

## HOW TO STIMULATE INNOVATION IN YOUR ORGANISATION WITH DESIGN THINKING

Both the municipality of Aalborg (DK) and the municipality of Rotterdam (NL) introduced the method of design thinking in several Like! projects to discover how design thinking can help to develop innovative and inclusive services and to stimulate a digital innovation culture. Both organizations applied this method in various projects. In this use case we share our findings, both on a personal level as on the level of the municipal organization on using the method of design thinking.

### Our main conclusions are:

- Design trajectories are iterative processes;
- Design trajectories cannot be seen as a project with results that are quantifiable;
- Design trajectories should aim to continue until a solution is implemented;
- Design trajectories need an organizer within the municipal organisation, that knows the current status and how to continue the trajectory;
- Design thinking is a mindset that can be used with different methods and tools designers have developed through education and experience;
- Design trajectories are not little tricks that can be repeated, but tailored processes set up to solve the issues at hand.

### About LIKE!

Local governments, citizens, universities and SMEs come together to co-create smarter, more efficient and more innovative services through 9 transnational pilots that cover 3 core themes:



## Design thinking



### Relations to Workpackages

Design thinking - as way of thinking that helps the innovation in the organisation - is used in several Like! initiatives in Aalborg and Rotterdam. It fits the aim of Like! to create a Local Digital Innovation Culture across the NSR, giving authorities & practitioners new skills and knowledge to deliver innovative services, to develop new ways to engage with communities, and to build more inclusive services.

### Local partners

- Ynnovate <https://ynnovate.it/>
- &ranj (NL) <https://www.ranj.com/>
- &samhoud (NL) <https://www.samhoud.com/>
- Zeewaardig <https://zeewaardig.com/>
- Being a designer <https://beingadesigner.com/>
- Fabrique <https://www.fabrique.nl/>
- PrimusMotor <https://www.primus-motor.com/>
- Social Digital <https://www.socialdigital.dk/>

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## Introduction

One of the main targets of the Interreg NSR project Like! is to create a digital innovative culture in which citizens are engaged, and more inclusive services are build. To reach this the cities of Aalborg and Rotterdam started several initiatives with design thinking. In these initiatives one of the objectives was to find out how design thinking can help us to develop innovative and inclusive services. To research what design thinking contributed, we evaluated the pilots with participants.

Initiative	Question
<i>Beeldbrieven (illustrated letters)</i>	How can we apply images in our letters, in order to communicate more effectively with all Rotterdam residents (with a learning disability)?
<i>Everyone should vote</i>	How can we make the elections more accessible for residents of Rotterdam coping with a mental or cognitive disability?
<i>Smart Senior</i>	In which way can senior citizens contribute to improving public service delivery?
<i>Grip op je geld (grip on your money)</i>	How can we help the people of Rotterdam in a stressful situation (e.g. debt) to take action on time and change their attitude and behavior in dealing with financial problems?
<i>Invorderingen (tax department)</i>	How can we ensure that more Rotterdammers, who receive an invoice from the municipality - contact us earlier if they think they cannot pay (in time)?
<i>Oude Noorden Noord</i>	How could we involve the residents of the neighborhood 'Oude Noorden Noord' in an earlier stage of our planning in order to take their wishes/preferences/needs into serious consideration?
<i>Coming to Denmark</i>	How can we make the entry process for foreigners in Denmark easier and more digital?
<i>Hackathon for people with learning disabilities</i>	How can we, through co-creation, find digital solutions for problems that disabled people experience every day?
<i>Smart Senior Aalborg</i>	How can the municipality deliver a better service to senior citizens e.g. how can citizens and Aalborg Municipality communicate in a SMART way in the future?

Table 1 Interview participants

In this use case Aalborg and Rotterdam share their findings obtained in design thinking initiatives. This is based on empirical research as part of an evaluation. The use case is written for other professionals in the field of design in public organisations. For more information about design thinking we refer to "Co-Creation of Public Services" written by Francesco Mureddu and David Osimo<sup>1</sup>.

<sup>1</sup> <https://lisboncouncil.net/publication/publication/156-co-creation-of-public-services-why-and-how.html>

## Evaluation

The goal of the evaluation is to gain useful insights in design trajectories<sup>2</sup>. Therefore, we reviewed both personal learnings as well as organisational learnings.

### Method of evaluating

In the design trajectories, we can distinguish between three roles:

- 1. Organisers** bring the right people together in the team. They are often responsible for communication with the commissioners of the project. This includes alignment about the result of current activities and looking for the next step in the innovation process. Organisers plan the design trajectory together with the designers.
- 2. Designers** guide the design process. Plan it together with the organisers, but they are the ones coming up with the methods. They guide the design sessions actively.
- 3. People from the field**, who bring in the content for the project. They are confronted with the problem on a daily basis, be it from their own perspective. In the end they will be the ones who apply the outcome of the process or witness/benefit from the effects of the solutions.

People that participated in the different design trajectories were interviewed (see Table 2 Interview participants). We aimed to interview participants from every role for all conducted design trajectories. The interviews were open-ended, but a topic list was made to guide the interview. It included topics like "obstacles in process", "lessons learned" and "results".

Projects	Organisers	Designers	People from the field
<i>Beeldbrieven (picture letters)</i>	Esmeralde	Ynnovate	Mourad, Sylvia, Ietske
<i>Everyone should vote</i>	Bjorn	Bjorn, Ruth	Astrid
<i>Smart Senior</i>	Bjorn	Bjorn, Ruth	Aebel
<i>Grip op je geld (grip on your money)</i>	Bjorn	Markus	Marloes
<i>Invorderingen (tax department)</i>	Esmeralde	Patrick, Elke	Mourad, Latysha, Ghanba
<i>Oude Noorden Noord</i>		Tomas	Esmeralde
<i>Coming to Denmark</i>	Grethe	PrimusMotor	Rikke, Miquel
<i>Hackathon for people with learning disabilities</i>	Lajja, Mikkel	Social Digital	Laila, Mikkelt
<i>Smart Senior Aalborg</i>	Grethe	Antropologerne	Louise, Camilla

Table 2 Interview participants

<sup>2</sup> We like to use design trajectory, not design project or design process. Design project implies that the results of design trajectories within Like! were clear beforehand. The design process however does not define a clear result at the beginning but starts with finding out what acceptable results would be. Designprocess on the other hand gives the impression that no actual results were reached within a certain trajectory, which is certainly not the case.



After the interviews, we made statement cards that interpreted the most important quotes from each interview (see Figure 1 Statement card). Those statement cards were analysed and clustered in a separate session, to define the most important

Statement card
Code
<b>Interpretatie</b>
Citaat
Interview

Figure 1 Statement card

### Insights

The most important insight was the essence of the design trajectory: through the application of a design approach, the innovation process itself will focus on people. Throughout the design trajectories, people from the field needed to get in touch with citizens. In order to do this, the people from the field needed to go out of the office-buildings. This can in itself spark a lot of inspiration, even before ideas are made.

Secondly, the needs of real people should be centered in order to develop solutions to problems. In the design process, understanding the problems people have and to check whether your solutions actually work are essential parts of the approach. The design team should be sincerely curious about, and interested in the experiences and opinions of real people. This will help them to see the problem and possible solutions from another point of view and therefore will help to improve public service to those same citizens.

### Esmeralde

*We learned so much [from testing]. It was also a lot of fun. Citizens gladly collaborated and gave valuable input, that we couldn't have found out by ourselves. It really helps if you can say: the people we are doing this for, the citizens, they really want this.*

**Ghariba** *Even though I daily deal with citizens that cannot pay [their taxes], it totally knocked me off my feet to hear the problems our citizens experience and how the actions of the tax department influences their lives. Paying a warrant can mean they have no more money for their personal care or even for food.*

**Mourad** *I think it is something beautiful: We have always created from our perspective, what is the most efficient for the municipality, but have we ever created from a perspective of added social value? From the perspective of our actual client - a human being - from a basis of feeling, of trust?*

Thirdly, the people who form the design team are of great importance. The trajectory is driven by those people. By setting up sessions in a comfortable environment, making sure there are sufficient supplies for the design team, and creating a team out of a group of people, everyone feels safe to come forward with their ideas. Important aspect of this is that assumptions and prejudices become clearer through the process and influence the solution less.

**Markus** *I think the design thinking methods are this: you first look into the root causes of a problem, before you go into solutions. People have the natural tendency to immediately come up with solutions. That is very nice. You observe a problem and you start thinking what a problem could be. But because of that you are insufficiently aware of your prejudices and assumptions, and everything you bring with you. Because of that you exclude many possible solutions.*

In order to set up successful design trajectories, we have determined four different aspects that should be considered. First, the **organisational culture and the knowledge** that must be present to organize design trajectories. In order to use design thinking an organization collaboration is necessary between departments, but also inside the trajectory team. Looking from a more individual perspective, participants need a **certain attitude and specific skills** to participate in a design process. Last, we distinguish between **essential parts of organizing a trajectory**. This is by no means a complete list, but these are the elements we have observed and discussed in interviews. We dive into those aspects in the next paragraphs. It will become clear that there is overlap between the different aspects.



## Results and winners

### 1 Organisational culture and knowledge What kind of organisation is necessary to give design thinking a chance?

To apply design thinking successfully in the municipal organisation it is necessary to create a climate in which it can flourish. Design thinking asks for a certain mindset, and is not a new method like Lean or scrum.

The first important aspect is the necessity of a culture of learning and failure. This is essential in design thinking but should be adopted more widely. Innovative design trajectories are often experienced as weird and uncomfortable. People need to have the space and motivation to 'surrender' to the design process.

#### Esmeralde

*It was a bit tense [to commission an assignment], because we did not know what we could expect the first time. You had to let it go. I had to completely trust that the supervisors would work with the right methods to a good result. But when you let it go, you get on a very exciting, fun train that does not stop until you reached the final station.*

A second aspect showing up in our data is that design helps to get to the core of the problem. It is easy to jump to conclusions and to come up with solutions, but chances are high that you're not solving the actual problem.

**Grethe** *It helps us not to jump to conclusions. We are very much like: 'we have a problem; we have a solution'. I think we then fail to see what the real problem is, what is the process and what are the contact points. There are so many more contact points than you think there are in the beginning. It helps to find the problem and then a much better solution, where you really get into detail and where you think of much more.*

### 2 Collaboration What kind of collaboration is necessary, both internal and external to make design trajectories successful?

To design successfully collaboration is necessary. This applies within the design team as well as with people outside the team. In the team a mix between expertises and roles is required, and collaboration with design agencies may also be necessary to guide the process.

**Grethe** *[about different people in the course design thinking] That was also a good mix, and they give very different input.*

**Aebel** *So also the group composition is very important. It is easy when you are speaking to your own people, but it is much more interesting to listen to someone who does not know the process you are working with. That is very refreshing.*

Collaboration also plays a critical role outside the design team. Communication about the design trajectory to create enthusiasm, to inspire and to share knowledge is very helpful.

**Mourad** *I really liked that we were very visible. There are many good initiatives within the municipality that many departments can use, but they are not shared in the entire organisation with all the colleagues. I think we can be more aware of visibility in this organisation. How can we share the things we are doing to help each other?*

If you look at design within municipalities at a more structural level, the municipality should collaborate with external organisations like design agencies, universities and the city. For certain knowledge on design it is not feasible to acquire internal employees. Hence, to make use of specific knowledge, a relation with external organisations should be set up or maintained.

**Markus** *You hope these kinds of methods will be used internally. It is still missing within the municipality, but also with a lot of companies. People do things as they always have done. It is also hard to change.*

**Bjørn** *External expertise is always necessary to keep an open mind. External agencies execute interesting projects on the commercial market, where important insights and experience is gained.*



### 3 Attitude and skills What attitude and skills are necessary to be able to use design thinking as a municipal organisation?

To be able to participate in design trajectories, a certain attitude and certain skills are necessary. The attitude that is needed is that people should be open to the ideas of others and to empathize. And it is necessary to be patient and to keep going on until a solution is implemented. Skills are for instance knowing how to conduct research or how to be creative. Through participating the attitude and skills of people can also change and develop.

**Tomas** *There are different levels of design. If you do something ten times, you get better at it. The basic skills are often not there. When you have them at some point, then it develops faster.*

**Bjørn** *In design thinking is a risk that people want to deliver some thing beautiful and sexy. I find the research phase essential, to make sure that what you deliver is useful.*

**Markus** *We used some methods in the process that are very effective in all kinds of processes with clients. We also applied that here. We for instance used Lego Serious Play as visualization method to explore the problem. I think that worked very well, as well as certain brainstorm techniques.*

### 4 Essential parts of organizing a design trajectory How do you organize a design trajectory so that it can become a success?

In setting up a design trajectory certain starting points lead to more success, due to expectations about the process and results. The next paragraphs explain the starting points that form the boundary conditions for a successful design trajectory.

#### Continuity of the design team

The design team must be stable over time, so knowledge of and support for the trajectory is not lost. Also important is to have regular meetings during the trajectory, where they can really be together and work on just that.

**Mourad** *I really liked the frequency. That we got together once a week over a period of nine weeks.*

**Marloes** *I would try to work with the same people every time. Sometimes people came in or were not there. The constant factor of the same composition seems important to me.*

#### Political or high-level administration backup to innovate

Support from the administration at high level creates commitment towards the process and results. They are the ones in the organisation that can make time and money available for design trajectories. However, the downside to this is the pressure it can create to come to tangible results.

**Bjørn** *Commitment through an advisory or managing board can give support to a process and the result.*

**Rikke** *That is how it is being a municipality, right? You are dependent on the politicians thinking it is a good idea.*



## Clarify and concretize what is the goal of the trajectory beforehand

Design thinking can deliver products that are usable, but can also be used to change the way people think and act, or create a positive vibe that will resonate in the commissioning of new projects. Before the trajectory starts, the result must be clearly and specifically formulated. This helps regulate the pressure on delivering only tangible results, which prevents disappointment in both the project team as well as with commissioners.

**Bjørn** *If you work with designers, you should strive for a real solution. Prevent that involved colleagues are at some point done with creative sessions with post-its without results.*

**Aebel** *I have really good results. Things that might not be feasible, or small parts. But really good results. Completely different from what you expected in the morning, and that you thought in the afternoon: wow!*

**Mourad** *Because I set my mind to have an intervention on the final presentation, I would have liked to have the ethical points in an earlier stage. Even though we already did so much that is tangible, and if you see what we collected, what we did with each other, that is already golden!*

## Conclusion

### Discussion

The evaluation that is conducted is based on the experiences of people with design trajectories. The kind of trajectories in which people participated varied widely. Some only took one or two days, others lasted months. It could be that experiences between trajectories vary, because trajectories differ immensely from each other. For instance, long and thorough trajectories seem to get to a usable product, while the shorter trajectories increased knowledge experience for its participants, but had trouble delivering a viable product.

Looking at the different projects, an important difference between Aalborg (Denmark) and Rotterdam (the Netherlands) could be found/ discovered. In Aalborg the importance of political approval was apparent in each interview. In Rotterdam it did come up as well, but to a lesser extent. An explanation of this could be that the municipal organisation and political systems in both countries work differently. In both systems the lessons of doing design trajectories were similar, but in Denmark the organisation and approval for a trajectory seemed to include more regulation than in the Netherlands. This was in a way discouraging, but if support was given from politicians it also worked encouraging for the trajectory.

In the field of design thinking much research has been conducted into the impact, effectivity, and lessons from using design thinking<sup>3</sup>. This use case is an empirical account from design trajectories conducted within Like!. Comparing it to the studies like the McKinsey study, could generate an interesting reflection on what is learned in Like!.

### Main conclusions of design thinking:

- Design trajectories are iterative processes;
- Design trajectories cannot be seen as a project with results that are quantifiable;
- Design trajectories should aim to continue until a solution is implemented;
- Design trajectories need an organizer within the municipal organisation, that knows the current status and how to continue the trajectory;
- Design thinking is a mindset that can be used with different methods and tools designers have developed through education and experience;
- Design trajectories are not little tricks that can be repeated, but tailored processes set up to solve the issues at hand.

<sup>3</sup> For instance, this research by McKinsey consultants: Sheppard, B., Dore, F., Kouyoumjian, G., & Sarrazin, H. (2018). The business value of design.