



The human factor determines the success of a smart city

Participants from six RUGGEDISED cities discussed in Rotterdam Ahoy how cities can transform into smart cities. In collaboration with companies and research centres, these six cities show how IT, e-mobility and energy solutions can be combined to design smart, resilient cities for everyone. The outcome of the congress was that the human factor is the key factor for the success of a smart city.

"It is five to twelve. Or maybe one minute past twelve already," said Jolanda Jansen, CEO Rotterdam Ahoy, after the 'RUGGEDISED, Sharing Capacities' conference organized by Rotterdam Ahoy. Jansen was referring to the scenario that was sketched earlier in the afternoon by philosopher and trendwatcher Ruud Veltenaar. "But we, as humanity, can do something about the enormous climate crisis that is in front of us, we all have to take our responsibility. And that is why Ahoy is participating in the RUGGEDISED project. "

Smart city project

RUGGEDISED is a so-called smart city project that is funded under the Horizon 2020 research and innovation program of the European Union. It brings together three so-called lighthouse cities: Rotterdam, Glasgow and Umeå and three fellow cities: Brno, Gdansk and Parma to test, implement and accelerate the smart city model throughout Europe.

In Rotterdam, the area around Zuidplein that is currently being renewed under the name Hart van Zuid, has been designated as a RUGGEDISED project. Partners within and outside the area, such as the Ballast Nedam/Heijmans building combination, energy company Eneco, Erasmus University, KPN and the municipality of Rotterdam, are working together to accelerate the sustainability of the Rotterdam district around Zuidplein.

For this, Ahoy invested heavily in solar panels on the roof of its largest event hall and on the roof of the new Rotterdam Ahoy Convention Centre (RACC). Eneco took over Ahoy's heat and cold storage installation and it was connected to a thermal smart grid so that surplus heat and cold can be supplied to nearby properties in the future. Ahoy reduces CO2 emissions and energy costs by 25 per cent. Jansen: "RUGGEDISED is not only a very innovative way of working together, it also makes a substantial contribution to sustainability. Moreover, it has turned out to be an accelerator in raising awareness about sustainability in general. Nowadays we pay closer attention to our waste streams and we use considerably less plastic. "

Radical change

To share the experiences of Hart van Zuid with an international audience, Rotterdam Ahoy organized the 'RUGGEDISED, Sharing Capacities' conference. More than a hundred participants listened breathlessly to the keynote speech by philosopher, trendwatcher and professor at leading institutions such as MIT and Nyenrode, Ruud Veltenaar. And he



didn't exactly tell a very positive story. "Because within the next twenty to thirty years the world is heading for a radical change. More radical than humanity has ever experienced. And as human beings, we have caused that revolution that is coming. We are thus - as far as we know - the only species that accelerates its own downfall." Yet Veltenaar does not want to call himself a pessimist. "Because people have also proven to take action only when the crisis is the biggest. So we will change. But for that it must first go horribly wrong. That is simply ingrained in our species", Ruud Veltenaar said.

Veltenaar then explained that the upcoming "uncontrollable climate change is forcing us to think differently, to act differently, to structure our economy differently, to organize smart cities differently. Because we can't sustain it this way. So, in the end we will live in a world and in cities that are much better than what it is today. But driven by crisis. So it's actually a very positive story. "

The keynote speech is exactly what RUGGEDISED is about: in order to be able to cope with climate change and also to find an answer to the ever-progressing urbanization in the world, cities will have to be smarter. "But," Veltenaar tells his audience: "Please do not limit Smart Cities to technical solutions alone. Technology is beautiful but not the only solution. How does our soul diminish when we are completely dependent on technology? I think smart cities are cities with good social cohesion. They have a different type of education that fuels the potential and passion of people. Smart cities focus on prevention rather than diagnosing and treating diseases. In smart cities, the government, market and society share their assets with each other's customers and suppliers. A smart city is Uber Everything. And then we don't need those technology giants at all. As long as people connect with each other. "

Frightening story

Jacqueline Cramer, professor of Sustainable Innovation at the University of Utrecht and former environment minister, was moderator and discussion leader during the RUGGEDISED conference. "Smart cities are the heart of everything we need to do to be able to transform into a more sustainable society," she said afterwards. "That's why I thought it was important to work on this."

Cramer wasn't shocked by Veltenaar's story. "It is a frightening story about what awaits us if we do not act. But he is right. It is the reality." However, Cramer believes that mankind is also able to overcome this crisis. "It's not the technology that holds us back, but we must change ourselves. We can only do that together, through cooperation in projects and cities. An afternoon like this can stimulate RUGGEDISED partners to help each other on points that could still be improved."

Cramer then led a panel discussion with Jolanda Jansen (Rotterdam Ahoy), Jasper Feuth (Eneco), Haydee Sheombar (Erasmus University), Rutger Borst (KPN), Albert Engels (municipality of Rotterdam), Maarten Kokshoorn (Hart van Zuid) and Maxine Tillij (TNO). The participants in the discussion agreed that the RUGGEDISED method of making cities more sustainable requires courage and leadership.



"But that alone is not enough," Sheombar said: "Because all actors - from citizens, to travellers, to patients, to consumers - must change their behavior. We have to help each other with that, nudge each other. Both government, business and society must enable us to change our behavior. "

Feuth stated it as follows: "We people are not very good with changes. But I am convinced that everyone can contribute. A lot of small stones can have a big impact."