single product could no more provide the answer to complex problem or designers have noticed that there were so-called "wicked problems" (Nigel, 1963; Buchanan, 1992) to face, traditional design skills are not sufficient to support the whole design process. Moreover, the needs of new design skills to explore and collaborate in new ways of doing has pushed designers to act at higher levels. Involved in higher levels of organisations, designers are encountering more complex relationships, both internal and external. The rising of service design and interaction design in the last 20 years has proved the third level of design activities are playing an unprecedented role in answering new requests and creating new solutions. Designers have tried to apply their creative problem-solving skills in developing new forms of design results. In many cases, there's no clear defined design brief, and there are more actors relevant to the problems, a strategic perspective is needed to perceive the situations as well as the opportunities. To

deal with all these factors, designers have understood that to get the final desired results, it's no longer a creative working path by themselves, but an exploration on how to create and manage a system-based solution together with others. From another perspective, thanks to the contributions made by the first and second level of design, people outside design disciplines have always connected design with creativity and problem-solving capabilities, when they feel to have something new, different, functional and beautiful, they would like to bring designers to help with finding possible answers. Therefore, at the third level, service and interaction designers are working in different aspects of a designed service system, from researchers on needs, the definition of a design brief, conducting design process, doing fast prototyping, supporting the service management and so on. All these actions have been considered as parts of designers' skills.

The experiences in the third level of design lead to looking deep into the backstage of a service or an interaction system. For guarantee the user experience and service interaction going smooth and effective, it's significant to look deep into the backstage, in which all actors are "involved" and "designed" to act precisely supporting the front stage. In different systems, these actors, organisations and their relationships might be completely different and complex, moreover, how they devote and benefit will also affect how the final system works. The importance of coherently involve these actors and organisations working together requires basic knowledge of organisations and management theories perceived and reflected from the designers' perspective, and then transfer them into practical design actions. This is where the fourth level of design appears: organisational design and design culture. When the "organisation" becomes the subject of design, what kind of approach and skills could shape and develop our organisations? (Buchanan, 2004) An organisation is a unity of individuals that work towards a shared vision and mission. Junginger (2007) has stated that product development can turn into an inquiry into the

organisation and a vehicle for organisational change. In today's society, then companies' offerings are services-oriented experiences, the development process, management strategies and any aspects of the services offering will be highly related to a company's mindset and internal organisational activities. How designers could step into organisational design field (what is the approach, how to establish the designer's perspective, how to collaborate with other scholars with significant roles) is the starting point to open this research.

2.1.2 Organisational Design

As mentioned in previous paragraphs, organisational design is seen as an emerging area of design research and practice. However, it already had a long history in organisation and management study. A literature review of this term, mainly on its developing process, has been carried on to identify why it's increasingly relevant to designers and design researchers and where are the spaces and opportunities.

Most scholars of organisation studies do talk about and work on the organisational design, no matter they intend to or not (Weick, 2004), it is an essential topic for people who are managing the organisations. The organisational design was born for responding to industrial development, and it is the way to arrange how to conduct an organisational purpose and strategy to achieve its objectives. There are some elements to consider when people arrange the organisation through making decisions and taking actions. There are a number of scholars who have discussed the organisation design with a focus on the form and models: McKinsey 7-S model (developed by Pascale & Athos, 1981; redefined by Peters & Waterman, 1982) front-back hybrid supported through matrix (Galbraith 2002), flexible form (Volberda 1996), ambidextrous organization (Tushman and O'Reilly 1999), and network- based structure (Nohria and Eccles 1992). Literature has presented the analytical and logic way, which has dominated the management and organisation studies,

to carry on organisational design with a concentration on optimisation. Efforts are primarily put in searching for "best" and "certainty". They view the word "design" as a way to figure out a form and pattern to efficiently organise all the elements towards reaching expected goals effectively (Haberstroh, 1965 & Bulter 1995). Those considered as "design" actions are selecting proper structures and forms to answer the demands, and when the new needs appear, managers tend to add new features or rearrange the structures to adapt to new situations. However, the new requirements and needs in nowadays are extremely different from what the organisations were facing before. Searching only for a new structure to control the organisation in new social-technology scenarios has ended up with a lot of problems. Instead of making organisations resilient and adaptive, these structures, models and the perception of design have put numerous constraints and limitations to develop and innovate organisations.

In 2004, a significant conference called "managing as designing" has firstly created an occasion to discuss possible contributions of design, as a scientific area, to the theories and practices of organisational management and development. And it gathered scholars from organisational studies, management and design to explore a design attitude in organisations. As followed in 2007, two important special issues, one from the journal of applied behavioural science and the other from organisation science journal, are published to bring design science into organisational studies and change management. There are several trends in organisational design field have been observed from the literature:

1) Firstly, the objective of organisational design research is changing, the question on "why to do it" is leading researchers to think beyond existing box. The history in this area is dominated by the idea of researching on "optimisation". The calculation on inputs and outputs was often providing consolidate answers to the managers and

investors about where to put the money and efforts. Thus, efficiency has been believed as the most important goal of organisations, especially in the business sector. Analytical approach of managing and decision-making has played a significant role for a long period. However, more and more practitioners have been noticing the differences when considering from design disciplines. Romme (2003) noted that focusing on solutions rather than trying to thoroughly analyse situations before taking action is an advantage that design science could bring to organisational development. Instead of previously predicting the organisational future, exploring innovative and creative solutions as organisational offerings are making organisations more competitive. **Innovation** and **change** have definitively replaced scale and stability as determinants of organisational survival and success, throughout the world and across most industries (Keller &Price, 2011). Numerous companies have collaborated in different ways with designers to absorb design knowledge to enrich their **capacity to innovate**, and the results generated by designers have various levels of impacts on the companies in ways of organising and managing. Some of these results don't have help to the companies to be efficient; instead, they suggested alternative directions for businesses' future development, which have been expected and found following traditional research approach in the organisational design discipline.

2) Secondly, the content of organisational design is also changing by time. The object of design activity is the organisation itself. However, there are different ways and approaches to carry it on. As presented before, scholars have pointed out that focusing on structures of organisations has put barriers to open new spaces and direction for developing the organisational design. Martin (2009) has stated that people are working in organisations with specific roles and defined daily routines, and he suggested a project-based activity system which is formed and disbanded according to specific tasks and needs of organisations. This task-based approach, other than

permanent structure, indicated a moving from exploring the best model for working and managing to transform organisations being dynamic and adaptable to different situations. Meanwhile, Junginger (2008) has studied on how product development process could turn into an inquiry into the organisation and a vehicle for organisational change. From a system perspective, the development of products and services has involved different types of users in a collaborative process. The interactions between internal and external actors of a company have proved as a big success to shape a satisfactory and competitive "offering", and invisibly it also created a significant way to conduct development and design activities. And more recently, the "human-centred design" method (IDEO.org, 2015) has been adopted in numerous fields, especially in public and social issues, for solving problems and looking for contextualised solutions. These movements from designing a model to reshaping the way of finding and providing solutions have presented the revolutions in organisational design area: from structure-focused to process-oriented, triggered by the natures of "design" as the intervention to the organisational process (Trullen & Bartunek, 2007).

3) Thirdly, the interpretations of "design" have completely changed. As mentioned in the previous paragraph, the design was primarily understood as a decision-making action of managers. A lot of analysis has often been conducted to find out the best organisational structure for specific missions and in specific contexts. And the decisions are considered as one of the key elements for organisational development. There is a substantial quantity of literature that has discussed how to build different organisational models to maintain competitive and innovative as business entities. When design started to be considered as one of the most influential factors to bring radical change and competitive advantages to companies (Verganti, 2009 & Martin,

2009), scholars in organisational management area have also studied "design discipline" to figure out the possible contributions it could bring to the organisation itself. Besides the idea that design brings radical changes to products of companies, Boland et. al. (2004; 2006) have intensely studied the design results and processes of famous architect Gehry, and they have analysed how he and his company were "designing" the organisation while conducting different architect projects. The temporary organisation designing activities, which is project based, have suggested scholars in organisation design to extend their attentions to identity, relationships to environment and integration of experience and future possibilities. Design and how designers (also architects) work is seen as an "asset" to the way of managing organisations. Starbuck and Nystrom (1981) suggested organisation design should originate from fantasies rather than analysis. This perspective has built a new relationship between design science and organisational study. More recently, design discipline remained not only as a resource to use for a new purpose and at a different aspect of managing organisations, more important, but the design thinking approach is also valuable to provide an alternative way to conduct organisational design activities. Managers are no longer the only want to decide how an organisation should work and look like, engagement of employees, customers and stakeholder have significant roles in shaping and developing organisations. Therefore, managing a complex system with all the participants could not look for answers in analytical ways but through design thinking. Managers have realised this "designing" approach not only provides something to learn but also how to think and to make it happen collaboratively. The organisational design is moving towards organisational designing with diverse actors.

2.1.3 Opportunities: Design Thinking & Organisational Development

it's essential to be clear on the following two aspects when searching for the reason why "designers" have the potential to propose new interpretations for organisational design and to bring organisational changes and transformations:

1) organisational change theories: the current knowledge and research directions of managing organisational changes; 2) what kind of knowledge that is possessed by designers could contribute to bringing a new vision for the organisations' future?

Deloitte (2017) has stated that successful organisations of the future will likely be those that can move faster, adapt more quickly, learn more rapidly, and embrace changing career demands. To provoke organisational change towards these objectives, it's necessary to start with basic knowledge on organisational development theories. Rousseau (1995) suggested three primary change strategies that organisation could take: drift, accommodate and engage in radical transformation, and organisational transformation will involve all layers in change, from artefacts, the pattern of behaviour, pattern of norms, values to the fundamental assumption of the organisation. Golembiewsky, Billingsley &Yeager (1976) have also introduced three levels of change: alpha change (perceived levels of variables within a given paradigm), beta change (standards and perception of values within a given model) and gamma change (change of paradigm). Similarly, some other scholars (Argyris & Schon, 1978 and Watzlawick, Weakland, & Fisch, 1974) have concluded as "first-order" change and "second-order" change. Incremental modifications are actions at the peripheral area, and it's the common way to bring and adapt changes to existing internal contexts. However, the latter one pointed out the importance to question the essential assumption of organisations, and it will not fix the existing one but to establish a new way of organising, managing and operating. Besides, Bartunek & Moch (1987) has raised up the third-order change. Even

though they talked about the orders from the perspective of "organisational schemata", it has presented the sign of empowering individuals to actively participate in doing their change by saying "the training of organisational members to be aware of their current schemata and thereby able to change these schemata as they see fit". And this is where I see the possibilities to push organisational design research further more from a design-driven or design-led approach.

Weick (2004) have presented the limitations in traditional management studies and have stated that design, with its nature, is making sense of things, referring to an organisation here. It's as abstract as a process of understanding, at the same time, it's able to share at different moments of a process, and it always plays between converge and diverge to make a balance between exploration and exploitation (March, 1991). On the other hand, scholars from design discipline have proposed and extended the scope of design activities theoretically and practically. Scholars (Brown, 2009; Barry, 2016; Buchanan, 2016) in organisational design research have highlighted the design-oriented approach to open a new era in this research area. To clarify "how-to", it's necessary to be clear with what/ which type of design knowledge to use. As summarised before in the literature review of the organisational design, the interpretations of adopting "design science" in the organisational study have created a new vision of developing organisations, which highlighted the possibilities of taking design-led mind and approach. Also in this research, a priority has been set on exploring how this approach could bring new changes for organisational development towards being innovative and competitive. Cross (1982) has declared a "designerly way of knowing" in his book, which separates design from science and humanity and indicated its own features of perceiving, understanding and creating the artificial world. When "organisation" itself becomes the artefact/object to design, this designerly way of doing is suggested by Barry (2006) to rethink organisation design process. The human-centred design method has been widely used by designers, design

researchers, and practicers without the conventional design background. This design thinking phenomenon and distributed design activities (Manzini, 2015) are well accepted as an effective way of solving problems, so as organisational problems. What are the challenges when dealing with organisational problems by implementing the designerly way?

1) Firstly, there's still a gap between acknowledgement and real actions. It is difficult for managers, having their traditional way of perceiving and interpreting the world, to accept and remain uncertainty during the process of reforming and developing. A design attitude (Boland & Collopy, 2004; Michlewski, 2015) is not yet common to embedded in existing organisational culture, which should be well understood before making any interventions. So fewer organisations have indeed adopted this mindset at an organisational level even though there is an explicit acknowledgement of using design as a crucial tool to innovate, there's still a substantial barrier to form and spread a design culture at different levels of organisations.

2) Secondly, this designerly way of doing organisational design is expanding the Human-Centred Design method to a higher level, in broader areas and with more actors. The "human" is no longer the end-users or clients of companies; instead, a new definition of "who is the human" should be clarified. Furthermore, what is a human-centred design approach to organisational design will be much different than it's now. In both inside and outside of the organisation, there're different "human" with various needs, and all of them are relevant to an organisational development process. They could affect organisations positively and negatively.

3) Thirdly, the design is adopted for achieving innovation: incremental and radical ones. Verganti (2009) have highlighted that design (designers) should be considered as an essential factor to make radical innovation, thanks to their capabilities to broker new meanings through products. And these new meanings are not the results of user research, technology innovation and logic analysis of markets, and it's possessed by designers themselves. Starting from this idea, applying this capability to bring "radical" innovation at organisational level could lead new meanings of companies and organisations, as well as how it operates internally and externally. However, organisations are the collective identity of different individuals, who have specific needs while sharing a common goal. Design thinking needs to balance the diverse needs and to align them in a shared and dynamic entity while fostering innovation and organisational changes.

2.2 Embedding Design Thinking through Organisational Design

There are a large number of researches investigating how to manage "design" for different objectives and in various ways and what kinds of values have been delivered. In the design management research field, managing the design often related to administering a design project, in which designers have been involved in using their expertise to answer specific needs. As explained before in the four orders of design, the design management activities also have different typologies: managing designed results; managing the designing process and interaction and managing strategic interventions and cultural transformation (Mozota, 2006; Best, 2015; DMI, 2015). This kind of literature leads me to link them with organisational change theories, and I started to question how design management actions could leverage organisational changes and transform organisations towards design-led and design alert (Design Council, 2007). In this part, an investigation on the impacts of design at three levels of organisations will be conducted. Afterwards, a summary of significant findings on design capabilities assessment diagram will be

introduced. Finally, this part ends with three assumptions on potential development directions.

2.2.1 Managing Design at Three Levels of Organisations

Talking about strategic design and design thinking seems like trendy now in business and also public sectors, and people increasingly believe that design is the powerful tools for solving problems and being creative and competitive. This worldwide interest in applying design in some topics and fields have brought significant opportunities to develop design knowledge at the strategic level. Top managers have involved designers working in their organisations to face entirely different kinds of problems, even though they stated that they are doing design thinking at the strategic level. The design has been used at an **operational level** to form the "look" and "feel" of intended results offered by organisations. At this level, the design has been adopted based on specific projects decided by managers and crucial contributions include a better understanding of users/customers; high quality of user experiences (the delivery phase) and differentiation (Mozota, 2006). And the success highly relates to designers' own expertise. If considering design strategy at this level, it's always linked more to the market communication strategies – how to build a relationship between users and offered artefacts, functionally and emotionally. Users/customers are considered as the fundamental part of organisations, especially for business companies. In the beginning, designers are mainly the ones conducting the whole design process alone, and they are in charge of transforming users' needs to satisfactory artefacts and during the entire process, users are involved in test phase and asked to give feedbacks on prototypes. This is a top-down and experts-focused decision-making process. Design knowledge has limited impacts on the organisation itself. Instead, it creates a positive link between users and organisation through physical artefacts.

Going further from individual artefacts-oriented to the process-based development, managers have seen the values of design at **tactic/intentional** level towards two types of changes: incremental and radical. The incremental organisational changes are often brought by designing and managing for services. These activities aim at improving existing service systems and social paradigms (transitions design, 2015). The capability to manage and innovate in complexity makes managers turn to and spare spaces to design disciplines. Knowledge on both design and management is required at this level. Design management contributes to decide what a service should look like; to build new principles for (inter)actions among actors and to create the business model for being competitive, now and in the future. Besides, Verganti (2009) has demonstrated that design can create radical product meanings when designers put their vision in driving product development. Design has the unique power to provide users what they like without being told. This guides organisations to open new directions and markets by following a blue ocean strategy (W. Chan Kim, 2004) rather than the red one. Involving design at this level allows organisations to change the rules to play in the markets. And internally, designing the process has changed organisational behaviours of employees, mainly the managers, and relationships between managers and designers. Thus, managing design at tactic level needs to put the efforts on system thinking for both the offerings and the process to develop and deliver them. The system thinking is not only obsessed by designers, but also by managers and staffs for maintaining and supporting the services and operations. A human-centred design approach doesn't mean putting users and clients in the middle of every decision-making activity; instead, all relevant actors are as important as the users. Integrating and negotiating with all of them is one of the main challenges for design. Besides, design knowledge here has more broadened significances than conventional trained design skills and tools; design thinking is communicated and taught by designers to all others to work together with the same mindset and methods. From an organisational development perspective, designing is enabling management to reorganise different

physical and human resources innovatively, as well, management is supporting design to act efficiently and logically.

Managing design at the **strategic level** of organisations is adopting design thinking to exam the fundamental assumption: why an organisation exists and to confront organisational problems and needs. At this level of actions, designing doesn't isolate itself from other disciplines; instead, it's highly integrated with all others. How it works impacts the organisational develop path. Drucker (1999) pointed out that how design can respond to different dimensions of an organization can be a rich starting point for identifying design opportunities. At this level, design thinking is showing the capability to "see the future" of organisations. "What will it be" could be explored following the design thinking approach, and questioning the original assumption helps to keep organisation stay open and flexible. Here assumption (or called vision) doesn't refer to its regulatory vision but its "essential" part. Organisations exist for accomplishing specific goals and creating specific meanings; even business companies lay the priority on fundamental assumption rather than economic benefits. And this assumption will decide how it "looks like" - identity, how it "feels like" – cultures and how it "works" – capability to act. As proposed in Managing as Designing (2004), a design attitude should be established in strategic level, and managers should adopt what they learn from design disciplines to managing the organisations whatever problems they are facing.

Even though design thinking and design methodologies have been considered at this level, it's also easy to miss the proper approach to conduct it appropriately and practically. There's often a big gap between strategic vision and intents. Knowing the reason "why" doesn't lead to knowing "what" to do (Boyer, W. Cook & Steinberg, 2011). Strategic intent is the glue transferring the motivation of vision into principles used for making

choices at a more discrete level (Hamel & Prahalad, 1989). There is a long way from strategic concept to implementation, delivery and impacts. Thus, design management at the strategic level requests not only a design-led mind but also a design-led hand. The quality of designed artefacts undeniably has substantial influences to organisations. When it's not well done, it doesn't make any sense.

2.2.2 Building Design Capabilities in Organisations

How organisations make use of "design" and how designers have participated in organisations has been studies by several research groups and scholars, we could find model and ladders like Design Ladder (Danish Design Center, 2003), Design Management Staircase (2009), The Public Sector Design Ladder (Design Council, 2015), Non Profit Design Ladder (Nusem, Wrigley & Matthews, 2017). These models have developed mainly based on Buchanan's four orders of design, and contextualised in different types sectors. Mapping and valuating the organisational design capabilities could help to find the proper way to involve designers and to adopt design thinking approach. Moreover, these ladders also tried to promote any types of organisations to clime the ladder by making better use of design thinking and design methods. For instance, at the highest level of organisations, design have been integrated in companies' strategic driver for innovation; in public institutions, design have already engaged in a policy-making process and more holistic utilisation in non-profit organisations is using design to build new business opportunities with social benefits strategically. These established strategic values of design could lead organisations to move from how they are using design now to how they will use it better. Doherty et al (2014) published a research paper in which they filled the gap between the stairs and suggested useful actions to move from basic problem-solving to strategic vision.

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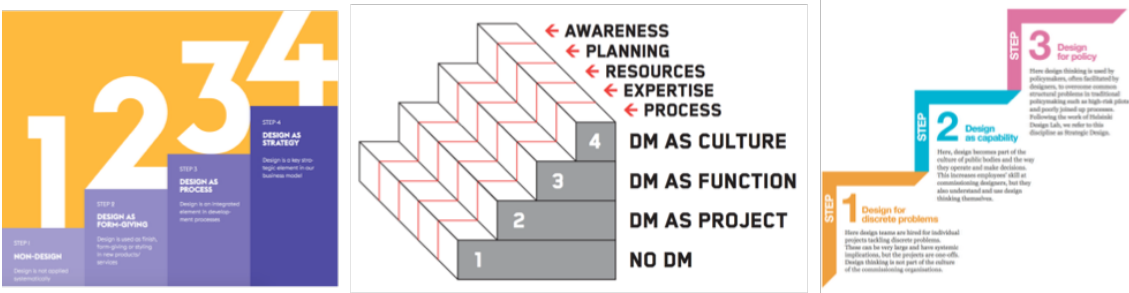
Figure 2.2 | Danish design ladder; design management stairs & public design ladder

In the literature talking about the role(s) of design within organisations, there are several reflections worth more efforts to explore.

1) Firstly, organisations are changing from hierarchical and bureaucratic structures to adaptable and function-oriented networks with influential individuals. This shift goes from vertical to horizontal dimension, as well as, from top-down to distributed teams. This phenomenon leads to the question on existing literature: is it necessary to separate and identify the roles of design at the different organisational level when there's no longer the structure itself? It is valuable to discuss how to conduct design activities in a new organisational scenario and is it possible that design thinking and design method could facilitate this transformation towards high-performing organisations? As we have learnt from the previous literature, applying design thinking and design methods in the whole organisation has the most significant impacts on its development in the future, even though a lot of them haven't realised the potential and importance. As Tartakower said, "strategy is knowing what to do when there is nothing to do". Design–led organisational design is to search answers for any problem that organisation will face while shaping itself. When the "design" here concentrates on building enabled network other than perfect structure, the management activities will be set for acting as designing. The designerly way of know-how will have the power to guide the organisation to define its assumption/vision, to identify its values for actors; to form its behaviour regulations and processes; to generate its offered artefacts and to build relationships in its new ecosystem. All these elements are not separated at different levels but are naturally considered before taking design actions. Of course, what has been pictured here is in an ideal scenario where design thinking is embedded entirely in all organisational elements, but as designers have been experienced and practised, the reality is much further away from this ideal situation. Since the organisation should change towards more flat and flexible than consolidate structured, is it possible to foster the adoption of design from parts to the whole? If yes, how?

2) Secondly, in most of the cases, designers enter an organisation with established culture and principles, which have guided the organisation and its employees for a certain period and have formed relationships around. There are substantial barriers in companies when new cultures or approaches are trying to enter, act and make the change. Thus, it's vital to know which is the "right" time to start the design intervention and from "where" to start. The first step to establishing something new is to know better what has been functioning till now. Since everyone is a designer (Simon, 1996; Manzini, 2015), people, not trained as conventional designers, in organisations are doing design – the traditional approach of organisational design - over time without knowing and mentioning the name. From the idea of human-centred design, designing starts with understanding the users or clients. When seeing the organisation as the customer, designers need to carry on field research to identify what works and what doesn't through design research tools and techniques. To conduct strategic design intervention should aware the importance of managing and organising to perform design-led approach not only as a tool of ideation but also of implementation.

3) Thirdly, as mentioned before, people have been doing "design" even before designers' intervention on organisations, who are they? What are the differences and how they have been organised to carry on organisational activities? And if we suppose to develop organisations towards agility and adaptable, designing is no longer an activity conducted by professional designers. Mutanen (2008) has presented four basic approaches to develop design adoption in business organisations, on one aspect he identified design as individual expert activities or as collective organisational activities by various organisational actors (Bucciarelli, 1994; Henderson, 1999; Bechky, 2003). The latter one has proposed a broader idea of "design" which is

situated, collaborative and multidisciplinary. The design activities might be conducted by any actors on how they are working, thinking and communicating (Blaich & Blaich, 1993). Even though this idea of seeing design as collective organisational capabilities is developed in a product – concentrated industrial context, it raised some interesting questions to think about as well. This idea suggested a strong link between design capabilities and organisational design activities by highlighting the way to design. This responded to the "human-centred design" methods. When "human" refers to anyone relevant in design and development process, a solution should properly balance all their needs and wants by working together, collaboratively, towards a shared goal. This goal of co-creation (Ostrom, 1996; Ramirez, 1999; Joshi & Moore, 2003; Sanders & Stappers, 2008), is to shape and form the organisation itself and clarify what the offerings to the market and society are. And this way of designing is raising up the concept of co-creation, which consider the formerly named "users" as "participants" in solution creation and knowledge developing process. Literature from marketing and organisational study has also demonstrated the strong link between individual and organisational identity, reputation and performance (Bromley 2001; Schultz et al., 1994; Kiriakidou & Millward, 2000).

Following this concept, when design thinking and design method are embedded in a collective organisational activity, there are different types of conflicts to face. Which are the criteria to balance diverse needs and to place the priority? Are these criteria different in business, public and non-profit sectors? What are the final goals of organisational design activities? And who will finally benefit from this design-led approach to intervene organisational activities? During this co-creation process, how to arrange these actors to work equally even though they have quite different roles in existing organisational structure?

2.2.3 Transformation Opportunities

After studying and reflecting on the literature, embedding design thinking and design method in building organisational design capabilities will focus on:

1) Transformation from using design as a professional add-on capability to realising that this way of thinking and doing should be rooted in every organisational activity. This change aims at changing the way to adopt design thinking and design methods and provoke organisational learning. Collective - when considering the organisation as a whole one - and independent - highlighting the importance of individuals - learning activities could assist to know better the designerly way of thinking and doing, furthermore, they could practise what have learnt to their day-to-day operations in running and developing the organisation itself. Again, keeping the balance of essential working tasks and new actions to support organisational transformation is one of the crucial elements to promote this transformation. In this transformation process, there are no strict levels and stairs to climb. Different actors just conduct different types of tasks for a common purpose, and there are no huge differences regarding importance. And adopting design thinking as a learning-by-doing process will be distributed based on the network, not the top-down direction. Everyone should be required to know how to make use of it. Of course, the relationships between different executive roles will change compared to before, and this will be a challenge to face but also an opportunity to make radical results.

2) The transformation from designing for artefacts and offerings which benefit the users directly to designing for organisational needs and development, which benefit itself and eventually its users. This transformation recalls the objective and subject of carrying on organisational design. Putting design priority on organisational

development rather than its offerings will reach the visible results over a longer period and with more efforts. In some cases, the results might remain invisible and intangible during the process due to the difficulty and complexity, and it's much more challenging to accept. Managers and other staffs need to confront and get used to ambiguity inside organisations. Designers have often working in an "unclear" situation during their design process, but employees in organisations who are familiar with analysis and accurate data, it might take certain time to make them convinced at the very beginning and working while this feeling is staying around. This is also one of the challenges that designers have to deal while transforming organisations to this direction.

3) Developing new internal and external relationships among actors. The designerly way of knowing has highlighted the unique capabilities that design discipline possesses, and this unique way pays close attention to "human" and their interactions and relations. In the ecosystem of an organisation, design thinking and design method could foster diverse actors to work collectively in the network model and participate in formulating relevant rules and regulation. For the internal part, actors could have chances to work differently. For example, participating in co-creation process might bring top managers and operative staffs together in a particular working session and tasks. The generated mechanism could enhance the motivation to carry on collective organisational activities. And in the external part, the users and other stakeholders are those who perceive and recognise the organisational values and performances. They are as important as internal actors. How they consider the organisation could have significant influences on its strategy and plan in the future. Moreover, design thinking and design methods also have the possibility to bring both internal and external actors together in a co-creation process for exploring specific organisational issues and elements, and this approach might come up not only with conventional tangible results

but also the knowledge of better managing organisational development and process innovation.
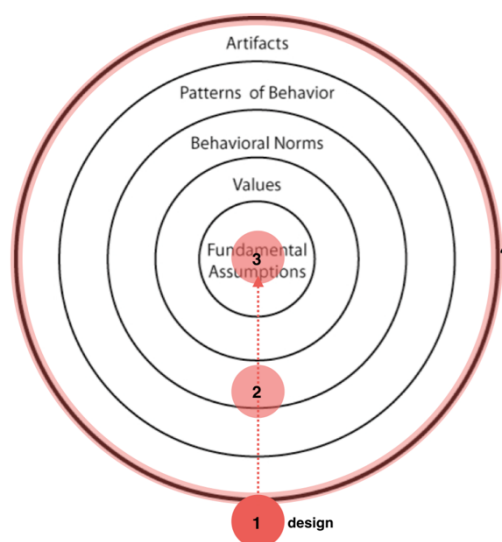
Figure 2.3 | design's involvement at organisational layers
(illustrated based on theories proposed by Rousseau, 1995; Junginger, 2007)

2.3 Developing Design Capabilities in Organisations: HOW

According to the assumption made before, the transformation activities will increase the integration of design thinking and design method in organisations. However, this will hardly succeed if we couldn't find the right approaches and strategies. In this part, several possible directions to theoretically guide the design actions will be presented and analysed, and this is also the starting point to find optional models, processes and strategies to face this complex and complicated issues within the design and organisational development studies.

2.3.1 From Periphery to Centre, What About the Opposite?

The different models and ladders for assessing organisational design capabilities discussed before have shown the importance to understand very well the status of an

organisation and its relationship with design and designers, and this should also be set as the first step of design intervention. Question to answer include: what types of design knowledge and design tools are they adopting? For what purpose do they involve designers? How do designers act and collaborate with all actors in the organisational ecosystem? When there's a clear organisational profile in mind (better also in hand), it will be clear to plan the design strategies to foster transformation listed before. Often, the transformation process has barriers to position design thinking and design methods in the organisational centre, where managers have a dominant legacy of mind set and behaviour patterns. In this case, designers have to fight for the spaces and opportunities to participate and bring less powerful actors to step in as well. This is known as the process from periphery part of the organisation to the central part. On the other hand, if the design thinking and design methods have been rooted in mind of managers and practisers, what barriers they are having? For example, in some cases, people in organisations have noticed the importance of collaborating with designers, or they have been doing so-called design thinking activities without realising it, but they don't have the idea how to "land" this idea and practices in specific problems, which are somehow vague and unclear. Or in some new startups, designers have been involved in a relatively free scenario to build everything from zero, and they transformation process might happen in the opposite direction. Thus, in this two ways of building organisational design capabilities, designers have to know how to make it happen.

2.3.2 Facilitating Through Conversations and Storytelling in Organisations

Attending meetings, well organised and structured, is one of the daily routines in companies. It's definitely necessary to arrange administrative tasks in meetings, however, when exploring creative thinking and imagining new scenarios in the future, conversations are much proper and effective than meetings. A conversation will be informal and more democratic, in which people are encouraged to show their opinions

and discuss with others, and fewer judgments are made. Besides, conversations are considered as creative processes allowing people to explore issues, create possible solutions and find ways to get out of mysterious situations (Golsby-smith, 2011). And this requirement of making conversation in organisations could be linked to the storytelling and visualisation nature of design and design thinking. Decentralisation movement and task-based network require proper approaches to place existing consolidate structures and the mind to build or remain them. Good storytelling and visualised evidence created by design thinking are useful tools. The power of a success story has been demonstrated in the marketing, branding and communication of organisations, especially business companies (Denning, 2006; Herskovitz & Crystal, 2010)). Moreover, how design thinking and design methods have strengthened this relation is also presented in different design research areas (Sametz & Maydoney, 2003; Beckman & Barry, 2007; Zurlo & Cautela, 2014). However, the impacts on internal organisational activities and behaviours of design thinking have not been well studied, especially in fostering the transformations discussed in previous paragraphs. There are several issues worth to consider for the following research activities: 1) where do conversations happen and who will take part in? 2) applying different strategies to the various actors of organisations; 3) developing specific design methods and tool along the process to facilitate conversations; 4) making good use of conversation to negotiate and cultivate people in organisations; 5) facilitating to change roles between storyteller and story listener.

2.3.3 Promoting Organisational Learning: Knowledge & Capability Building

The idea of learning organisations has emphasised the learning capability and solve problems by system thinking, the collective and group learning activities keep organisation transforming itself through fostering aspiration, developing reflective

conversation and understanding complexity (Senge 1990). This includes both group learning and individual learning activities within organisations. When looking the organisation as a social system (Katz & Kahn, 1978), the learning organisation could also cultivate the external actors, end users and relevant stakeholders, to engage in the learning process. Thus, design intervention could and should play a role in fostering the openness and interactive learning activities. Design thinking and design methods will be well perceived and accepted when organisations are open to change, willing to see from another perspective and capable to behave differently. It's fundamental for designers to promote the knowledge and capability growth with design thinking and design methods, the growth will also accelerate the adoption of design and benefit itself from this adoption. Enabling its learning capability is also useful to transform the knowledge of design thinking to different organisational behaviours: problem-solving, decision making, strategic planning and so on. And this knowledge will also be digested by the organisation, afterwards, re-adapted to its contextualised situation. Eventually, the organisation could use design thinking independently to develop and innovate their relationships with external actors, even to educate them. Strategic designers should be aware the opportunities in this approach, and actively show the benefits that organisations have and could gain during the whole process. At the same time, creating a satisfactory environment and enjoyable actions will encourage actors to participate easily. Accompanying them along the whole experience and celebrating the small success in different stages is also crucial to make sure to reach the final big achievements. How designers act dynamically at different phases with different purpose will be another big challenge to face.

Summary

In chapter two, through reviewing the literature in the fields of design thinking and scope of design, design management and organisational design, this research has drawn several assumptions in developing design thinking for organisational reformation and development. The lessoned learnt from business and public sectors will be transferred and applied in a new context, third sector, through a critical point of view.

Chapter 3 |

Leveraging Organisational Changes through Design Thinking in Third Sector

Inside this world, as an individual of the society, the activities that conducted by human beings are changing and affecting the environment, the surroundings, the people and the future path. Designers can influence the society by their practices, actions and philosophy. The projects we are carrying on is a platform to present and open conversations with others who have the same motivation to develop future and who are willing to realise possible solutions together. A few decades ago, Papanek (1984) had claimed that designers have to take the responsibility of the society to "give forms" through design, and consider the new system was thinking of design profession. Margolin & Margolin (2002) raised up a series of questions to push designers to think about their roles in the society and new models of design for social needs. This is the time to examine where and how to make design thinking and design practices more meaningful to the society.

With a specific interest in social impact, the research starts to study third sector organisation (TSO), which put social needs and development before business benefits and consist of very diverse organisational typologies. The literature on TSO will be studied to show the general image, the characteristics, strengths and weaknesses. Afterwards, a review on different types of social design (also called as social impact design, civic design…) will be presented. The last part will make reflections and questions on

integrating three main categories of literature: the designerly organisational design approach, social design methods and strategies and features of the third sector organisations.

> The role of design expands from its traditional role of idea generation, visualisation and prototyping to also becoming a *catalyst* for change.
>
> *(Kimbell, 2015)*

3.1 Third Sector Organisation (TSO)

All over the world, we have been witnessing the rapid growth of the third sector, the growth of the social economy, the effective solution for social issues and the growing number of participants. All these initiatives represent the new ideas and practices against the traditional system of production and consumption and are trying to fill the economic and humanistic gaps in existing business and public sectors. The third sector consists of diverse types of organisations, institutions and structures and is mixing and creating various relationships among them. The name "third sector" could be tracked back to the initial term "third type" of the economy, especially there is much literature discussing the "co-operative" economic typology and principles. There are mainly two different approaches to develop this idea and the "third way" of doing: the US "non-profit" approach has focused its priority on social needs rather than profit, so they developed its theoretical basis and used the term "non-profit" sector. The other one has followed the "social economy" approach and brought different entities and institutions. This approach has also adopted widely in Europe and taken up by the Europe Union, which has highlighted the objective to develop rather than to synthesise.

3.1.1 What are Third Sector and Third Sector Organisations (TSO)

Definitions on the third sector and third sector organisations differ from countries to countries regarding sociology, politics and law. Salamon and Anheier (1997) presented several perspectives to make the definitions: 1) legal definitions – getting definitions from the countries' laws and the organisations follow the legal forms. 2) economic/financial definitions – define by their income resources, meaning the revenue doesn't come from the sale of products and services in a market but the supports and contributions of members. 3) functional definitions – concentrate on the objectives to reach and the functions. The functions are defined as:

to serve underserved or neglected populations, to expand the freedom

of or to empower people, to engage in advocacy for social change, and

to provide services *(McCarthy et al., 1992, p.3).*

4) structure/operational definition – defined by how they work and their structural features, including formal, private, non-profit distributing, self-governing, voluntary. And Defourny (2001) also provide definitions on third sector organisations (enterprises) referring to three categories: co-operative enterprises, mutual societies, and those organisations which might generally be described as "associations", under a wide variety of other names as non-profit organisations, voluntary organisations, non-governmental organisations and so on. In 2015, a research group funded by the European Union called Third Sector Impact has reported the latest research on the third sector, Salomon and Wojtek Sokolowski (2015) have published a report on the definition in Europe. The third sector includes:

most nonprofit institutions (associations, foundations, charities), many (but not all) cooperatives, many (but not all) mutuals, many (but not all) social enterprises, and most volunteering whether done through organizations (indirect volunteering) or directly for others (direct volunteering).

All these definitions are describing the third sector organisations from one side and with one specific emphasis, thus it's important to choose the most proper definition for this research. According to the research objectives and selection criteria suggested by Deutsch (1963), the **definition of third sector organisation** used here will:

1) never forget about the economic aspect: diverse financial resources and possible business model; 2) highlight the function aspect: generating social economy through providing solutions to emerging social demands and problems and contributing to common good (Laville & Sainsaulieu, 1997); 3) take advantages of the categorised operational structures already summarised, but not limited by.

TSOs have shown the strength and potential to develop the social economy:

1) A certain number of TSO (mainly co-operative and social enterprises) have been developing their performances in the market while providing social services and supports, and in this way, they are becoming much more competitive than before. Especially in Italy, the rise of the social cooperative has shown a big success in developing social economy. These organisations/associations have broadened the concept and paradigm through providing social services to unserved communities and effectively filling the gaps in mainstream services. They will work on both the social and business aspects to develop their ideas, quality of provided services and business models to guarantee social and economic success. For sure they can't be compared directly with existing business and firms, but the economic potential and social impacts are essential values to foster them grow smoothly and rapidly. Relying on the "charity" is not working at all, high quality of services and products is what all TSOs need. Another raising opportunity is the idea of promoting "social entrepreneurship", which will help to bring people (elderly, poor, disabled et al.) in employment system and in this way, improve their life qualities and social network.

2) Two typical working models. TSOs vary a lot regarding typology. However, they are conducting their operational activities in two models: firstly, back to the initial of the third sector, it aimed at providing solutions that have social values and bring social

equity, the solutions undeniably are function-oriented, resources and efforts should be well planned to reach the goal. The target communities are the final users and receiver of service and products offered by TSOs. Differently, the second working model aims at promoting and engaging the target communities in the labour system, in which they are no longer the passive receivers but the active contributors. They could also benefit directly or indirectly from the new solutions. These two operational model have provided the fundamental basis to understand diverse existing situations better. Moreover, this will guide the research actions in the world of the third sector.

3.1.2 Advantages to Grow and Challenges to Face

The economic crisis, refugees increase, global development and all the emerging issues all over the world have shown the weakness of the domain economic and social systems, and have pushed people to search for new models and approaches in solving the problems. The TSO with its flexibility and social missions have presented considerably added values. And because of its natures, TSO has more advantages in promoting radical system changes in specific contexts and for specific problems. There are several features that make TSO much significant:

1) It's social-mission driven nature. The essential assumption of TSOs is to serve the society, the common good and to power and engage people in creating a world/society they prefer. So all their organisational activities are linked to this assumption, and they position the users and target communities in the centre. They are the organisations directly driven by users' needs other than by business profits and interest in the private sector.

2) TSOs are paying high attention to the process not only the results. Moreover, they are making social values visible by provided products and services. For example, they are devoted to create and build up solutions in different scales with different strategies, and finally, they evaluate the influences and impacts in short and long terms. So it's both process-focused and results-oriented.

3) They are creating values in a network. TSOs are creating values that almost every stakeholder could benefit. TSOs care about the impacts of their new solutions for all the actors in the ecosystem they are situated, so they do things and make decisions with much caring minds and hands towards an "all-win" objective.

4) Because of the flexibility and dynamic natures of TSO, it's easier to develop alternative paradigms of actions for diverse social needs and demands. And this might lead to generate new paradigm of mixed economic models which exist neither in business nor in public sector.

5) TSOs are getting supports from both business and public sectors; this also allows them to learn from both and to apply what they have tested and proved properly. Knowledge of those two sectors will make TSOs develop at a much faster speed.

However, there are also limitations that TSOs are facing:

1) Looking at the economic aspect, TSOs still have a lot of difficulties. The investors and donators require the transparency of income and cost. They have to generate "smart" and "effective" model to conduct creation process and to delivery the solutions. They need to search for new ways to obtain more economic incomes, at the

same time, produce solutions for bigger markets and figure out other possible clients and consumer communities.

2) They have been becoming stronger than before. However, it is still difficult to compare most TSOs with business sector organisations. This also lead TSOs to study from business companies in being competitive and create radical changes. However, it should not always be like this, TSOs have to explore their own paths towards innovation in the social economy context.

3) People rarely link TSOs with innovation and creativity, which is often mentioned in business and now also in public sector. Fewer people have recognised the potential and significance to transform towards being more innovative and competitive. Since innovation has been highly linked to design thinking and design methods, it's exciting to explore the possibilities that design could bring to TSOs, which have never been considered as design-alert (Design Council, 2007).

4) TSOs often have quite complicated structures, and the dimension varies in different cases. There are international TSOs operating all over the world, and at the same time, there are small social enterprises are performing successfully in local scale. Therefore, the diversity of typology requires more time and efforts for an investigation in the third sector. Moreover, when the TSOs have international structures, the cultural issues should always be considered in any decisions.

5) A strategic perspective is needed in managing TSOs. The importance of strategic thinking in managing and organising has been recognised and practised for a long time in business companies, and the rise of New public management (NPM) approach

has also used in governments and public institutions for better organising public services. So in TSOs, it's also necessary to conduct strategic thinking approach and to see how it could contribute to the economic and social performances.

6) Evaluation is one of the keywords to mention in the third sector. Evaluation activity could make the results and achievements more visible, but its methodology varies widely in different environments and scenarios related to the economy, politics, structure, culture and so on. To evaluate the social impacts field is still quite vague.

3.1.3 Embedding Design Thinking in Third Sector – Why

The value of design thinking (Buchanan, 1992; Martin, 2009 & Brown, 2009) has been highly recognised in business and public sectors thanks to the growing numbers of successful design practices and interventions. Especially in business, design thinking is considered as one of the most important competencies to enhance companies' competitiveness on the market. Mozota (2006) has defined the role of design as "good business" for the whole society. She considers design and design thinking as an important factor in transforming organisations' mind-set and features towards a more "social-oriented" model. Based on this idea, the value of design and design thinking definitely should be linked to (re)manage and (re)organise problem-solving processes and, more significantly, to catalyse social changes. This is the starting point, from where I see the possibilities to discover and expand the scope of design and design thinking in organisations with social vision and mission – the third sector organisation (TSO).

The third sector, born with social-oriented missions, is likely be considered as "non-market" sector (Gassler 1986; Mintzberg et al. 2005; Westall 2009) and is hardly linked to design-intensive fields (Dell'Era & Verganti, 2010). However, the emergence of new

types of TSO requires new mind-sets and lenses to witness requirements and challenges. These forms of economy and organisations provide a great opportunity for designers with a holistic perspective to take an active part in. Since design thinking focuses not only on communication and products but also on systems and strategies through understanding, defining, generating, prototyping, delivering the ideas (Design Council, 2005 & IDEO, 2015) and maintaining solutions to be sustainable. The offered outcomes of TSOs are physical products, communication evidence, service systems with intangible social values, aiming to benefit vulnerable individuals or groups. Instead of using old methods and formats from design in business sectors, it's necessary to rethink the "process" and the "meaning" of creation and production in situated contexts with the involvement of specific beneficiaries.

More specifically, there are strong signs that make me see the possibilities to develop the designerly organisational design approach in TSO scenario. This idea has been inspired by the following aspects:

1) Since TSOs was born in between private and public sectors, it naturally has this dual and mixed "personality". Even the definitions are hard to make. As introduced before, there is no unique organisational structure in TSOs, this might be an advantage to adopt designerly way of doing organisational design. Because this approach doesn't aim at building organisational structure but creating task-oriented working models and groups. It seems that TSO has offered the best context to carry on design thinking activities in shaping and defining what an organisation could and should be. The emphasis on "common good" and "social impacts" could lead managers to focus more on the essential assumption (vision and mission).

2) Because of economic constraints, TSOs are searching for more effective and economic way to operate and to manage. They need to find the best way to create solutions and to attract enough funding, donations, incomes from other sectors and so on. All these require to organise, link and integrate different resources they have. Design thinking might be able to provide a strategic perspective in building new models of doing business and creating social solutions. And this strategic intervention will definitely have organisational impacts on TSOs.

3) The designerly organisational design has always put "human" needs in the centre, and this feature fits perfectly to the social-mission driven TSO. It's fundamental for TSOs to understand who are the communities and what they need and want, design thinking and design method can get the roots of the problems and guide the process to solve them practically (Brown, 2010; Mulgan, 2014). By providing delight artefacts (products and services) to the community, TSOs are also establishing new relationships with external actors and the situated ecosystem. These two elements are as important as internal ones for shaping and building TSOs. In the third sector, design thinking could have more possibilities to explore the external-actor-impacts on organisations, and these impacts might finally be transferred to influence the internal aspects, for example, organisational behaviours.

4) Bassi (2014) has underlined that the main differences between the third sector, the business sector and the public sector is from the perspective of production, mainly in "how" to produce and above all "with" and "for whom" they produce. This statement on TSO reminds me the capability of design thinking in engaging and organising participants in co-creation process. TSO has emphasised the innovation request on creation process, engagement paradigm and business model. From the point of view

of organisational design, these factors also influence how organisation acts and perform. This is the answers to "why" to adopt designerly organisational design to form TSOs.

3.2 Crafting Social Change through Design Thinking

There has been a long history that designers are taking part in complex social issues, relationships, systems and contexts, under a range of names as: social design (MICA, 2014), design for social impact, civic design, socially responsible design, design for social innovation (Manzini, 2015) and so on. No matter what the name is, the terms tend to show the emerging design practices towards social values and impacts. However, all these design actions are quite different regarding objective, design strategy, design paradigm, approaches and methods and tools, so, a review on diverse design approaches will be analysed and presented to have a clear picture in mind.

3.2.1 The Emerging Phenomena towards Social responsibility in Design Realm

In 1972, Victor Papanek has published the book design for the real world which called industrial design field to rethink the design purpose and process, moving to search for the needs of development, poverty, disability, equality and other social issues. This raised up the question: how design could and should act in social contexts? In 2002, Margolin & Margolin presented a social design model, which intended to satisfy the human needs through a problem-solving process. It started with engagement, then assessment, planning, implementation, evaluation, in the end, termination. Not like Papanek, who has suggested to separate designers' socially responsible - actions from the mainstream market economy, the social design model encouraged all professionals to work together and think about designers' contributions to social welfare in this way. Design research and practices have

noticed the importance of designing for social issues for development and disadvantaged people rather than for the market, sales and economic benefits.

This first movement from design for business to design for social responsibility has the following features:

1) The shift of design purposes and objectives. This is the initial of looking at design theories and practices in social context. "Why" design thinking and method could be used was questioned and explored. This shift also revealed the humanistic responsibility of design for developing the world towards the common good and share future. The quality of design is distinguished not only by technical skill or by aesthetic taste but by the moral and intellectual purpose toward which technical and artistic skill is directed (Buchanan, 2001).

2) Designers are dominating the design process. In this shift, designers have witnessed the "mistakes" they've made and has realised to change the path of doing to modify the existing situations. Designers have reflected on their own activities and imagined the possible future of the society, they have taken the responsibility to understand better the people and their needs, and have applied design skills to the new field of doing. At the same time, they started to involve other experts and professionals in the design process for achieving satisfactory and sustainable results.

3) Designing for social responsibility mainly focuses on social problem-solving. The design activities started from understanding the users and their problems, then they develop solutions, which mainly function-oriented, that could solve the problems with specific design methods and skills.

4) The designing solution for specific target groups/communities. Thanks to the way trained and the experiences got from the business world; designers have conducted their activities independently and successfully for the people they would like to help and to care about. They were extremely skilled and talent to manage the design process from users' study, ideation, prototyping, test, modification till final solution, practically used by target communities. The traditional design model is applied in new social challenges and contexts, and the target communities are passively received of the designed solutions.

3.2.2 Community-Engagement Strategy: Co-design with the Locals

The society is taken into a network of multi-locals and interconnected communities and places, at the same time globally opened and localized (Manzini, 2010); the impact on the cultures seems consequently happening much more rapidly and in larger scales than before. And this situation increases the needs to provide methods and operational tools that can emphasise cultural sustainability, rather than the material aspect. When considering the scenario of "cosmopolitan localism" (Sachs 1999; Manzini 2009), the collaborative design process is believed to contribute to communicating and visualising the "local" resources and identity within a global picture. Being collaborative means that the design process is open and connected to other actors of the whole distributed network, especially the local communities. Design collaboration requires a higher sense of working together to achieve a holistic creative result (Kvan, 2000). During the process, a group of people is driven by designers to take part in the collaborative process with their talent and unique knowledge. In this relationship, the designers are the representatives of "globalisation"; while, the local group represents the "local culture". The co-design process follows the idea of everyone has the possibility to design (Manzini, 2015) and it involves local communities as active contributors in building and implementing creativity.

Since the process is an integrative and mutual process, it's necessary to analyse the two aspects in details to understand how co-design approach could act effectively for achieving the final results.

Numerous research labs and studios (e.g. DESIS research network) have worked for years in collecting and fostering the grassroots design initial on social innovation. In their research activities, they observed closely in our daily lives and the emerging social activities in facing new issues and difficulties. They participated in these ideas and applied design thinking and design methods in strengthening, improving and scaling up these little radical innovation ideas locally and globally. Local communities, supported by designers and design methods, were collaboratively and actively participated in this co-design process. Finally, they could benefit much better from the "designed" result, and if necessary, they also started to build self-organised local organisations to guarantee the continuum. In this ways of design intervention, we could see several significant changes:

1) The objective of design has changed again. The purpose of design has been developed from design for users' needs to design for social movements and social innovation. This shift is not separated with the previous objective, but one step future, meaning designing for answering people's needs and using the solutions as a platform to foster bigger and profound social changes. People are not isolated by their social network and living environments. Design for users also cares the way to connect with others and to adapt to develop and advance. Cosmopolitan localism proposed a robust and dynamic relationship between small, local scale and the global one. Design thinking and design methods have been applied to moderate changes and to improve existing systems into better ones.

2) From *user-centred design* method to *co-design* approach. This change of relationship between designers and users have been developed from treating users as receivers to active participants. The user-centred design method has been well applied in developing consumer products, and the human-centred design guideline is still one of the most practical design methods for social issues. However, the merging co-design practice is exploring open-ended solutions for a larger scale of unmet needs in a complicated network. Designers are no longer the only one who produces the knowledge and generate solutions. The traditional users, who were the target to be studied, now act as "experts" in facing their problems, and they are supported by design methods and tools to tell, show, act how they feel and what they want. Meanwhile, they also collaborate with designers to make ideation and implementation. This idea of seeing users as the 'expert of their experiences' (Sleeswijk Visser et al. 2005) has also been discussed by Fischer (2002), who viewed consumers as designers, also Manzini (2015) identified two types of design activities - the *diffused design* and *expert design*: treating people as an asset and thinking everyone is endowed with the ability to design.

Also, the role of designers has been changed from brokers (Verganti, 2003) or translators to facilitators, who have to act differently with different types of actors/participants and in different phases of co-design process. For example, they need to guide people in understanding the reasons to take part in; they need to provide people practical and easy-to-use tools to do what they have never done before; they also have to set criteria and principles to indicate proper way to behaviour and collaborate. These changes that designers are facing are crucial factors for guarantee a successful co-design process, especially when the social issues are complex and context-oriented. And co-design activity is not only "producing and creating"

solutions, but it's also a process to learn, exchange and integrate. Design thinking and design methods have been taught and transferred to people who will act better in the future to "design" new solutions for new social problems.

3) The design results. Since the purpose of design has moved to supporting social change and innovation, the final design results have definitely been realised in various form. These results generate through co-design don't have a visible "shape" or physical products-oriented; instead, they exist in various forms depending on how they fit the needs and contexts. From the point of view of relations with target users, there are two kinds of solutions: the first type is in traditional model: people make use of the solutions and they are the solution receivers; instead, in the second model, users are benefiting from the solution while contributing. The solutions act as a platform in which users could be supported to do what they desire and prefer or what they are good at for improvement, development or sustainability. It's called the enabling solutions (Manzini, 2004, 2008; Cipolla, 2009), which provide opportunities for more and more people to learn, to grow and to participate in social actions and innovations. It's not only a way to benefit from, but more significant, to experience an actively doing and learning the process.

4) Design thinking and design methods have been well applied to solving social problems, but also in making sense of the society and the future we are heading. Design thinking's advantages and capability to deal with "wicked" problems (Rittel, 1960; Buchanan, 1992) has been identified in the literature, and *wicked problems* are:

 a class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers

with conflicting values, and where the ramifications in the whole system are thoroughly confusing. (Rittel, 1967).

Due to the complexity and unclearness, there're no linear processes, definitive model and the unique solution. In applying design thinking in solving the wicked problem, we could see the link with what Manzini (2015)'s statement on the other role of design – sense maker. For the complex social problems, designers are searching for answers, at the same time, they are also formulating an opinion, proposing a vision, fostering a behaviour, which is suggested to users, any actors, people in general, to adopt and act. These solutions are alternative and optional, there are no right or wrong but better or worse. Thus, besides the functions, these solutions are intending to guide people towards a "common" good future, which are more sustainable and resilient. In this way, design thinking and design methods have contributed to creating meaningful products, service and social system.

5) New design methods and tools, especially in service design area, have been developed. The change of applying design thinking to social needs and innovation has provided experiences and practices in advancing existing and generating new design methods, tools and techniques. All the changes discussed before could never happen if not supported by situated tools and the way to use them. In service design (or called as design for service) field, but not only, numerous design research teams are working on improving design methods and tools to make design thinking approach better applied in more and more social issues worldwide.

3.2.3 Developing Different Design Paradigms – Community and TSOs

The previous part has reviewed the two shifts designers have elaborated and practised in seeking concrete answers with social motivations and responsibility. We have witnessed the contributions of design and design thinking in the bottom-up approach towards social innovation; it's also necessary to observe the other way: the top-down approach driven by strategic design. There are thousands of social innovation practices, and cases belong to this strategic way of planning and doing: a series design projects done by Design Council's RED unit; united nations industrial development organisations' design and creativity projects; social projects funded by public institutions and foundations and so on. This design process has engaged and enable a broad range of actors with diverse background and knowledge to collaborate. And it's often hard to clearly identify the beginning of design interventions and how the process will be conducted, who will be involved in which phases. In many cases, there are people, not trained as conventional designers, doing what we call "design thinking". This emerging phenomenon leads designers and design researchers to take one step back to rethink about the purpose (why), subjects (what), approach, paradigms, participants, locations (how) of design activities.

Many scholars and research groups have offered their opinions and visions for developing design research in this shift, and the following directions will provide significant references to next research steps:

1) Where design thinking and design methods could be applied for intervention? We have seen the diverse types of social problems that design thinking approach has intervened, and these issues have covered a large scales of hot topics highly related to disadvantaged people and communities. However, considering the importance and features of TSO, merely few issues related to the organisational development and innovation have been raised and pointed out. As one of the most important actors in

crafting social changes and innovations, TSOs and the roles they could play definitely have influences on the communities it services and its ecosystem. The co-design approach and generate enabling solutions focus on building the capability of target communities and transforming them from passive receivers to active contributors. But when considering the capability building and knowledge transformation actions at a bigger scale: what about for TSOs? What will happen if a strategic top-down approach will motivate the change? In this case, the relationship between TSOs and designers will somehow effect on the relationship between designers and target communities. Decisions such as how design thinking and design method will be applied, where to start, what will be the results et al. will be made by TSOs. Thus, building a trustful relationship with TSOs and negotiating on getting more spaces and rights in decision-making process is undeniably of high importance.

2) What could be generated through design thinking and design methods? Ideas on the subject to design is another promising topic to discuss. In top-down strategy, TSOs often has more rights to decide and guide the direction to go except they deeply acknowledge what design thinking could bring to them. Unfortunately, TSOs have fewer experiences and knowledge about design thinking approach and the potential it has, so, it will take a long time to present different scopes and characteristics of design and design thinking. For example, in the United Nations' Craft and Design programme, the objective of involving design is still restricted to the communication and traditional product design, the first and second level of design activities. This is not a single case but a common situation when TSOs think about "how design and design thinking could contribute". As summarised in the first part of chapter three, TSO has advantages in developing designerly organisational design theories and practices; it's possible for designers to propose criteria and principles to guide TSO

in formulating, development and innovation processes by properly applying design thinking and design methods. And this exploration process could also activate its own capability to "design". Going back to the idea of enabling solutions, we might consider TSO as the metaphor of "people with the capability to design" and treat it as an active asset to participate in the design process. The ideal scenario will be like: the subject of design is the "organisation" itself, and TSO will be able to collaborate in shaping and building processes actively.

3) Make things visible, to the organisations and the target communities. Designing organisations is an invisible process, which doesn't have a concrete and able-to-touch result, which even less tangible than a service system. However, design and design thinking tend to have the ability to make different elements and stages "visualised" thought design tools and techniques. However, when the organisational design doesn't focus mainly on the hierarchical structures and efficiency, the challenge to visualise and communicate through design increased. Visualising the problems, the potential opportunities, the prototype feedbacks and the pilot and solutions are fundamental and crucial activities that will facilitate TSOs and all stakeholders to actively participate in and contribute to seeking for shares visions as a common good.

4) Design paradigms – relationships between three main actors: target communities, TSOs and designers. There's no doubt that co-creation is how TSOs could grow and innovate, but the question is "how" to cultivate this mind of thinking, the way of doing to both TSOs, their target communities and other actors in the social ecosystem. Co-production and co-creation have been discussed a lot in public sector, which has been dominated a top-down decision-making process for a long period. Co-creation opened the door of sharing and balancing power, responsibility and resources, from the

experts and professionals to individuals. Horne & Shirley (2009)) have identified co-production as a way to establish a partnership between citizens and governments. Following this idea of partnerships, Bovaird & Trust (2006) has presented different relationships on how users and professional knowledge is combined to design and deliver public services. This diagram has shown diverse possibilities to involve citizen (users) in a co-creation process, and it's absolutely necessary for designers when they establish their design strategies to foster and facilitate co-creation.

As discussed in the second part, co-design methodology has shifted the design model from design *for* to design *with*; meanwhile, enabling solution has established the role of users from receivers to contributors. Moreover, Junginger (2015) has developed a design conversation model, which illustrated possible conversation paradigms: designing *for/with/by* organisations or citizens. These conversation pieces have the purpose of assisting public organisations in reflecting how they could do their own design engagement. As well, this could also be used for designers as a guideline to intervene further in organisational changes. These research results definitely provide useful references and implications to the third sector and TSOs. Understanding existing relationships among three actors in the social ecosystem is the first step to open a design conversation with TSO and its target communities, and proposing new potential ones will help to guide TSO in better utilising design thinking to develop how they co-create with their own target communities now and in the future

5) Future transition – from organisational changes to a new social-economic paradigm. The transformational thinking of proposing a designerly organisational design approach in shaping and developing TSOs towards innovatively creating co-creation paradigms with all internal and external actors in the ecosystems. Design thinking and

design methods could act as a facilitator and educator to guide towards this direction long the process. All the exploration could lead discussions on new definitions of "organisation": why an organisation exists, what its culture and values in the social and environment are, how it should behave and act for providing benefits to different stakeholders and better organise them in actively taking part in collectively building a shared future.

3.3 Developing design capability of TSO through organisational design

In this part, the research will link what have been discovered before together to highlight **five main issues** to explore in the following case study and participatory action research phases. Reflections on design process and methods referring to the emerging needs in organisational design and third sector will be presented as well.

Junginger (2015) has identified three elements of organisational design legacies: organisational purpose, organisational design approaches and organisational design practices. Creative Differences project of IDEO (2017) has published six creative qualities which great companies embody: purpose, looking out, experimentation, collaboration, empowerment and refinement. These elements provide organisational design practisers the theoretical and practical references in formulating their design strategies and actions. More specifically, in the context of the third sector, the following questions are worthy to deeply explore designerly way of organisational design in fostering TSO to formulate its way of *being*, *doing* and *designing*.

1) How could co-creation models contribute to developing TSOs, and **what role(s) design thinking could play**?

TSOs have quite diverse structural and operational models for fulfilling their social missions, and some of them, e.g. many social cooperatives worldwide, have considered to treat local communities as powerful resources in establishing their working models and getting economic benefits. This initials and trials have the same idea of co-creation philosophy. Moreover, it will also assist a capability building and knowledge transformation. In this scenario, design paradigm suggested in the literature could perfectly leverage this transformation in different ways. On one way, design interventions could reinforce the co-creation model by better connecting and communicating between internal and external TSOs; on the other way, design intervention could also propose new paradigm and models that TSOs could involve external resources. At the same time, this intervention could also offer TSOs a better understanding of design thinking through practically interact with them. And it will accelerate the adoption of design thinking in TSOs towards the core and the whole.

Besides, there are much more spaces to explore when thinking more from the internal perspective of TSO. Compare with the local communities, relationships between TSOs and designers in social contexts have less been discussed and highlighted. TSOs have their own needs and demands as well. And it's not right to separate how they serve the target communities from how they manage themselves. Thus, a co-design / co-creation process will look at the two sides of TSOs at the same time and integrate actors from both sides to interact directly with the others.

2) **Scale of time**: how does it affect the design process and design strategy in shaping and developing TSOs?

It's the time to talk about more "how". The double diamond design process (design Council) and human-centred design methods (IDEO) are fundamental and practical

tools in developing design process for social responsibility and innovation. And this is also the starting point for me to think about how to develop a more situated design process in this research.

One aspect I have considered is the step before design actions start, which I would like to call as "**pre-design**" phase. The design capabilities models discussed in chapter two and the top-down strategy for social innovation mentioned in this chapter have reminded me of the importance to "study" the current/existing situation of TSO before taking any design interventions. Because often there're people already doing organisational design, no matter they are experts designers or not, the first should be set to generate a holistic perspective and understanding on the TSOs. Then during the design process, asking "right" questions, creating "right" design brief, finding the proper way to engage possible stakeholders, visualising any forms of conversations are crucial steps in different stages. The capability to create or adapt design tools and techniques in different contexts with different type of participants is also required to designers. In the end, when the test, pilot and implementations have been done, in my opinion, there's another phase we could not ignore, which I name as "**post-design**" phase. In this phase, one of the main issues is: what will happen when designers leave the TSOs after design interventions? Not like big business companies, many TSOs has limited money in "hiring" designers. How could the design results remain the values and impacts? Is it possible to consider this issue while creating the design interventions? Is it possible that TSOs could carry design thinking without designers?

3) Creating design strategies for organisational design: **inside-out and outside-in**?
The two opposite directions of developing TSOs are not contradicted. Inside-out means the top-down approach of adopting design thinking and the outside-in

approach refers to bring external resources and opinions to formulate what an organisation should be. The inside-out approach will assist to distribute design thinking to all employees in TSOs and their target communities and partners. This approach will function very well for knowledge transformation through educating and cultivating. On the other hand, the outside-in approach will lead TSOs to look out of the box and obtain fresh opinions and interpretations on essential organisational elements, like the visions, mission and behaviour pattern. In this process, design thinking will facilitate and integrate to create the internal experience by involving external stakeholders. This idea is difficult to imagine by traditional managers. In this way, there is potential to "redefine" an organisation, especially third sector organisation.

4) Speak the **language** which could be understood by all.

In the third sector, social problems and contexts are much more complicated, and target communities are considered as "vulnerable" groups. There are strong barriers and gaps between what TSOs want to do and what they can do. And this is the reality, and for me, this is where design thinking could make a change, even a small one. But designers need to solve the 'language" problem first. What do I mean? It's not the different languages spoken by different nationalities, but the languages we use as designers. There are two language gaps: one with employees in TSOs and the other one is with target communities. It might be more difficult to work in the third sector than the other two due to its natures. So what kinds of visualisation and design tools and techniques could diminish the barriers and foster the collaboration?

5) Will design thinking contribute to the economic or the social aspect of TSOs?

If we are trying to answers "why" to embed design thinking in shaping and developing third sector organisations, we have to "evident" the outcomes and contributions. The economic values of design thinking have been demonstrated in literature in design management field. Does it have the same values for TSOs? Are the values the same? If not, what are the other contributions? How will it assist TSOs in accomplishing the social missions and objectives? Are these values linked or impacted by organisational changes? The opposite, how will TSOs take use of design thinking? For building a design culture? For being innovative? For new branding? For economic benefits?

Summary

In this chapter, the literatures are reflectively reviewed regarding to the characteristics of third sector organisations and its potentials and advantages for developing designerly organisational design approach. It's different from both business companies and public institutions. Based on all the theories, the following steps will seek for practical answers through empirical research actions.

ACTION RESEARCH STRATEGY

Chapter 4 |

Case Study Method

In this chapter, the research has applied case study (Yin, 2009) research method in collecting, selecting, studying and analysing practical cases/projects for generating insights and knowledge from the fields. Based on the literature reviewed in chapter two and three, the research, at this phase, will focus on collecting data in answering the questions: 1) *What are the design outcomes that have been generated in the design-led co-creation processes?* 2) *How could these design results impact the third sector organisations from the perspective of organisational design – the organisational components, activities and development processes?* 3) *How could different design paradigms empower the third sector organisations and their target communities in actively participating in co-creation processes.*

Data from the following aspects was collected:

1) the objective(s) of involving design - relevant to TSOs' organisational design practices

2) the design processes and paradigms in shaping and developing TSOs (process and participants)

3) design outputs and outcomes: what have been co-created?

4) organisational transformation changes made by applying design thinking and design methods.

4.1 Case Study Strategy

4.1.1 Objective

Case study method adopted in this research mainly aims at collecting and analysing diverse design practices in the third sector towards making social benefits. This method will allow the researcher to have an initial picture of what design practices have done in collaborating with TSOs all over the world for different social issues and problems. And this research method will help to obtain on-site data and evidence from real-life. Especially in this research which aims at exploring rather than testing or demonstrating, case study method is extremely useful to get qualitative data, to generate insights and to develop models for the following participatory action research.

4.1.2 Process

The case study method has been carried on in two steps. Firstly, cases are widely collected worldwide through different means and channels, mainly as second-hand data. The criteria to select the cases are: design project to fulfil specific social needs or to solve specific social problems; the projects are led or co-led by designers; the projects are supported or managed by third sector organisations (TSOs). The resources to find the cases include several international design awards, internal design magazines and important international design studio, which have a distinct focus on design for social impacts. In the first case collection, there are 20 cases have been collected and listed (Appendix1). A general review and study are conducted in all the 20 cases, some similar types of cases are categorised, then cases that only concentrate on the first and second level of design are not the ideal ones for the second step. Finally, 8 cases are selected for in-depth data collection, mainly through semi-structured interviews.

Research process in case study:

1st case collection → 2nd case collection → semi-structured interview → data analysis

the shared characteristics of selected cases:

- The Projects were driven by top-down "design"[1] strategies for social issues

- Designers have played an active role in leading the co-creation process

- The projects have relatively big impacts locally or worldwide.

The diversity of selected cases:

- Third sector organisations are working on different social issues and with different target communities.

- The typologies of third sector organisations

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[1] Here "design" refers to design activities in general, is not specific limited to professional design

4.1.3 Short Introductions of Selected Cases

1) TSARA

Figure 4.1 | Launch of TSARA project in Madagascar (designboom[2])

TSARA is a project funded by UNDP (united nations development programme) & UNIDO (united nations industrial development organisation) for revitalising the Malagasy creative industry. The project aims at creating a system and revenue to support and sustain the community for protecting local women; to engage local craftsman and involve them in a socially and economically sustainable venture that improves their quality of life; at the same time, strengthening the image of Madagascar on the global platform. Italian designer Giulio Vinaccia, who has been working with UNIDO, UNDP and UNWTO for around 20 years, and two junior designers have led the design process in the project.

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[2] https://www.designboom.com/design/tsara-collection-giulio-vinnacia-madagascar-12-25-2014/

The project started with understanding the local resources, the conditions of local communities and the skills they have. Then a training course on basic production technologies have launched, and 120 local artisans have been involved. During the co-production process, the design team was working together with the local artisans. More than 120 prototype products (furniture, home decorations and fashion pieces) have been shown in a great exhibition, as well as the release of this brand and the social enterprise, in a historical building in Madagascar. The UNIDO representative of Madagascar, the prime minister of Madagascar, the design team and all the artisans have participated in the event. Together with the physical products, a business model to support this initial social enterprise has also been created. And a number of these artisans have also received training on financial and leadership, which will assist to manage the social business.
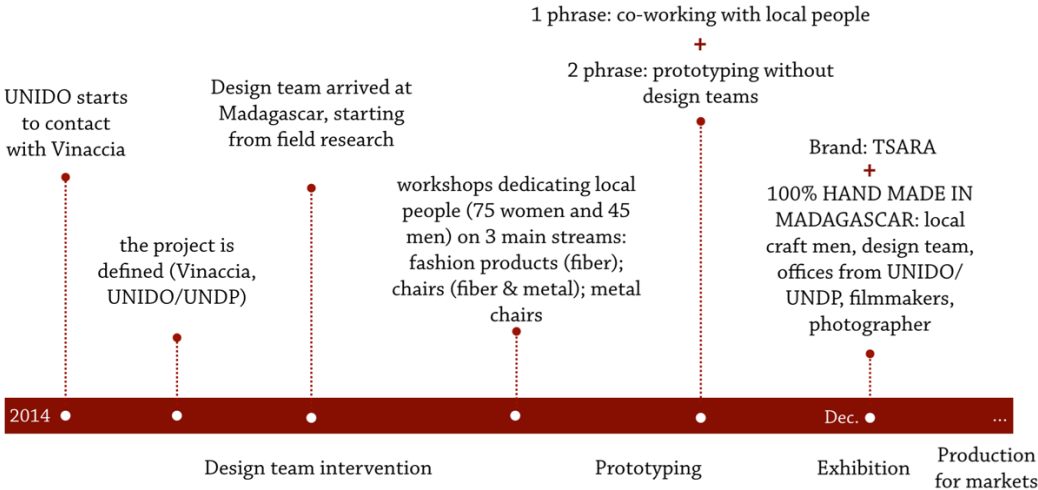
Figure 4.2 | design process in Tsara project (elaborated by author)

2) Dignity Design Collection

Figure 4.3 | Dignity Design Collection (ADI Design Index 2014[3])

Dignity and *Design* are the key inspirations of this collection. Dignity Design collection project firstly began in Thailand in 2014, and it is part of an international project sponsored by the Good Shepherd International Foundation ONLUS and the OAK Foundation and Misean Cara. The objective is to use design as a powerful tool

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[3] http://www.adi-design.org/adi-design-index.html

to ensure a sustainable future for the local artisans in the rural area of north and northeastern Thailand. Designer Patrizia Scarzella, with the collaboration of Valentina Downey and an impressive team of female Italian designers, has made the product design part. Then through skill training workshops, the local woman in Good Shepherd Sisters' centres was able to created and produce the product as their jobs which will finally bring revenues for them.

For distributing the products worldwide and helping Shepherd Sisters' centre to be sustainable, Patrizia Scarzella and her colleagues also built a network with fair trade in Italy, Europe, USA, Australia and New Zeland. The initial pilot project was a success in Thailand, then they have also held similar projects in both Philippines and Kenya. In Dignity Design Collection, the educational role of design and designers has been well presented. Besides, the economic benefits brought by the co-created products and improvement on life quality of local communities have also highlighted the role of design in promoting the performance of Good Shepherd International Foundation.

3) La República del Tejido

Figure 4.4 | Products and co-creation process (La República del Tejido[4])

The objective is to create and strengthen the textile production capacity of local women in the highlands districts of southeastern Peru, and to improve the economic situation of the families and to contribute to the development of the community in general. Klaud design studio, founded by Kristie Arias and Laura Sacchi, has collaborated with a Peruvian NGO - DESCO - to seek the possibility to form local textile industry as an option for economic development. At the very beginning, they found that the residents have only a very basic understanding of the textile and products, and they were unable to reach the quality needed to compete in domestic and international markets. The design team have opened training workshop in the communities to teach practical skills of producing high-quality yarn through classifying, carding, colouring, combining, spinning, washing and winding. At the same time, it's crucial to teach them the added values they could generate more than selling the raw material. The artisans and all project members participate in regular meetings to strengthen ties of the group, to share suggestions for improving the training, and to discuss topics of interest with a gender perspective.

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[4] https://www.larepublicadeltejido.com/home-ingles

DESCO and Klaud have launched the brand - La República del Tejido - in the international market with the unique imagine: the daily work of the artisans meets with the designer's imagination to develop a collection inspired by the softness and luxury of the alpaca fibre. The products of La República del Tejido include "hand-spun" yarn and well-designed fashion pieces made of yarn. By 2016, with La República del Tejido, the local artisans could earn the cost of the fibre ($7) and an additional $16 for their value-added craftsmanship & labour per kilo of spun yarn.
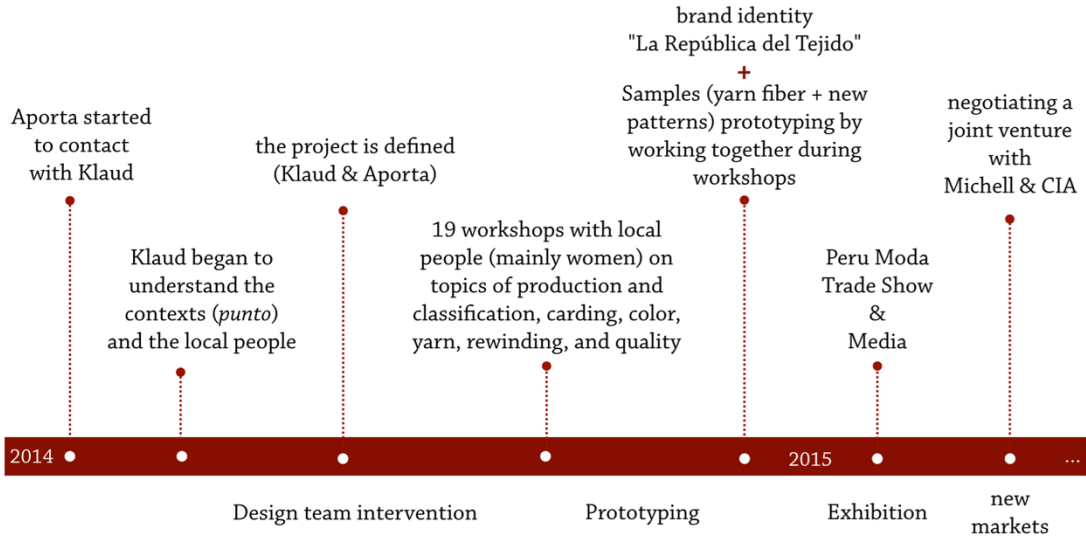
Figure 4.5 | design process in La República del Tejido project (elaborated by author)

4) K-LAB Storie Di Incontri

Figure 4.6 | co-creation process and product of K-lab (K-lab[5])

This is a collective project that develops and creating objects, events and performances through communicating, thinking, producing and managing. And it fosters an encounter between people from the creative and entrepreneurial world and the world of fragility. The project was born of the deep desire to exploit fragility and differences through creativity and beauty and born of a way of design that starts from strengths and capabilities, not from shortages. Designer with different backgrounds, architects, illustrators, entrepreneurs are working together with the capabilities of fragile people, recognising their values, giving dignity and rights recognition to their talents.

K-LAB always put the target community in the centre and keep open to growing. They believe that they could make a sustainable economy and do business with fullness without losing market competitiveness. They look at the entire production process and work with the fragile children and their families in creating high-profile products and constitute working system relevant to creativity, in which they could both contribute and benefit. In Italy, they have both physical shops and online purchase platform to sell their products. Meanwhile, K-LAB has a physical location, which is acting as the interaction encounter to engage more and more people in participating the workshops and events. K-LAB has collaborated with different design fair and events in promoting the value of disabled children in product production process and the stories behind.

5) SmartLife: Designing a Scalable Water & Health Business

Figure 4.7 | Smartlife social enterprise designed by IDEO.org (IDEO[6])

SmartLife is a social enterprise that sells and delivers pure drinking water and wellness products in low-income neighbourhoods of Nairobi, Kenya. It's supported by Water & Sanitation for the Urban Poor (WSUP), Unilever, Aqua for All, and Global Alliance for Improved Nutrition (GAIN). The design studio IDEO has adopted a human-centred design process in leading local communities and the TSOs in ideation and implementation phases, and finally, they built up this social enterprise together.

Smartlife is a service-based local social business, and it has developed a sustainable business model to reach the market. It has negotiated with local citizens and other partners (business and public) to form the final working model and prices. Customers

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[6] http://www.designkit.org/case-studies/4

could select their preferred subscription model to use the service: daily standard or personalised wellness. In the first year, Smartlife has served around 4200 customers. This localised service system has well relieved the hygiene and nutrition crises in Kenya. Besides, it has built up a strong brand identity representing "clear water and healthy life" for people. All touchpoints of the service system have been well developed and set in the local context. Smartlife is a successful case in linking social needs with sustainable business opportunity. The social enterprise will be run by the local communities, and this strategy will definitely help to grow the trust and loyalty of customers.

6) PET Lamp

Figure 4.8 | production process in PET- Lamp project in Colombia (PET-Lamp[7])

PET Lamp is a project inspired by the plastic wasted contaminating the Colombian Amazon. Designer Alvaro Catalán de Ocón has seen the amount of waste generated by plastic bottles, and he believed there is "designerly" way of changing this problem into positive solutions. The idea started with expanding the life cycle of plastic bottles and transforming them into functional and desirable products in the market. After seeing the traditional weaving technology of Colombian communities, the Spanish designer tried to combine the used PET bottles with specific traditional weaving technology to make high-quality handmade lamps. In this way, the PET bottles changed from water containers to the ceiling of lamps. The traditional weaving skills were reinterpreted to fix to the reshaped body of the bottle, which is transformed as the warp to wave. Now the co-production idea has been replicated in Chile, Ethiopia and Japan with local weaving technologies, resources and styles. This model of production and contextualisation make PET Lamp been presented in different esthetic shapes.

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[7] http://petlamp.org/colombia/

From 2013, PET Lamp project started to convince the market with its unique values and brand identity. It has participated in world famous design weeks and won several important design awards, which definitely help the brand to grow worldwide. It has also established significant relationships with creative studio, public event spaces and restaurants to spread its images, meaning and identity to wider audiences and potential customers.

7) People of The Sun

Figure 4.9 | Production process and product of People of the Sun (project website[8])

The project aims at helping the low-income artisans in Malawi to produce high-quality products with their traditional skills and to open their own businesses for improving their living conditions. The brand People of the Sun was founded by Maria Haralambidou, an architect and designer, in 2012. She started the project with the idea to use design as a powerful tool to overcome local poverty. With the passion in craftsmanship and handmade products, Maria planned to combine these skills with her architect and design background. She started with workshop teaching artisans about production, team working, managing and leadership and at the same time inspiring them to create something new. By 2016, there are around 120 artisans and 5 people running the head office. Now the idea has grown into a social enterprise which supplies retailers worldwide and getting money back to change the lives of artisans' communities and families.

Access to the market is one of the crucial issues to face. People of the Sun has also open to collaborating with external designers, design studio and international brands

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[8] https://www.peopleofthesun.net/

in order to strength the brand identity and gain the brand awareness in the international market. And this will help to guarantee the regular incomes for artisans and to grow the social enterprise. In 2017, People of the Sun is scaling up the model in Nepal and trying to promote diverse cultures and local artisanship through social business.

8) Dialogue Social Enterprise

Figure 4.10 | Two interactive exhibitions of dialogue social enterprise –
dialogue with age (left) & dialogue in the dark (right)

Dialogue social enterprise is a social enterprise with the mission to facilitate social inclusion of disabled, disadvantaged and elderly people on a global basis. And this mission is achieved through exhibitions, events, performances and workshops worldwide. And they have developed a franchise model that involves local communities and partners. Three specific programs are: dialogue in the dark, dialogue with time and dialogue in silence. The founders - Andreas Heinecke (social entrepreneur) and Orna Cohen (exhibition and experience designer) have a clear vision and strong backgrounds to create scenarios in which the general public could get the experience of "unable" and "vulnerable" in person, but during this experience, they are supported by the marginalised people. Dialogue social enterprise acts as platforms to break down the barriers between "us" and "them" through well-designed experiences and artefacts.

Dialogue social enterprise now operates worldwide providing products and services for social good with profit business model. And they would like to use the term more-than-profit to identify their features as a social enterprise. By creating the fantastic

relationships between marginalised communities and the public, this social enterprise brings attention on social equity with impressive experiences and visible spaces and artefacts. Besides, lots of working positions are created to disadvantage people. The awareness about people with disability and elderly people set up by Dialogue social enterprise has led a social behaviour change. The contributions in social economy for disadvantaged communities is another significant social impacts.

4.1.4 Mapping cases in different diagram regarding different research aspects

Based on the questions raised before, several different models will be used to find answers to the different questions. Firstly, the research will study the motivations and results of involving design and designers in TSOs. A diagram will be presented for categorising the 8 cases into four different models in linking the *role of design* in TSOs and the *strategy to establish and communicate the design results*. Afterwards, another diagram will show several different design paradigms which are discovered from diverse co-creation approaches and processes.

4.2 Contributions of design-driven activities for TSOs

Building the model:

One axis: design as added values to improve the offerings and artefacts of TSOs – design as essential elements to consider for organisational development

The other axis: design for local markets and communities – design for creating a new brand in global markets
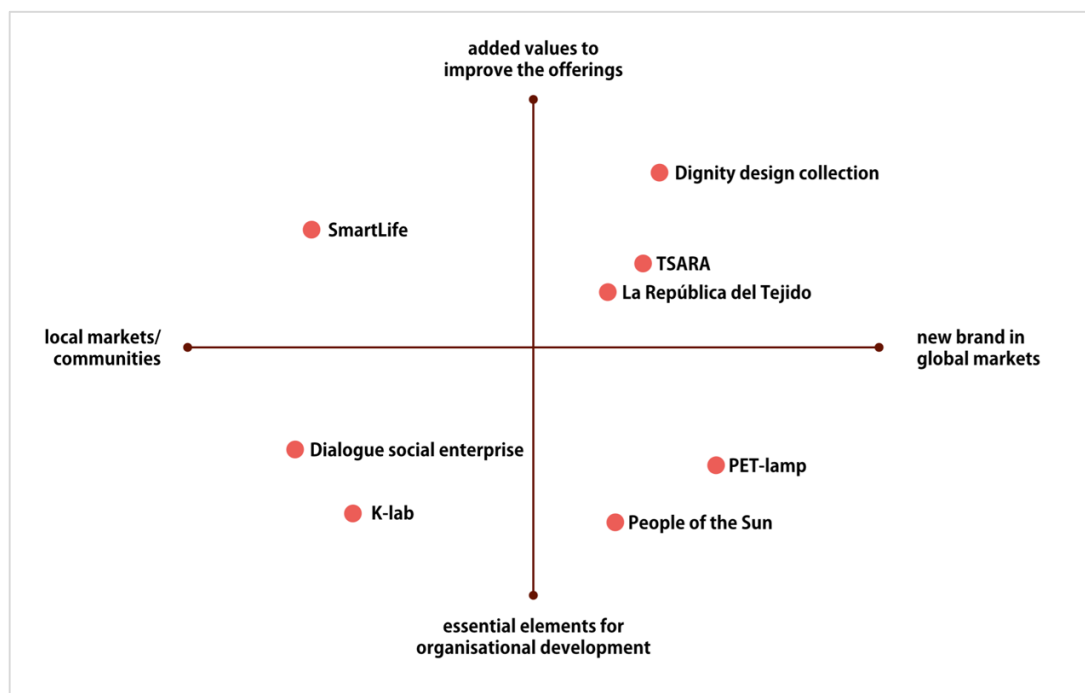
Figure 4.11 | case analysis map1 (elaborated by author)

From the map above, four categories motivations of involving design and design thinking in TSOs:

1) **Left-Up: building new social enterprise in solving local social problems**

   case Smartlife represents this category, in which designers have devoted in engaging local communities in co-creating a local social enterprise to solve a specific problem. Smartlife created a water delivery service system that is run by the local and finally benefits to the local.

   Considering the relationships between design intervention and organisational development, I could find the following characteristics:

   - IDEO.org is the design team in this project, and they have followed a human-centred design approach to develop the service as the solution for getting affordable clear water consistently.

   - In the human-centred design process, design thinking has played crucial roles in defining and generating the ideas and final solutions. In the solution, the service is the core, which also include two optional choices supported by two different business models.

   - The case was funded by several TSOs, and they initially tried to use design as a social problem solver for creative and sustainable solutions. The local communities are the users/clients of these TSOs. And the design is limited to impact mainly the offerings of these TSOs and the relationships with local communities and stakeholders. However, for the new social enterprise, design thinking is possible to position itself in the core and the whole: defining its values, way of behaviour, all physical evidences, brand awareness in the local and so on.

- The social enterprise serves the local and empowers the local at the same time. Design thinking and design methods have created a service-based social enterprise, which has provided the local communities with the opportunities to work, to gain skills and knowledge, to devote to local communities' development and to serve others.

- Design thinking and design methods have created a strong local brand, multi-service touch points and a successful business model. Therefore, for the new social enterprise, design has impacted more essential aspects of the enterprise. In this case, designers have considered the delivery model, subscription model, cost and revenue systems, suppliers and partners to ensure the validity of the service.

2) **Right-Up: ethic design brands for the international market**

Cases TRASA, Dignity Design collection and La República del Tejido belong to this category, in which designers have applied professional design knowledge and design thinking in co-creating and co-producing high-profile design artefacts with disadvantaged communities (in these cases refer to communities with low-income in less developed regions). And at the same time, new brand identities have also launched to the international market to obtain more awareness, which could bring more economic benefits to improve the living conditions of the communities.

In this category, several common characteristics could be found:

- The designers are talent and excellent as a professional. They are experts in specific design areas and might have a network of supporting designers as well. So they could guarantee the design (the second level of design) quality.

- Besides the professional design skills and technologies, these designers have also followed a design thinking approach to do more than traditional design tasks. In all the three cases, designers have acted as knowledge "broker" or "teacher" to educate local communities in skills building and knowledge growing. The knowledge includes not only how to produce, but also how to *think* and *create, innovate.*

- In these cases, the TSOs are different in each case and designers act in diverse relationships. In the case of TSARA, the United Nations Industrial Development Organisation is the original TSO which has launched and founded the project to "use" design as a creative tool to foster local industrial development sustainably. For UNIDO, design and designer are the social problem solver, and the local communities are the target group, could also be seen as the users. However, when the final goal is to build a social enterprise producing co-create design pieces, the local communities become the collaborators and internal operator of the social enterprise, and now the final clients/users are the buyer in the international market (figure).

- Redefining the **design brief** enables designers to approach the core of the social enterprise. The TSOs doesn't know very clearly what are the real barriers and the strengths of local contexts. "*the negotiation and conversation with different actors is also part of the design process*" said by Giulio, the leading designer of TSARA project. In all these cases, the design team have redefined the design problem and design brief at the beginning of design process.

- In these case, one of the main problems mentioned in the interviews with designers is the economic issue. Firstly, it's crucial that they need to communicate very well with investors and chief managers in the TSOs to

make sure they could receive sufficient money and enough spaces to carry on the projects. "*we always need to convince the investors to continue the project*" said by Kristie of La República del Tejido. On the other hand, creating access to the markets is another issue in maintaining economic sustainability. The story behind the brand, the quality of the products and possible relationships between final buyers and artisans are crucial for the brand identity.

3) **Right-Down: design-led social enterprise in global networks**

Cases PET-Lamp and People of the Sun have presented a design-led approach in forming social enterprises that have highlighted "design" as the important brand feature and identity. These social enterprises are using design thinking and design methods in connecting existing resources and transforming them into solutions that might solve some social problems. At the same time, the solutions could bring economic revenues to benefit the target communities and to maintain the social enterprises.

The two cases have presented the following features in common:

- The initial ideas of these two social enterprises are proposed by the two leading designers, Alvaro and Maria, who were inspired and motivated in solving social problems by using their own professional design skills at the very beginning. And both of them have been following the whole growing process of the social enterprises.
- The designers have played significant roles in developing the social enterprise. As mentioned before, designers have led the entire design process from ideation, implementation, production, distributions and replication. Diverse TSOs have supported and funded the initial phases, but they didn't include

design and design thinking in their operational and organisational activities. However, for the new social enterprise, the design thinking has been positioned in the core and the whole (here it's the same as that in the second category). Furthermore, the designers have synthesised the core working model and adapted it into different geographic and cultural contexts, and at the end, they developed an international networked of the social enterprise.

- Competitive brand strategies. Thanks to the international network, the products have the same "blood" but with different appearances. For example, in the PET Lamp case, the social enterprise is now working and collaborating in four different countries, Colombia, Chile, Ethiopia and Japan. The co-design and co-production processes have integrated the local weaving techniques and local cultural inspirations with the plastic bottles and the basic lamp structure. All the products share the same family feature but with fairly diverse look. This is a unique value for the brand in the international market.

- Both of them organised a multidisciplinary team as the core working team of the social enterprise. They mentioned the importance to have people who know how business works to organise and direct the operation, but it's important that they need to have design attitude when working for a design-oriented social enterprise.

- Building the trust with local communities is one of the factors to success. Both of the designers have lived, talked and worked with the local people. This helps to involve the local communities in the right way and also contributes to "shape" the social enterprise through a better approach.

- The social enterprises have more than one type of "target user". They are serving both the local communities and international clients. To the local communities, the social enterprises offer the training workshops and working

opportunities, knowledge on operations and management, better economic

revenues for improving the life and so on. It's service-oriented. To the

international consumer market, both of them are selling high-profile products,

which are well-designed and produced.

4) Left-Down: integrating design in developing TSOs in local contexts

Cases K-lab and Dialogue Social Enterprise are in the last category, in which design and

design thinking have guided and permeated in the whole process of building up the TSOs

in local contexts. Two cases have presented two different social performances and

economic models, but they have shown the same philosophy and strategies to adopt

design thinking and design methods in connecting vulnerable groups and the public.

These features have been found in both of the cases:

- Designers have been working in the core of the TSOs. In the K-lab, a group of

  architects, designers and creative individuals have participated in organising

  every activities and event. The same in Dialogue Social Enterprise case, one of

  the founders, are exhibitions and experience designers, she has naturally

  transferred how designers work and think to the design process, the co-creating

  process and daily working and operating activities. Besides, this could also be

  transferred to people working with them.

- The design results/outcomes have put a priority on the experiences and services

  other than physical artefacts. The unique and personal experience are considered

  much more precious and valuable.

- Also in this category, the TSOs have two different types of "customers": the

  vulnerable communities and the final local clients. K-lab involved the vulnerable

  children in co-working and co-producing activities, which aims at providing a

personalised learning experience and transforming their unique creativity into some designed products. K-lab also collaborate with other local brands to make awareness of the products. Dialogue Social Enterprise do it slightly differently. They have involved vulnerable groups in supporting an experience based exhibition for the local public. In this way, the public could experience personally the daily lived of vulnerable people.

- Design thinking and design methods have been applied to the core to many organisational components. For example, in Dialogue Social Enterprise case, they applied design thinking in shaping the exhibition spaces, selecting people to work with, deciding the strategy for future development and considering the business model for getting economic revenue to balance the cost. Besides, they hire vulnerable people not only in supporting the exhibitions (organisational offering) but also in important conventional positions.

- Pay more attention to the local contexts. Both of the cases have focused on local impacts rather than international ones. In this way, the impacts generated by design and design thinking might be much more evident and vivid.

After elaborating the four different categories, there are lessons learnt to think about how design thinking could impact at different organisational levels:

- the first and second categories have shown the possibilities to transform the impacts of design for TSOs from the periphery to the core: building new social enterprise, more effective than a service system or products.

- The time and the access to the market are two important issues to face when the social enterprises are building its brand identity internationally.

- Experience-based offering and brand identity could be the "brides" to link design thinking to organisational development. And there might be different ways and approaches, directly and indirectly.

- Design thinking definitely contributes to the social business model.

- Make things visible and tangible is also important for TSOs' development.

4.2 Co-creation Process and Paradigms (internal and external actors)

There's no doubt that co-creation and co-production are now in the essential part of TSOs and it is the forgotten engine of change that makes the difference between systems working and failing (Cahn, 2001). All the cases selected have also shown different co-creation models proposed by design and design thinking for divers TSOs with diverse missions and in diverse contexts. Based on the *user and professional roles in the design and delivery of services* developed by Boyle and Harris (2009) and *conversational piece on reflecting organisational design practices* proposed by Junginger (2015), I have made a model to better understand the co-creation process in different cases. (figure 4.12)
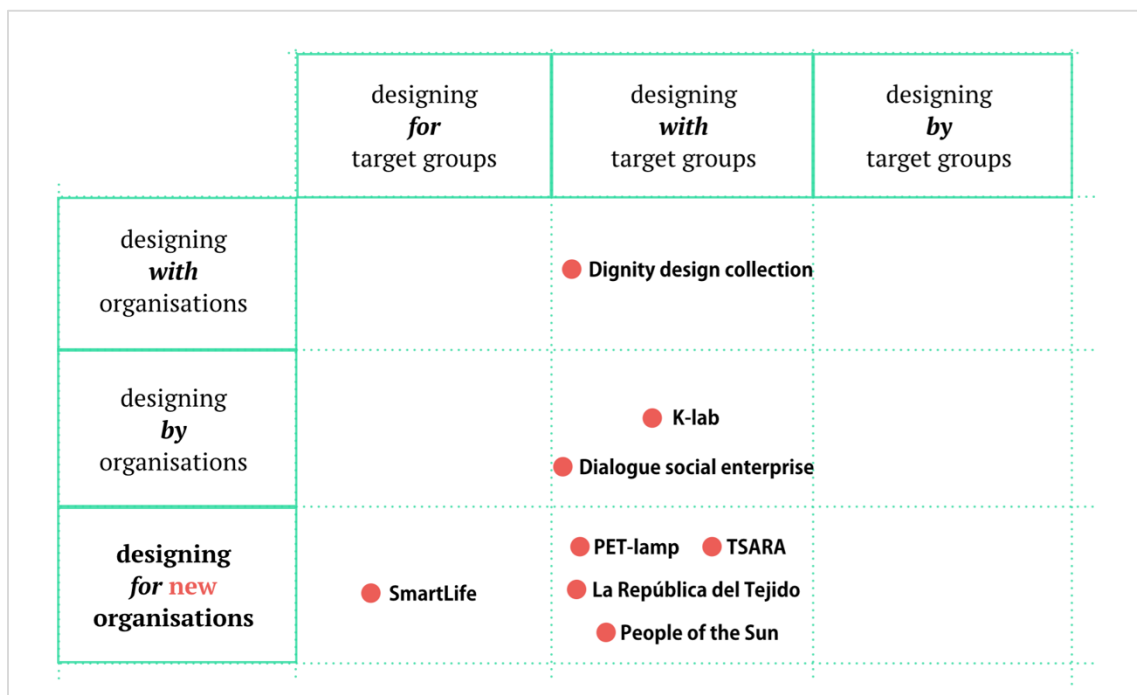

Figure 4.12 | Case analysis map2 (elaborated by author)

Because in this research, I am observing the co-creation and co-production from the design perspective, especially the point of view of organisational design, I have taken the terms used by Junginger in this model. But, I have also modified the model according to the feathers of TSOs and the data from selected cases. In the vertical direction, I have added another item "designing for new organisations" - referring the cases in which design thinking has been applied to build up new TSOs (mainly the social enterprises). the *organisations* in the term "designing for organisations" refers to the TSOs that initially had the idea to adopt design in the projects. The term *target communities* represent the target vulnerable communities that have specific demands and unmet needs which can't be answered or covered by conventional solutions.

In this map, all the cases are grouped into four categories:

1) Designing **for** Target Groups + Designing **for New** Organisations

   In this category, target/vulnerable groups are involved in creating a new social enterprise, which serves for providing solutions (mainly service systems) to others in the same community or the same local context. And TSOs are providing necessary and basic supports to them. In this co-creation model, designers are performing as professional experts in leading the design process, they started to understand the target communities and their problems and needs, afterwards, they proposed ideas and iterated the solutions with the target communities to make it work properly in the contexts. The local communities are mostly in charge of delivering and operating the services in the new TSOs. The vulnerable groups are both the solution providers and the customers (solutions receivers) of the solutions.

   During a design process, the TSOs that founded the projects were less present in the design process. And the local communities participated in a design process has two

roles: the "subject' to study in the research phase, and the "broker" of local culture or information - they provide useful information to support specific design decisions that related to local issues. In the case of Smartlife, the local communities collaborated in the design research phase and during the development phase, local communities have supported design teams in deciding the locations of retail shops, the delivery paths and the subscription models (e.g. payments).

And designers have developed solutions firstly aims at providing local communities with the accesses to clean water and basic well-being products. So it's designing for target communities. A service-based solution has been tested and demonstrated useful and reasonable to improve the situation. In order to make long-term improvements, a business model and the enterprise have also been designed to fulfil the mission. And local communities are empowered to operate and maintain the social business. Thus, in the second phase, design thinking has been applied to shape the social enterprise and to figure out how it will work.

2) Designing **with** Target Groups + Designing **for New** Organisations

The second paradigm includes cases that involve vulnerable groups as active participants for co-creation and building up new TSOs (mainly social enterprise), which generally targets the international markets with high-quality products. And these products combine both the local culture and production skills with global trends and aesthetics. The local communities need to be able to produce the products, more importantly, they need to gain the skills to run it as a business and to manage it as an enterprise. Designers have acted both the professional designers (product designers, textile designers and so on) and the knowledge distributor, teaching necessary skills

and techniques to the local communities. In all the cases, designers have run training workshops to teach how to make, produce and manage themselves.

The TSOs that proposed the initial ideas of the project or involved to support the projects have considered designers and design thinking as a way (in some cases as an optional way) to find effective and efficient solutions for solving a social problem. They didn't participate actively in the design process. The local communities, instead, are those who work closely and actively with the designers. They are inspired and empowered by designers, and they collaborate to produce the products. This co-creation activity is the beginning of creating the new social enterprise. Design thinking and design methods were applied to formulate the different elements of the social enterprise. For example, what're the unique values of the products? How to communicate the co-created products? What's the brand identity? How to distribute and enter the international market? How to replicate the model in other contexts and with other communities? Designers started to discuss these issues with the local communities and to involve them in planning for future development. This is the paradigm in which designers are designing with the local communities for establishing new social enterprises.

The four cases, TRASA, La República del Tejido, PET-Lamp and People of the Sun, have created the same paradigm in which design is applied not only as the professional skill to design products, more importantly, it has integrated existing resources and empower the target communities to make use of the resources. Through working with them, designers have also educated the local people to produce artefacts and manage their business. All these activities will eventually contribute to local industrial development, economic growth, improvement in life quality and knowledge building.

3) designing **with** target groups + designing **with** organisations

In this paradigm, both vulnerable groups and TSOs are engaged in a design process, during which the final solutions are generated. Local communities are mainly taking responsibility for creation and production, and they are encouraged and facilitated in participating the "design" phase as well. This paradigm can be seen in many social design cases, in which co-creation process aims at strengthening the quality of offerings or differentiating the offerings from other TSOs. The design thinking and design method have devoted to adding TSOs' brand values and impacts. The employees in TSOs are providing supports to guarantee the co-creation activities, e.g. the working spaces and schedules; communication between the designers and the local people.

The paradigm could be illustrated as: the TSO provides the co-creation working opportunities as the offering to target communities. The target communities are taking the working position to produce products for the TSO, and at the same time, they gain certain knowledge on drawing, weaving and designing. The ideas of products are from a network/community of international designers, which help the TSO's brand to be trendy and fashionable in the markets. Designers in this paradigm use professional design skills to design products and fashion pieces, and they also act as knowledge broker for local communities. For example, they teach local communities the basic knowledge of design as an educational program. Besides, since designers are leading a co-creation process with both actors, they need to balance and negotiate the conflicts between two actors from the point of views of design, culture and humanity.

The TSOs are playing relatively dominant role in this paradigm, in which design thinking is not entirely applied on the organisational essential issues and development process but only the peripheral elements. However, there're still spaces and opportunities for designer to explore or to push the adoption of design thinking in some decision-making conversations and to bring more actors in the conversations.

4) designing **with** target groups + designing **by** organisations

TSOs have adopted design thinking approach to developing services as a platform or encounter in which vulnerable groups participate in a co-creation process to create high values products for the TSOs. In this paradigm, designers are no longer acting as external resource. Instead, they have been involved in the TSOs' organisational activities and have impacted TSOs through applying design thinking and design methods in fulfilling the organisational mission. It means the designers are already part of the TSOs and designers acting as staffs through "designing".

The case K-LAB represents this paradigm. In K-Lab, designers and architects are part of this inclusive and sustainable enterprise, and the objective is to serve the fragile communities (for example, the children with speaking problems) and to empower them through the offered services. Eventually, the unique products they created from their own interpretations bring the revenues to make the enterprise grow and develop. Besides the collaboration models with the target communities, designers have also played an active role in organisational operations and management, and many designers and architect are also inside the decision making group.

The TSOs in the paradigm are experimenting a designerly way of managing and organising. They are acting as designing and applying design thinking in a variety of

activities related to organisational elements: from developing relationships with fragile communities (the target/users) to deciding the strategies for communications and building external partners and collaborators. From here, we have seen the possible direction of operating a designerly way independently by TSOs.

To present the four categories doesn't aim at comparing among them or selecting the best paradigm, instead, it intends to present the different possibilities for designers who are working for or with TSOs in different situations, contexts and organisational typologies. On the other hand, these paradigms could also be useful for managers and leaders in TSOs, who would like to involve design and design thinking in their practical actions or strategic plans. They could select different way to collaborate with designers according to their objectives and specific needs.

From studying the different types of design results generated by different paradigms, I have noticed the importance to consider the **time issue**. There is an implication to move from designing "*with*" to designing "*by*" – facilitating and transforming TSOs to be capable and independent in serving their clients/users, finding solutions to the social issues and building competitive business model.

Chapter 5|

Participatory Design Activities

The research follows participatory design action while conducting the case study, in order to get personal learning experiences and reflections on practical activities. The participatory design phase offered the opportunities to criticise the actions taken in the design research projects. In this research, particularly, applying participatory design activities allows me to gain practical data and experiences to answer the second and third research questions.

My empirical data collection and analysis include three projects which I have participated as a member of Creative Industries Lab[9] from January 2015 till June 2017. The clients of the design research projects are three different types of third sector organisations operating in Italy. And my data collections and personal reflections were recorded during the design processes. The design interventions in the three project were led by a strategic design approach, and I, as both the designer and the participatory observer, have focused on collecting data and information that relevant to the research questions. Also, I have transferred what I have learnt from the literatures and case study steps to our design interventions in these projects.

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[9] http://www.cilab.polimi.it/ Creative Industries Lab is a research lab in the department of Design, Politecnico di Milano.

5.1 Service Design per Universiis: Reshaping Relations and Services in Social Cooperatives through Co-design

5.1.1 Project Introduction

Founded in 1993 in Udine, the non-profit Social Cooperative Universiis[10] currently operates in the third sectors - health, education and assistance - occupying approximately 2,000 workers (social and home care workers, nurses rehabilitation therapists, educators, animators, etc.). And the Universiis entire structure covers 8 regions of Italy, with 14 local facilities and the headquarter in Udine. The activity of Universiis is divided into three main areas:

- Elderly Area - Health care services and auxiliary services for elderly people provided at residential facilities and at home.

- Minor Area - Services for children and adolescents in cases of hardship and disability; support for socially disadvantaged families.

- Handicap Area - Services for people with mental and/or physical disabilities at rehabilitation structures and socio-educational centres, residential communities, schools and at home.

Through its activities, Universiis pursues new directions in finding practical answers to problems and issues not completely resolved with the welfare intervention. Universiis works for a shared commitment to designing and conducting participation in new services that respond concretely to the needs of the community. Being able to listen and to prevent social hardship, Universiis offers appropriate and effective services, and always pursue the improvement and promotion of the living condition.

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[10] http://www.universiis.it/

According to the demands and needs, Cilab began a collaboration with Universiis with **the initial aim of conducting design research for developing and delivering new services and effective communication of their values**. It was planned to work throughout the whole development process of new service: from the needs analysis to design the operational actions of service delivery in three areas (the elderly, disabled, children) through a design-led approach. And a co-design process will be organised to engage different actors in seeking for new ideas for service innovation, locally and nationally. Meanwhile, the project will also work on the systematic improvement of Universiis communication strategies to build a stronger brand identity.

5.1.2 Design Methodology

Following the overview of the social cooperative Universiis and for fulfiling the research objectives, Cilab has created a methodology to lead the design-led approach (Figure 5.1), and we mainly applied the two research methods:
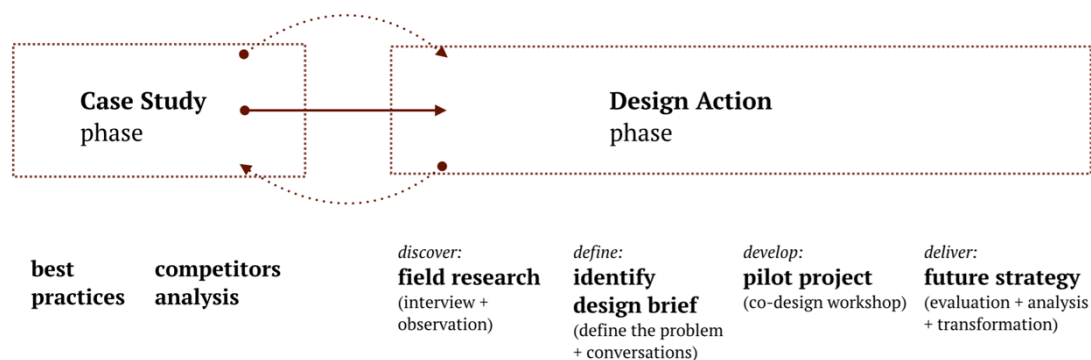
Figure 5.1 | Design methodology of Universiis project (illustrated by author)

- Case study (benchmark & best practices)

  Case study has played an important role in this research project. The research team conducted case study during the first phase of the research, and it mainly contributed to two aspects: firstly, it was used for analysing existing domestic competitors, all organisations in the third sector for welfare in Italy. By utilising the format of

"competitor analysis", research team got the general picture of domestic contexts and also had a much clearer vision about the where Universiis is in this picture. Secondly, the case study was taken for studying international best practices related to welfare. Cases are collected and examined for building the knowledge of trends and insights for project development; the research team undertook the analysis with a specifically designed tool.

- Design action (observation, interview & iterate through pilot)

  Based on the results of the case study, the research team made the plan for carrying on action research into three different phases: firstly, the on-site observation is crucial to obtain firsthand information as much as possible. The target of observation included all the actors in a local structure: elderly people (patients), care workers (operators), managers, family members of the patients, volunteers and the surrounding of the local structure and its relations. Secondly, several interviews were done during the whole design-led process. Different actors, from the operative level to Universiis central managers, were involved in the interviews. Third, the pilot method was highlighted as one of the main steps for completing the research. The design team conducted a "pilot" to prototype, experiment and developed the ideas generated by previous steps. It was arranged to focus on a **co-design workshop** with diverse levels of staffs within the local structure. In the pilot, all the designed tools and new strategies for organisations were tested. All the details will be explained in the following part.

5.1.3 Design Research Process

The whole design research process is illustrated bellow (figure 5.2).
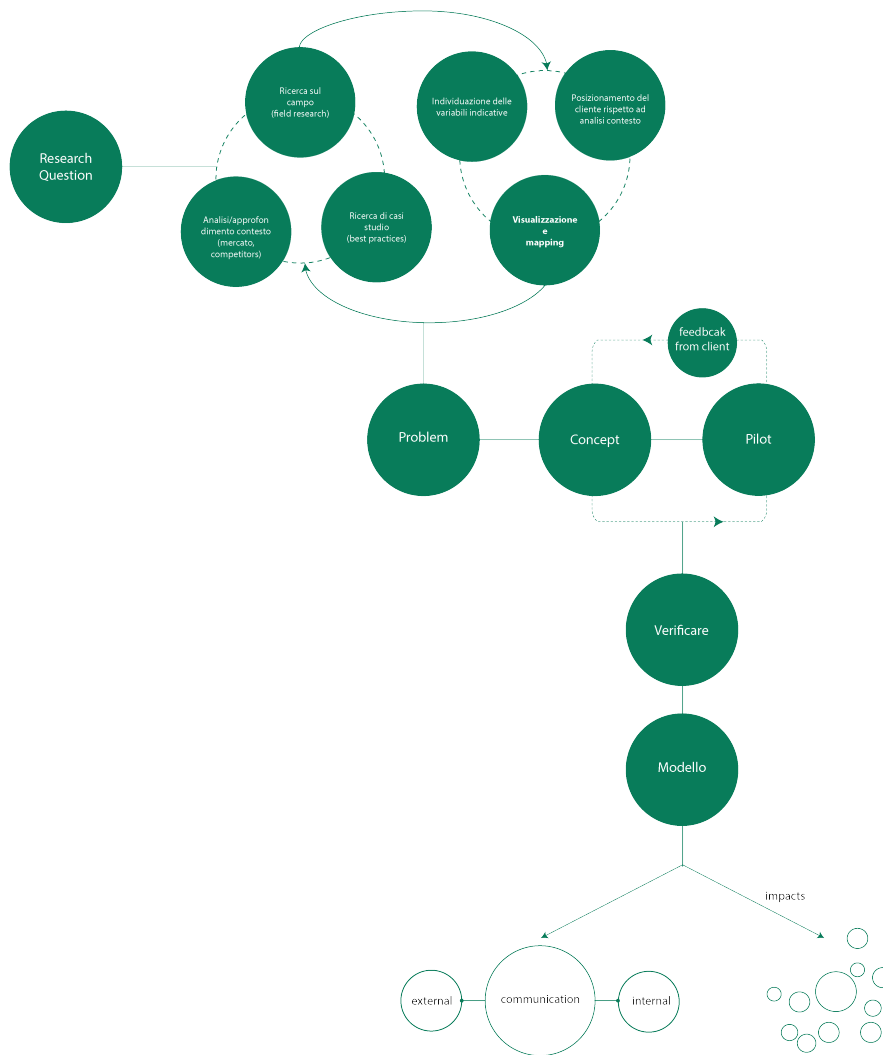
Figure 5.2 | Design research process in Universiis project (illustrated by author)

The design team analysed the reference market at national level about most relevant competitors (18 competitors). An analysis board has been generated to present the organisation's operational focus, the most important projects and the impact of communication. The design team has also underlined the positive and negative aspects of each competitor. During the competitor analysis, a map of positioning all the competitors was done for understanding the trends and possible innovation areas. 22 best practices from 9 countries all over the including best practices from international design firms and significant design awards are studies for finding most promising factors and directions. All the best practices have been scheduled and mapped by the level of customisation of

the solutions, the empathetic involvement and considering the main driver of innovation adopted between strategic, technology and space. By comparing the mapping of the competitors and the best practices, the design team defined three trends and areas of action: the customisation of the services provided; an empathetic involvement as educative treatment and assistance; and the importance of introducing technology as a driver of innovation.

Figure 5.3 | Map of competitors in Universiis project (elaborated by author).

Figure 5.4 | Map of best practices in Universiis project (elaborated by author).

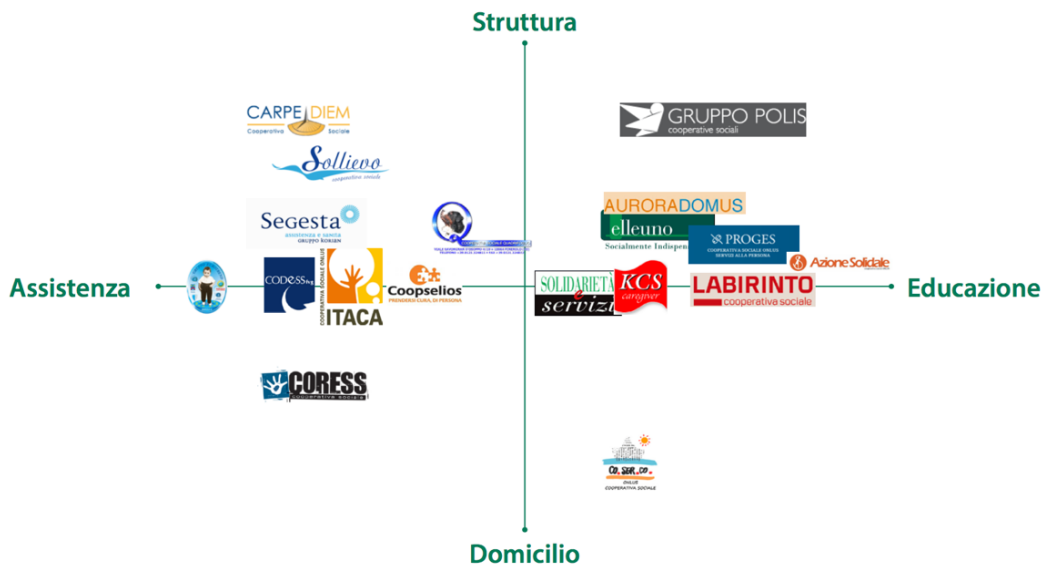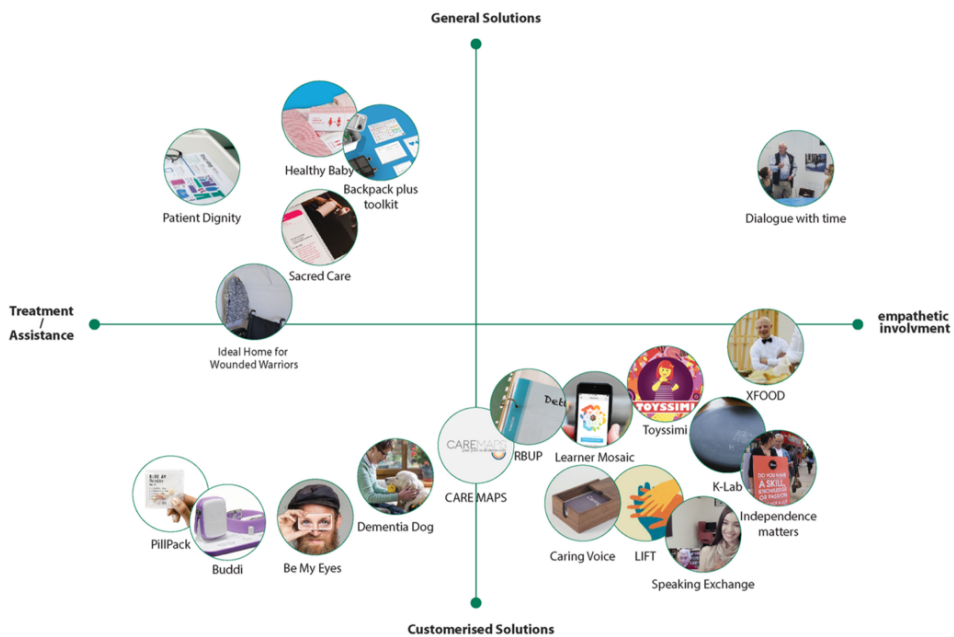The design team continued its analysis of the organisation with a field research: visiting two local structures: a retirement home and a kindergarten. Interviewing the local managers and the care workers has provided **a turning point** for the project: massive numbers of customer-engagement activities had developed and arranged in the local structure by manager team; also the quality of these activities was considered pretty high. All the files and the documents about the activity, however, are stored only on paper without any digitalisation. Interviewing the managing team has also been disclosed the needs again to have a knowledge of know-how and to exchange information with other structures and especially with the Universiis headquarter. The design team has summarised the problem: there was **a lack of effective communication within the whole structure** about the activities developed by different local structures. The headquarter itself doesn't receive the information about interesting projects and experiences from the local structures. This finding makes the research team realize **it's necessary to underline the importance of creating a shared database to easily register the projects and the developed activities from all the levels of the organisation**.

Developing the visual mapping of the structure with all the fluxes of information and money has been crucial to increase the **awareness of the complexity** in the organization's managing team. This bureaucratic and complex structure has diluted the effectiveness of communication. It was also lack of direct communication between the local structures for the exchange of know-how. All these have demonstrated that **there's a lack of holistic and systematic thinking** in Universiis managing team.

Another key point emerged pointed out **a lack of involvement** of the care workers in their work within the organisation. Many of them **don't have a strong motivation and responsibility for work**. And from the research, we have noticed that they felt less

importance in the social cooperative and they **didn't realise the importance and values** of their work to the clients (elderly people/patients) and their families.

The design team then made a comparison based on the information acquired: complete analysis of the organization, the mapping of the competitors and best practices and all the information obtained while visiting the local structures. As a result, the research team had designed **a new strategy to engaging all employees, care workers and local structure managers, in creating a collaborative service development process in the social cooperative,** through conducting a small pilot project as a way to test and get feedback immediately. Inside the pilot testing, a participatory workshop was planned to test the tools, process and the strategy. Both of the retirement home and the kindergarten have been involved in this activity.

To stimulate and leverage the collaboration and involvement of all the staffs, the research team has developed the tools based on the idea of "gamification". The metaphor for the storytelling of the whole experience was taken from "postal exchange" and "pen friends". The activity has been designed in two main steps: **a preliminary preparation** and **a co-design workshop**. The preliminary preparation began fifteen days before the workshop, and the design team had distributed a package of materials to all possible participants from the two structures. Each package was composed by an envelope for each staff (care worker and managers in local structures), including an invitation letter to the workshop, a letter from the team as a pen friend of them and an empty postcard that, voluntarily, they could fill following our instructions.

Figure 5.5 | Toolkits for pre-workshop phase (designed by author).

The design team asked all possible participants to fill the postcard with a memory that changed their professional life. The memories might seem normal, but actually, they were unique and powerful. The memories could be: a gesture towards colleagues and/or the guests; a moment that made possible a rediscovery of the importance of work. The postcard could be filled in any forms (picture, drawing, objective or link of the video, etc.). Meanwhile, a postal box was positioned inside both structures to collect filled letters until the date of the workshop. The materials collected during the pre-workshop phase found their usage during the participatory workshop.

Fifteen days after the delivery of toolkit, the workshop was undertaken on one Saturday morning with around 30 staffs of both structures and 15 volunteers. All the participants

were divided into three teams identified by colours after check-in. To start, the design team made an introduction to explained the aims and basic rules of the game for motivating them to win and to engage deeply. And to guarantee the process, in each group, there was a designer acting as a component.

The first activity of the workshop was designed to stimulate to "break the ice" between people by physical movements. A box with the filled postcards was disposed in the centre of the room, and each team had to divide their members into three different roles: the runners with the task of collecting postcards under specific rules; the readers with the task of communicating the contents of the collected postcard; and the judges with the task of deciding the better memories from their perspectives. This phase had the duration of 15 minutes. 2 best postcards were selected by each group. At the end of the first phase, the participant who wrote the six best postcards shared their own memories to all. Then all the people voted for "the best of best" by raising hands. During the first phase, the design team noticed a high emotional involvement with the memories in postcards by all the staffs, and a good teamwork was essential to win.

The next phase was structured as a creative session, in which each team needed to "design" an activity (new experience/event) for Universiis local structures. The designers and the managers inside each group could not lead but facilitate the care workers during the creation process. The teams had to describe their project in detail by filling a template letter. This template was acting not only as the communicative tool for presenting their ideas, but also, more importantly, as the tool to develop their ideas based on a design thinking approach. This phase had a limited time of 25 minutes, which consisted 10 minutes for brainstorming on generating different ideas; 15 minutes for completing 2 forms based on 2 best ones. Afterwards, 2 best experiences, from each team, were

presented during a pitch session in front of all participants, who then voted for the "best of best" concept by sticking a "Universiis postal stamp" provided by the design team. All the projects developed during creative session had an unexpectedly high level of innovation and feasibility.

Figure 5.6 | Creative session during the co-design workshop (photo taken by Cilab)

The winning idea was an activity designed to create a communication link between the retirement home and the kindergarten by organising a series of theatre performances, in which the kids and the elderly were the superheroes. And the kids and elderly were in charge of designing superhero costume for each other. The "best of best" experience (winning idea) has been sent to the future post-box of Universiis and will be probably developed with the local structure. Meanwhile, all the team members received a "Universiis" creative badge that they can hang to their white coat during working time.

After the pilot project, based on the participants' (operators and managers) feedbacks and the observation during the pilot project, a **complete toolkit** (figure 5.7) has been created as the guideline to conduct similar co-design workshops in other local structures with different participants.
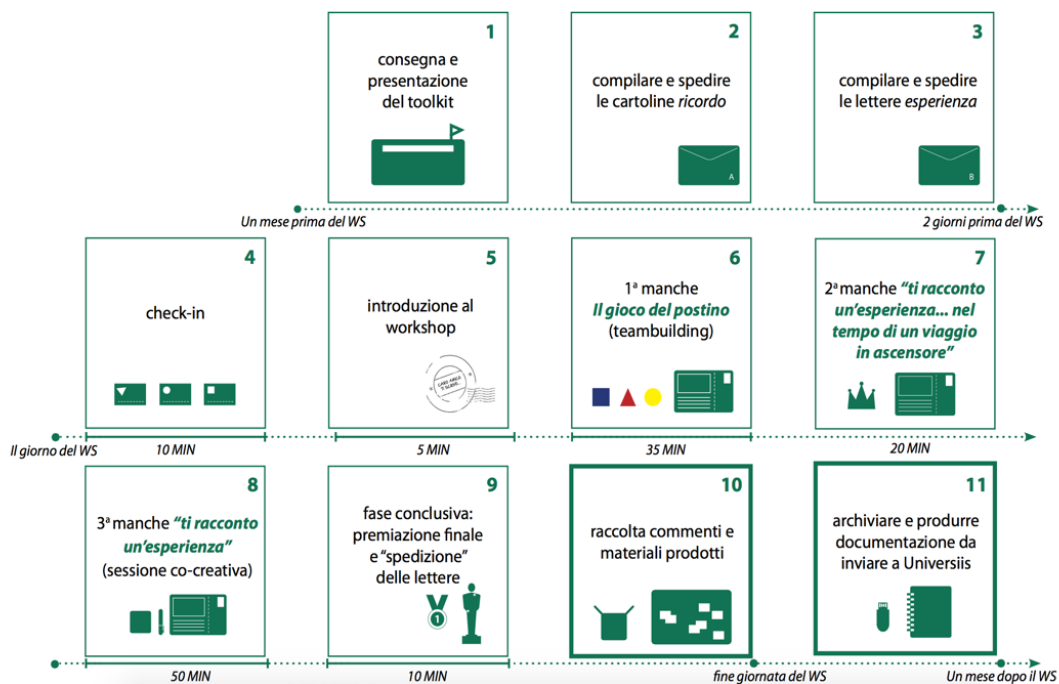
Figure 5.7 | Co-design workshop toolkit: CATS (designed by author, supported by Cilab)

Considering also the post-design phase, the design team has also proposed the strategy (figure 5.8) for the following two more years. And our design team will still support the co-design activities in other structures as well; at the same time, we start to train internal facilitators/mentors, who will be able to play the same role as us in the future. And this training and transformation will enable Universiis to be more independent and powerful.
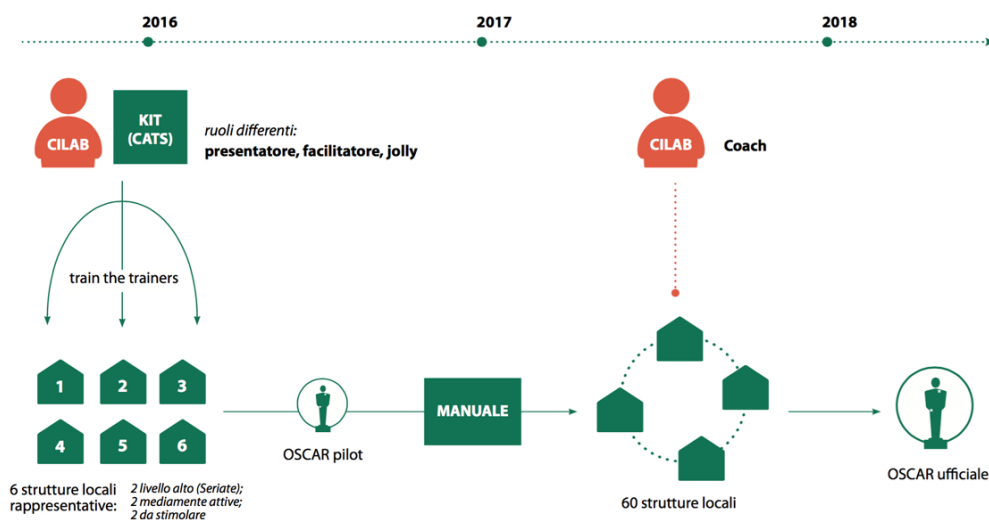
Figure 5.8 | Design strategy for future steps in Universiis project (elaborated by author)

5.1.4 Valuing the Design Intervention

The main goal is to use a model to identify the changes generated by strategic design interventions at different organisational levels of the social cooperative. The evaluation not only aims at analysing the final results but also illustrating the design process.
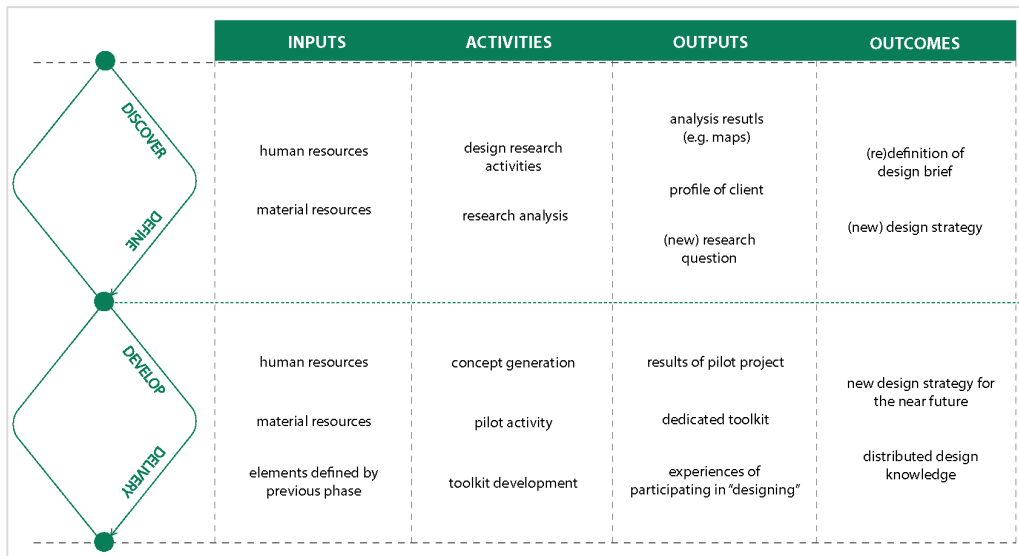
Figure 5.9 | Valuing the organisational design activities in Universiis project (elaborated by author)

Outputs:

• **Research tools** and generated research **results**: all the research tools are designed by the authors for this particular project, including user analysis, benchmarking in third sector (competitor analysis template and positioning map; best-practice analysis template and position map), profile analysis template and scenario building axis. These results have shown: the advantages and disadvantaged of Universiis (at both local and national levels) and social-technic trends for innovation in the third sector.

• **Problem redefinition**: one of the most important outputs of the first phase is the redefinition of "problems" and the "design brief". Based on the research activities and results, authors have realised there is a gap between the Universiis' real problem and the problem that managers at headquarter had considered. The problem is not a lack of innovation and high-quality services, oppositely, the feedbacks from the end-users

and the families are relatively positive; instead, the process of creating and developing these services was not well organised, and few care workers were motivated to participate and contribute to this process. Lots of them, of course, are doing the work **without motivation and enthusiasm**. At the same, there is **a lack of communication channels** among all local facilities and between the locals and the central. The managers at headquarter rarely know and updated with the impressive services developed at local facilities.

- Dedicated toolkit: the toolkit has been tested during the pilot project and it's modified with authors' reflections and participants' feedbacks. This toolkit will guide managers at local facilities to organise creative events and idea-selection step by step more independently. At the same time, it acts also a method to transform the results of events at different facilities into an easy-to-communicate form for archiving and sharing. It's contributing to establishing a digital database of Universiis' projects and services.

- Selected best projects and new ideas of services generated during the pilot project by using the dedicated toolkit.

- Experiences of participating in "designing" and the acknowledge of design thinking. The idea of design thinking and co-design have been spread inside Universiis through different types of interactions and activities, from care workers at local facilities to the managers in headquarter office.

Outcomes:

- **New design focus**: authors have moved the design focus from creating new services to developing a new approach to enable them to care workers to **engage** in services development process **actively** and motivate them to respect their role in Universiis. At the same time, authors have also planned to use this approach to generate an

accessible and **interactive communication channel** to make the Universiis more connected at all levels.

- **Distributed design knowledge** (Manzini, 2015) will definitely have impacts on the working attitude and motivation of staffs at different levels of Universiis in their daily life in the future. The quality of service offerings will also be improved as the indirect results, which will, eventually, benefit the target communities – the final users.

- After analysing the feedbacks from the pilot project, the design strategy for the following three years has been created and confirmed by the managers at headquarter of Universiis. And this new design strategy will focus on two main tasks. On the one hand, more co-design projects will be conducted at different local facilities. On the other hand, a training programme will start soon for building a group of creative staffs in Universiis, and in the future, this group will act as a facilitator, the same role of authors in the pilot project, to leverage continuous co-design activities and to embed design thinking to the DNA of Universiis.

5.1.5 Implications for Organisational Development and Innovation

From the outputs and outcomes of the design interventions, I have summarised the organisational changes made in this research projects in the following categories:

- It's useful to adopt a design-led approach to understand organisational problems. During the research phase, different design research methods have shown the advantages to identify and visualise problems and opportunities. More importantly, integrating different research methods in the right way is the "key" to "interpret" the situations and phenomena. The design research tools have presented the "real" problem of Universiis, which is quite different from what they were thinking before.

- Service development process has acted effectively as designing for organisational change. The research project started with a goal to improve the quality of welfare service system and its communication strategy. However, through the design-led process of intervention, a package of the situated tool will be generated as the final results for the social cooperative's organisational development, which certainly will lead its own capability to improve its quality of services for its vulnerable groups. Therefore, it pointed that the service design process could be the media, a platform or a catalyst to pushing "design" to the higher organisational level. And this elevation will definitely provide more spaces and possibilities for embedding design culture in third sector organisations.

- The new structure will also contribute to the communication between local and central structures and among diverse local structures. There will be less pressure on local managers to work on new ideas of service. Instead, care workers might take more responsibilities in working together with them. Therefore, the innovation on the process and organisational behaviour will eventually benefit to the organisational artefacts, offering and its clients/final users.

- Transforming design *for* and *with* organisation to design **"by"** organisation in the near future. The design intervention has engaged and facilitated the social cooperative to experience a design development process with its employees and clients. As presented before, in the future, they will be enabled by specific design toolkits to conduct their service innovation activities more independently.

5.2 Creative Workshop for New Brand Identity – Fondazione Cariplo

5.2.1 Project Introduction

Established in December of 1991, Fondazione Cariplo, one of the world's main philanthropic organisations, has been pursuing and fulfilling its missions in the Lombardia region of Italy. It doesn't aim at replacing or doing better than private businesses or public institutions, instead, Fondazione Cariplo has defined itself in being a resources for supporting social and cultural organisations in better serving their communities[11]. Fodazione Cariplo was separated through a reorganization process of the Savings Bank of the Lombard Provinces - **Cassa di Risparmio delle Provincie Lombarde** to focus primarily and only on philanthropic activities. And they describe themselves as the entity that **anticipates emerging needs** or to selects deep-seated yet still unmet needs and to find new solutions to respond effectively and economically.

In the year 2016, the management team of Fondazione Cariplo has the idea of **updating and innovating the brand image and identity** and to find the right way to **communicate its values** to its audients/clients and also to the society. The communication group of Fondazione Cariplo has started to contact Cilab with the initial demand and asked us to facilitate and assist them in finding the right way to clearly shape the "design brief" to the public, especially the creative people, to take part in the process.

After several conversations with the main team of Fondazione Cariplo, the objectives of this collaboration have been summaries as: through brainstorming and collecting useful inputs/information, a well-defined brief on how to launch a "call for idea" to build the brand images/identity and a new philanthropic campaign for Fondazione Cariplo. This brief will be in line with the culture, strategy and business model of Fondazione Cariplo and it will also represent its 25-year history. And in the collaboration, Cilab will in charge

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[11] http://www.fondazionecariplo.it/en/the-foundation/mission/

of setting, directing and guiding the whole process in generating the brief, the activities include:

- Identify the methodology for this collaboration

- Identify the useful inputs (resources and participants) of the creative activity

- Criticise and support the decision-making and choices

- Propose the new strategic communication plan

5.2.2 Design Research Methodology

Action research was the main method that we have used in carrying on this research project. This study follows didn't follow the conventional action research approach of observing, planning, acting, and reflecting (Zuber-Skerritt, 2009) neither use the traditional interviews or focus group methods on leading the participants in answering questions or presenting their ideas or opinions orally. Instead, we proposed to engage them in creative workshops, in which they will be facilitated to "design" and "visualise" their minds and thoughts. We are working together with all of them. In the whole design research process, there were two collaborative workshops with different aims and focus. And the second workshop was planned based on the results of the first workshop. There were 30 participants in total engaged in the workshops, and 80 percent of the participants have contributed to both of the workshops, while the other 20 percent participated only one.

The data was collected from both of the workshops. The data includes the "design" results that participants produced during the workshops; the invisible data we got from observation during the workshops; and conversations we had with participants during the coffee breaks and several meetings we organised with managers of Fondazione Cariplo.

5.3.3 Design Research Process
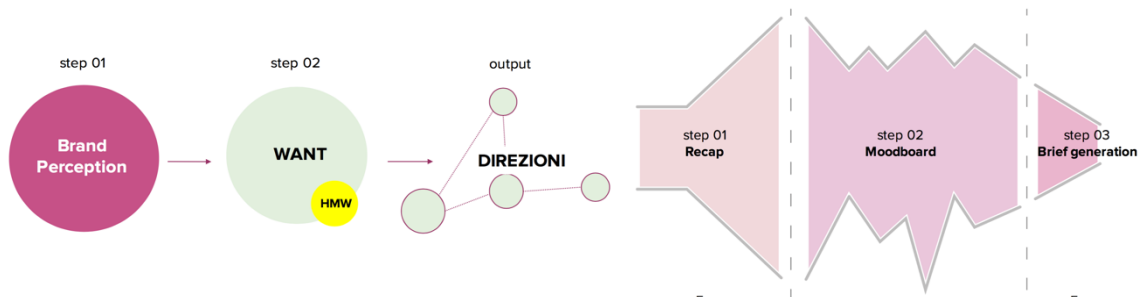
Figure 5.10 | Design research process in Fondazione Cariplo project (elaborated by author)

The project started from building up the framework of workshops and the selection of participants. The essential idea is to use workshops as conversations to obtain the opinions and perspectives of what Fondazione Cariplo means to the cultural and social institutions (the targets) and how to communicate the brand meaning and identity to wider audiences, potential target communities and the public. The strategy is to bring together the internal employees (high level managers and staffs in brand communication team) and external clients - Fondazione Cariplo's target communities, who have collaborated with and have been supported by the fundation. The main questions to answer during the workshops are: 1) what does Fondazione Cariplo mean to the public? Several keywords to describe? 2) what should Fondazione Cariplo do in the future? What is the direction to go?

5.3.3.1 First Creative Workshop

The first step for Cilab to conduct was to select the "right" participants together with Fondazione Cariplo. As we wrote before, we would like to integrate the internal experts and external actors to discuss, negotiate, design and produce together. For the external participants, the idea was to cover diverse research areas and typologies of institutions and enterprises. The people needed to have a lot of experiences in working closely with Fodazione Cariplo - the collaborators or active beneficiaries of the foundation. 11 external actors were selected to involve in the first creative workshop. We also asked them to send

us their "creative bio", which could help us to organised the teams later. For the internal part, we involved the director of Fondazione Cariplo, the top managers of brand communication office and other staffs whose working tasks are relevant to the brand and communication strategy. Finally, 6 internal employees were decided to participate in the first workshop.

The second step was team forming. There were three different type of participants in each team: the internal employees, the external actors and one design facilitator from Cilab team. Four teams were created with 4/5 persons in each. And one leader from Cilab hosted and guided the whole workshop process – inducing, explaining and controlling on general. Every design facilitator needed to foster the co-working process in their teams, and at the same time, they had to observe and take notes of the physical and emotional reactions to the process and research tools.

On the day of the workshop, every team worked together following the steps: 1) creating a team name; 2) finding three key characteristics of brand Fondazione Cariplo by using the brand perception tool; 3) branding storming on the future brand identity – WHAT should Fodazione Cariplo be like in 10 years and what communication strategies should it use?

Data collection and analysis

We have collected all the results produced during the workshop and used the affinity map to categorise and summarise all data/information. And we have generated two main findings:

1) a brand perception map of Fondzione Cariplo.
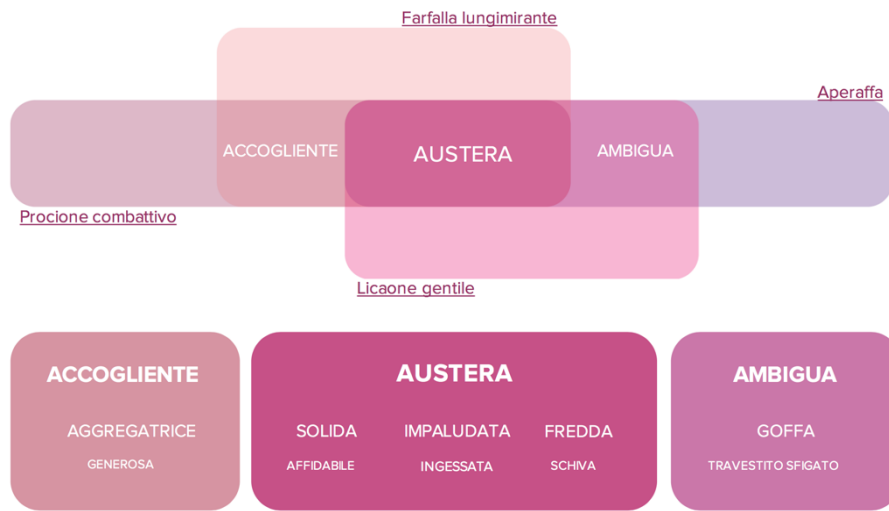
Figure 5.11 | Collaborative brand perception of Fondazione Cariplo (developed by author)

2) six directions for future development
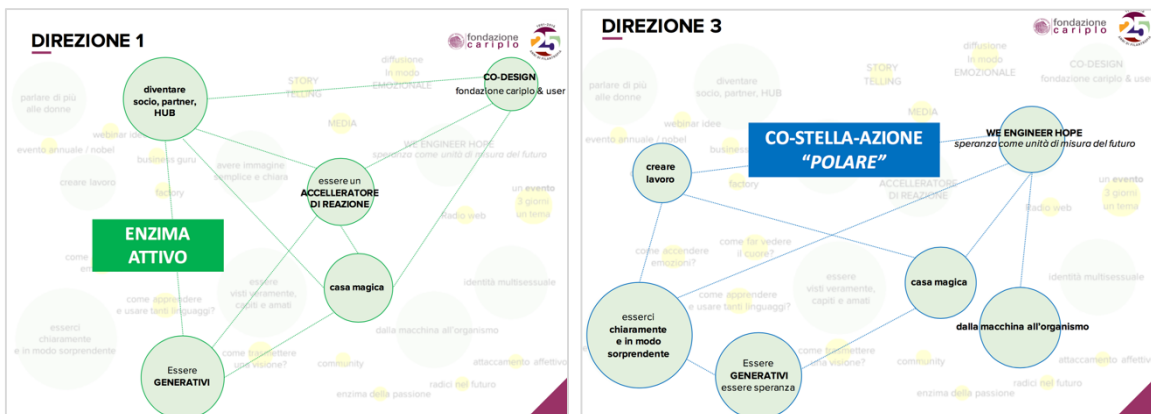
Figure 5.12 | First and third directions for new brand identity (developed by author)

Two weeks after the first creative workshop, a meeting has been held between the organising team of Fondazione Cariplo and Cilab, during which the analysis results and findings have been presented. The FC team has confirmed the impressive results generated during the first workshop, and they also mentioned two questions for future actions: 1) how to make the directions more concrete? 2) how to select from these options?

5.3.3.2 Second Creative Workshop

One week after the first week, a report of results and findings of the first workshop has been sent to all external actors, and we also asked them to give feedbacks from their perspectives before the second workshop. This is also started the preparation phase for the second workshop.

Cilab and organise team of Fondazione Cariplo have reorganised the participants and teams. We have changed 20 percent of external actors and 10 percent of internal employees in order to bring some fresh opinions. There were four teams and the structure of each team was more or less the same as the previous workshop. They have worked in three different sessions in the second creative workshop: 1) recap of previous findings. In this session, all participants were free to give any personal comments, preferences, disagreements on the first reports. And every team will select or add one particular direction which they would like to work on. 2) moodboard creation. Every team was required to make one moodboard with the physical materials to represent the selected directions (and the key words) visually (pictures and drawings). All the four teams presented to each other their moodboards. 3) Brief generation by using a tool designed by Cilab.

Data collection and analysis

We have collected results from both workshops: the six directions for future development; the moodboards and four briefs. We broke them into small pieces of data and reorganised the pieces into several categories to build a new profile/image of Fondazione Cariplo. This interpretation process has been done interactively with the Fondazione Cariplo's core team. Finally, three main categories have been formulated: the essence, the relations and

the appearance. And we illustrated each category based on the "why-how-what" methods (Sinek, 2009).
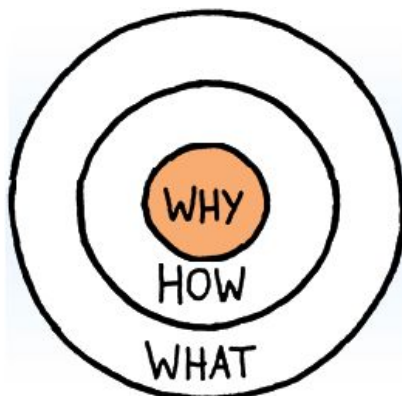
Figure 5.13 | Why- How-What golden circle (Sinek, 2009)

After the second workshop, Cilab team and Fodazione Cariplo main team had several meetings to finalise the detailed strategy to launch the "call for idea". Now we are still in this phase, and the final strategy hasn't been confirmed. At the same time, Fondazione Cariplo also started to collaborate with an external brand design studio to assist them in shaping and designing the new brand identity.

5.2.4 Reflections and Lessons Learnt

The reflections made here related to the organisational changes made by design interventions in the TSO (specifically referring to foundation in this project). The changes could be summarised as:

- A new model of open innovation. This research project has built an "outside-in" approach to create the brand identity for a foundation. This outside-in approach means not only involving external design professionals to "design" particular artefact for or with the TSOs, more significantly, engaging external actors and stakeholders in discussing essential organisational issues (brands identity and meanings) through design-led approach. The change is a big step to apply design thinking and design

methods in reshaping the organisational behaviour for innovation, which goes beyond development innovation of product or service. This innovation model also suggests a promising transformation of operating organisational practice, which is mainly conducted by internal leaders and managers, now this activity is likely to be shared with external actors and stakeholders. This transformation is fostered and supported by design thinking and situated design tools.

- Transforming from visible changes to invisible changes. The initial objective to adopt design and design thinking in TSO (Fondazione Cariplo in this case) is to produce the new idea of brand identity, and through conversations and practical participatory experiences, the TSO has realised the recognised the "additional" values that design thinking and design methods could bring to them – new way of open innovation and new way of managing the organisation. The design intervention in this projects didn't end with a conventional design artefact but new model of operation and new spaces for future organisational development: Cilab will continue to collaborate with Fondazione Cariplo for designing new working experiences and physical spaces to foster and provoke innovation in the organisation.

- The economic aspect. The foundation generally has strong economic supports from the shareholders and investors. However, the economic aspect should not be left behind. The design strategy to generate new brand identity proposed by Cilab has better organised and used the existing resources and transferred them into promising results. This is the economic advantage of this design research.

5.3 Designing for New Social Enterprise - Merits

5.3.1 Background

Merits was a social-mission driven start-up established in 2016 in Milan, which aims at providing a service platform to build a global community involving individuals, firms, third sector organisations, cultural institutions and all the organisations that take care of human beings and nature. Through the creation of a digital currency, called Merit-Coin, the start-up amplifies the impact of donations by rewarding donors and recipients. Merits operates as a catalyst to facilitate 1) The flow of donations from Donors (Business Community & Individuals) to Caring Organizations; 2) The flow of information from Caring Organizations to Donors (accountability).

Merits started to contacted Cilab with a general idea of supporting the design of services and user interfaces, and this request came from their understanding of design and designers. As a start-up, Merits is open to search and explore diverse approaches to develop the idea and the enterprise. And for me, it's a promising case which could allow me to suggest a design-led approach to transfer their initial idea to concrete service touch points and to contribute to how they form and manage the social-mission driven enterprise.

5.3.2 Research Methodology and Process

This project is a practice-based design research, I am always reflecting on the interactions with the team and changing the design strategy while collaborating with Merits. I have been working with the two founders of Merits since November 2016, and the design research activities done by now could be categorised as:

- I have used my design professional, as a service designer, to assist them to develop and optimise the initial idea. And I have also organised some small workshops in

which I introduced them the basis of design thinking, and they have practised with specific design tools in small exercises. Thanks to the workshops and the core knowledge of design thinking, they started to understand the importance to think about their service from the customers'/users' perspectives. So while we were developing the service, we have done a series interviews with potential target people including both the donors and managers of important third sector organisations in Milan. From these interviews, we have collected precious data which were extremely useful to design the customer journey and interactions.

- While I am developing the service and its touch points, I have mentioned the importance of rethinking about the meanings, brand identity and visual language of Merits. These activities have been conducted slowly. Since they have already had a logo and basic website, they still haven't realised the importance of "updating" the visual identity together with the service contents. Meanwhile, I have started to create simple "visual principles" for the communication materials, like Fonts, Layout of presentations and so on.

Figure 5.14 | Service blueprint developed visually with founders of Merits (illustrated by author)

- Applying design thinking to building business model and bringing more economic supports. After three months of collaboration, I have gained more trust from the founders, and they also got used to adopt a design thinking perspective to face some

issues. I started to be involved in discussing the business model and possible ways to attract investors. We have made brainstorming together with other collaborators and external stakeholders who were interested in the project. On the other side, I have contributed in visualising and designing some communication evidence for specific occasions and events to communicate the idea, the service and the social mission to potential partners, stakeholders, investors and the public.

- Broaden the role of design thinking into formulating the enterprise. As mentioned in the background information, the client of this design project is a social-mission driven start-up, which is on the way to build up the organisational culture, values, behaviours, operational models, offering/artefacts, relationships and so on. As a design researcher, I have been pushing and distributing design thinking and design methods in any activity I have participated and will be involved.

Figure 5.15 | collaborative working sessions with diverse actors of Merits (photo taken by author)

5.3.3 Reflections and Future Steps

The changes made by design interventions on Merits could be summarised as:

- A clear and complete service system has been developed and visualised with specific service design methods and tools. This has demonstrated the contributions of design thinking on the offerings and artefacts of the social-mission driven start-up. In this service, there are different types and roles of clients (donors and other third sector organisations). All the typologies of clients and their service experiences have been clearly defined and illustrated. This will help the start-up to grow its network in the ecosystem.

- During the collaboration, a more detailed strategy for future development has been crafted, which will include conducting implementation (pilot project) in a specific zone in Milan. This will guarantee the success of the service idea and its economic flow.

- I have facilitated Merits to organise three collaborative workshops with external partners and potential investors in shaping general service idea and also in adapting the general one to fit specific partners for specific purpose. And thanks to these workshops, Merits have successfully created partnerships with two important Third Sector Organisations (one social cooperative and one national foundation) in Milan. They will start to work together with Merits to invest and support its future activities. The new relationships will bring awareness of Merits in the social economy area and the public.

- The design interventions and collaborations I have done so far have established close relationship with the two founders of Merits. The trust built between us allows me to participate in more organisational management activities and some decision making sessions. In this way, design thinking and design method will be positioned in the core of the social-mission driven start-up.

This is an ongoing design project, and I will continue to collaborate with them. With the two new partners, the implementation/pilot project will soon be carried on in Milan. I will definitely devote to facilitating the process, and at the same time, I will observe and collect all the data from the pilot project for the further development of the service and the enterprise.

FINDINGS AND IMPLICATIONS

Chapter 6 |

Developing Design Capabilities by Establishing Organisational Encounters

This practice-based design research has strategically applied a design-driven approach in leverage organisational changes in TSOs for different development objectives. In this chapter, I will firstly discuss the finding from previous research activities through analysing empirical research data. The five characteristics of designerly organisational design approach will be introduced. Afterwards, based on the action research activities, both the case study and participatory design projects, three different type of organisational encounters are elaborated. TSOs could make use of these organisational encounters as platform to involve internal and external actors in solving organisational problems collaboratively. At the end of this chapter, SWOT matrix is used to self-evaluate this research. And several barriers to adopt the design-driven organisational design approach have been presented.

6.1 Discussion of Research Findings

6.1.1 Characteristics of Designerly Organisational Design Approach in TSOs

The designerly organisational design activities could bring diverse possibilities to transform third sector organisations at different levels – *operational* level; *tactical* level; *strategic* level (Best, 2015). Design thinking and design methods could **enable third sector organisations (TSOs) to build their capabilities towards *innovation* and *sustainability* through challenging the existing organisational assumptions, paradigms and offerings (artefacts[1]).** Challenges at different levels results in different forms, which act as the ***organisational encounters*** to engage TSOs' internal and external actors in a collaboration. Sennett (2012) has defined cooperation by saying: "collaboration takes place when people *encounter* each other and exchange something in order to received a benefits; in other words, they create a shared value." And this definition is the same as how Meroni and Sangiorgi (2011) have defined service encounter: an interaction between people (things and places) targeted to produce value. Considering from organisational design perspective, I have seen diverse TSOs, from my empirical research activities, that have opened themselves as an "encounter" to make actors to involve employees, target communities and its relevant external stakeholders to create shared values collaboratively.

In the organisational encounters, designerly organisational design approach, supported by design thinking and design methods, has taken essential roles in fostering changes and transformations through communicating and connecting different actors. And from my empirical research activities, I have identified the following characteristics of this organisational design approach:

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[1] The term artefacts refer to any types of offerings that third sector organisations provide to their target communities. it doesn't limit to physical products or tangible offerings.

1) **Enabling**: a capability building and learning-by-doing process

Design Council (2015) has summarised the design thinking's contributions in public sector at different levels as "design for discrete problems; design as capability; design for policy". During my empirical actions in this research, I have noticed that the organisational design approach is primarily aiming at building TSOs' capabilities towards serving their targets better (the social aspect) and maintaining competitive and innovative in the network (business aspect). The organisational design activities don't focus on generating concrete design objects but on proposing occasions and opportunities in which TSOs could understand themselves better, experience new way to manage resources and processes, and gain knowledge by practically doing and making.

In Universiis project, we didn't come up with any conventional design objects, not even a well-defined service system, however, we have managed to formulate a "Universiis service design" system, which innovatively involves different actors in actively "designing" initial service ideas. This design result isn't considered at improving the service quality to the elderly people immediately, but it provides a new model to innovate the process and will enable Universiis to generate diverse new service systems with good quality independently. During the project presentation meeting, Elena, the manager from Universiis headquarter, has said:

> "I haven't imaged the design results innovate our services to the elderly in this way to. The experiences you have presented provide us a new perspective to think about our traditional working process."

Her comment has also shown that the results of this organisational design approach is impacting the organisation invisibly. In Tsara, La República del Tejido, K-lab cases, designers have established new TSOs as design solutions to enable the target communities to gain basic skills and knowledge, and in this way, they could improve their living conditions and qualities. Therefore, we could see that the design outcomes become part of the organisational operation process and behavioural models. The design results enable TSOs to build capabilities through learning and using the design thinking knowledge and tools. The knowledge and tools will have long-term impact on the organisations.

2) **Networked**: building new internal and external relationships

In both case study phase and action research phase, co-creation has presented its significant role in third sector. The organisational design approach has put collaboration in the centre of all the design actions. The **engagement of target communities** in actively participating a design-led co-creation process has been identified by many scholars. Normann & Ramirez (1994) stated that "co-production is the term we use to describe the 'reciprocal' relationships between actors...". And Manzini (2015) has also written that "people can (also) be considered as an asset". These statements have elaborated a similar idea of considering people, especially the conventional vulnerable/fragile communities, as active contributors/participants in providing and delivering services to others. In this research, I have witness and proved the idea in empirical research phases. Moreover, I have found that these communities could also actively contribute in shaping the TSOs. In the second and third action research projects, the target communities of Fondazione Cariplo and social-oriented start-up Merits have been engaged in building the organisational identity (essential assumption). Moreover, in the development process of Merits, the target communities

also collaborated in formulating its operational model. In both of the cases, the target communities are not conventional "vulnerable" groups, but they are all under-served communities in the society. The active role of target communities in co-creation and co-design activities has support TSOs to gain external perspective in understanding themselves and in collaboratively developing the strategies for future development.

Besides, not only the target communities, but also other **external stakeholders** are increasingly becoming important for TSOs. Since problems and social relations are complicated and interdependent, TSOs couldn't isolate themselves from their social context and the stakeholders around. From my research experience, the TSOs identify and brand themselves through the pointe of view of their targets and stakeholders. Unlike business companies, the priority of fulfilling social missions and obtain social recognition made TSOs' to put efforts in cultivating their external communities and ecosystem around them. In Fondazione Cariplo project, the external stakeholders have also been involved in assisting the foundation to identify its brand, values and communication strategies. The organisational design approach has guaranteed the contextualisation of TSOs in their ecosystems. And close relationship with stakeholders will not only help them to service the target communities better, but also guide TSOs in developing their futures.

On the other hand, TSOs has seen the importance to created new internal relationships among different employees. The traditional bureaucratic structures have decreased the motivation of work and the opportunities to innovate. Like in the Universiis project, care workers are less motivated in their daily job and were devoting their passions to the social cooperative less and less. The organisational design approach in the research has opened up new spaces alongside the daily working model.

Moreover, in the co-design process, they have worked equally with the managers and felt their importance to organisation. Thanks to this experiences, a new relationship between different administrative roles has transformed the social cooperative to be flat and equal. And all of them were at the same basic level to learn design thinking and to use relevant tools. Even though this relationship was still weak and emergent, it has strong potential to enable care workers and managers to work more closely and collaboratively. This is how designerly organisational design approach has generate new internal relationships towards innovative and democratic performances.

3) **Explorative**: leveraging innovation in third sector organisation (TSO)

Gopalakrishnan & Damanpour (1997) have identifies three dimension of innovation: its development, adoption and diffusion process; its context and its typology. Knowledge has been playing a dominant role in fostering innovation in generating and implementing new ideas and offerings (Swan, *et al.*, 1999; Ahuja, 2000). Design thinking and design methods have presented the capability to generate knowledge and transform it into innovation at different levels of TSOs in both case study and action research. And in this research, the designerly organisational design approach has contributed mainly to the explorative capability in searching for new opportunities to innovate.

As discussed in the first property, the organisational design approach has generated unconventional outcomes that aiming at building capabilities. Our design actions have led TSOs to applying design thinking and design methods to explore different ways to make innovation happen. In Universiis project, we have gone beyond the existing organisational structures to figure out an alternative system to create new service ideas; in Fondazione Cariplo project, we have formed up integrated groups to explore a

promising brand identity of the Foundation collaboratively, instead of following traditional internal focus-groups and interviews; in Merits project, we have also developed collaborative working process to implementing and testing initial service ideas in real contexts and with partners in the market; in Tsara, La República del Tejido, PET lamp and K-lab cases, designers have created new TSOs to keep opportunities open for in-depth innovation and long-term impacts.

These explorative design activities challenge existing organisational bodies and bring innovation on TSOs' assumptions, operational models or offerings to the targets. However, this research doesn't deny the importance of exploitation in organisational management and development. Exploitation and exploration have to be recombined towards value creation (Eisenhardt and Martin 2000, O'Reilly and Tushman 2008, Teece 2007). The exploitative aspect of design thinking could also be seen in these projects, especially in implementation and pilot phases.

4) **Suggestive**: applying design-oriented paradigm to well-defined operation model

Martin (2009) has identified the power of project-based work/structure and team work. An alternative working model suggested by designerly organisational design approach could be found in all the three action research projects. Proposing this alternative model doesn't intend to replace the existing one but to integrate an additional way fulfil specific organisational objectives. Therefore, there are two organisational models interactively contribute to each other. One exists for efficiency while the other for effective.

In Universiis project, as I have introduced in Chapter 5, the design intervention has suggested new collaboration paradigm in generating new service ideas. But this

approach will not be able to conducted without the support of existing administrative model. Especially in the pilot project, there was preparation phase before the co-design workshop, the administrative teams in both local structure and in headquarter have assisted the design team in distributing and communicating the design idea and requests on participants. Without the supports, the design intervention couldn't be organised and conducted very well and the managers have acted as bridge between design team and other participants (care workers, volunteers and family members of targets). The same supports have also been provided by Fondazione Cariplo team. All the members in the core team have communicated between design team and internal employees, target communities and relevant stakeholders. And in local development cases analysed in chapter 4, there was big gap between the local communities in less-developed areas and the designers. The administrative structures at local level have helped designer to better understand the needs of local communities and their living contexts. At the same time, they have also supported the decision making moments for prototype and implementation. They are the people who know what works and what doesn't.

The permanent tasks and jobs and the operational model that every organisation use to manage themselves have guaranteed the success of well defined tasks and work. Meanwhile, the design interventions have suggested chances to seek for new possibilities to innovate. The designerly organisational design approach is suggesting to apply the alternative innovation model to modifying and shifting existing TSOs operational structures.

5) **Transformative**: leveraging design impacts through reframing design questions

The strategic role of design and design thinking in problem-setting (Zurlo, 1999; Zurlo 2012b) and problem definition (Design Council, 2005; Burns. et al. 2006) have been recognised to make the right questions to guide the design directions and processes. The same feature has also been presented in organisational design practices, moreover, the reframe of design question has also contributed in cultivating designerly approach more in-depth in TSOs. Defining the proper questions has shown the possibility to use design thinking from basic level to the core and the whole of TSOs.

In the interviews with Giulio (designer in Tsara case) and Kristie (design in La República del Tejido case), both of them have mentioned the importance of redefining the questions and design brief through designers' perspective. Giulio changed the design brief from designing "for" local communities to designing "with" them; Kristie shifted the initial idea to design clothes with basic fibre to training and educating local communities in making high quality fibre before doing professional textile design. Both of the redefinition of design direction have resulted in bringing long-term impacts on the local communities and the development. And the generation of new social enterprises has created space to involve design thinking in shaping and building the organisations.

In the Universiis project, thanks to the reframe of design direction and strategy, the design intervention has moved from designing new service by professional design teams to establishing co-design process to facilitate employees to design new services collaboratively. And the design outcomes have transformed the social cooperative's organisational working paradigm. In Fondazione Cariplo project, we have helped the

foundation to reform the research question from designing their new brand identity to creating creative workshops with internal and external actors in figuring out new ideas on the identity. This process has brought external actors in organisational decision-making moments and in shaping foundation's essential assumption. Finally, in Merits project, we have built co-creation approach in which external stakeholder could participating in developing the start-up's service ideas and how it could be elaborated locally. Therefore, the transformative role of reframing questions and design strategies have reminded us that there's no clearly identified level of design adoption in TSO, and it's possible that designerly organisational design could elevate a higher levels of interventions.

Project name \ Characteristics	Enabling	Networked	Explorative	Suggestive	Transformative
Tsara	X		X		X
Dignity Design Collection	X	X		X	
La República del Tejido	X			X	X
K-LAB	X		X	X	X
SmartLife	X			X	X
PET-Lamp	X	X			X
People of the Sun	X	X	X		X
Dialogue Social Enterprise	X	X	X	X	X
Universiis project	X		X	X	X
Fondazione Cariplo project	X		X	X	X
Merits project		X	X	X	

Table 6.1 | Characteristics of designerly organisational design approach summarised from 8 cases and 3 participatory design projects (illustrated by author)

The five features - *enabling*, *networked*, *explorative*, *suggestive* and *transformative* - elaborated above have presented a general image of the designerly organisational design approach in third sector organisations (TSOs) that I have experimented in this research. This approach has shown that this organisational design approach is an effective and useful way to think and to make. It also contributes to fulfil the *strategic intent* (Hamel & Prahalad, 1989), which acts as the glue to translate the motivating force of a grand

vision into principles that can be used to make choices on a more discrete level. This designerly organisational design outcomes include both intangible organisational transformation and visible design artefacts. The integration of visible and invisible types of design outcomes supports the success of adopting design thinking and design methods at strategic levels of TSOs for future development and to transform the strategic thinking to practical plans on process and expected results: from the *cloud* (what to think) to the *ground* (where, what, how to do).

6.1.2 Organisational Encounter: Platform to Develop TSOs' Design Capabilities

The designerly organisational design approach could lead to diverse design outcomes according to the objectives and purposes. As introduced before, these design outcomes are the mix of conventional design artefacts and intangible organisational changes. Three types of organisational changes in third sector organisations (TSOs) could be summarised as different organisational encounters to explore opportunities to develop social and economic performances and to build the organisational design capabilities (figure 6.1).
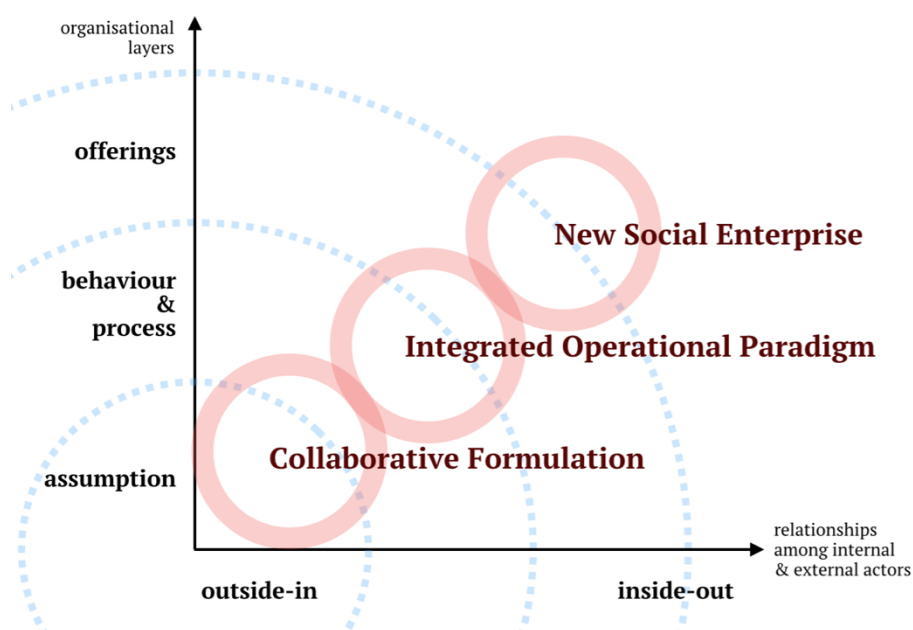
Figure 6.1 | Three organisational encounters (illustrated by author)

All the three types of design outcomes will be elaborated in detail. The summary of each type will be presented on the basis of main factors that promote design process (Jones, 1981; Archer, 1984; Cross, 1989; Cross, Christiaans & Dorst 1996; Zurlo & Cautela, 2014) and the properties of the TSOs that suitable for conducting the designerly organisational design activities:

- The main properties and contexts of TSO that might adopt this approach;

- The design orientation, especially focusing on analysing from organisational development perspective;

- Time issues: analysing design activities in pre-design/designing/post-design phases, and paying more attention on the post-design phase;

- Collaborative design paradigms[2]: who are the different participants in the co-design process, and what roles have they played in the co-design paradigms?

- Trade-off between economic and social resources and performances, furthermore, what's the link with the design approach.

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[2] The design paradigm model developed in case study phase (details could be found in Chapter 4)

1) Establishing Social Enterprises as new TSO offerings
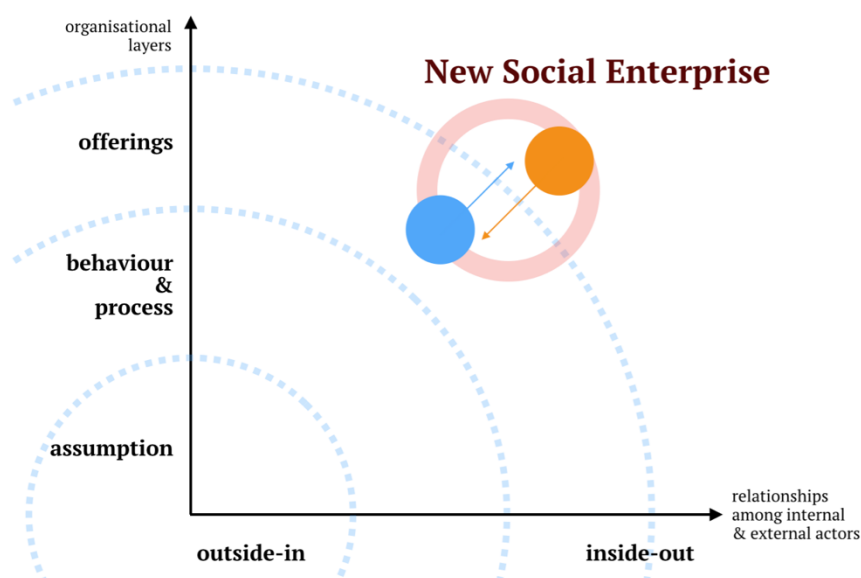
Figure 6.2 | First type of organisational encounter – new social enterprise (illustrated by author)

The contributions of design and design thinking for improving the TSOs' artefacts (including both physical and intangible offerings) could be seen in numerous social design cases and practices. And these contributions are considered to impact the peripheral aspect of an organisation (Rousseau, 1995). However, the designerly organisational design approach proposes new social enterprise as an organisational encounter, gathering the original TSO, target community and designers to work together from formulating and developing a new organisation from zero. And in this new social enterprise, the design thinking and design methods are definitely used as the essential way to generate organisation's assumption, values, behaviour and the offerings to new clients/users.

The TSOs suitable to be categorised in this group are mainly international non-profit or non-governmental organisations. They generally operate in different geographic and cultural contexts all over the world. It's difficult to apply designerly

organisational designer approach directly in the core of these NPO or NGO to challenge the general organisational operation models and structures, therefore, it's an opportunity to develop new social enterprise which are local and contextualised for applying design thinking from the beginning of establish an organisation.

In this category, the organisational design activities primarily intend to transfer basic knowledge and skills through offered service systems. Educating and training target communities through co-design and co-creation processes is the core activity. Design thinking and design method are used to design easy-to-use tools in the proper visual "language" to support the education and training process; at the same time, they are also used in formulate target-centred operational models to maintain the social enterprise. The new social enterprise, acting as an encounter, provides spaces to carry on conversations among TSOs, target communities and designers. Designers could propose to design "with" both of the other two actors and to make decisions together on organisational issues. The social enterprise's offering could aim at local market or the international one. The economic revenues from the offerings are used for running and developing the social enterprise and the target communities. Meanwhile, it could also bring social benefits for the target community, like social equality, social engagement and so on. This is more obvious if the social enterprise is local-based.

The assumption in this category is that design paradigms could be transformed from design *with* to design *by*. Both actors in TSOs and the target communities could be enabled to take important roles in managing the new social enterprise. And after certain period of organisational design intervention, they could be independent enough to maintain the service delivery and business management, for sure these activities need to be supported by situated design tools.

2) Building Integrated Operational Paradigm
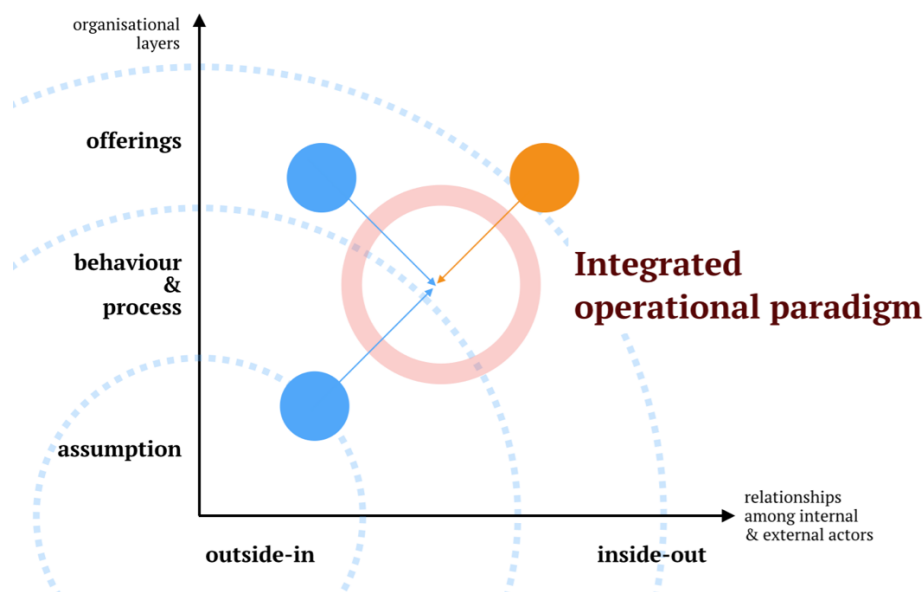
Figure 6.3 | Second type of organisational encounter – integrated operational paradigm
(illustrated by author)

The second category of designerly organisational design outcomes is to establish alternative working process and operational model in TSOs, which innovates existent management structure towards improving the offerings and social and economic performances. Organisational design intervention has proposed a new way to organise resources (human and material resources) towards fulfilling social missions and organisational assumptions. It doesn't question the essential meaning and values of TSOs but to reform a collaborative approach to carry on the practices. The collaborative approach involves new internal and external actors of TSOs in dealing with organisational issues, especially the offerings and artefacts. Most of the actors are not considered as valuable resources in participating innovation activities, however, they could come up with unexpected and useful ideas and opinions that were never considered before. The innovative working model is another type of organisational encounter, in which internal actors act equally regardless their administrative roles and external actors entered the TSOs' internal conversations.

Different types of TSOs could adopt this organisational design approach in innovating their existent management structures. This new working model will benefit TSOs that carry on their activities closely with their target communities and offer experience-based services to them.

This type of design outcomes often is less visible and concrete, instead it's soft, intangible and process-based. The organisational design interventions intend to challenge the dominant management structures and behaviours through distributing design thinking and design methods in communicating the importance of innovation and effectiveness. The design activities provide co-design based experiences to understand and "see" the differences that design thinking could bring to the TSOs compared to their traditional approach.

As mentioned above, collaboration is in the heart of the organisational design approach. The new working model proposed by design interventions provide opportunities for designers to establish new co-creation paradigms. Designers could involve internal and external actors in collaboratively designing "with" them and facilitating them to follow certain steps in creating new solutions. Pilot project and prototypes are extremely essential to establish and communicating the design outcomes. Besides, TSOs often take certain period to understand and accept the changes, therefore, designers have to work closely with TSOs for long-period in order to transform them to conduct this approach independently. In the post-design phase, designers need to consider the continuum of carry on this new working model and approach in the TSOs. Situated tools and strategies to support the future development are often needed.

The alternative co-creation model with internal and external actors will results in high quality ideas and perspectives on solving organisational problems or improving organisational development process and offerings. The reorganise of existent resources and new offerings will also bring more economic benefits from the service receivers, potential stakeholders and donors or public supporters. Certainly, the engagement of diverse actors will lead to build close social relationships in the TSOs' contexts.

3) **Collaboratively Formulating TSO's Purpose/Assumption**
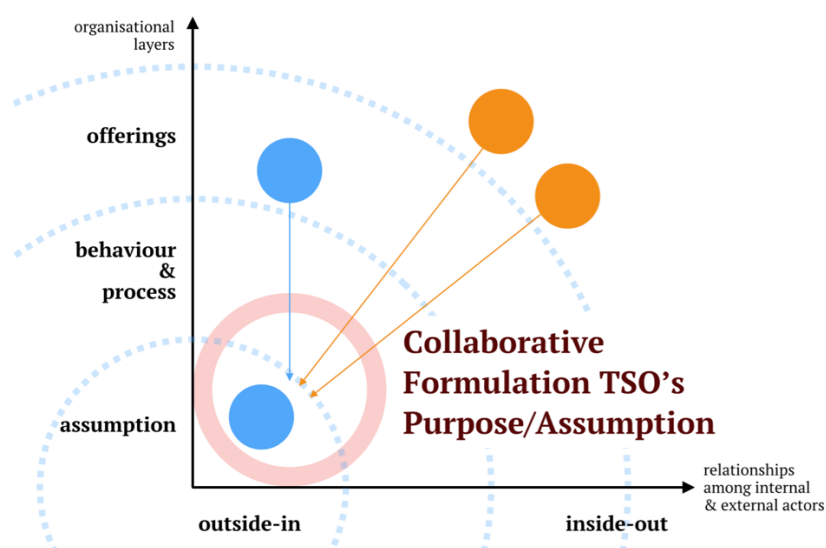
Figure 6.3 | Third type of organisational encounter – collaborative formulating the assumption
(illustrated by author)

Organisational psychologist Edgar Schein proposed four basic organisational elements of the structure: common purpose, coordinated effort, division of labour, and hierarchy of authority. And the common purpose is essential to unify all the employees with the same understanding of organisation. The designerly organisational design approach has broaden the ides of common purpose from a wider perspective. The purpose of TSO is not only a shared vision among all the internal employees, but also a collaboratively defined common vision that is recognised by

the external target communities and relevant stakeholders. External actors have the opportunities to contribute and propose ideas and opinions to impact the TSO's organisational assumption and purpose.

Various TSOs could utilise the designerly organisational design approach to reshape and reform their organisational visions. Buchanan (2004) said that higher level of design actions helps to reform the "service vision" that presumably inspired creation of the agency. This service vision is especially important for TSOs. They care about the external perspectives and opinions on the organisational identity and image. Like business, TSOs has brand values that need to be recognised by their targets, which are not the consumers in mass market but the specific target that TSOs are supporting and assisting. Compare with business companies, TSOs are more target-centred and context-based. For example, the foundations, local social cooperatives and social enterprise will develop their services and businesses relying on the social conditions.

The organisational design focus is put on creating an approach to integrate internal and external perspectives in (re)formulating the organisational visions and assumptions. Unlike the second category, the (re)form processes result in concrete solutions that include primarily the shared organisational visions and supportive communication artefacts and evidence. Design thinking and design methods contribute to facilitating the collaborative design process, in which actors are guided and supported to use situated design tools to negotiate their opinions with others. This co-creation process generally takes certain period to implement and repeat. At the same time, a core working team from the TSOs is always needed to guarantee the practices and to communicate between design teams and all involved participants and relevant internal and external issues.

In the co-creation process, the design paradigm proposed by designers is under the main assumption of designing for TSO's development. Designers are facilitating to design *by* internal employees and external targets and stakeholders, who are the main contributors in the (re)formulation process. In the action research projects, Designers design *with* TSOs in managing the co-creation activities: draft the design brief and strategies, select the participants, deciding the working schedules and so on. Therefore, in the design paradigm, TSOs design *with* designers in creating the organisational encounters – the new collaborative co-design process; meanwhile, the final design outcomes are also designed *by* different employees in working with other external actors. The TSOs have two roles in the design paradigm. With the same idea in previous categories, the organisational design process proposes design tools to support TSOs in independently managing collaborative inquiry process on redefine the organisational essential purposes and visions in post-design phase.

The collaborative formulation for TSOs' fundamental assumption (Rousseau, 1995) is playing increasingly crucial role in developing TSOs' brand values and its business performance. Since business companies are putting a lot of efforts in branding and communicating their brand values through experiences, service system and capability to innovate and maintaining sustainable competitiveness, TSOs should learn from these experiences and practices in building the brand values and relevant benefits while fulfilling their social objectives.

6.1.3 Implications for Business Companies

Through elaborating the characteristics of the designerly organisational design approach and its design outcomes in different forms for organisational changes, I have realised that

the lessons learnt from this research experience could be interesting and valuable also to conduct designerly organisational design approach in business companies in the private sector. Junginger (2010) stated in design for social business conference that business means care as well. There has been long discussion on the ethic role of business in private sector, and particularly, design and design thinking could implement this role of business through disruptive actions and interventions. And from this research, the organisational changes made by designerly organisational design could provide suggestions for business companies to develop towards social impacts and sustainability in ecosystem.

The implications could be summarised as:

1) "Enabling design solutions" as new offerings for consumers.

   Organisational design in business scenario could try to reshape the service offerings as new enterprises/start-ups for motivated consumers to run their own business. Examples could be founded in some companies' offerings in which consumers buy a package of supportive toolkits to run your own business or services in your specific contexts. This might be considered as new business strategy to grow globally and to contextualise locally, at the same time, the business open more spaces to potential actors worldwide and to communicate companies' essential values and visions directly.

2) Experience-oriented organisational design outcomes might be useful to innovate the business and its organisational structure. In business companies, sometimes it's much harder to establish new development approaches or process especially then the businesses are quite successful. This designerly organisational design approach which is less focusing on structures but on collaborative experience might be effective to "see" the differences compared to conventional management approach. Therefore,

there're more opportunities to adopt design thinking in (re)form their innovation processes.

3) Extending conventional business for social purpose is useful to add new brand values. The Corporate Social Responsibility (CSR) has been identified as one of the factors to evaluate a company's brand value. Business companies definitely have to consider their social impacts on people and the ecosystem. Companies will definitely seek for new approaches and methods to broaden their business scopes. For example, Airbnb has offered a social impact experiences[3] programme stepping into the charitable tourism trend. The new offering has proposed new relationships between local non-profit organisations (also TSOs) and the tourists. This also changed the way to make profits for both Airbnb and the local NPOs. Again, to the tourists, this social-oriented experiences will definitely differ from conventional Airbnb experiences. As Fast Company has said in the article, it's still difficult to tell the exactly how important this "social impact experience" programme for the company. However, this movement will for sure change both the business logics, behaviours and structure, as well as the TSOs' ones, e.g. rethinking about donation system and behaviours.

6.2 Design Guideline (Operational Manual) in Third Sector

6.2.1 Step-by-Step Organisational Design Process

As elaborated in the previous part, the characteristics and three types of outcomes have shown the organisational changes made through applying design thinking and design methods to developing and (re)shaping TSOs. In order to make bigger impacts of this approach, a guideline is developed based on Design Council's double diamond design

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[3] https://www.fastcompany.com/3065925/airbnb-now-offers-social-impact-experiences-how-much-good-will-they-do

process (2005) for designers to conduct organisational design activities in third sector. The objective of this design guideline is to provide an alternative point of view to designers who are working in third sectors and would like to applying design thinking to impacting TSOs more profoundly and essentially. This practical manual offers designers step-by-step operational guide to establish proper design strategies to empower diverse actors inside or outside of TSOs in co-creation processes. The design guideline has been divided into 6 steps: pre-design; discover; define; develop; delivery and post-design.
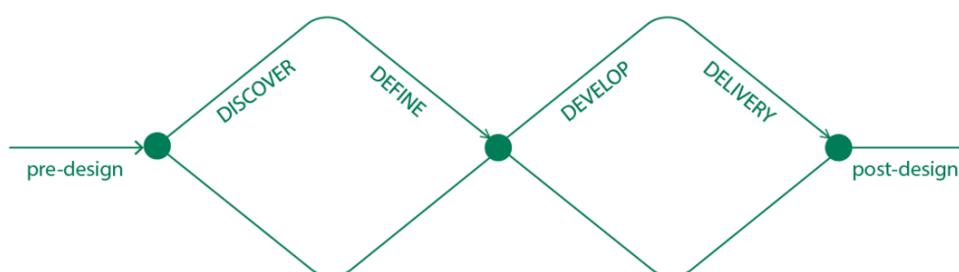
Figure 6.4 | Designerly organisational design process in TS
(illustrated by author based on Double Diamond Design Process of Design Council)

1) Pre-design phase: building trust with TSOs

Before beginning organisational design activities, it's crucial to build trust with the managers of the TSOs. As mentioned previously, the success of implementation, e.g. conducting pilot projects, will rely on the management team, who will support design team to distributing information, communicate and organise people, manage the spaces and so on. Making several conversations with managers of TSOs could, firstly, help designers to better understand their requests, requirements and expectations on the design activities. Besides, conversations are also creative processes to explore and discuss organisational issues (Golsby-smith, 2011). Through conversations, designers could start to distribute design thinking and organisational design approach to managers, and to negotiate with them on the design questions, objectives and briefs.

Especially, the organisational design activities and outcomes are less visible and tangible than conventional design professions, it takes time for TSOs to imagine the design's impacts and final results. Therefore, building strong trust with TSOs is the first step to start the organisational design journey.

2) Discovery phase:

- Analysing the initial objectives of design interventions.

  At the beginning of organisational design process, it's important to analyse the TSOs' perspective of design and design thinking. Identifying the expectations and motivations to adopt design thinking, mainly focus on creating or improving the artefacts, service systems and customer experiences, and linking them to the organisational elements and layers are building the basis of an organisational design intervention.

- Building TSO's profile.

  Managers of the TSO rarely have a holistic view of the TSO (e.g. how does the organisation look like? What are the values they are providing? What is the operational and behavioural models and patterns?). The very first thing to help TSO start an organisational design process is to make them better understand who they are, the advantages, disadvantages and the opportunities. Designers could develop specific research tools to build a visualised organisational profile for TSO.

- Collecting best practices and competitors.

  In the research phase, it's useful to collect and select diverse successful cases and projects and competitors at different levels and dimensions: local, regional, national and international. The selection could refer to the typology of TSO, project topics and social contexts. And for competitor analysis and study, the

selection could focus on the similar levels and contexts. The case study and competitor analysis should also highlight the organisational changes made in these cases and by the competitors. The data will show the emerging trends in the markets.

- Field research to understand the TSO and its internal and external actors.

Besides the desk research and second-hand data, the field research is one of the most significant activities in the design phase. Field research is the basic research method to get first-hand data of the research subject. In an organisational design process, field research generally aims at understanding the TSO, especially the internal organisational structure, operational patterns and relationships between actors at different levels and with different roles (tasks), its target communities and external stakeholders in the contexts. And at this phase, designers should observe and collect the data from a designer's eyes. The research techniques could be used in field research are: focus group, individual interviews, shadowing and so on. Designer should also select suitable methods for different situations or in different contexts. In some particular cases, designers will integrate some research methods or develop more situated methods.

3) Define phase:

- Integrating desk research and field research data.

To start the define phase, designers should interpret the previous collected research data and transfer it to promising design opportunities. In an organisational design process, the interpretation of data should be conducted collaboratively. Applying emerging trends to real organisational contexts requires designers to use the designerly way to know and to produce. Designer

should play a relatively dominant/leading role in this phase before involving other actors.

- Defining the TSO's problems *or* defining the TSO's primary values.

After integrating different types of research data, it comes to the problem-definition or fundamental assumption-definition step. This step is of great importance for three reasons: a) the problem definition will decide the following design directions and design strategies; b) this step provides TSOs a holistic view to better understand the "real" problems they are facing or the "primary" values they would like to offer to the targets and society; c) the process to define the problems also has the opportunities to leverage TSOs to involve designers (design interventions) at higher organisational level(s), meaning the way to formulate the problems or organisational assumption could act as the further *inquiry* to existent or conventional organisational structures and operational models.

While defining the problems or primary values of TSOs from organisational perspective, please check the following suggestions:

a) examining the research data from holistic and systematic perspective; b) finding hidden and weak signals through questioning what have been taken for granted in TSOs' central part(s)/layer(s); c) collaboratively engaging internal employees and external actors in providing their opinions, which will help designers to generate the "right" questions; d) specific design tool and skills might help to communicate the interpreted data to actors and to get their opinions easily and effectively.

- Defining design strategy

Based on the results of last step, the research strategy should be drafted to lead the develop and deliver phases. In generating the design strategy, two main

aspects should be considered: 1) the design paradigm in develop and delivery phases; 2) possible organisational design changes to achieve.

4) Develop:

- Drafting organisational encounters to involve diverse actors in co-creation process.

    Based on the design strategy, designer should create the suitable organisational encounters (three types of them have been introduced) as a co-design conversation to develop solutions collaboratively. The organisational encounters are not one-off action, instead it might be carried on through several interactive, collaborative and iterated workshops. And during these workshops, managers in TSOs will be closely connected to their employees, target communities, stakeholders and partners. In diverse organisational encounters, different design paradigms will be established to enable and empower both employees in TSOs and its external actors to play active roles in the co-design activities.

    Specific co-design tools are very necessary to facilitate this process. The design of the tools should consider both functional and emotional aspect. Sometimes, designers also need to adapt the tools to specific communities with specific needs.

- Collecting feedbacks and comments.

    It's always useful to hear what people are discussing and commenting. Different forms and occasions to engage participants who have collaborated in developing activities in sharing their experiences and opinions should be organised by designers and TSOs together.

5) Deliver

- Establishing the developed organisational encounters as design outcomes.

In the delivery phase, designers will assist and facilitate TSOs to launch the tested organisational encounter and relevant other design outcomes to internal and external actors. The invisible organisational encounters are not easy to understand to all the actors, therefore, designers have to work closely within this scenario at the beginning to communicate and educate them to form or change their behaviours, work routines and attitude to the new organisational changes.

- Facilitating TSO in delivering the new design results

    In different design paradigms established in develop phase, designers are acting differently to support internal and external actors of TSOs. And as discussed before, in the deliver phase, designers should also consider the transition to post-design phase.

6) Post-design phase: Maintain

In the post-design phase, designers will still take the responsibility to make sure that the organisational changes made in the design process will continue impact or even in larger scales with better performances. The focus here is to 1) enable TSOs to manage and organise the actors to maintain and continuously develop the organisational encounters. 2) enable TSOs to adopt design thinking and organisational design approach as their references to behave and act. Due to several limitations, fewer TSOs have permanent designers in their structures. When designers finish the design interventions, the remained research and co-design tools could continue to support collaborative design activities.

6.2.2 Suggestions for Social Designers

This research proposed a designerly organisational design approach to use design thinking and design methods to shape or transform third sector organisations. This

practice-based research has provided an alternative but influential approach to adapt design and design thinking to leveraging social changes through intervening in organisations. This approach has assumed that designers could leverage and enable third sector organisations (TSOs) to actively participate and to involve their relevant actors in co-creation and co-design processes, which will finally benefit the organisational social and economic performances.

At the same time, the research also proposes the following implications to designers who would like to carry on this approach with TSOs:

- The objectives of conducting designerly organisational design in TSOs should always included social & environmental concerns.

  It's significant for designer to consider the possible social impacts of design choices and strategies during the whole process, in short and long terms. The transition design 2015 report established by School of Design, Carnegie Mellon University has presented a design-led societal transition which is radically exploring new socio-economic & political paradigms in local contexts and demands. The designerly organisational design approach is one of the ways of seeking for new paradigms or to change existent ones. Through establishing the organisational encounters which are broadening the organisational boundaries and establishing internal and external relationships in the contexts, designers could foster TSOs to enter the global transition design phenomena towards sustainable society. And the design interventions at organisational levels could provide designers opportunities to train their design skills of making systematic changes at relatively small scales before acting at bigger scales.

- Designers should learn to protect this designerly organisational design approach from being challenged by conventional design approaches.

As introduced in previous part in this chapter, this organisational design approach is more difficult to understand and to accepted compared with many mutual design disciplines. Not all TSOs are capable to agree on this explorative action which definitely brings uncertainty and less visible results. It's challenge for designers to communicate its values and potential long-term benefits. For example, in the second participatory design projects, after the two collaborative workshops with Fondazione Cariplo, even though we have come up with promising and interesting results to guide next step of designing the brand identity, it was still quite hard to convince the top managers of the foundation to follow our strategies and plans. After the first collaboration with our team, they started to contact a brand design studio to carry on a conventional brand identity design approach. From several conversations with staffs in communication office who have mainly collaborated with us, we understood that the top managers were not comfortable with these unconventional design outcomes, which are quite differently from what they imaged as design results. The fact and experience make us realise the difficulties of putting this approach in reality. Therefore, I would like to remind designers of being aware and prepared for the disagreements, suspicions, criticisms and even failure. Staying closely, interacting frequently and negotiating with the TSOs are definitely significant and they are all part of the design actions. Besides, as we have discussed in chapter two, organising effective conversations and telling stories in proper "language" could be useful to guarantee the success of designerly organisational design approach.

- Time to take actions and to leave with responsibility.

  In the social design filed, designers should always to consider the impacts of their design interventions in time scale. Also for conducting designerly organisational design in TSOs. As presented in the design guide, the *pre-* and *post-* phases are as

important as the other four phases which are well discussed and accepted in diverse design approaches and processes. Therefore, I would like to highlight these two phases when designers are thinking and making in social-oriented projects and contexts.

6.3 Reflective Evaluation

At the end of this chapter, I will evaluate this organisational design approach by using SWOT analysis, in order to show the positive and promising aspects and the weak points. Afterwards, I will present several barriers to adopt this approach in TSOs.

6.3.1 SWOT analysis

SWOT analysis is a model including *strengths*, *weaknesses*, *opportunities* and *threat* to evaluate a number of diverse subject: a project, an organisation, a person and so on. Here I will use the SWOT matrix to analyse and to identity my research process and the research findings.

Strength:

- The research has studied an emerging and increasingly developing field. This make the research activity more valuable and profound. And the unique design-driven perspective has also brought advantages to the research.

- The action research strategy, which combined both case study analysis and participatory design actions, has strengthened the practical values of the research. And the design tools developed in participatory design projects could also be used in similar projects.

Weakness:

- The knowledge on social science research methods could be improved to deepen the research findings and impacts.

Opportunities:

- The fast growing needs in developing the third sector has opened opportunities to continue develop this research, both theoretically and practically.

- The designerly organisational design approach could be also tested and applied in business and public sectors.

Threats:

- The uncertainty during the design process

- The unfamiliar "form" – less visible and tangible - of the design outcomes

6.3.2 Barriers to adopt designerly organisational design approach

As an explorative research action in a developing area, there are various barriers and difficulties to adopt this approach in practices in the third sector.

- Bureaucratic issues

   Like in the public sector, the bureaucratic issues can't be ignored. The desigerly organisational design approach are proposing an alternative way to manage and organise, which will no longer rely on the administrative structures and layer, or even challenging the existent ones. Therefore, it's hard to make changes and transformations in short term, especially when the TSOs have relatively complicated and big structures.

- Unconventional design outcomes

   The organisational design outcomes result in less tangible and visible design outcomes, even though they are often linked to some conventional and visible design artefacts, it's still not easy for TSOs to understand and accept. There has been a long period for dominate actors in service management and service innovation areas to

collaborate with service designer in developing and shaping new service offerings. Similarly, it will definitely take longer time and more efforts to adopt a design-driven organisational design approach to shape and form organisations in the third sector.

- The poor knowledge in execution phases

Often, there's alack of knowledge on effective and efficient excitation in TSOs. It's necessary to educate TSOs that prototyping and piloting doesn't equal to production and delivery to target communities or in the market. They should put more efforts, resources and money in guaranteeing the success in implementation and delivery.

- The long-term impacts

The maintain of new organisational behaviours and operational patterns is one of difficulties to overcome after design interventions. And continuing to adopt design thinking at strategic level to dealing with internal and external organisational issues also need to be supported by designers in different ways. Otherwise, the organisational design outcomes and the impacts will hardly remain in third sector organisations.

Chapter 7 |

Contributions & Limitations

7.1 Research Contributions

The contributions of the doctoral research could be summarised into the theoretical and empirical ones.

Firstly, the research contributes to develop theories in three research areas:

- The designerly approach in developing organisational design

  The research has disclosed the advantages and results of conducting design-led organisational design approach. These research findings and practical design results will provide other designer researchers useful suggestions and guides who also try to lead the organisational design activities. At the same time, the research results also shown "evidences" to other roles (non-designers) in the organisations what designers could bring to facilitate organisational growth. Arguments and discussions on the research results will foster the research movement towards the fourth order of design and help to broaden the scope of design practices.

- Developing organisational design capability

  This research has highlighted the demand to build organisational design capabilities, especially in the third sector. Design thinking has provided effective ways and techniques that allow TSOs to establish relationships among internal and external actors. New relationships or co-creation paradigms have provided new scenario and possibilities for TSOs to organise resources in a different way. TSOs' design capabilities will not only refer to the quality and development process of their offering, but more importantly refer to their strategies and practices in enabling diverse actors in collaboratively contributing to develop a shared vision with TSOs.

- Third sector organisational development

The designerly organisational design approach experimented in this research has proposed other scholars in the third sector field an alternative perspective to do and to make. For example, scholars working on the topic of social enterprise and social entrepreneurship could try to integrate this designerly organisational design way in their traditional operation approach.

- Finally, this research has added important case study to the literatures in the research realm.

Secondly, the research has also provided empirical contributions to

- practitioners in organisational design field
- practitioners in third sector development
- designers practising in the third sector

The case study maps and practical organisational design tools developed in action research phase could be valuable and useful for other similar design research projects.

7.2 Limitations of the Research

Regarding the limitations that restricted this research and their potential impacts on the research findings, firstly, it is important to grow the scientific knowledge in both organisational studies and the third sector. And the scientific quality of the research should be improved. Even though the research is constructed with literature review, case studies, field research and design practices, the research result is more qualitative than quantitative, which is still playing important roles in management and organisational studies.

Secondly, in the participatory design activities, the projects have geographical limitation, because all the three cases are in Italian social and cultural contexts. And since it's a practice-based design research in the third sector, the scale of time is relatively important for generating the findings and discussions. The participatory design projects have been adopted design thinking and organisational design approach for relatively short time, therefore, the design outcomes still need time to revalidate and re-analyse. In the future, these design methods and tools will be continually tested and modified in other design-led research projects in the third sector.

Finally, researches in third/social sector are always associated with evaluation and assessment phase. However, in this research, due to the time issue and the difficulty to evaluate, there's a lack of valuation on the impacts made by design activities, particular the long-term impacts the third sector organisations will achieve. The future steps will focus on identifying proper evaluation tools to "evident" the design impacts of the organisations.

Appendix 1

List of collected Case (20)

No.	Project name	Nations	Social problems	Target people (Vulnerable)	designers (design team)	third sector organisations	typology	Year	Mission / Objective
1	DEEP - Development of Ethnic Product	Egypt	poverty and industrial development	geograpgically local people with poor living conditions	Giulio Vinaccia	UNIDO –United Nation Industrial Development Program IMC – Industrial Modernization Centre Ministry of Industry	international NGO (non-governmental organization)	2009-2011	integrate Egyptian Ethnic products in the International supply chain and develop branded ethnic products revolving around consumption habits
2	TSARA ('beautiful' in malagasy)	Madagascar	abandoned women in the south east of Madagascar	local women in the south-east of Madagascar (abandoned by families, no imcome)	Giulio Vinaccia	UNDP (united nations development programme) & UNIDO (united nations industrial development organization)	international NGO (non-governmental organization)	2014	to create a system and revenue to support and sustain the community for protecting local women; to engage local craftsman and see them involved in a socially and economically sustainable venture that improves their quality of life; while simultaneously strengthening the image of madagascar on the global stage.
3	Dignity design collection	Thailand, Kenya, Philippines	bad living conditions of countries in the developing world	the women communities in roral villages of the three developing countries (somehow abandoned by families / society)	Patrizia Scarzella& Valentina Downey (Lab.Brain design)	Good Shepherd International Foundation	not-for-profit organization based in Rome	2011-2013	the educational role of design as a tool for growth and the basis for a sustainable economy
4	K-Lab	Italy	isolation of disabled children (with talking problem)	children with disabilities	Stefania Vasques	K-lab (cooperative)	cooperative 3rd sector, funded by creative labotory	2013	to promote the culture of the uniqueness of the person and to give voice and recognition to the rich and deep thoughts of those who until now felt condemned to silence
5	La República del Tejido	Peru	poverty and chronic malnutrition in Puno	People, especially women, living in Puno, Peru	kristie Arias & Laura Sacchi (Klaud)	DESCO/Aporta (national NGO, DESCO is a Peruvian NGO. Since 1985 it has been supporting farmers and alpaca rearing families in the country's southern Andes. Farmers in this area depend	a nonprofit organization, funded by Minsur (a mining company interventing in the districts of Antauta, Ajoyani and Macusani in Puno)	March. 2014	to create and strengthen the textile production capacity of local women in the districts mentioned improving the economic situation of the families and contributing to the development of the community in general.
6	Zoom Jet Cookstove	Rwanda, Kenya, Somalia, South Africa, Mexico etc.	fuel savings; environmental protection; woman empowerment in developing countries		designers in IDEO and…	EcoZoom (socialenterprise) & Aproveeho Research Center (cooperative)	Initiated by Social Enterprise	2013	to improve the users' (in less developed areas) health, income and the environment they are living in.
7	Ripple Effect: Access to Safe Drinking Water	First phase in India (11.2008 to 06.2009); second phase was in East Africa (07.2009 to 03.2010).	unsafe drinking water, specifically related to clean water transport and storage	world's poorest and most under served people	IDEO	Acumen Fund and The Bill & Melinda Gates Foundation	non-profit Funding	2009-2010	aims to improve access to safe drinking water for the world's poorest and most under-served people; to stimulate innovation among local water providers; and to build the capacity for future development in the water sector
8	Children's Eye Care for VisionSpring			children and adolescents in India	IDEO	USAID	lead U.S. Government agency	2009	develop a scalable system for providing affordable, comprehensive eye care to families; assist VisionSpring personnel in learning the principles of human-centered design (HCD); and experiment with a new mode of client engagement.
9	SmartLife: Designing a Scalable Water & Health Business	Nairobi, Kenya	GLOBAL WATER, HYGIENE & NUTRITION CRISIS	people don't have access to clearn water; suffering from water-related disease	IDEO. Org	WSUP, Unilever, Aqua for All, GAIN	NGO..	May,2012	design a sustainabel business to provide accesses to clearn water and relatd knowledge

10	**Healthy Baby**	India	neo-natal deaths	new borns and the mother	Frog	Bill Gates' funding, finding the design studio through Wired Magazine	Non-profit		design a prototype for a comprehensive solution to improve neo-natal care for the developing world. frog's solution supports the mother from the start of pregnancy through the gestation period and after the birth.
11	**Fire Sensors for Safer Urban Communities**	Nairobi and Cape Town	the awareness & poor knowledge on fire prevention	people living in slam	Frog	American Red Cross	NPO NGO	2015'2016	focus on fire prevention: researching how best to add value by incorporating other types of sensors for heat waves, enabling technologies and complementary services like home security, as well as developing a sustainable business model to support access to and expansion of these solutions.
12	XFOOD	Italy(Puglia)	social care for diabled people	people with physical disability	Sara Mondaini		third sector	2014	It is a project of social inclusion and of a different way to get welfare. A project in which disability is considered as an added value for the entire community.
13	**COSTRUIRE BELLEZZA**	Italy		serious marginalization and homelessness.	Campagnaro Cristian (Politecnico di Torino)	Comitato Promotore S-NODI, supported by public institutions and universities	third sector	2014	Reactivate the self-confidence
14	**Divine Divas**	zambia	unplanned pregnancies	young female teenagers	Open-IDEO	Global Development and Population Program+ Marie Stopes International	Foundation+health charity (NGO)	2014	help teenager to access reproductive health services
15	PET lamp	Colombia	the polution created by plastic bottle in Colombian Amazon	local poor people (craftmen)	Álvaro Catalán de Ocón	Artesanías de Colombia	national non-profit organisation	2012	to make an attractive, desirable and contemporary object by taking care of a global problem as the plastic waste with local action as the use of traditional weaving techniques.
16	Ensaimadart	Majorca (Palma)	job equity & social equity	people with mental disability	a group of famous designers	amadip.esment foundation	non-profit	2012	promote the NGO, and make society be aware of the
17	people of the sun	Malawi	less development	low-income artisans	Maria Haralambidou	social enterprise - people of the sun	local social enterprise	from 2012	to help low-income artisans build sustainable businesses, which will raise their income and standard of living. In turn this will preserve their cultural heritage and skills for the next generations.
18	Dialogue with age	Germany; Israel	social equity	the elderly	Orna Cohen	dialogue social enterorise	global-network-based social enterprise	from 2012	exhibition concept on "aging", promoting the experience, stereotypes and the dialogue between different generations
19	dialogue in the dark	Frankfurt, Germany; worldwide	social equity	blind and disabled people	Orna Cohen	dialogue social enterorise	global-network-based social enterprise	from 1989	use exhibition concept to facilitate social inclusion of blind and disabled people on a global basis
20	Design for a better world	zambia	unplanned pregnancies	young teenager	Open-IDEO	Global Development and Population Program+ Marie Stopes International	Foundation+health charity	2014	help teenager to access reproductive health services

Appendix 2

1. Questions for interviews with **designers**

PERSONAL INFORMATION:

Name:

Occupation:

Past experiences in design field (in general):

What is your past experience with organizations? Your past collaboration with non-designers?

PROJECT INFORMATION:

The project name:

What is the **motivation/ purpose** of the project?

When and how is the project started?

please **describe** your specific design approach:

What do you think about the **role of designers** in the projects you have involved?

What is your **perspective/ understanding** of design-led approach comparing with other approaches? (Do you ever think about? Or did it happen before?)

Describe the final results of the project from the perspective of you as designer and from the perspective of the organization?

Is there **revenue** as feedback of the project?

How do you **communicate/ spread** the results and impact?

PARTNERS INFORMATION:

Who, do you think, are the most important **actors/ stakeholders/ resources** in the projects?

Which is the main **organization** that supporting the projects? (Describe it)

How do you (you and the organization) **start** to work together?
(The project is the first or there have been experiences before and **specifically** in this project)

(The Double-Diamond Design Process Model: **Discover, Define, Develop, and Deliver;**
Human-centered approach**: Empathize, Define, Ideate, Prototype and Test)**
Which phrase did you start from in this project?

What do you think is the **difficulty** of working with the third sector?

2. Questions for interviews with **staffs in TSOs**

PERSONAL INFORMATION:

Name:

Occupation:

The name of the organization you are working for (short description):

How long have you been with this organization? What is your background?

PROJECT INFORMATION:

The project name:

What is the **motivation/ purpose** of the project?

Why did you (the third sector) launch this project?

When and how is the project started?

Describe the final results of the project from the perspective of the organization.
your team and the designer/design team

Is there **revenue** as feedback of the project?

How do you **communicate/ spread** the results and impact?

UNDERSTANDING ABOUT DESIGN(ER)

Why do you (the third sector) involve designers/ design team in the projects?

What is your **expectation** of design(ers)in the project before the project started? Did it changed? How?

What do you think about the **role of designers** in the projects?

What is your **perspective/ understanding** of design(er)'s approach comparing with other approaches? (Do you ever think about? Or do they have happened before?)

What is the main **working process**? (The level of design involvement)

What do you think is the **difficulty** of working with designers?

Would you work with designers **again**? What would you do differently?

Do you have a concrete project where you will work with designers again?

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