# Looking back at the Living Lab Scheveningen Tour June 5th 2023

Despite the problems with the railway system, most of us were able to arrive around 10 AM for the presentations and the tour at Living Lab Scheveningen. We all spoke Dutch that morning, but we will write this text in English for broader accessibility.

Finished and upcoming activities Human Values for Smarter Cities

We started with a presentation of the finished and upcoming activities in the Human Values for Smarter Cities project (see presentation). Mike de Kreek did a short summary of the project and revisited the kinds of knowledge we are looking for. And then he went through the finished projects and upcoming projects while placing them in a schematic view of the playfield of various phases and layers of a smart city tech's life cycle.
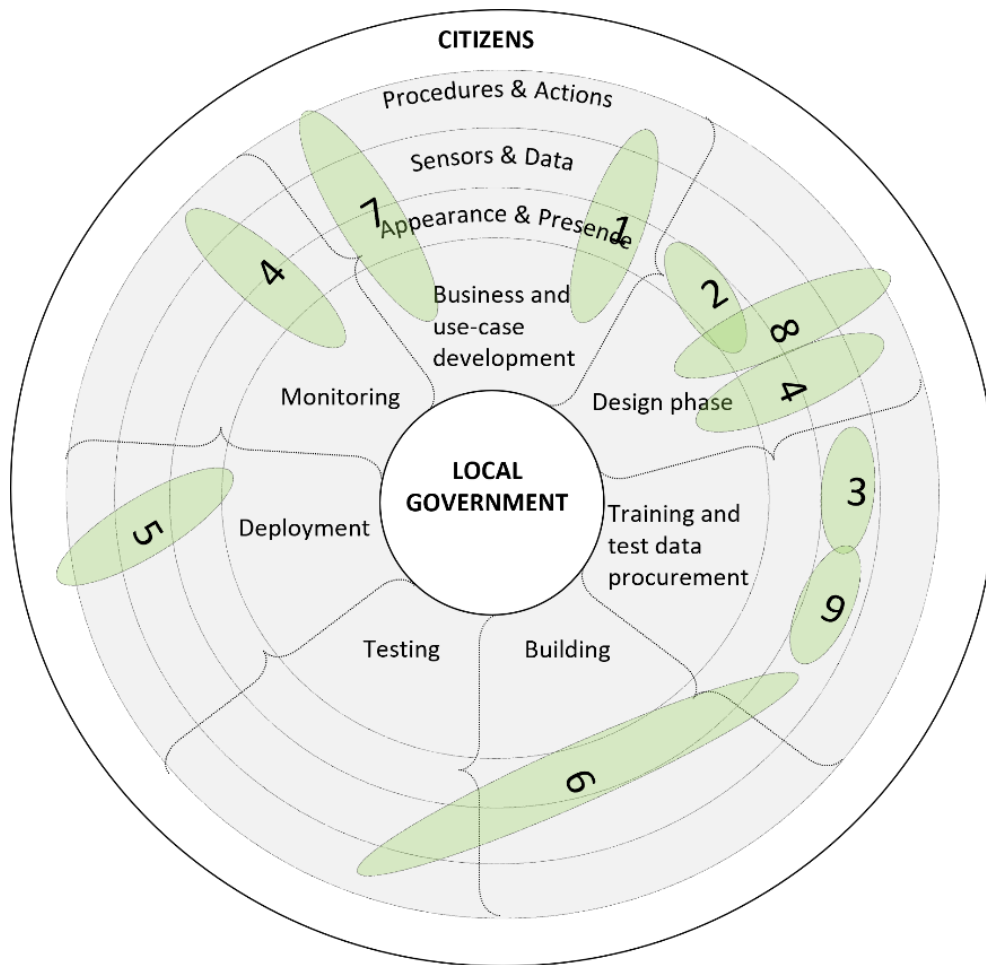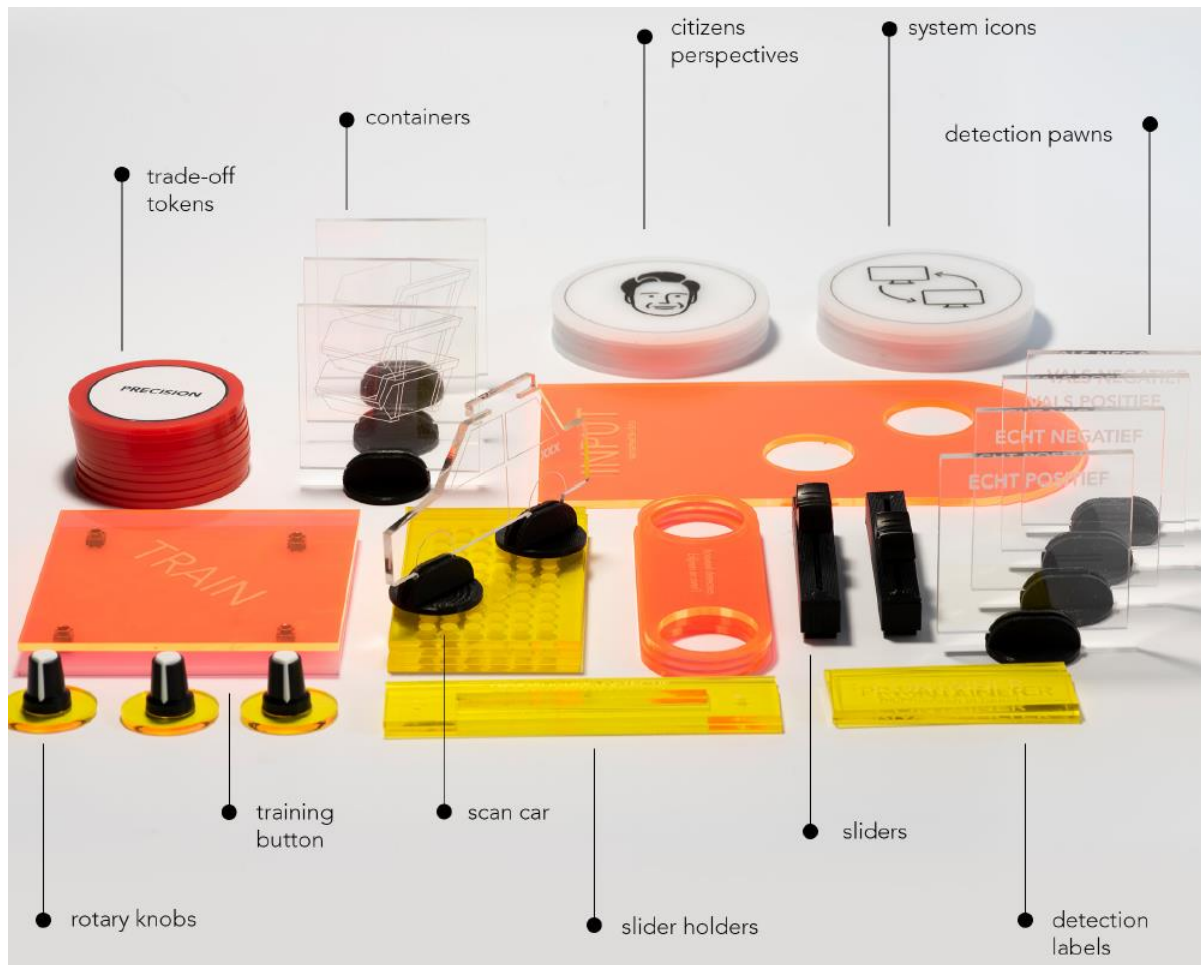
Finished activities

1. Identification 'requirements' tender – Amsterdam
2. Scan car conversation piece – Master Digital Design HvA
3. Machine vision development game – Laura de Groot TU Delft
4. AI and Society – Prof. Dr. Gerd Kortuem Master Course IDE TU Delft
5. Value evaluation spider web – Mozfest (Mozilla Festival) Workshop

Upcoming activities

6. Participation track R&D scan car – Amsterdam
7. Human values and citizens in tender process – Waag
8. Prototyping experiments – Tessa Steenkamp
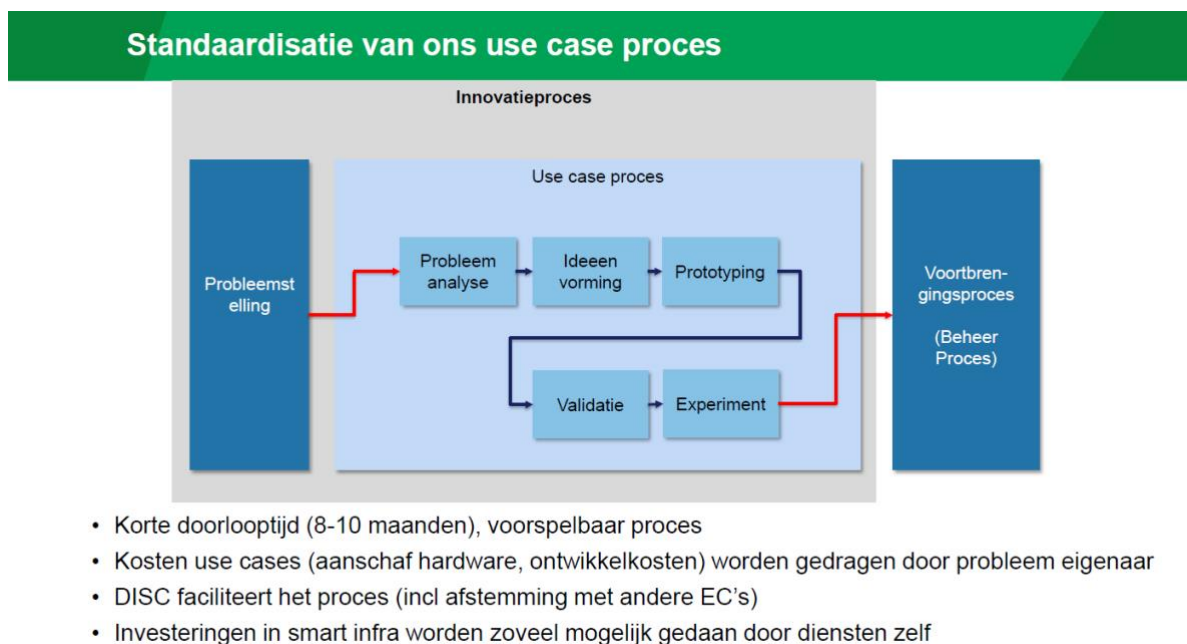9. Participatory machine learning – TU Delft

Machine vision development game

Laura de Groot presented one of the finished activities in which the Human Values project was involved sideways (see presentation). For her master thesis (MSc Design for Interaction - TU Delft) Laura explored opening the discussion about the acceptability of a machine vision system during the development phase, using the scan car development process in Amsterdam as a use case. The final prototype is a tangible user interface to explore the machine vision model in its complete system. By providing a tangible approach to explaining and interacting with the system, this game improves the understanding of non-expert citizens about machine vision systems and nurtures a deliberative debate. During the development, Laura facilitated and improved the game with three groups of five people. The participants stated they understand the workings of the system better, but also that they knew now how to weigh different trade-offs and that they could form an opinion.

The Hague update developments

Carlien Roodink explained the developments starting in 2014 towards the opening of Living Lab Scheveningen (LLS) in 2020 (see presentation). The LLS has offered and still offers the opportunity to do pilots more concentrated in one place instead of in the whole public space of The Hague. The role of the LLS partly led to the start of Expertisecentrum Digitale Innovatie & Smart City in 2022 which facilitates the process for new use cases.

Standaardisatie van ons use case proces

- Korte doorlooptijd (8-10 maanden), voorspelbaar proces
- Kosten use cases (aanschaf hardware, ontwikkelkosten) worden gedragen door probleem eigenaar
- DISC faciliteert het proces (incl afstemming met andere EC's)
- Investeringen in smart infra worden zoveel mogelijk gedaan door diensten zelf

An overview of the use cases clearly shows that currently two areas have the main focus: 1) Public order and safety in a close collaboration with SHIELD, the innovation hub together with the police and 2) Smart energy and Smart Grid: technologies for energy management. Interesting is the discussion about crowd management systems which can be handy for citizens in order to get signals when it is getting too busy in Scheveningen, but which are less approved by entrepreneurs who like it to be busy. Carlien also shows some other uses cases among others related to mobility, rubbish, and swimming. She mentions that the use cases in the area of well-being are somewhat underrepresented. For the Human Values 4 Smarter Cities project a connection with the Registration System Scheveningen Harbour might be a possibility.

Rotterdam update developments

Suzanne van den Berge takes us along some details of the "Programma Beeldherkenning" of the department of "Stadsbeheer" (see presentation). As an advisor "kennisgedreven werken" she helps departments to get a grip on ethical aspects of their projects. The program is a collaboration between the municipality and the university, which implies that there is supported from researchers of the Erasmus University Rotterdam. Different technologies for object recognition are part of the research. The

program is also department-independent in order to help projects develop. The aim is to learn from the research projects both in terms of process and policy: technical aspects, internal processes, interweaving with practical use cases and experiences of users. The resulting knowledge and expertise is shared to improve the awareness around machine vision and image recognition. Suzanne introduces three projects: 1) Scouring for waste and rubbish, 2) Scouring of the presence and state of certain assets like traffic signs and 3) the so called Mulder enforcement about wrongly parked cars (different then unpaid parking). This latter project might be something we could link to the Human Values for Smarter Cities Project.

Suzanne mentions that a flow chart has been developed which incorporates existing frameworks and assessments for the ethical implications of smart city tech. Their flowchart zips tools like De Ethische Data Asistent, "Impact Assessment Mensenrechten en Algoritmes" and Data Protection Impact Assessment together in order to prevent doing double work. In relation to the tight corporation with researchers doing research among citizens we had a fruitful discussion about the involvement of judgements and expertise of professionals in research.

Tour Living Lab Scheveningen
Hidde Kamst takes us on a tour through the Living Lab Scheveningen showing us all the experiments that have been done and those that are still going. It is interesting to hear that some initiatives were really experimental in terms of starting with something and see how it is received by the public. One example

consists of the Smart Garbage Bins that are self-pressing the garbage in order to be able to contain more volume. He also takes us into the dunes at the North side of the Boulevard where some experiments were done closer to nature.