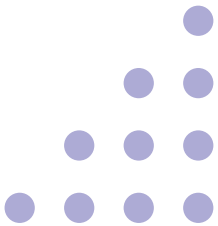
# A practical guide to design thinking

A collection of methods to re-think social change

**Moritz Gekeler**

FRIEDRICH EBERT STIFTUNG



# A practical guide to design thinking

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Friedrich-Ebert-Stiftung (FES) is the oldest political foundation in Germany. The foundation is named after Friedrich Ebert, the first democratically elected president of Germany.



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# The need for more out-of-the-box thinking

Friedrich-Ebert-Stiftung (FES) has a long history of working on social issues: on improving workers' and women's rights, on social inclusion, and on democratic accountability. With our large network of partner organizations we have been constantly working on the reduction of gender inequality by capacity building, socio-economic analyses and sensitization campaigns. Since 2015, however, we have been wondering why, despite so much expertise and good work, the situation of women has by-and-large not really improved. Within the context of Asian feminisms, we have realized that our work on gender equality has ended up going in circles. By now we have understood the root causes of inequality (capitalism, patriarchy) and have the moral high ground (social justice) on what needs to change. Still, both men and women, and in fact all gender identities, are trapped in a patriarchal system that withstands any efforts to make substantial changes to its power structures. We have organized seminars, trainings and campaigns, all working well for those already convinced of change. What we have failed to do though, is to get on board those women and men who resist a progressive understanding of the term "feminism" and gender . Civil society organizations and government programmes are stuck in technocratic solutions like gender mainstreaming or over-emphatic political correctness. Largely dependent on donor funding, many organizations with good intentions have become trapped in project cycles and application writing. But actual alliances for change have seldom materialized.

This was the point that started the FES India Office wanting to do things differently. We acknowledge that patriarchy was the root cause of gender

inequity , but did we ever actually try understanding those in favour of the system? Did we—that is, civil society—really put enough effort into convincing the other side why gender equality matters? Did we reach out to the fence-sitters and rally them to our cause? And, most importantly, who are we genuinely targeting with our own work, and why does that seem not to function?

Gaining a fresh perspective on the alleged beneficiaries of patriarchy seemed equally important as questioning our own lines of work and conceptual approaches. With the help of the design thinking methodology we wanted to de-construct not only patriarchy but also our own perceptions and assumptions, which frame our work. "Why are we doing this?" has become the new guiding question. Like the annoying child wanting to know why, the continuous challenging of our own mindset has led us closer to the truth and, yes, also closer to understanding the enormous challenge ahead of us. We cannot change a running system overnight, but we can certainly try doing things differently. And finally, we should get out of our comfort zone and interact with the Other. Our experience has shown that the world might not be that black-and-white after all.

Design thinking is neither rocket science nor a panacea. But it can surely help us re-image an alternative world, and to tell a different story about life. We need to break out of our own work habits and project cycles and just start doing things differently. This manual provides some guiding steps to that path. There is no executive summary as it would consist of the two things only: You and Why?

**Patrick Ruether**
Director, FES India Office

# Background

The use of creative concepts and innovative methods—now often referred to as design thinking—was for a long time a niche practice for nerdy Californian innovators, creative German problem-solvers or arty Scandinavian designers. But since the turn of the 21st Century they have evolved into an approach applied by professionals from different fields and industries all over the world[1]. In the software industry the concept is widely accepted, though design thinking is also becoming popular in other fields. In the social sector, big, very often American organizations such as the Bill & Melinda Gates Foundation[2] , the Acumen Fund[3] and others[4] have been playing around with design methods. Smaller organizations or even local non-governmental organizations (NGOs) are only slowly gaining some exposure to it.[5]

The Friedrich-Ebert-Stiftung (FES) India Office has taken on the challenge of applying design thinking with their partner organizations in a context that is less product- and business-oriented. The goal was to enable experts from the partner organizations to think differently about a topic that they have been working on for years or even decades: improving gender equality in India.

This publication will give you an insight into the process, the strengths and specific challenges of the approach. It features experiences from the FES partner organizations and finally offers a practical guide to some of the methods that have been used throughout the process. This guide has been designed on the basis of the process that the group of partners and FES colleagues have gone through. It is not seeking to be a comprehensive collection of design methods, but should act as a reminder for the  project team of the methods they have been using. Additionally, we publish these methods to help other organizations in the social sector to identify how design thinking might be useful for them and to provide some tools for thinking more creatively and collaboratively about their respective topics. Most methods have not been developed specifically for this project, and we will provide links and resources for further engagement with the concepts.

# The concept of design thinking

# What is design thinking?

"Design thinking is a way of finding human needs and creating new solutions using the tools and mind-sets of design practitioners."[6] – David & Tom Kelley

This quote from David and Tom Kelley very broadly defines the concept of design thinking. The simple way in which the two brothers from Palo Alto, California, formulate it highlights the rather high aspiration behind the concept: design and its methods can be used to solve challenges that human beings face. Throughout the literature the challenges that are best suited for design thinking are described in more detail: Design thinking works best when the problem is ill-defined[7], or "wicked" as Richard Buchanan and others have called it[8]. It should not have one single answer. Rather, several answers might be equally valid, although maybe not equally desirable. In short: Design thinking is useful when the problem is complex.[9]

Additionally, the aforementioned definition of design thinking suggests that those tools and mindsets can be used not only by the design practitioners themselves, but also by other professionals. As the famous French-American designer Raymond Loewy is said to have remarked: "Design is too important to be left to the designers."[10] Instead, people from different disciplines should come together, collaborate creatively and thus create new solutions.

But why should the tools and mindsets of design practitioners be of any help in solving these challenges? In order to answer this question, let us take a look at the world as it appears today.

## A short history of design thinking

Over the last two decades the pace of change has increased dramatically. Even though statisticians such as Hans Rossling have proven that this change has usually been for the better[11] , on a global scale many new challenges have evolved without the old problems being solved. New technologies such as the computer and smartphone, and others yet to come such as artificial intelligence or robots[12], will increase the speed at which humankind innovates

and adapts to a changing world.

The capitalistic mindset of the 20th Century with its methodologies and strategies—namely an industrial, profit-driven and top-down approach based on a patriarchal system—have managed to bring much prosperity to some parts of the world, while leaving others way behind. In the highly competitive business world of over-saturated markets, only those companies are to thrive that manage to distinguish themselves from others and to create added value for the consumers. The capitalistic race for higher margins and shareholder value have contributed significantly to greater phenomena such as climate change, air and water pollution, or the emergence of new forms of bonded labour across the globe, to name a few. In 2018 these megatrends can no longer be considered a somewhat distant sword of Damocles, but have become reality in daily life, in the form of draughts, heat waves, smog clouds, plastic islands in our oceans, etc. The sword is not somewhere above our heads but has already begun falling.

In recent years it has thus become more and more obvious even to the wider public that the mindset and strategies of the 20th Century will not be able to produce solutions to problems that they themselves have created or at least accelerated. Based on this insight the search for alternative approaches had begun. Initially, companies were merely looking for better ways of differentiating themselves from their competitors. Design and its methods seemed promising. Organizations like Apple were doing increasingly well by focussing all their efforts on creating experiences for their customers rather than just selling interchangeable products to them[13].

Around 2003/2004 Hasso Plattner, one of the founders of the software company SAP, read about David Kelley's d.school, which is connected to Stanford University in Palo Alto. David used a process that he called design thinking to let students collaboratively work on problems that are not easily analysed. Similar approaches and methods had been taught successfully around the world before, but usually to students who were aspiring to become designers themselves. At Stanford, David invited students from all kinds of disciplines into what he called the d.school[14]. He wanted to teach his students to become innovators rather than administrators in their respective fields and even across disciplines.

The following meeting between Hasso and David accelerated the subsequent rise of design thinking. Hasso generously funded the d.school at Stanford, which since then has spread around the world from Potsdam, Germany, to Cape Town, South Africa, and then on to Kuala Lumpur, Malaysia, and Beijing in China.[15] Other schools from various backgrounds are also introducing a design-thinking approach. The company SAP, which touches the lives of millions of employees in various sectors, also introduced design thinking and it was only a matter of time until design thinking also became popular in the board rooms of companies as diverse as PepsiCo, Daimler, IBM or even traditional consultancies such as McKinsey or Accenture.

## Tackling the way of working vs the workshop approach

In the course of these developments design thinking has evolved from a profession (traditional design) into a novel approach that helps people solve their respective challenges in a more creative, human-centred, collaborative, iterative and visual way (design thinking)[16]. There often is a discussion around how design thinking is to be done correctly. Many employees of the companies mentioned above say that design thinking is best done in a workshop format. If you ask members of design agencies or professional design teams within those organizations they strongly disagree and say that design thinking is rather embedded in their way of working, and might but equally might not also happen in a workshop format.

One reason for this discrepancy lies in the amount of training both sides have put into learning the methods and approaches of the designer. While classical designers have studied the profession and worked creatively more or less all through their university life and professional career, employees with a background in a different field usually learn about design thinking through highly engaging training formats. Therefore, these workshop-like trainings become what they think of as design thinking, and it takes a long time and a lot of practice for people to introduce the principles of design thinking into their regular work routines, as opposed to holding dedicated design-thinking workshops.

Nevertheless, even short-term design-thinking work-shops have their value, since they enable teams to approach their challenges in a different, more creative and more human-centred way.[17] The FES project on which this paper is based was conceptualized as a series of workshops. However, the partner organizations of FES applied the methods according to their needs in between the meetings. The goal was to enable the partner organizations to look at their respective fields of work from a different perspective.

# The three core elements of design thinking

How does design thinking enable this different perspective? At its core, design thinking is a collaborative and ideally multidisciplinary approach. That is the biggest difference from classical design as well as from other disciplines.

While traditional projects in the corporate world, the classical design world and also in the social

sector are usually based on cooperation, design thinking is based on collaboration. Cooperation in this sense means that people work together as a team but are not necessarily all involved in all steps of the process. A design-thinking team on the other hand ideally works together and decides together, therefore each team member is involved in all steps of the process (see Image 1).

In order to ensure that this collaboration works well for the team members and also that it produces results within an acceptable time frame[18], design thinkers make use of three core elements: people, place and process[19].

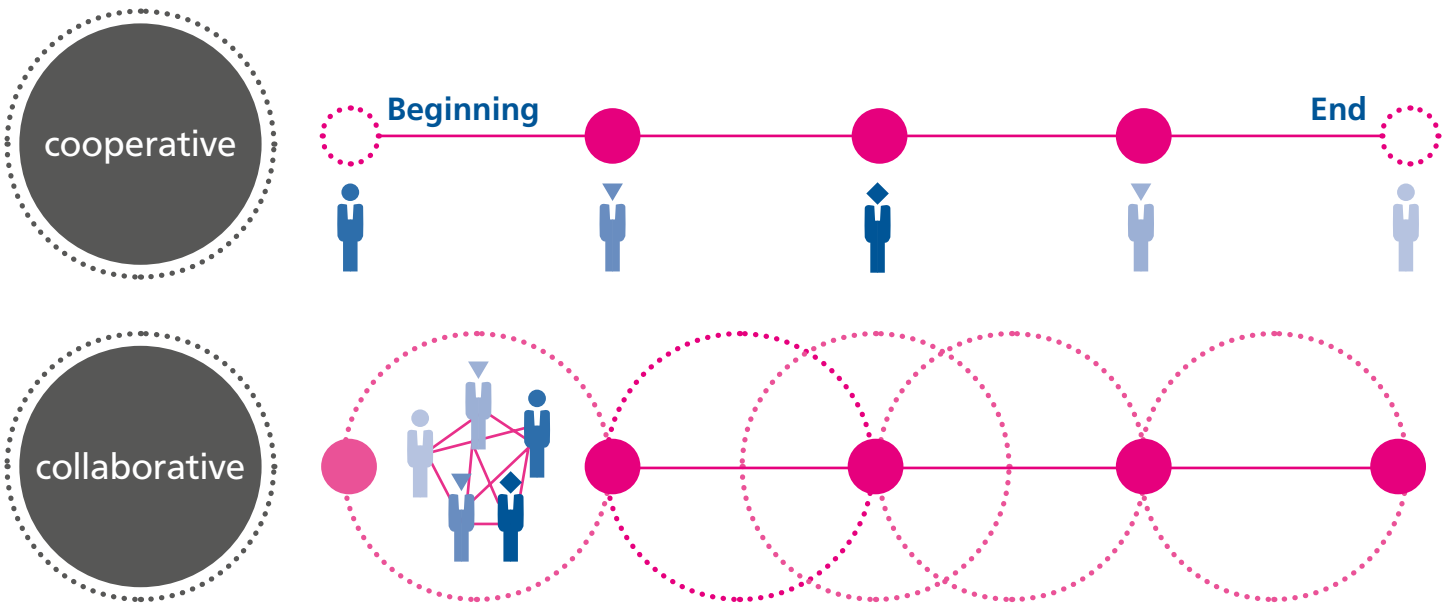
## *Be mindful of people*

Anything that a design thinker does is based on an attempt to better understand the human being. In fact the term human-centred design can be used almost synonymously with design thinking. This attitude of being mindful of people has at least two sides[20] : the focus on the team on the one hand and the focus on the target audience or user[21] on the other.

### The team and their experience

As mentioned, the team in a design-thinking project should ideally be diverse in terms of gender,

Image 1: Projects based on cooperation vs. on collaboration




Source: Andrea Augsten and Moritz Gekeler, "Für einen Paradigmenwechsel in der Designlehre des 21. Jahrhunderts: Welche Haltungen braucht kollaboratives Design?", in: J. Parks, Design & Bildung – Schriften zur Designpädagogik, Band 2 (Munich: Kopaed, 2018, pp. 32-33), translated by the author.

backgrounds and skills. For example, an engineer could work with a social worker, a designer, a philosopher and a business expert to solve whatever challenge they are working on. The concept of the "T-shaped person" describes how the people in this team should be selected: the vertical line of the T describes the depth of any given expertise (e.g. design[22], social work, psychology or business), while the horizontal line symbolizes the ability and willingness to reach out to others and to bridge the gap between the disciplines. This requires an open, curious and empathetic attitude[23] towards other people, and less of the imagined omniscience of some domain experts. In general, design thinking requires the team members to take an innocent perspective in order to be able to learn something new.

In reality many organizations do not have the diversity that would be ideal for this kind of work, though. In this case it is useful to highlight and embrace the diversity on other levels, such as character or working style. Additionally, a true design thinker would always bring on other perspectives during a project, e.g. through interaction or even co-creation with the target audience, experts or other people who can contribute their views and ideas to the project.

Design-thinking teams also take responsibility for maintaining a good team spirit by exchanging constantly about their behaviour, their feelings and emotions. Games and other fun team activities help the team members to get to know each other in a much richer way.

### The audience and their context

Whenever you read about design thinking, you will definitely find the user focus to be a very important element. A design-thinking project has at its core the needs, wishes, aspirations and the context of the people it ultimately serves. Since it does not make sense to talk about users in the context of social activism or social work, terms like audience or even just person or human being seem to be more suitable.

Working with design thinking, the team ensure to always keep the human being at the core of whatever they are doing: They take care to understand the situation and the context of that human being—the challenges and opportunities, the wishes and needs. They try to understand the target audience of the final concept or solution (e.g. girls who should be empowered to go to school). But a design thinker will also try to understand other stakeholders who are important in that situation (e.g. fathers who think that too much education will make it difficult to find a good husband for their daughters). Through thorough ethnographic research they try to get a good understanding of the system in which they are operating. This involves constant interaction with the people who are affected or even causing the problem, or who have any other helpful information concerning the given challenge.[24]

## Be mindful of the (work) place

In order to support the team, it is helpful to work in a space that is flexible. Many traditional offices have very heavy furniture, which cannot be removed from the room, or they have policies which do not allow for the employees to mess with the interior design. If you are working in a traditional conference room or banquet hall of a hotel, the staff usually obligingly bring enormous tables and unwillingly destroy any flexibility that an empty room would give you.

In an ideal set-up on the other hand, the room should inspire creativity and should be flexible so that the team can move the furniture around whenever they need. Instead of being constrained by the built environment, the team should be able to decide what space they need at any given moment. Scott Whithofft and Scott Doorley have written a very useful book that explains how spaces can be designed in a way that encourages people to collaborate with each other and be creative.[25]

If you do not have the financial means to change the whole office set-up, some very simple tools such as rolls of brown or white paper, sticky notes and markers will take you a long way.[26] Even changing the setting for a day or two, working from a park or from a coffee shop, will help you in changing perspectives.

## Be mindful of process

David and Tom Kelley describe design thinking as "a way of finding human needs and creating new solutions". Usually the little word "new" carries a lot of importance whenever design thinking is used.

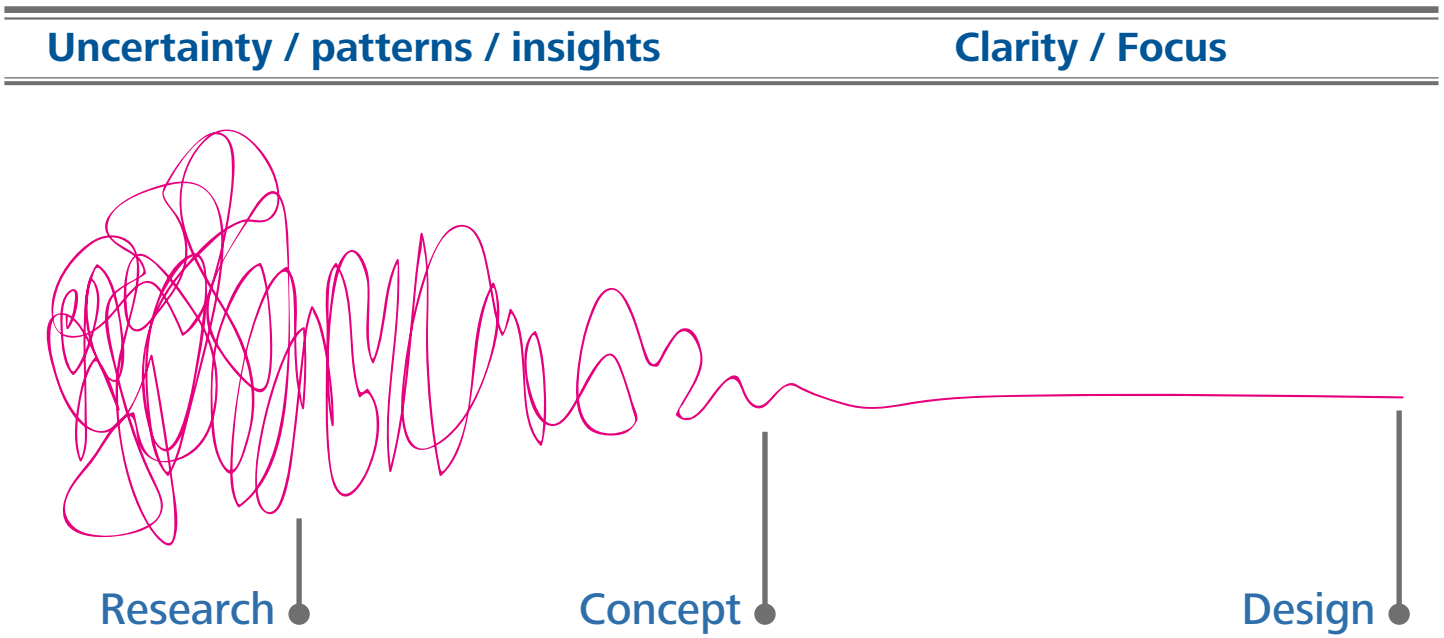
The reason for many organizations to even look at an approach like design thinking is the need for innovation. The problem here is that the team (or even the sponsor, supervisor or president of an organization) cannot know at the outset of a project exactly what the outcome will be. That actually is the whole point of the exercise. If you think you know exactly what the outcome is, you do not need a design-thinking approach.[27] But whenever you have no clue what solution could help solve the challenge or which solution is the best one, design thinking might help. Especially when the challenges are rather complex in nature and could be solved in many different ways.

If you search the internet for images related to the term "design thinking", you will find many process visualizations. This is because being mindful of your process is very important to ensure proper collaboration and avoid getting lost in the openness of the whole endeavour. The team should be able to mutually understand where they are in the process and what has to be done in order to be comfortable with not knowing exactly what the final outcome will be.

The visualization that comes closest to the experienced reality of a design-thinking project is the "design squiggle" coined by Damien Newman.[28]

At the beginning of the project a lot of research has to be done to understand the challenge better

Image 2: The design squiggle by Damien Newman




Source: Damien Newman, https://thedesignsquiggle.com/ (accessed: 13.12.2018)

and build empathy for the target audience. In this phase the team might feel a little lost sometimes, but through broad research (ideally the attempt to get a 360° view) they will eventually find patterns and reach insights that then lead to initial ideas, prototypes and, with increasing clarity and focus, finally to a very concrete design. The challenge for teams that are new to a process like this is to make them feel comfortable with not knowing where the process will lead them. An experienced design thinker will just simply trust the process, having seen it work so many times.

### Divergent vs. convergent thinking

In order to structure this seemingly chaotic process, design thinkers and other creative problem solvers use a very simple trick. They pay attention to their own thinking style and consciously adjust it. A very open style that values every observation, every insight and every idea, as small and irrelevant as it might seem (divergent thinking), is differentiated from a more selective, critical and picky approach that enables the team to find patterns in the previously generated abundance of data, and to make choices (convergent thinking). These two thinking styles are strictly separated from each other to enable the team to leave the area of the known and consciously go forth into an area of discovery.[29]

### Separating the research from the search for a solution

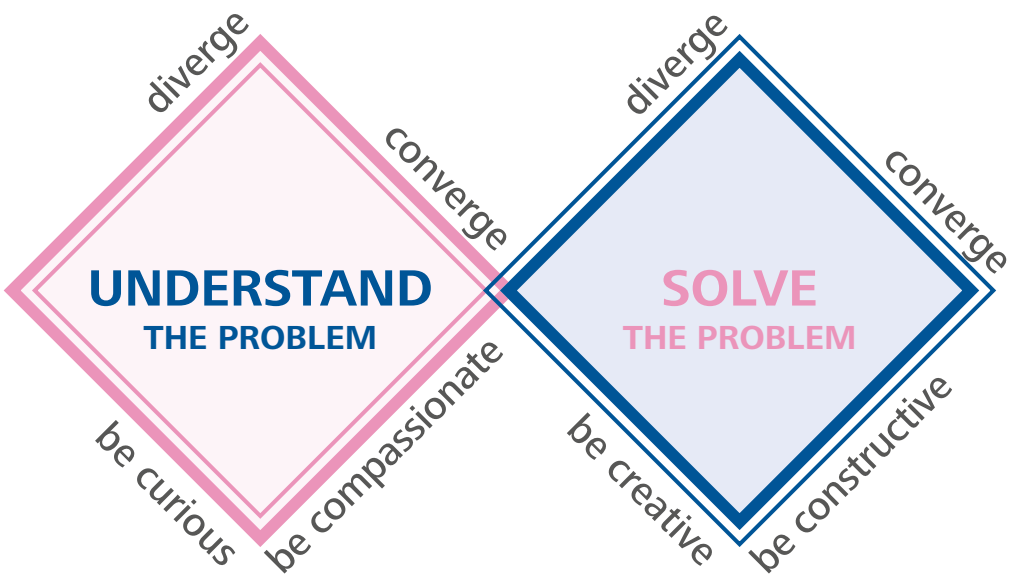
Additionally, design thinkers apply another simple trick: they separate the analysis and understanding of a problem from the search for the solution. This way they can ensure that the final solution is actually based on needs and observations that are gathered in the research phase. Especially this second trick sounds extremely simple, but it turns out that many people find it easier to directly jump to conclusions and to solutions rather than spending time on analysing the problem from different perspectives first.

### The double diamond

Image 2 shows an idealized version of the design process, and visualizes the thinking styles and tricks. This process visualization highlights the thinking styles of divergent and convergent thinking and the trick of separating "understanding the problem" from "solving the problem". It also differentiates four attitudes that are predominant in each phase of a project.

During the initial research phase, the prevalent attitude is curiosity. The goal of this phase of a design thinking project is to learn as much as you can about the given challenge and its context. After that, while convergently finding patterns and selecting insights, the team compassionately describes the target audience and the situation in which the challenge occurs. In this phase the team reformulates ("re-frames") the initial challenge into more meaningful problem statements, which will help them at the beginning of the next phase to be creative and have better ideas. If the research has

Image 2: The double diamond shows the different thinking styles, tricks and attitudes




Source: Adapted from the "Double Diamond" by the British Design Council.

been done well the team builds not only an intellectual but also an emotional understanding of the problem they are working on. Being creative in this context means developing as many ideas as possible. No idea is too crazy or too challenging. Again, this is part of the divergent way of thinking. Only in the final phase the team select ideas. Now it is time to be constructive in two ways:

- They build prototypes of their respective ideas.
- They test them with the target audience and experts, and constructively collect feedback.

That feedback starts a loop that brings the team back to being curious. Compassionately, they then make sense of the collected feedback, find creative solutions to the issues that have been raised in that feedback, and build the next iteration of the solution. Design thinking is never a linear process —instead it involves constant exchange with the target audience and other experts in order to improve the solution well before implementing it.

# Deconstructing stereotypes through creative collaboration

# Structure of the project

Design-thinking methods were used in this project as a catalyst for more creative, collaborative and systemic thinking. During a series of workshops the partner organizations were enabled to use design-thinking methods such as the ones featured in this publication.
Before and between the workshops the participants were directed to do homework such as field research, creating mood boards and personas, or developing their prototypes further. Each homework task was related to one or more design methods that were applied and discussed during the workshops.

The workshop series culminated in a "train-the-trainers" session, where the participants discussed and practised certain facilitation techniques in order to be more confident in using the described tools and exercises with their teams and their target audiences.

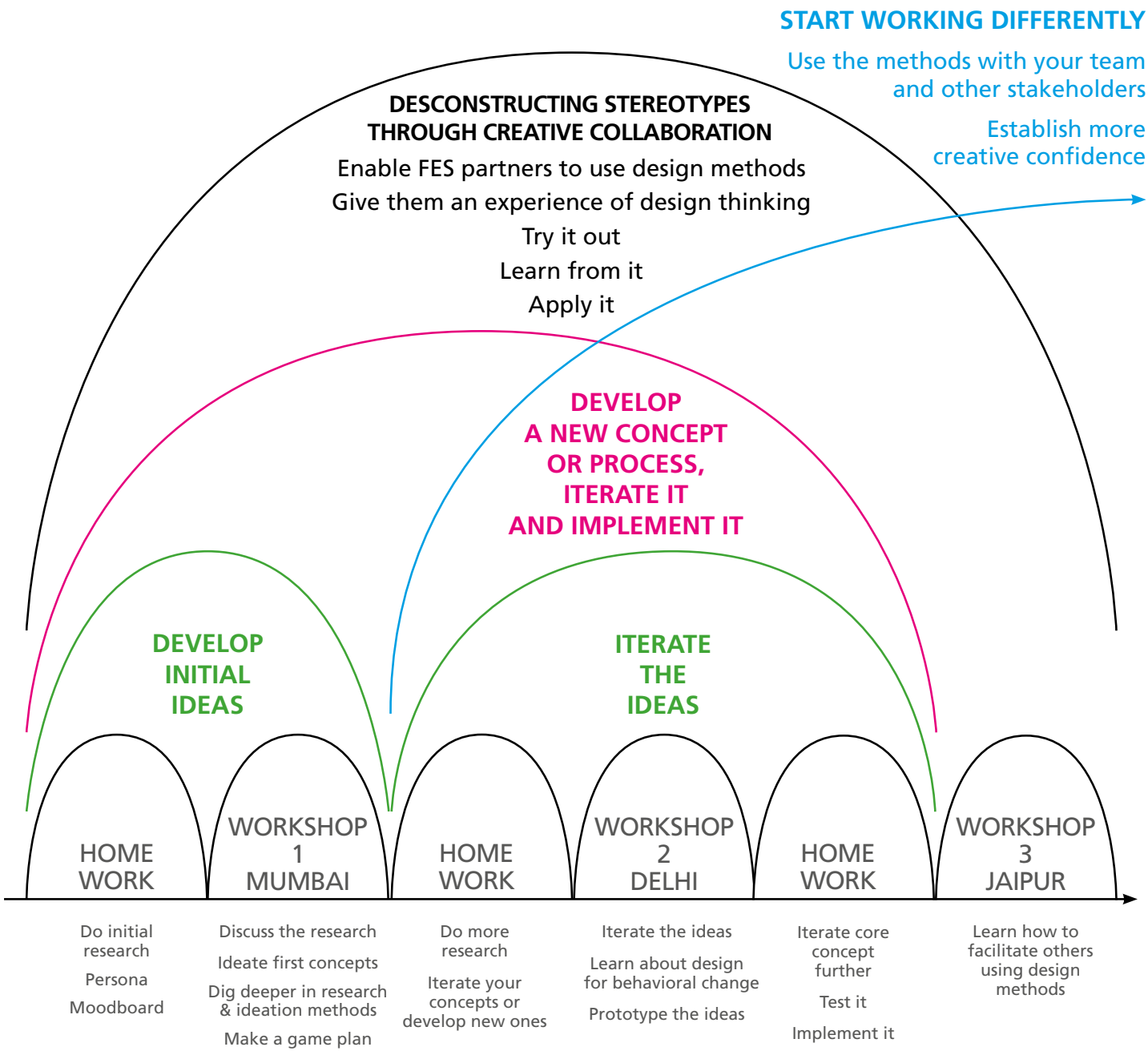
Image 3 shows this approach visualized according to the "Learning Arches", which the famous creative leadership school Kaos Pilots in Aarhus, Denmark[30], uses for planning its learning engagements. Each arch represents a phase in the learning journey and the correlated goals. Since design thinking is an iterative process, the workshop series was not planned according to the design phases. Instead, each workshop consisted of several design phases, where the different mindsets and approaches had to be used. As early as the first workshop, the teams came up with initial ideas and then went back to their respective organizations to do more research or to develop them further. In the second workshop several iterations were explored to look at the concepts with a critical mind and to develop better prototypes.

The guiding principle behind the design of the workshop series was that whatever topic, method or exercise has been started should be brought to a thought-out conclusion. Nevertheless, one core goal of the whole project was to bring new ways of working to the partner organizations.

# Focus: gender equality

Since the topic of the project was gender equality, the obvious choice as a focal point for research and future solution proposals were the women and girls who face unequal treatment. The gender unit partners of FES India who went through the design-thinking journey have been working with women and girls since many years. Still, they were open

Image 3: The design of the workshop series



**The FES Project: Political feminism**

Damyanty Sridharan, Senior Advisor for Gender and Social Justice (FES India)

The vocabulary of feminism the world over today is, unfortunately, more disengaging than engaging. In India as elsewhere, the feminist space has a distinctive identity, but builds upon a diversity of women's groups, individuals, institutions and movements. Despite this broad basis of experience, or perhaps because of it, this space remains disunited. Alongside the traditional women's movement, new groups have arisen, and not all of them are or even want to be called feminist. It is imperative to recognize the diversity of their ideas and reasoning. For the Friedrich-Ebert-Stiftung (FES), with its commitment to the values of freedom, equality, democracy and social justice, it is important to build bridges between the established feminist activists and new-generation feminists, between staunch advocates of feminism and the non-converts, from elite feminists to grassroots activists.

In this context we noted the decline of the political nature of feminism and a growing technicality of the same. Political in this sense refers to feminism representing one of the many groups and movements in the political discourse that constitute our democracies. Reducing feminism to gender mainstreaming or linguistic gender-washing neglects the broader context in which the recognition and dignity of the marginalized has to find its place. The NGO-ization of gender, as some have put it, falls short of explaining why the structural imbalances still prevail. And it is a global phenomenon in which not only women but also men and other genders feel more and more on the losing side of a system that is no longer or has never even been theirs. Thus, FES initiated the Project on Political Feminism to revive the debate on "the Political"—that is, a debate about visions and ideas on how we want to build an inclusive, gender-just society.

In India, it is with this approach that we thought of engaging with new methods such as design thinking, together with our partner organizations, to deal with the ever-pervasive, complex, and challenging task of dealing with the patriarchal mindset. Thus, learning from each other, accepting the differences, embracing the common goals and reaching out to new allies, FES hopes to contribute to creating a new narrative for social justice in India.

to trying out a different approach based on the insights they gained following the design-thinking principles.

A thorough analysis of the stakeholders who heavily influence the context in which these women and girls live made some partner organizations realize that there is a group of people about whom they know very little, even though they have an important role to play. We called them the withholders.

This big group of people might include the husbands, fathers and brothers of the women who are opposed to them going to school, executing their rights in political committees or just earning their own livelihood. But men are sometimes not the only ones standing in the way of positive change. Even the mothers, grandmothers or mothers-in-law, who may not have been fortunate enough to experience equal rights themselves, can act in a way that hinders or even oppresses other women. Religious leaders and opinion leaders in the local communities might use their dominant status to influence the community against change for gender equality.

Since the topic of gender inequality is so emotionally and politically charged, the participants in our project had never thought of including those people who are opposed to the concepts of women's rights, political and social equality into their approaches. Even though this might seem like an obvious thing to do in hindsight, it has not been attempted because many obstacles seemed to stand in the way of approaching someone from

the opposing end of the political spectrum. They seemed unreachable.

The participants thought they could be certain that there would only be a negative reaction.

The different tools and methods that were applied helped the partner organizations in re-organizing their thoughts, in taking a new approach to their research and in developing fresher ideas. By making those ideas more tangible and conveying their discussions more easily to other stakeholders and the target audience, these partner organizations ultimately managed to make some impact in their respective field of work.

# Results of the creative collaboration

During the last workshop of the series in Jaipur, Rajasthan, we interviewed the partners and asked them for their feedback on the process. The variety of ideas, new approaches and unexpected applications of the things the group did during the workshops was overwhelming.

## A more human-centred and optimistic mindset

All partner organizations mentioned the human--centredness of design thinking as one of the core benefits. Even though they are all working in the social sector which, of course requires them to know much about their target audience, the methods and tools helped them to get an even better understanding of their context and to find new opportunities for intervention. This influenced their way of working even when they did not officially apply design thinking in a structured, methodological way.

Gayatri Sharma and Parul Sethi from Women Power Connect in New Delhi mentioned that the workshops and the inputs on human-centred methods changed the way they organize their work. Based on the processes and methods that were discussed and used during the design thinking workshops they now asked students to identify their most pressing issues and designed a new format based on that input. The result was so positive that a partnering university decided to frame a whole campus festival around the topic they had identified. The topic was self-esteem.

Besides this approach of involving their target audience more, Parul Sethi also pointed out that design thinking helped them to get rid of a very negative way of thinking, which sometimes hinders them from doing good work. Instead of being "bogged down by a lot of problems" such as resource limitations or bureaucratic issues they now feel "a spirit of opportunities".

## Improving team spirit

As one participant put it during a collaborative feedback session: "Just like all rivers meet in the ocean, in design thinking different ideas come together." This flow of different ideas from within the team and from the outside often has an encouraging and motivating effect.

Renuka Bala and V. Balakrishnan from the Centre for Women's Development and Research (CWDR) in Chennai emphasized that the approach of design thinking helped them rethink their relationship with their own staff and their entire strategy. Inspired by the concept of design thinking they now let their staff "talk about their dreams and visions," he said. This reportedly led to a much more engaged and happy work force.

They were so engaged in the concepts that they decided to take an additional online class on design thinking offered through Plus Acumen.[31]

## Visual and creative approach

Many participants emphasized the usefulness of the visual tools and of the basic concept of working visually. They said it helped them in their work to make concepts and ideas clearer, but also to enable others to share their views.

V. Balakrishnan from CWDR had community members in the area where his organization works draw visual maps of their village or slum in order to get a better understanding of the challenges that they are facing every day. Besides that, his team iterated a simple questionnaire several times while applying visual elements in order to make it easier to use by semi-literate women in the local communities.

Krupa Haresh Balan from the Vacha Trust, an advocacy group for women's and girls' issues, described creative projects they started doing with the girls from their community in order to create awareness about boys lingering in front of girls' toilets. They encouraged the girls to take pictures and create a photo exhibition. The exhibition worked as a conversation starter between the girls and some of the boys and the situation improved considerably.

## Immediate intervention and co-creation

The design methods that the participants learned and applied during the workshops were originally intended to be used by dedicated design teams to gain more empathy, synthesize insights or build prototypes. However, many organizations told us how they also used them directly as a tool for intervention. Gururaja Budhya from Urban Research Center (URC) took the workshop design that the participants had experienced and copied it with a group of urban women councillors. In this way he enabled the women in his area to come up with ideas of their own and to test them immediately.

The NGOs Social Action for Human Resource Development (SOHARD) in Rajasthan and Social Centre for Rural Initiative & Advancement (SCRIA) in Haryana organized a design-thinking workshop where they invited elected female leaders. They simplified some of the tools (which you will also find in the method section of this publication) in order to think about how to approach the withholders in their communities better. One of the results of these workshops was that their staff engaged with the Khap Panchayat, a traditional, non-elected community organization representing a certain clan or several clans in rural communities. By finding the right words and the right timing, a woman was allowed for the first time ever to even speak in front of this group of very traditional and influential local leaders.

## *Be compassionate – even towards withholders*

The biggest impact of the project was achieved for those partners who had the idea to focus more on people who are not their usual target audience. Through the analysis of the stakeholders they had understood that the withholders play an important role and therefore decided to learn more about them.

Sunder Lal from SCRIA said that with design thinking you should "unlearn what you already know", in order to apply this different mindset. He admitted that they have been "involving women for so many years". To start working with men seemed to be just a small idea in the beginning. During 2017 and 2018 this tiny change enabled SCRIA and SOHARD to understand the needs and wishes of male surpanches (local elected leaders) better. Only by inviting a group of traditionally sceptical surpanches were they able to convince two of them to commit to the participative way of creating the next village plan for which they had been advocating for a long time. In the years before they had used this participative way of planning only with the women of the villages. Now this planning method benefits all citizens and is transparent at the same time. Based on this new plan they were able to unlock a significant allocation of funds, so that now other surpanches want their help in doing a participative village plan.

SCRIA also went into ideation sessions with schoolboys. Based on the insight that the mother in a household often eats last in the family and sometimes does not get enough food, they asked the boys to think about what could be done to decrease inequality at home. Beautifully simple ideas came. One of the boys said: "Let's eat all together, so that everyone gets an equal share." After the session the boys pledged to propose this new dinner set-up to their families.

Gururaja Budhya also highlighted this specific aspect: "We always see the opposite person from one perspective and don't understand that they have another point of view." Based on this insight it was also important for them to learn more about the stakeholders in the context of their community of urban female leaders.

# A step-by-step guide

# A thousand and one methods

Within each of the phases many different methods can be applied. Many books and online resources describe these methods. Have a look at the resources section in the box. Each design thinking team will create their own set of methods, theory hacks and approaches.

An experienced team will have someone from within the team to facilitate the process, while a less experienced team might have someone from the outside guiding them.

## Additional resources

Dave Gray, Sunni Brown and James Macanufo. *Gamestorming: A playbook for Innovators, Rulebreakers and Changemakers.* Sebastopol: O'Reilly, 2010.

Vijay Kumar. *101 design methods: A structured approach for driving innovation in your organization.* Hoboken: Wiley, 2013.

Florian Rustler. *Thinking tools for creativity and innovation: The little handbook of innovation methods*. Zürich: Midas, 2018.

Dan Saffer. *Designing for interaction: Creating innovative applications and devices*. San Francisco: New Riders, 2010.

Marc Stickdorn, Markus Hormess, Adam Lawrence, and Jakob Schneider. *This is service design doing: Applying Service Design Thinking in the real world.* Sebastopol: O'Reilly, 2018.

The design kit, online.[32]

Design research techniques [33]

Google design sprint methods [34]

Stanford d.school resources [35]

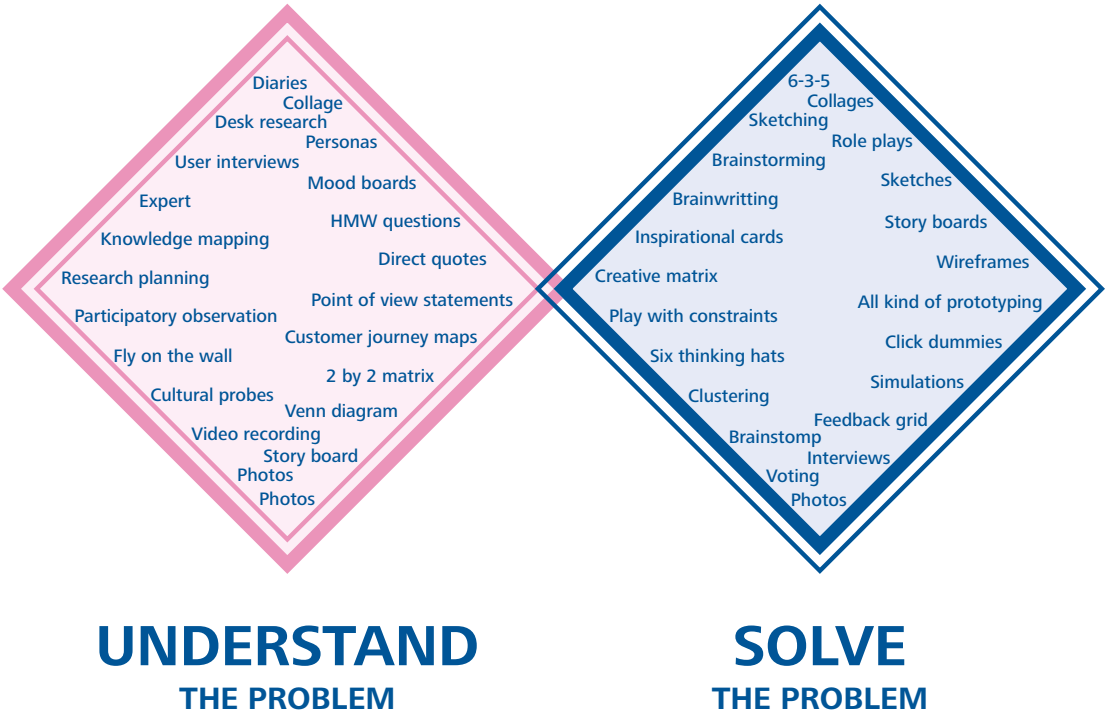
Gamestorming repository [36]

Luma Institute workplace [37]

Service design tools [38]

The method repository of "This is service design doing" [39]

Image 4: The double diamond with a selection of the most important methods in each phase




Source: Adapted from the "Double Diamond" by the British Design Council.

# Facilitate your team

Design thinking is very much based on the self-organization of teams and thus does not entail a belief in the usefulness of a hierarchical decision-making process. Since the team works together in all phases of the process, it usually builds much more knowledge than a manager or a team leader could possibly have. By iterating and testing ideas and concepts, the team ensures that the ideas they are taking forward actually work. Therefore, the team should be enabled to take decisions as quickly and as un-bureaucratically as possible. A leader in this context will make use of a facilitative style of leadership.

## *The concept of facilitation*

"Facilitators are like midwives," writes Roberta Tassi. "Facilitators help groups of people by identifying and using a variety of processes that help participants to bring ideas to the surface, and enable them to reach their goals."[40] A facilitator, in design thinking or another context, knows the process thoroughly and constantly develops their knowledge about methods and tools. Such a facilitator will be able to decide whether a certain part of the process should be done as a workshop or whether some parts need individual work as well. In our project, Moritz Gekeler acted as both facilitator and trainer. He guided the participants through the process, choosing the methods that he considered helpful to deal with the specific issues of each phase. By giving the teams homework he ensured that they would prepare specific content before each meeting.

## *Methods for facilitation*

The following methods are just a small introduction into the broad toolbox of a great facilitator.[41]

# Warm-ups


**Time requirement**

5 - 90 minutes

**Required material**

- Depends on the chosen warm-up

**Additional literature**

Grace Hawthorne et al., "Impact and Sustainability of Creative Capacity Building: The Cognitive, Behavioral, and Neural Correlates of Increasing Creative Capacity", in: *Design thinking research. Building innovation eco-systems*, (Zürich: Springer, 2014, pp. 65-74).

Improv Encyclopedia, an online collection of improv theatre games[42]

Session lab, an online workshop planner and library of methods and tools, see the energizers[43]

Service Design Doing, official website to the namesake book, see the section on Warm-Ups[44]

## How to use the method

A warm-up (or energizer) is a short playful activity. Usually warm-ups are used during work-shops, but even in a longer project they can help teams to loosen up and change the perspective. As studies have shown, regular creative activities also help in building the creative capacity of a person. Any game can be used as a warm-up. You can take inspiration from fields as varied as improvisational theatre, children's games, meditation and sport. Some warm-ups have as their goal simply for the team to have fun, while others might help them in achieving a specific goal in one of the design phases: For example, you could do a quick round of interviews between the team members in the curiosity phase or do a handicraft exercise as a warm-up, in order to get the team on board for prototyping, feeling constructive or trying out an idea that might seem crazy.

## When to use it

Warm-ups should be used regularly to help the team to get to know each other and be comfortable with each other, and to get rid of tensions. Ideally the facilitator should have a goal in mind when proposing a warm-up (e.g. relate it to a design phase).

## Step-by-step guide

There are millions of warm-ups to be found in books and online. The general process for choosing one is the following:

1/ Identify the occasion for which you need a warm-up. Does the team already know each other or do they have to introduce themselves first? Are you in a specific phase of the design process that could need some introduction or kick-start?

2/ Decide on the amount of time you want to spend with the warm-up.

3/ Have a look at the online method repositories in our additional literature section.

4/ Choose one or design your own playful exercise.

5/ Play it with your team.

6/ If the warm-up was not only a fun activity but had a certain goal, do a short reflection with your team. This will over time also increase the willingness of sceptics to participate in such activities.

## Pitfalls & challenges

Since warm-ups are playful activities there might be people in the team who think that games are for children only. In order to bring them on board it makes sense to explain why it is a good idea to do a warm-up. Also, while choosing a warm-up for sceptical people you should ideally relate it to the activity or phase you are working on at the moment.

# I like, I wish

**I like:**

**I wish:**

**(How to:)**

**Time requirement**
5 - 30 minutes

**Required material**
- A computer and/or sticky notes.

**Additional literature**

Method "I like, I wish, what if", Stanford d.school.[45]

Method "I like, I wish, what if", Interaction Design Foundation.[46]

## How to use the method

One of the core elements of design thinking is to be mindful of the people who are involved in the process. In order to do this it is important to constantly check how the team is doing. Design thinkers, instead of holding long meetings to discuss the status of the team, rather use short and concise methods. "I like, I wish" is one of these methods. It helps the team to quickly share what works well in the collaboration experience and what could be done better.

## When to use it

This should be used regularly at the end of a day or a meeting. In these cases it can be a very short activity of 5-15 minutes. After bigger achievements or project milestones the team should take a little bit more time and reflect in more detail.

## Step-by-step guide

1/ Bring the whole team together.

2/ Ask everyone to share one thing they like and one thing they would wish to be different about their experience. Some versions of this method make use of a third category of "How to" or "What if", where the team members can already propose solutions on how to meet the wishes.

3/ Document the likes and wishes either by having the team write them on sticky notes or by typing them on your computer.

4/ Regularly have a look at the wishes in order to think about how to improve the collaboration.

## Pitfalls & challenges

Make sure that the team feels comfortable in sharing their views. If there is a strong hierarchy or cultural environment in which some team members might not feel comfortable in speaking up, have them write the likes and wishes individually on sticky notes and shuffle them before reading them out loud. Do not go into long answers for each item, in particular the wishes. Use the session with the team as a time for collection (divergent) and decide on a specific time for solving the raised wishes (convergent).

# Visual thinking

**Time requirement**

No specific time requirement.

**Required material**

- A lot of whiteboard space or brown paper
- A good amount of diverse stationery close to hand
- Cameras or mobile phones with cameras
- Access to online images

**Additional literature**

Rudolf Arnheim, *Visual thinking* (Berkeley: University of California Press, 2004).

Robert H McKim, *Thinking Visually. A strategy manual for problem solving* (Dale Seymour Publications, 1980).

Method "Draw it", *Design Kit*, an online collection of design methods.[48]

The Noun Project, an online resource of icons created by designers around the world.[49]

## How to use the method

This is a core approach throughout the design thinking process and one of the justifications of even calling it design thinking. In any phase of the process the team should visualize the results and ideas they are working on.

They can sketch simple stick-figures on a piece of paper. They can take pictures and videos of their research instead of just writing it down. They can apply visual frameworks (such as 2-by-2 matrices or Venn diagrams[47]) to their research data in order to be more compassionate with the target audience, or they can make their ideas and concepts tangible by prototyping them in a visual and experiential way.

## When to use it

Visual thinking should be applied in all phases of the process.

## Step-by-step guide

1/ Encourage the team to use visual tools during the entire process.

2/ Even if the team members do not feel very comfortable in their sketching or other artistic abilities, reassure them that you are not looking for art, but only for a way to convey a concept or a meaning.

3/ Encourage them to take pictures and videos.

4/ Help them in providing material (stationery, whiteboards, flip charts, brown paper, etc.) that is inspiring and fun.

## Pitfalls & challenges

Some people do not feel confident in their own drawing skills. Let those team members who sketch well work together with the ones who do not in order to create an exchange. Also enable the team by reminding them of tools where they can find images that express the specific concept that they are thinking about. This can include providing old magazines to cut out images, or showing them on-line resources for visualizations and icons such as the noun project (see additional literature).

# Make use of the walls


**Time requirement**

No specific time requirement.

**Required material**

- Some kind of wall-mounted canvas (e.g. whiteboards, chalk boards, brown paper or flip charts)
- Markers in diverse colours and sizes
- Tape
- Pins

**Additional literature**

Scott Witthoft and Scott Doorley, *Make Space. Set the stage for creative collaboration* (Hoboken: Wiley, 2012).

## How to use the method

In today's world most of our work happens within a frame of 12 to around 30 inches. Those are the sizes of the most commonly used computer monitors. Creativity and especially collaborative creative work does not really fit into those dimensions. Therefore, design thinkers try to go beyond the boundaries of the computer as often as possible. To do this, they make use of the space and especially the walls in their work space. You can use whiteboards, chalk boards, pin boards or just regular paper, which you stick to the wall. This has several benefits:

- You have all your work visible at once when it is stuck to the wall.
- The team will be forced to stand up in order to stick things, which stops them from being stuck in their comfortable office chairs. Working in a standing position increases the energy level and will force the team members to look at each each other more often and interact more physically.

## When to use it

This should be used throughout the process. Ideally the team should have a dedicated space where they can leave the posters and visualizations over the whole time of the project. This way they will be able to even physically remember where a specific information is after a longer project involvement.

## Step-by-step guide

There are millions of warm-ups to be found in books and online. The general process for choosing one is the following:

1/ Make sure you have empty walls in your work space.

2/ Put as many boards or brown paper around you as possible, to encourage the team to stick everything there.

3/ Sometimes unexperienced design thinkers will fall back into the mode of just discussing without taking any notes or visualizing anything.
Reinforce the concept of visualizing and documenting everything while the team is working.

4/ Take pictures of everything you have done, but also keep the posters for future reference.

5/ If you are working with a remote team, there are online resources such as the Realtime Board[50] realtimeboard.com or Mural[51] mural.ly which help teams to work as if they were in the same room. But be aware that online collaboration needs even more moderation from the facilitator.

## Pitfalls & challenges

Unexperienced design thinkers sometimes need to be reminded of taking notes and visualizing everything. Some people also regularly fall back into the habit of sitting down and relaxing instead of standing in front of the wall they are working on. Avoid this by taking regular breaks and by deliberately deciding when the team should be working in an upright position and when it makes sense to sit down.

# Be curious!

As explained above, the whole point of the initial phase of the design thinking process is to be curious. Instead of expecting the team to know everything already, a design thinker expects the team not to know anything – but in a positive way.

## *The concept of being curious*

Based on the attitude of not knowing, the team can start gathering as many observations and develop as many insights as possible. Design thinking is based on a constructivist world view, in which each individual has an own, very unique experience of the world. From that standpoint it is always valuable to interact with other individuals and be surprised by the stories they tell about their lives.

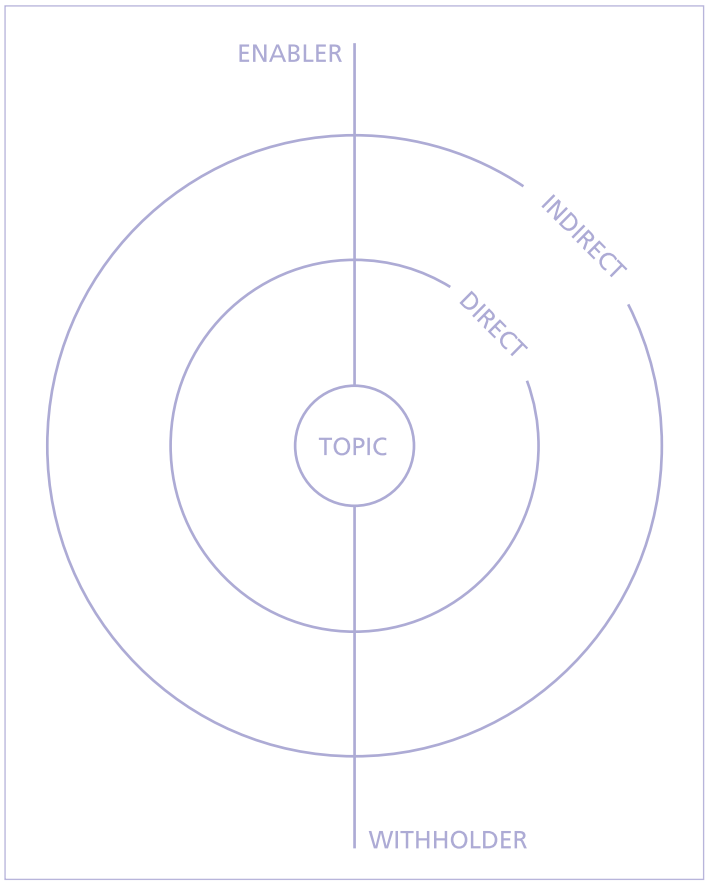
A design thinker will usually learn something new in every project they do, even if it is a project in their very specific field of expertise. The goal of the design thinker is to gather a 360° view of the given challenge. This involves looking at blind spots, and taking another look at things that had supposedly been understood earlier.

In our project, this meant not only looking at our direct target audience, but also trying to understand and build empathy, maybe even compassion with the other side – that is, in our case, people who are opposed to the concept of gender equality.

## *Methods for nurturing curiosity*

The following methods are just a small introduction into the broad toolbox to stimulate curiosity.

# Stakeholder mapping




**Time requirement**

30-90 minutes

**Required material**

- Template (printed or drawn on a board)
- A lot of sticky notes
- Markers for each team member

**Additional literature**

Marc Stickdorn and Jacob Schneider, "Stakeholder Maps", in: *This is service design thinking. Basics - Tools - Cases* (Amsterdam: BIS Publishers, 2012, pp. 150-153).

Tool "Actors Map", Service Design Tools.[52]

Method "Stakeholder Map", Interaction Design Foundation, online.[53]

## How to use the method

To understand the whole system of stakeholders who are directly or indirectly part of the context of the project, it is very helpful to map them all out. Especially when done with a diverse group of experts from different fields, this is a very fruitful exercise, which enables the team to quickly see any blind spots.

## When to use it

A stakeholder map can be done quite early in the project, but it should be revisited over the course of the project, and expanded or amended if necessary. During the research more stakeholders might become apparent and the interconnections between the stakeholders might become clearer.

## Step-by-step guide

1/ Prepare a template on the wall. The template should show the topic you are working on in the middle, and can show potential categories around that, which will help to think about specific stakeholders. The template given in this publication suggests the following categories: direct vs. in-direct stakeholders as well as enablers vs. withholders. These were specific to the project on gender equality, while other templates propose other categories (e.g. internal vs. external stakeholders). You can decide which category makes most sense in your specific project situation.

2/ Hand sticky notes and markers to each team member.

3/ Let the team members think of stakeholders who are part of the context of the project. Let them keep their thoughts to themselves at first, and only later share the ideas with the rest of the team.

4/ Have them stick their ideas on the template is inspiring and fun.

5/ Let the team take a closer look at the map and identify missing stakeholders and blind spots.

6/ If you have more time, you can also have the team draw connections between the stakeholders.

## Pitfalls & challenges

The more diverse the group is the more complete the stakeholder mapping will be. There should be some experts on the topic, but it always helps to have people with a completely different perspective, since they will more easily identify unconventional stakeholders. To avoid missing out on anything you can also test your stakeholder map with other experts.

# Interviews

**Time requirement**

30-120 minutes per interview

**Required material**

- Collection of questions
- Notebook and pen
- Device for audio and/or video recording

**Additional literature**

Dan Saffer, *Designing for interaction. Creating innovative applications and devices* (San Francisco: New riders, 2010, pp. 87 f.)

Vijay Kumar, 101 Design Methods. *A structured approach for driving innovation in your organization* (Hoboken: Wiley, 2013, pp. 88 ff. and 110 f.)

Method "Semi Structured Interviews", Design Research Techniques.[54]

The video introduction "Getting people to talk" by IIT Institute of Design.[55]

## How to use the method

Interviews are the most popular method for getting to know another person in design thinking. They can be applied when speaking to the target audience as well as to other stakeholders such as experts or donors. In the process of getting a 360° view of any given challenge it is very helpful to use interviews across the stakeholder map and speak to selected people from different areas and contexts. Depending on the challenge you are working on it some-times helps even to just go out on the street and speak to random people.

An interview in the context of design thinking is different from a structured survey. While the latter relies on a heavily structured questionnaire, the former keeps things more open to give space to the interviewee to express their thoughts and views.

## When to use it

Interviews usually are used at the beginning of the process to get an overview and an understanding of the situation. Depending on the interviewee an interview can be hours-long or very short. To really get new insights, interviews that last between 30 and 120 minutes usually help the most.

The second phase where interviews are really helpful is the "be constructive" phase, where the team collects feedback on the concept(s) they have created.

## Step-by-step guide

1/ Have at least a basic understanding of what you are working on and who is related to that specific challenge (e.g. through a stakeholder map). Make use of the collective brain of the team to first understand everything that you already know or think you know about the challenge at hand.

2/ Identify what broad areas you would like to talk about with your interviewees. Instead of a linear questionnaire, a mind map with questions gives you more flexibility during the interview. Since we are not trying to prove anything, this questionnaire can also change over the course of the interview. If one interviewee asks an interesting question that you had not thought of, add it to your questionnaire.

3/ Set up the interviews. If at all possible it is always advisable to do the interview in the interviewee's usual surroundings, as opposed to a meeting room or any other artificial place. This way the interview will also link to another method in design thinking, which is observation.

4/ Build a rapport with the interviewee. It is important that they do not feel judged or tested during your interview. Tell them that you are here to learn, and ask very openly and naively in order to really understand the meaning of what the interviewee is telling you.

5/ During the interviews it is crucial that you let the interviewee speak most of the time. Ask open questions and avoid leading ones. The 80/20 rule applies: the interviewer only speaks for 20 percent of the time, while giving 80 percent of space to the interviewee. Remember you are not judging the answers and you are not there to defend or prove anything.

6/ It is key to take notes. Direct quotes in particular should be noted down, but observations can also be helpful later. If possible, record the interview, but be aware that you will not have the time to listen to everything again. If you think something is very interesting, you can make a note of the time-stamp in your recording in order to jump to that specific topic later when you listen to it again.

7/ After the interview thank your interviewee and ask them if you could come back at a later stage with more questions or even a prototype for testing.

8/ After the interview, review your notes and highlight any extraordinarily interesting quotes.

## Pitfalls & challenges

Since the rapport between interviewer and interviewee is crucial, it is best to go as a team of two to an interview. This way, one person can take notes while the other concentrates more on conducting the interview. You definitely should avoid judging or contradicting the interviewee, even if they express views that do not correspond with your own. You are only collecting data (divergent thinking). Try to understand why they think in this specific way. You should also not try to sell the interviewee anything. To avoid that, ask open questions that give space for the stories of the interviewee.

# Observation

**Time requirement**

30 minutes to one or more full days depending on the situation

**Required material**

- Notebook and pen
- Recording device for pictures, and audio and/or video recording

**Additional literature**

Dan Saffer, Designing for interaction. Creating innovative applications and devices (San Francisco: New Riders, 2010, pp. 86 f.).

Vijay Kumar, 101 design methods. A structured approach for driving innovation in your organization (Hoboken: Wiley, 2013, pp. 88 f.).

Florian Rustler, Thinking tools for creativity and innovation. The little handbook of innovation methods (Zürich: Midas, 2018, pp. 122 f.).

Design Research Techniques, online.[56]

The explanation on "How to conduct user observation", Interaction Design, online.[57]

## How to use the method

As described in the context of interviewing, ideally your curiosity should lead you to not only hear what people are saying, but also to observe what they are actually doing. Very often the two do not fit together.

Observation can be done in many different ways. While doing an interview, you can ask the interviewee to show you the things they are talking about. You can conduct fly-on-the-wall observation where you do not interact at all with the objects of your observation. You can even observe yourself trying out something related to the challenge you are working on. The important thing is to be mindful that you are observing. Ideally you should take pictures or notes while observing and again not judge if you see someone make a mistake or use a certain tool in the wrong way. In fact those are the observations we can learn the most from.

## When to use it

Observation is especially helpful at the beginning of the process, when you still need to understand the problem, and again in the later stage when you have a prototype of your solution and you want to see how people are using it.

## Step-by-step guide

1/ Identify the things or activities you want to observe.

2/ Make an appointment with the target stakeholder who can give you access. Again make sure that you can go as a team in order to have one person to take notes.

3/ Go to the place where you can observe. Interact with the people (participatory observation), immerse yourself consciously in the situation you would like to observe (self-observation) or observe from a distance without any interaction (fly-on-the-wall).

4/ Take notes, take pictures, take video footage! Additionally you can even take artefacts (things that have meaning to the challenge you are working on) from the scene with you. Of course you will have to ask if it is OK to take them.

5/ After the observation is complete, take a look at your notes. Highlight the surprising things and reflect on what you have learned from them.

## Pitfalls & challenges

For people who are not used to consciously observing it might be difficult to know what to look for. Keep a curious mind and pay attention to the details. Take note of everything, even if it might initially seem irrelevant. Take pictures or video footage to have something to remind you of the things you saw.

# Be compassionate!

During the initial, “be curious stage”, the team applies divergent thinking techniques. This means they collect data without selecting or prioritizing any of it.

## *The concept of synthesis and how to develop compassion*

In the synthesis phase the team now brings that data back home and analyses it. To do this it is important to have good notes, pictures and artefacts from the previous activities. Back in their studio the team compiles this data, ideally by writing observations and quotes from the research on sticky notes. The team then re-arranges the sticky notes and applies a variety of frameworks to the data to find patterns and create insights. If done right this process should produce some lightbulb moments, where the team realizes that they have uncovered things they did not know before.

## *Methods for being compassionate*

The following methods are just a small introduction into the broad toolbox to stimulate curiosity.

# Storytelling and clustering


**Time requirement**

Two hours to a day or more, depending on the amount of data.

**Required material**

- Boards and board markers
- Sticky notes and markers
- Print-outs of the pictures

**Additional literature**

Dan Saffer, *Designing for interaction. Creating innovative applications and devices* (San Francisco: New Riders, 2010, pp. 94 f.).

Florian Rustler, *Thinking tools for creativity and innovation. The little handbook of innovation methods* (Zürich: Midas, 2018, pp. 132 f.).

Tool "Affinity Diagram", Service Design Tools.[58]

## How to use the method

During the curiosity phase all observations, quotes etc. have been collected in a notebook. Now it is time to share the data with the rest of the team. Since not everyone was present in each interview or each observation, the team has to collaboratively understand what they have learned. A simple way of doing this is the method of storytelling, where each team member shares the stories from their interviews and observations while the rest of the team notes the stories on sticky notes. Colour coding helps identify where each information came from afterwards. After collecting all the data on the wall, the team sorts the sticky notes to find common themes, trends and clusters.

## When to use it

Storytelling can be used right after a set of activities such as interviews or observations, when the memories of the activity are still fresh. The clustering should be done in a dedicated session in order to ensure that the whole team is present and focused.

## Step-by-step guide

1/ Choose a body of data (e.g. your interviews, observations etc.)

2/ One team member or small research team recounts each activity one by one and highlights the information that stood out. The rest of the team notes everything down on sticky notes. Only write one observation or quote per sticky note.

3/ Once all research activities have been shared the team re-sorts the sticky notes to find clusters of observations, pictures and quotes that have something in common.

4/ Once they have found the clusters, the team identifies headlines that describe the common element in each cluster. Ideally these headlines should not be single words but full sentences. By finding a full sentence for each cluster the team actually processes the data. This is where the magic happens.

5/ The cluster headlines should give you an overview of the world you have found in your research. They will describe problems you have seen and observations you have made, and condense your raw data into insights and key learnings that will help you later in the process to design a better solution.

## Pitfalls & challenges

The biggest challenge here is to be too picky about what information you share from your research. Since you do not know before what each data point might mean, you should make sure to collect as much as possible. Clustering poses another huge danger. Instead of making things clearer it might actually obscure things. This usually happens when the clusters are too big and the headlines of the clusters are comprised only of single words or half sentences. Be careful to create clusters that actually only allow one conclusion and write that conclusion down as the headline of the cluster. This might mean that there are only very few sticky notes in a cluster. Here it is not about quantity, but quality.

# Mood board


**Time requirement**

30-90 minutes

**Required material**

- Big sheets of paper, Glue, Scissors, Photos, Old magazines and newspapers
- Diverse artefacts that you found during research
- Other inspiring material such as textiles, differently coloured paper etc.

**Additional literature**

Dan Saffer, Designing for interaction. Creating innovative applications and devices (San Francisco: New Riders, 2010, pp. 149f.).

Tool "Moodboard", Service Design Tools.[59]

Method "Mood Board", Game Storming, official website of the namesake book.[60]

Method "Mood Boards", This is Service Design Doing, online.[61]

## How to use the method

A mood board is a collage of images, texts, artefacts, newspaper cut-outs and other found objects. It either represents a set of feelings that the target audience finds themselves in as observed in the research (as-is mood board), or it visualizes an emotional vision for the final product or service that the design team wants to create (to-be mood board). Due to its abstract nature the mood board works well as a creative activity to build empathy with the target audience. It can even be created in collaboration with the target audience or by the target audience.

## When to use it

Traditionally, mood boards are used in design fields such as interior, graphic or fashion design to explore the aesthetic style that the designer wants to achieve in the final product. In this sense they are part of the creative phase of a design process. But during the research phase as well, mood boards can help visualize the emotional level of a situation or the context.

## Step-by-step guide

1/ Prepare material from which to create the mood board. You can use whatever comes to your mind, for example pictures from the research or from magazines, discarded product wrappers that you found during research or that represent the community you are working with, print-outs, movie stills, colours, textiles, natural things (e.g. leaves) etc.

2/ The process of creating a mood board is rather intuitive, so start with whatever material you want and explore where it leads you.

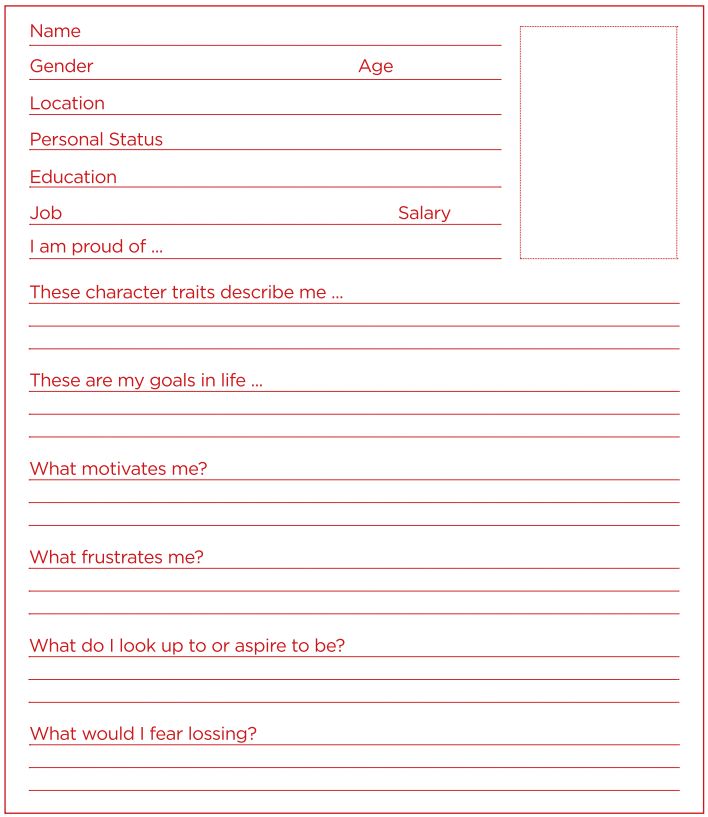
3/ Use words or sentences from magazines or newspapers to make the things you want to express more explicit.

4/ The mood board is a great way to convey a message on an emotional level. Use it for presenting your target audience to others in order to explain the problems they are facing.

## Pitfalls & challenges

Since it is a rather intuitive and not a very structured method, some people might not feel comfortable with it. In order to take away the seriousness you can use the creation of a mood board also as a warm-up game at the beginning of the compassion or creativity phase.

# Personas




**Time requirement**

30-90 minutes

**Required material**

- Sticky notes and markers
- Print-outs of the template
- Pictures from the research or from the internet

**Additional literature**

Vijay Kumar, *101 design methods. A structured approach for driving innovation in your organization* (Hoboken: Wiley, 2013, pp. 210 f.).

Florian Rustler, *Thinking tools for creativity and innovation. The little handbook of innovation methods* (Zürich: Midas, 2018, pp. 140 f.).

Method "Personas", Interaction Design.[62]

Method "Personas", Service Design Tools.[63]

## How to use the method

Personas are fictional characters. They represent individuals who could live in the world that has been observed during research. They help design teams to identify the goals and limitations of a specific stakeholder group for their project and at the same time to relate to someone with a different perspective on the world. In a design project the persona is very often used as a starting point. It can inspire ideas that otherwise would not be possible.

Even though it might feel unfamiliar to focus just on one individual instead of a target group the tool of the persona can be very powerful. Think of a persona as the character of a theatre play or a movie. The collection of qualitative fragments of this character makes it easier to tell a story about him or her. An audience who listens to a presentation that is based on personas can relate much better to the content.

## When to use it

Personas are used during the compassion phase in order to synthesize the research into one or more specific points of view. In the creative phase they function as starting points for ideation. In the constructive phase they can work as basis for testing the prototype in a role play. The design team then asks: "How would this persona feel when our solution was implemented?"

## Step-by-step guide

1/ Choose a body of data to inform your work. The better your research the easier it will be for the team to create the persona.

2/ Prepare a template that provides some guiding questions that make sense in the context of your project such as the one provided here.

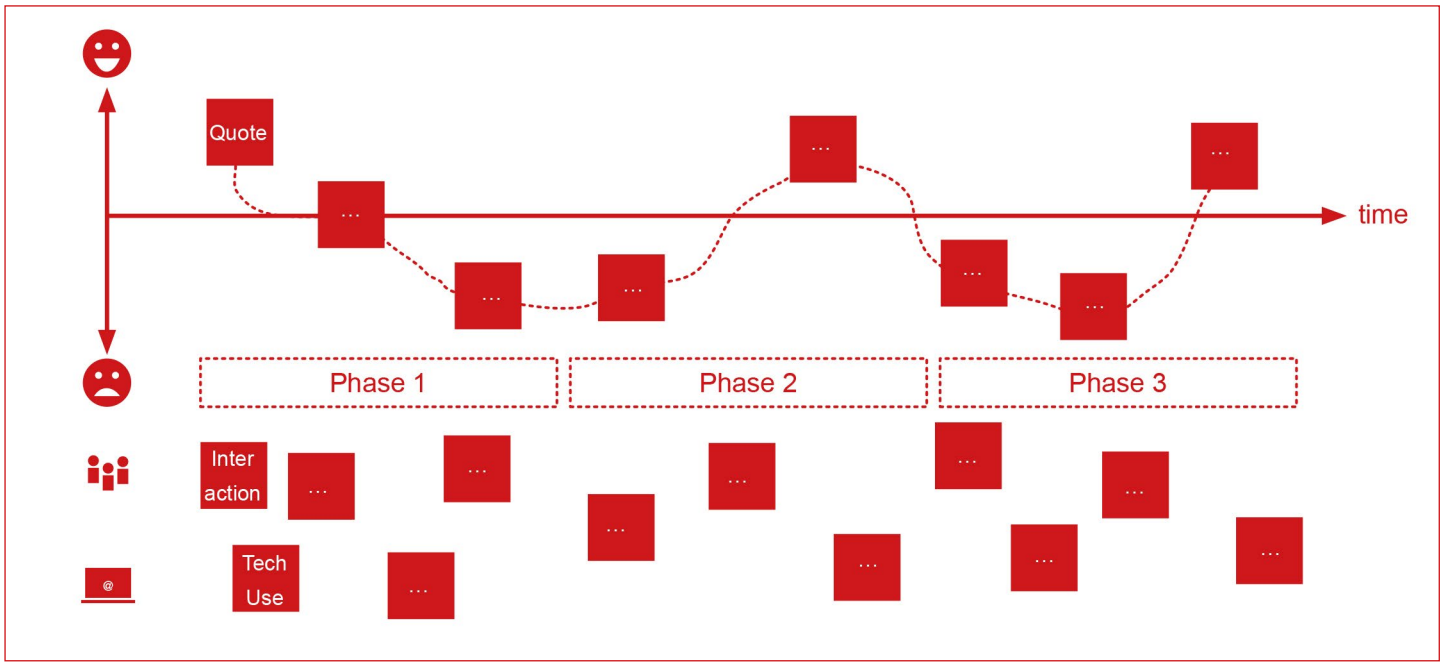
3/ Fill out the template.

4/ Use the persona throughout the project.

## Pitfalls & challenges

There are two main risks when using personas: not enough research or too much research. When you do not have enough data to ground your persona in, it becomes over-stereotypical and usually teams drift into making fun of it. If you have too much data, teams sometimes tend to take one specific person from the research who was representative of a specific group during the research. This is generally fine, but remember to modify the persona a little bit, otherwise the team might feel uncomfortable designing something for one specific person, especially if the topic you are working with is delicate.

# Journey mapping




**Time requirement**

30 to 120 minutes depending on the number of personas

**Required material**

- Space on the wall
- Sticky notes and markers
- Maybe pictures and other artefacts from the research to make it more specific

**Additional literature**

Vijay Kumar, *101 design methods. A structured approach for driving innovation in your organization* (Hoboken: Wiley, 2013, pp. 182 f.).

Marc Stickdorn and Jacob Schneider, "Stakeholder Maps", in: *This is service design thinking. Basics - Tools - Cases* (Amsterdam: BIS Publishers, 2012, pp. 158 f.)

Method "Customer Journey Map", Service Design Tools.[64]

Method "Journey Map", Design Kit.[65]

Method "Mapping Journeys", This is Service Design Doing , online.[66]

## How to use the method

Based on your persona you can create a journey map. This is a visual representation of the experience a person has over time. The journey map shows the different steps the person takes and should link them to some emotional evaluation. How does this person feel at any given point of time during the process? Depending on the topic of your project you can add additional information: Where in the process does the person interact with others or with technology? It is best practice to use actual quotes from the interviews to create a journey map.

## When to use it

Journey maps can be used in two ways: for describing a status quo and for describing a future vision.

## Step-by-step guide

1/ Have a body of data to inform your journey map. You can map the journey of your interviewees, or have personas in place who will be the protagonist of your journey.

2/ Decide on a time frame that you would like to depict. This can be a 10-minute process where your personas experience one specific problem in their lives, a day in the life of your persona, or even a period of several weeks, months or years, depending on the project.

3/ First map out the quotes, observations and insights from your research on that time frame. Usually the template for a journey map has some kind of scale on which the team rates emotional aspects of the journey. This scale can be for example based on the happiness, excitement or stress level of the persona.

4/ You can add detail by adding information about technology use, interaction with other people, or by highlighting crucial points in the journey, where important decisions take place.

5/ If you have the time and the data available it is very helpful to map several personas in order to see differences in their experience. Based on that the team can find patterns and usually find a structure that is similar across all journeys, as well as the differentiating elements.

## Pitfalls & challenges

Journey maps, as well as personas, should always be grounded in research. To be able to create a journey map, the research has to be done in a certain way. The team has to delve into processes, experiences etc. Otherwise it will be difficult to identify the journey.

# Be creative!

The myths that surround artists and other creative people often suggest that creativity is an activity for the lone genius. We imagine artists sitting in their studios finding inspiration in themselves and their individual context. While this might be true for some, design thinkers experience a different kind of creativity.

## *The concept of collaborative creativity*

Design thinkers work in a team and get inspired by the ideas that the other team members contribute. This can be a very empowering and inspiring process.

To be able to create something together in this way it is important to remind yourself of the divergent vs. the convergent thinking styles. The goal in this divergent phase is to create as many ideas as possible. To achieve this it is necessary for the team to follow some basic rules:

- Defer judgement, any idea counts
- Go for quantity first, select later
- Encourage wild ideas, don't limit your thinking
- Get inspired and build upon the ideas of others.

## *Collaborative creativity*

The following methods are just a small introduction into the broad toolbox to incite collaborative creativity.

# How might we...?


**Time requirement**
30-90 minutes

**Required material**
- Paper and markers

**Additional literature**

Florian Rustler, *Thinking tools for creativity and innovation. The little handbook of innovation methods* (Zürich: Midas, 2018, pp. 144 f.).

Method "Design and frame your design challenge" Interaction Design.[67]

Method "How might we", Design Kit.[68]

## How to use the method

The deliverable once you understand the problem better is a set of reformulated or re-framed questions. These questions should be informed by your research and should describe the problem you are working on in a clearer, more empathetic and more insightful way than before. Design thinkers often use a certain structure to formulate these questions. They ask "how might we…?" This formulation encourages finding solutions ("how"), opens up the mind to unexpected possibilities ("might"), and creates a sense of ownership within the team ("we"). Once this simple formulation becomes natural to you, most of the problems that you find in the world will become opportunities for improvement.

## When to use it

In order to create good questions it is necessary to have a good body of research. Ideally you should use this method after being curious and compassionate about the context of your challenge. Nevertheless, this way of formulating questions in order to inspire better ideas is valid in any case. So even if you have not done your research, you can use this formulation before a brainstorming session.

## Step-by-step guide

1/ Make use of the insights you obtained through your research.

2/ Reformulate those insights into questions by putting the phrase "how might we…" at the beginning.

3/ Especially for beginners, it makes sense to also put the target audience in the formulation in order to make sure that the ideas will be human-centred:

"How might we enable/help/empower ___ [who]_____ to _[do what]____?"

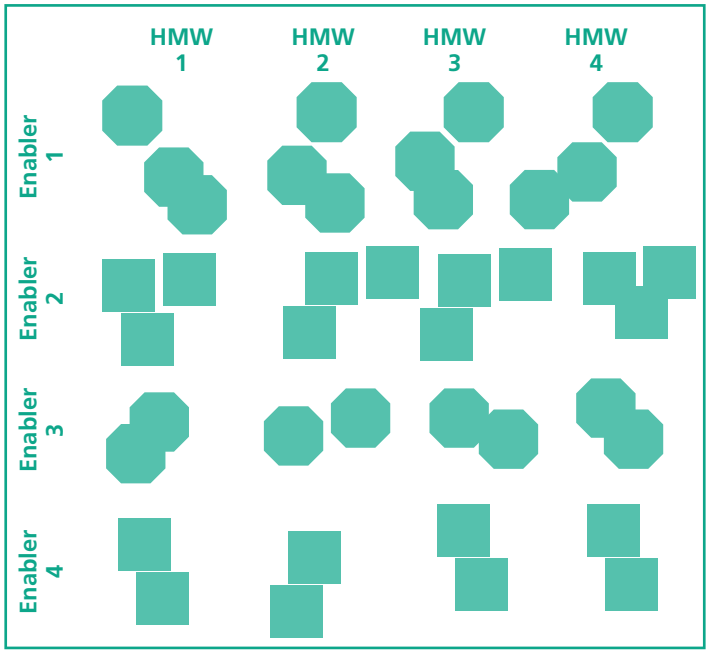
4/ If you have a lot of questions you might want to let the team vote on the ones that seem more pressing, or more inspiring to work on, to choose the right ones.

5/ Use the questions for any creative technique, such as brainstorming or the creative matrix.

## Pitfalls & challenges

Beginners often underestimate the power of this formulation. Instead of "how might we…" they might ask questions that start differently, for example with "why…" or "who…" These questions will not produce solutions. Sometimes beginners also change the word "might" to "can" or "should". Experience shows that this is simply less inspiring and can hinder the team from allowing themselves to have their own wild ideas.

# Ideation technique: Creative matrix




**Time requirement**

30-60 minutes (not longer). If necessary, take a break and repeat the exercise at a later stage.

**Required material**

- Board with the matrix
- Good questions and enablers
- Sticky notes and markers for each team member

**Additional literature**

Vijay Kumar, 101 design methods. *A structured approach for driving innovation in your organization* (Hoboken: Wiley, 2013, pp. 216 f.)

LUMA Institute, *Innovating for people. Handbook of Human-Centered Design ≠Methods* (Pittsburgh: LUMA Institute, 2012, p. 62)

Method "Creative Matrix", Business Models Inc., a collection of the best design tools.[69]

Worksheet "Creative Matrix", Bressler Group, insight driven product innovation.[70]

## How to use the method

There are countless ideation methods such as brainstorming, silent brain-writing or others. In our project we used the creative matrix and it is a method that always delivers what it should: a lot of ideas! The creative matrix may seem a little bit counter-intuitive to beginners. It is highly structured and thus people might think that it hinders creativity. But the opposite is the case: the structure of the creative matrix makes it easier for the team to develop a lot of ideas.

The matrix usually consists of five columns and five rows including the headline for each row and column. The columns either represent different "how might we…?" questions, or they stand for different personas or different phases in a process (e.g. based on a journey map). The rows on the other hand represent different enablers that might help solve the problem. Enablers could be anything. Usually the following enablers are very useful: technology, social media, events, programmes, processes, policies or facilities. Depending on the challenge at hand other enablers can be used. In order to inspire more creative ideas, even

unusual or fictional enablers such as gods, public figures, superheroes or very successful leaders can be used. Sometimes it is also helpful to reframe a constraint as an enabler in this phase. For this it is necessary to exaggerate the constraint in order for it to be inspiring. For example: Every project in every sector always struggles with budget. Mentioning the exact budget as an enabler would not be very inspiring. Instead design thinkers would use "zero budget" or "unlimited budget" as an enabler here.

## When to use it

The whole reason of doing the research before going into solving the problem is inspiration. During the curiosity phase and the compassion phase the team seeks a better understanding of the problem and inspiration on how to solve it. Therefore it is better to use the creative matrix after a thorough research and synthesis. Nevertheless, it can be used right away if you have formulated good questions.

## Step-by-step guide

1/ Draw the matrix on a board or big sheet of paper.

2/ Choose four "How might we…?" questions.

3/ Choose four enablers based on the challenge you are working on.

4/ Set a time frame for the ideation (not too long!).

5/ First let the team members silently write down and sketch ideas (brain-writing). At each intersection of the matrix the team should ask themselves, how might we solve that question using that specific enabler?

6/ While they apply their ideas to the matrix others can add more ideas (brainstorming). Now they can also start explaining ideas, but without criticizing or judging them.

7/ Once the time is up let the team discuss the ideas and add more.

8/ After the board is full of ideas it usually makes sense to do a clustering similar to the clustering the team did during synthesis, to find redundancies and clusters of related ideas.

## Pitfalls & challenges

The questions are crucial. If it is not informed by good research or well formulated, even a creative matrix can fail to help the team to come up with ideas. Besides, it is important that the team follow the rules for brainstorming. Every idea that is added to the board counts! It is also important to emphasize the necessity of doing a silent brain-writing first, before moving on to a brainstorming mode. Research has shown that this increases the likelihood of better ideas.

# Be constructive!

Design thinking is an iterative process. This cannot be mentioned often enough. Instead of creating one concept and then implementing it, design thinking calls for prototyping and testing your ideas.

## *The concept of constructive prototyping and testing*

While prototyping sounds rather technical, it actually only describes the process of making your concept tangible and ideally even experienceable. This can be done with a product, a campaign idea, a service concept or even with a policy proposal. There are several ways of making an idea tangible: You can visualize it in sketches or images, you can physically build it, or you can create a role play around it. The goal of any of those activities is to be able to convey your concept to testers. The testers might be your future audience or customers, they might be subject-matter experts or even potential donors and supporters. Based on these tests the team should iterate the concept. Some ideas might be dropped while others might be added. Once you have tested and iterated your concept well, you will have more confidence in its future success. Based on this confidence it then will be much easier to take the final steps to actually implement the concept.

## *Methods for constructing solutions*

The following methods are just a small introduction into the broad toolbox to test towards finding a solution.

# Voting visually

**Time requirement**

5-15 minutes

**Required material**

- Sticky dots in different colours
- Markers in different colours

**Additional literature**

Method "Visualize the vote", Design Thinking Toolkit, Atomic Spin, the blog of the software design agency Atomic Object.[71]

Method "Visualize the vote", Google Design Sprint Kit.[72]

Method "Quick voting methods", This is Service Design Doing.[73]

## How to use the method

In the creative matrix, you have come up with a lot of ideas, and you might have clustered them based on their affinity to other ideas. Now it is time to select which ideas you would like to take forward. One simple way of doing this is by voting with sticky dots. Instead of giving each team member only one vote, you may give them three different votes. Each vote should be showing a different category of ideas. For example:

- Red–most radical = wildest idea
- Green–most resonant = quick win for a huge target audience
- Blue–most relevant = biggest impact for the persona

This way the voting will not be based solely on the personal preferences of the team members, but focussed on specific aspects that will be helpful for choosing. If you work in a bigger organization it also makes sense to involve others in the voting process. This way you get a clearer picture. The results of this voting should be used as a heat map that informs the team decision, not a strict mechanism. The ultimate decision lies with the team.

## When to use it

It is usually applied after ideation, but you can apply the same method also to identify which "how might we…?" question you would like to work with, or which insights from your research you might want to focus on.

## Step-by-step guide

1/ Select body of data (e.g. a bunch of ideas, questions or insights)

2/ Define the categories you want to vote on (e.g. radical, resonant, relevant) and allocate a colour to each category.

3/ Give each team member some time to decide where to put their votes.

4/ Have them stick their votes all at the same time to avoid too much influencing.

5/ Take a look at the heat map of votes on the board and together decide what to do with it.

## Pitfalls & challenges

It is usually helpful to document the categories and colours somewhere on the board. This way each team member remembers them and does not get confused. Additionally you will be able to remember them looking at your board in the future. You can also use a different set of voting criteria such as technical feasibility, economic viability and human desirability. But the technical and economic criteria might be limiting at an early stage. You might be able to iterate an idea that now seems technically challenging and come up with a better way of making it real later in the process. Do not limit yourselves only to the simple ideas.

# Idea napkin


**Time requirement**

30-45 minutes per idea

**Required material**

- Print-outs of the template
- Markers in different colours for sketching
- Additionally you can use other visual material (similar to the ones you used in the mood board).

**Additional literature**

Method "Idea napkin", The Straight Up Toolkit – a resource for entrepreneurs.[74]

Method "Concept poster", Mindlab Methods – a collection of methods for iterative design processes, online.[75]

## How to use the method

In the creative matrix, you have come up with a lot of ideas. By clustering and voting you were able to identify the ones that seem more promising, but your ideas are still very raw. Now it is time to define them further. The idea napkin helps you in doing that. It provides the team with a set of questions that help in thinking a concept through. Fill out the template for each of the ideas that you would like to proceed with. At the end you should be able to explain each idea much more easily.

## When to use it

This method is best used when you have selected a set of ideas and would like to develop them further. It helps a team to make up their minds about an idea on a more detailed level. Based on an idea napkin, the team will be able to share their concept with others.

## Step-by-step guide

1/ Select a set of ideas.

2/ Fill out the template and sketch out each idea in more detail.

3/ Share the idea with others to get early feedback.

## Pitfalls & challenges

Sometimes teams find it difficult to envision their idea in all relevant details. Encourage them to play around again with divergent and convergent thinking. If you are not clear about one specific question of the template, have the team brainstorm about it and then select the answers that best apply to that specific idea.

# Six thinking hats

**Time requirement**

10-30 minutes per hat

**Required material**

- Sticky notes and markers
- Space on a board
- Optional: it's fun to have actual hats to put on

**Additional literature**

Edward de Bono, Six Thinking Hats, (London: Penguin Books, 1990).

Method "Six thinking hats", Tools Hero, a knowledge platform for skills and career development.[76]

## How to use the method

There is a huge amount of literature on the six thinking hats. It is a concept that Edward de Bono published as early as1986. The basic idea behind the six thinking hats is again based on the observation that we can consciously adopt different thinking styles. De Bono differentiates six of them and attributes colours to them. He encourages people to mentally put on a hat of a certain colour and switch them when necessary. He speaks about the following colours and meanings:

- Blue–the hat of the facilitator who keeps the overview of the process.
- White–this hat calls for the facts and just the facts.
- Yellow–this hat enables the wearer to feel optimistic. It makes you look for value and benefit.
- Red–symbolizes feelings, emotions and intuitions. You can also share fears wearing this hat.
- Black–stands for judgment, and for when you look for everything that can go wrong.
- Green–encourages you to have new ideas. It stands for opportunities, alternatives and new solutions.

## When to use it

Traditionally the method calls for a certain degree of self-organization by the team. In our process we used it in a rather structured process, where the facilitator announced each hat and gave the teams a certain amount of time to discuss their concepts in the form of an idea napkin from the perspective of that specific hat.

The concept can be used in different parts of the process. During research it can help to look at the findings from a different perspective. We used it as a way of iterating the concepts that came out of the creative process. It enabled the members of different teams to give each other more critical feedback.

## Step-by-step guide

1/ Decide on a topic to discuss (e.g. in our case an idea a team came up with).

2/ Have someone facilitate the session (blue hat).

3/ Announce each hat in turn and give the team some time to discuss the topic from the perspective of that specific hat.

4/ Encourage them to collect the discussion on a board in order to be able to build on it afterwards.

## Pitfalls & challenges

Depending on the local culture you are working in, it might be difficult for people to adopt certain thinking styles (e.g. the black hat, which is focused on critique). The facilitator should encourage the team to really stick to the prescribed thinking style for each respective hat. If people are uncomfortable uttering negative comments in front of their team members because they fear offending them, have them write down their comments silently and then shuffle the comments before discussing them.

# Behavioural change world café

**Time requirement**

90 to 120 minutes

**Required material**

- Stations prepared with boards
- One moderator per station
- Sticky notes and markers

**Additional literature**

Dan Ariely, "Are we in control of our own decisions?", talk on ted.com.[77]

Dan Ariely, Changing Customer Behaviour, course on plusacumen.org.[78]

Method "World Café", Game Storming.[79]

## How to use the method

This is not necessarily a classical design method, but for the purpose of our project we developed this method based on the publications of the behavioural economist Dan Ariely. We discussed his principles in a world café approach for each concept.

A world café is a structured discussion where different teams discuss different topics. While they are talking, they document their thoughts on a board. After a set amount of time one person stays back and the rest go to the next station where another topic is discussed. The person who stayed back introduces the thoughts of the first group to the next group that comes to that station. They build on whatever has been said. This process repeats until all teams have been at all stations. In our case we provided four stations with one question each from Dan Ariely's concept of behavioural change. He describes six different principles that you can use to influence behaviour:

- Simplicity and defaults–simple choices make it easier to change your behaviour.
- Concreteness–it should be very clear what the desired behaviour should be.
- Pre-commitment and loss aversion–the pain of losing something is greater than the joy of gaining

something.

- Choice architecture–design choices for the desired behaviour in a way that they come easy.
- Incentives–use rewards to incentivize the desired behaviour.
- Social proof – show people that others are acting in the desired way.

Our stations were based on the concepts of simplicity and defaults, loss aversion, incentives, and social proof. We left out concreteness and choice architecture because we felt that the partner organizations were not in a position to do much on those particular principles.

## When to use it

In general this is a concept that you, as a member of an NGO or social organization, should know more about. Since you are often working on changing behaviour it is crucial to think about your own offerings and check whether the principles of behavioural economics can be of help in refining them.

## Step-by-step guide

1/ Explain the principles of behavioural change to the team and watch Dan Ariely's TED talk together.

2/ Conduct a world café with stations that reflect those principles.

3/ Discuss your concepts based on those principles.

4/ Iterate your concepts in a way that they comply more with the principles.

## Pitfalls & challenges

Since this is not a simple method, it requires a more thorough understanding of the principles of behavioural change. This publication does not have the space to go into more detail, but we encourage you to attend the online course that Dan Ariely has developed for Plus Acumen (see additional literature). For the world café approach it is necessary to have one facilitator at each station to encourage the teams to document their discussion and to transfer the results to the team that comes next.

# Storyboard

**Time requirement**

60 minutes to several hours per story depending on the detail level

**Required material**

- Space on a board
- Sticky notes and markers
- Some material to make the story more visual such as old newspapers, magazines, coloured paper or printed figures e.g. from SAP SCENES (see additional literature)
- Scissors
- Glue
- Tape

**Additional literature**

Jonah Sachs, *Using the hero's journey to build better brands*, online.

Method "Storyboard", Game Storming, online.[80]

Method "Storyboard", Service Design Tools.[81]

Method "Scenes", SAP Design Services, a visual toolset for collaborative storytelling, online.[82]

## How to use the method

The partner organizations are working in the social sector. Therefore, many ideas are not product-oriented, but they might be campaigns, policy proposals or other interventions. In order to prototype such a concept, we made use of storyboards. Storyboards are familiar in the context of script writers or playwrights, but most people will also remember them from primary school, where children have to add images to a cartoon in order to tell a story.

The benefit of telling your concept in a story format is that many people relate to stories. We are able to identify with the characters and thus can imagine what the specific concept adds to the world. A storyboard usually consists of several pictures and some text. Together each picture and text represent one scene in the storyboard.

The plot of the story can be freely developed.

In our project we gave the teams some input on standard storytelling formats, such as the hero's journey, and encouraged them to use that format in order to come up with their story. The hero's journey is a format that has been identified by literature theorists by looking at huge numbers of fairy tales and folk stories. They found out that most of these stories are based on a similar structure: A hero or heroine receives a call to go out on an adventure, and after some struggle and with the help of a supernatural mentor crosses the threshold of an unknown world. She fights several obstacles (such as dragons) and finally reaches a remote place (such as the underworld or some magical cave) where she acquires a secret that she then brings back to her own world. Through undergoing this journey, the heroine has grown into a stronger and more knowledgeable character. She now can solve a problem in her own world based on her learnings.

## When to use it

Use it whenever you have to convey a concept that is time-based such as a service, a process, or a policy change.

## Step-by-step guide

1/ Identify what idea you want to tell in a story format.

2/ Let the team brainstorm on the different scenes that the story should consist of. A standard format like the hero's journey might help to create a more vivid story.

3/ Visualize each scene and tell the story in words.

4/ Share your story with others in order to get their feedback.

## Pitfalls & challenges

Developing a storyboard might not feel easy for people who have not done it before. A standardized framework such as the hero's journey can help.

In our project the teams struggled a little bit with that format, though, because of the nature of the project. Instead of making the women or girls the heroines of the story, we encouraged them to take the withholders. The thinking behind this decision was based on the idea that they should be the ones who go through a change and thus will grow by means of the intervention that is part of the concept. Most teams did not agree with this approach and thus created female heroines.

# Testing the concepts

**Time requirement**

30 -120 minutes per test

**Required material**

- Prototype to test
- Clear idea of what you want to learn
- Notebook and pen
- Photo and/or video camera

**Additional literature**

Dan Saffer, Designing for interaction. *Creating innovative applications and devices* (San Francisco: New Riders, 2010, pp. 181 ff.)

Method Design Kit.[83]

Method "Measure and evaluate", Design Kit.[84]

## How to use the method

Design thinking is an iterative approach to solving problems. It is iterative because instead of spending a lot of time and money on developing the solution first and then rolling it out, it encourages teams to check, test and adapt their concepts right from the start of a project. The concept might be still very rough, but design thinkers should feel comfortable in testing it with experts and especially with the target audience. A design thinker will approach testing their concepts with the same attitude as they start into any new project: with curiosity. The goal of testing your concept is to learn from the people you are testing it with. This might mean that you learn that your concept is not as great as you have thought. It might mean that you have to accept ideas from others that are better than yours. But it will ensure that you do not develop the wrong thing and then fail after a lot of effort.

## When to use it

Once you have an idea for a solution you should test it. It can be as small as a sticky note or it can be a full-fledged prototype. Go back in the process of design thinking to a mindset of curiosity and collect as much feedback as you can.

## Step-by-step guide

1/ Choose the concept you want to get feedback on.

2/ Identify what exactly you need to learn about it. Ask yourself, "what don't I know about my concept?"

3/ Go out, meet people and engage them with your concept. Ideally you will have an experiential prototype. So let the testers experience that for themselves. If you have a more visual prototype, such as a storyboard, show it to them, but do as little explanation as possible.

4/ Let them express their thoughts. Use the interviewing techniques such as the 80/20 rule. Listen carefully and take notes. Observe how the testers are dealing with your prototype. Ask open questions that leave space for the tester to really tell their opinion.

5/ Don't sell your idea. You are not here to convince anyone. You want to learn from them.

6/ Go back to your team space. Collect the data and go through synthesis just as you would have done after research.

## Pitfalls & challenges

There are two main challenges to overcome: the fear of embarrassing yourself and the pride of having developed something amazing. Both will hinder the team from really learning what works and what does not. To get rid of the fear, make them go out with their concept as early as possible. In order to avoid the pride of the new concept, force them not to answer any questions that have not been solved yet. Instead of answering those questions, the team should ask back "What do you think?". This will prevent them from selling anything that is not even there in the prototype, and force them to really learn about the ideas of the tester.

# Pitfalls: Where to be cautious

While the benefits of design thinking have already been discussed in previous chapters, it is also necessary to describe the weaknesses and challenges that this approach poses to any organization, but especially to those in the social sector working directly with local communities.

In general it is important to state that design thinking is not a magic wand that will immediately solve all problems of the entire humankind. This might seem obvious, but nevertheless a lot of people who hear about design thinking for the first time seem to think that. The expectation that is put towards design thinking as a one-size-fits-all wonder-tool can be found in the corporate as well as the social sector.

Besides, the objective of the design-thinking approach is not necessarily to be more time-efficient. Even with design thinking, things take their time. Due to its creative and structured approach it might help teams in starting small and circumventing obstacles and thus getting quicker to their goal. But for that to happen you need a high level of self-discipline within the team.

Of course a facilitator can help with that, but that was another fear of the participants: Do you always need a facilitator? As mentioned before, the facilitator's role is especially needed in teams working with design thinking for the first time. More experienced teams will manage themselves or have rotating members take the role of the facilitator.

Participants in this process additionally described the danger of getting lost in the process and not finding your way out towards actually implementing the ideas. This is a problem that can be observed in many design-thinking teams. They get overly excited about having ideas and building prototypes, but then nothing really happens afterwards. Therefore the expectation towards design thinking should be kept to a realistic level. It can inspire teams to have creative ideas. It can help teams to create innovative solutions to their respective problems, but it is not a guarantee for success. Again, you need discipline within the team to walk the walk and actually implement the ideas and concepts. Since design thinking (especially in the social sector) is highly self-driven with few resources, the team must take the lead and step out of their comfort zone in order to really take advantage of the methods and tools.

During the workshop in Jaipur the participants also asked themselves whether design thinking could be applied without a team. Since design thinking as it is described here is seen as a way of thinking, it can also be applied alone. Concepts like divergent and convergent thinking, for example, can be very helpful even if someone is working alone, but it is more fun and more effective when several people from diverse backgrounds come together.

Another issue that was raised was the fact that donor organizations often do not give space for human-centred and iterative proposals. In this case the team can try to find creative ways how to apply the mindset even during a seemingly closed request for proposals and secretly sneak some collaborative and creative methods into their project.

# Outlook: How design thinking could help in other projects

Design thinking has many applications and it can successfully be applied in the social sector. As described in the introduction, design thinking works best when the challenge to be solved is rather complex and allows for several answers. Through the process of design thinking a multidisciplinary team is empowered to work collaboratively, visually and to be compassionate with their target audience and their context.

If that future team has the right mindset, it will be able to develop solutions for the problems they are working on, which might be different from the ones they have had so many times before. In the social sector in particular, these solutions do not necessarily have to be big innovations. Sometimes even small changes or a new angle for applying decades-old knowledge can be just as effective.

In order for this to happen, that future team must be…

## … curious!

This means they have to leave their office and go out in the field. It also means leaving the comfort zone of working only with the stakeholders whom they know and like. Peter Coleman has shown that knowing those you consider your enemy is the best strategy to solve a conflict. "Listen carefully. Work hard to listen to the other side in a conflict. […] This alone can move the conflict in a more friendly and constructive direction."[85] True curiosity helps in doing that first step.

## … compassionate!

Only if that future team can understand the perspective of other people will they be able to include and involve them. For this the team needs empathy. But only if they also have a wish to help these other people improve their situation will they ultimately get into the mode of finding new solutions. Therefore a team using design thinking in the social sector ultimately needs more than empathy. It needs compassion.

## … creative,

and believe in their own creativity! Sometimes this creativity is hidden behind fears and traditional structures, hierarchies and processes. Design thinking can help to break those up.

## … constructive!

In order to work on huge and complex problems such as gender inequality it is necessary to start small, and permanently evaluate and re-think the solution proposals. Applying a constructive mindset and prototyping their way to new interventions and campaigns that future team will be likely more successful than following the traditional approach.

By not only accepting the "existing situation", but constructively turning it "into a preferred one"[86] that future team truly designs, as Herbert Simon has defined it.

Hopefully this publication will help other teams in doing just that, and inspire them to go on an adventurous journey that leads them to new ways of solving their old problems.

# Partner organizations involved in the project

**Center for Women's Development and Research (CWDR), www.cwdr.org**
CWDR works on issues of education, violence against women, social security, income generation and human rights in Tamil Nadu. It also serves as a support service organization for capacity building and networking for other NGOs. CWDR has organized women domestic workers in Tamil Nadu under a Trade Union called "Manushi".

**Social Centre for Rural Initiative and Advancement (SCRIA), www.scria.org**
The goal of SCRIA is to organize rural communities for sustainable rural development. In order to fulfil this goal, SCRIA has been building capacities of rural communities for their meaningful participation in self-governance processes for inclusive governance. SCRIA has been engaging with women and youth groups for initiatives on local self-governance since 1995 in Haryana and Rajasthan.

**Social Action for Human Resource Development (SOHARD)**
SOHARD, an NGO based in Rajasthan, has been working on the issue of local governance with women since 1997. Through its activities with self- help groups and elected members, SOHARD has been training women in Panchayati Raj. It tries to bring the concept of local self-governance within the reach of the people and to build confidence amongst women including elected women representatives to participate effectively in Panchayati Raj Institutions.

**Urban Research Centre (URC)**
Urban Research Centre (URC) is a non-profit organization working on action research projects on urbanization in Karnataka. URC is working on ward based participatory planning and brings together citizens, local groups, councillors and municipal councils.

**Vacha Trust, www.vacha.org.in**
Vacha is a women's group that was formed in 1987. It was first established as a women's library, together with a cultural centre that created and collected oral and visual resources. Vacha organizes gender training for teachers and social activists, youth groups and others. The organization is based in Mumbai and its outreach programmes are mainly in Maharashtra and Gujarat. It is an active part of the network of autonomous women's groups in India.

**WomenPowerConnect (WPC), www.womenpowerconnect.org**
Women Power Connect (WPC) is a national level organization of women's groups and individuals working together for formalizing the process of legislative coordination. Their activities are aimed at influencing legislators and policy makers to frame gender-friendly policies that impact women positively. WPC has 1,400 individual and institutional members across the country. WPC works actively with members of Parliament to protect the interests of women in India.

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[19] This dictum was presumably coined by George Kembel, the former head of the d.school at Stanford university.

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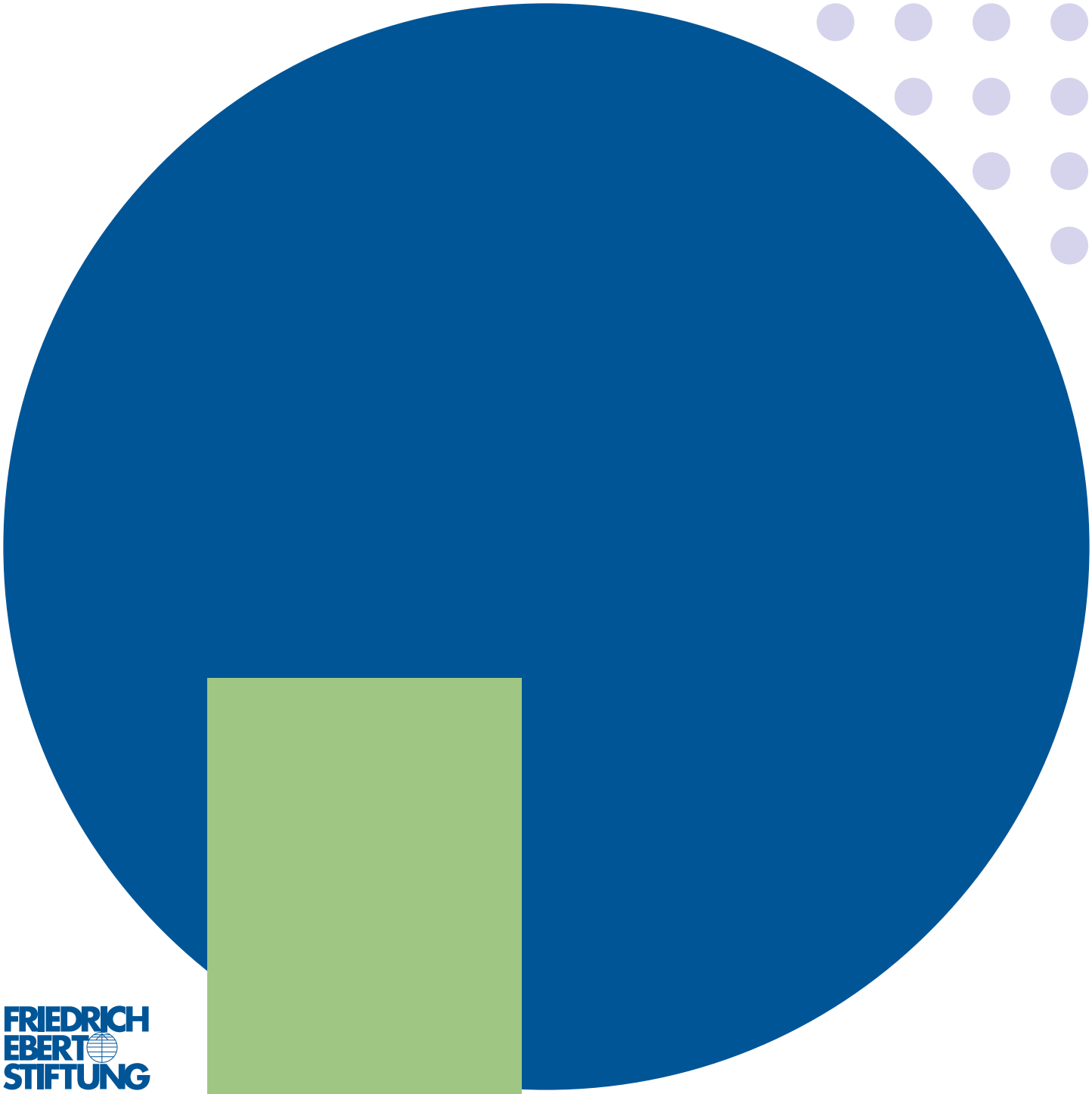

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