

Hackathons for citizens with disabilities

THE TRANSNATIONAL COLLABORATION

Based on the success with the SMART Senior workshops in Rotterdam and Aalborg in 2017 the two municipalities decided to continue the transnational collaboration and work together on hackathons with- and for the benefit of people with different disabilities. Aalborg decided to focus on working with citizens with learning disabilities whereas Rotterdam focused on a more general approach targeting people with different kinds of disabilities or special needs. At both hackathons the citizens themselves defined which everyday challenges they wanted to address. In Aalborg the dialogue with the citizens led to a creation of a user panel who became engaged in planning and designing of the hackathon.

About LIKE!

Local governments, citizens, universities and SMEs have joined forces to co-create smarter, more efficient and more innovative services through 9 transnational pilot projects covering 3 core themes:



Relations to Workpackages

This pilot shows how local governments can involve vulnerable citizens in building digital solutions based on their own ideas. The input from citizens is vital to understand their needs and wishes for future services.

Local partners

<i>Aalborg:</i>	
Social Digital:	www.socialdigital.dk
<i>Rotterdam:</i>	
The Mee-foundation:	www.mee.nl
The centre for disability studies	www.disabilitystudies.nl
Alternative council (brede raad 010)	www.brederaad-010.nl
Sport support Rotterdam	www.rotterdamsportsupport.nl

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Aalborg - Preparation

Planning a hackathon was the starting point for a co-production project involving citizens with learning disabilities and employees from the Department of Elderly and Disabled in Aalborg Municipality. The planning process went through several phases and involved workshops and meetings with employees and citizens. The goal of the co-production project was to involve citizens in creating solutions to everyday challenges by means of digital solutions.

The project can be seen as capacity building for individuals, organisations and institutions that improve their abilities to reach their goals. The process requires involvement of both citizens and employees.

Aalborg Municipality chose an open approach to identify challenges where the focus of the initial phase was to clarify which everyday challenges are the most important for citizens with learning disabilities. The challenges were identified by visiting institutions and getting to know the citizens, for instance by playing football or cooking together, or by working with drawings or Lego bricks. The citizens pointed out three challenges as the most important in their daily life.

- **Networking as part of their daily life;**
- **Focussed on health in their daily life;**
- **Getting around (Transport) in their daily life.**

“Network, health and transport”



Presentation of VR at Hackaton in Aalborg

The discussions with citizens led to the creation of a user panel who became engaged in planning and design of the hackathon. The user panel also tested different ways of working in groups as preparation for the hackathon. Simultaneously, Aalborg Municipality engaged a consultancy firm, Social Digital, to help with the preparation of the hackathon and to develop a catalogue of apps that could be useful for citizens with learning disabilities.



Rotterdam - Preparation

The Rotterdam initiative arose from the city's ambition to increase awareness on inclusiveness of services in the broadest definition, and to engage with more vulnerable members of the Rotterdam society in the co-creation of new solutions for every-day challenges they encounter because of their disability or special needs.

Organising a Hackathon seemed a new, and effective way to create new ideas for every day challenges, but even more: the co-creation process to organise and execute a hackathon with different partners, including those people who are actually suffering from exclusion, because of a disability, could create impact on mutual understanding, awareness and capacity building within the municipality and its partners in their understanding of the target-group's needs and desires regarding participation in society.



Preparation sessions which organised where all the participants worked together on identifying the different domains in which challenges are experienced regarding accessibility.

During the dialogue, which took place around several brainstorm sessions, a lot of time and attention was spent on creating a safe environment for discussion and sharing personal experiences. A safe environment was created to inspire everyone to challenge assumptions and ideas and this resulted in new insights.

The outcome of the session was a decision to organise a hackathon around challenges regarding the following topics:

- **Accessible and inclusive services:** how can we enable the Rotterdam "Flying Squad" to make social services more accessible for their clients. The Flying Squad is a mobile team delivering public services to people who are unable to use the regular channels to do so, due to their disability.
- **Inclusive sports:** How can we make sports and activities more accessible for people with a disability?
- **Inclusive employment:** How can we improve autonomous employment opportunities for people with a disability?
- **Inclusive attitudes:** How can we improve the attitudes of citizens and professionals towards people with a disability?



Aalborg – The Hackathon

The hackathon for citizens with learning disabilities in Aalborg on 26th September 2018 was very successful in terms of very positive feedback from the participants and ideas for solutions to the three challenges defined by the user panel: Network, health and transport.

During the hackathon the members of the user panel took on the role as hosts and helped the other participants. By taking part in the planning and acting as hosts at the hackathon, the members of the user panel gained valuable experiences in managing new tasks and being active in a social context.

The 40 participants at the hackathon worked in six groups and produced ideas for solutions to the three challenges. The members of the user panel made the participants feel welcome and secure in relation to all practical issues, such as which group they belonged to and how to participate in the different ways of working. During the hackathon there were short breaks with physical exercises every 15 minutes to help the participants concentrate. An illustrator captured the discussions and ideas and converted them into drawings, immediately making the results from the hackathon visible and accessible to everybody.



Results from Hackathon in Aalborg

Aalborg – Results

- The participant gained self-confidence and felt independent after taking an active role in the hackathon. Through genuine involvement the citizens found out that they could handle much more than they thought they could.
- The hackathon gave the professionals valuable insights as the citizens showed that they could cope much better with new situations than formerly believed. This could be a step towards a change from a care perspective to a development perspective.
- The hackathon and the preparations for the hackathon gave insight into citizens' demands and competences in relation to technology. One size does not fit all, and competences are not determined by diagnoses.
- The hackathon resulted in several initiatives:
 - IT-support via IT café, individual support, IT education and help to find relevant apps for everyday challenges.
 - A design sprint for citizens and professionals using VR Technologies to overcome social and cognitive challenges provoking anxiety. The design sprint takes place in May 2019.



Rotterdam - The Hackathon

On October 4th 2018 the Rotterdam Hackathon took place in the top-sports centre in Rotterdam. It was attended by a diverse group of people with disabilities of all kinds: physical, mental or a combination and also people without disabilities.

To emphasize the ambitions, the hackathon was opened by the deputy mayor of Rotterdam, Mr. de Langen, responsible for public healthcare, elderly and sports.

The hackathon in Rotterdam was based on four identified challenges regarding inclusive sports, inclusive employment, inclusive public services, and finally: on how to influence attitudes and behaviour towards people with a disability. Each challenge was addressed by multiple teams of people with a diverse background. Every team was supported by a designer, who ensured that all members, regardless of their ability, could participate in the different brainstorming phases. The outcomes were visualized in drawings, and the different outcomes formed the inspiration for the designer-teams to develop concepts, presented at the final session.

In the final presentation, the groups were represented by their supporting designer, presenting concepts to address the challenges. The results were offered to the Municipal Director of Wellbeing, care, and youth-care Mr. Onno de Zwart. Whereas some of the ideas seemed not ready for upscaling immediately, a few results led to actual activities.

Rotterdam - Results

- A survey started in order to improve the accessibility of sports facilities in the cities
- Mr. Onno De Zwart kicked off a “relay race” in which municipal board members and executives, experienced the challenges of people with a disability for a day. He actually joined board meetings with visual-impairment simulating goggles and used a wheelchair. It is expected that other board members and directors will follow his example in due time. His insights will be offered to the facility management services in case improvements can be made to the accessibility of work environment, or to the autonomy of co-workers with a disability.



Conclusion

The insights gained from preparation, execution and follow up on the Rotterdam and Aalborg Hackathons, as well as the intensive collaboration between the two municipalities, led to different initiatives.

Rotterdam

In Rotterdam, creative ways to improve awareness on inclusion, accessibility and autonomy are looked into at the moment. Disability, and as a result of the shared insights from the Aalborg Hackathons, mental illness is a risk for digital and democratic exclusion. Because of the insights there has been more acknowledgement, and it finally lead to extra activities regarding the accessibility of the election process.

The Rotterdam Hackathon was a co-creation process in which people with a disability as well as professionals, citizens without special needs, designers and people from the field of research worked together both in the preparation as well as the actual hackathon. This meant that even preparing the Hackathon was an exercise in inclusive thinking and -working, creating open minds in all participatory “sub-groups”.

Aalborg

In Aalborg, the IT- and App-cafes for people with disabilities were already popular. The VR design sprint has started including citizens with learning disabilities, care workers and professionals.

An important outcome of the process in both cities, lies in the preparation stage for the pilots. Aalborg's project managers spent time and effort in truly connecting with a group of vulnerable people, trying to gain their trust and commitment to work together in the Hackathon. This required new skills, insights, and deviation from standard ways to find representation of the specific target group. At the same time the members from the user panel were empowered by the process and the confrontation with their own skilfulness regarding organisation skills as well as digital skills.



Lajla, Mikkel, Grethe at Gebruiker Centraal Festival



The Rotterdam preparation process consisted of preparational sessions in which people with a disability, people without such challenges, professionals, designers, and an organisation consultancy specialised in inclusive hackathons, chose the topics and methodology together. These sessions confronted all participants with their existing fixed ideas and attitudes and created a level of “discomfort” and vulnerability, which was supportive to the process: Fixed ideas were made tangible and provided triggers for dialogue and learning.

The second outcome from this project in both cities, is the increased insight in the needs people with different kinds of disabilities experience, regarding their desire to use services that impact their daily life, in a way that suits them, and increases their level of autonomy, without decreasing the amount of support or presence of support where needed. The outcomes might not all result in immediate upscaling of prototypes produced by the hackathons, but on a higher level they will most certainly help to make daily life easier for many people, because the insights will settle out in new service development.

The exchange of knowledge and insights between the two municipalities is ongoing as a result of this project.

Presenting the results

The hackathon in Aalborg has resulted in a design sprint on how to use Virtual Reality to overcome social and cognitive challenges that provoke anxiety. Aalborg presented their results at the Gebruiker Centraal Festival on the 5th of November 2018 in Zoetermeer, The Netherlands. The planning process for the hackathon and the whole co-production process with citizens with learning disabilities was presented and discussed in a workshop at the festival. The workshop had short breaks every 15 minutes, just like the hackathon. During these breaks the participants played with Lego and balloons to illustrate the methods used at the Aalborg Hackathon.

