

Intelligent Systems Cube Content

Smart City

Improving train platform info // 2010

What did we do?	Explored how a new mobile app and LED screen on the train platform could improve travellers' experience by providing real-time travel updates.
How did we do it?	Investigated train travellers movements, motives and needs through observation, surveys, interviews and diary studies, plus tested two functional prototypes.
Why did we do it?	To create a more efficient, informed and enjoyable train experience for travellers.
Who was it for?	Public transport company
At this time...	Smart technologies were being used throughout the city to increase efficiency and improve people's experiences in everyday interactions.

Internet of Things Seminar in Eindhoven // 2013

What did we do?	Discussed the human side of networked devices in an urban context.
How did we do it?	Presented a talk about 'People, Devices and Ecosystems' at the International Internet of Things seminar.
Why did we do it?	To bring a human-centred approach to this fast-moving digital innovation.
Who was it for?	Tech conference
At this time...	People's list of connected devices was growing longer by the day, and digital innovation was happening quickly in the city. But, the human-aspect of design was lagging behind.

MozFest: Connecting Citizens not only devices // 2017

What did we do?	Explored how we can foster a citizen-led approach to smart city development and how humans can be placed at the centre of its services and systems.
How did we do it?	Hosted a walking workshop with an international community of educators, technologists, artists, journalists and activists at Mozilla's annual festival.

Why did we do it?	To bring a human-centred approach back into smart city development.
Who was it for?	Tech conference
At this time...	The open internet movement was gaining speed as challenges arose around online privacy, web literacy, and the health of the internet.

Co-creating insights on the far future // 2021

What did we do?	Explored how people from different cultures imagine futures of mobility in 15 years and the role that different transport options may play.
How did we do it?	Facilitated online sessions in the US, China and South Korea that explored future design concepts of multi-modal urban transport innovation.
Why did we do it?	To inform the client's global strategy about how three different cultures view urban transportation and how they want it to evolve.
Who was it for?	Automobile company
At this time...	Electric and self-driving cars were becoming trendy, along with walkable cities. Connected multi-modal smart transport systems were being explored around the world.

Evolving technology to fit public life // 2022

What did we do?	Researched how to improve bicycle parking infrastructure by evaluating new digital gates that allow seamless entrance/exit.
How did we do it?	Conducted a public life study and user experience research with prototypes of the new gates.
Why did we do it?	To inform the design team about how to develop gates that can identify bicycles and cyclists without a need for them to stop.
Who was it for?	Public transport company
At this time...	Bicycle parking facilities in the Netherlands were expanding to hold thousands of bikes, making rapid entrance/exit crucial to avoid congestion and mishaps.

Smart Homes

Mediamediators Vlog // 2005

What did we do?	Explored how interactions with appliances in the home can become more personalised and relevant for the user.
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How did we do it?	Helped build a set of animated prototypes to test out and documented this via a video blog.
Why did we do it?	To inspire design ideas by observing people's experiences with connected, interactive devices in the home.
Who was it for?	Tech company
At this time...	Digital objects were making their way into our daily routines at home, creating ecosystems that can communicate amongst themselves.

Remote services for older people // 2010

What did we do?	Explored how remote services could support older people to live independently at home.
How did we do it?	Co-created service concepts, service blueprints and prototypes to validate with elderly people and caretakers.
Why did we do it?	To develop new services that help familiarise elderly people with remote support services before they become care dependent.
Who was it for?	Healthcare organisation
At this time...	Remote care services offered the possibility to get a lot of support at home, delaying the move to a retirement home and promising a balance of flexibility and independence.

Interview on IT & Care // 2013

What did we do?	Interviewed by a newspaper about common problems with elderly care at a distance (e.g. video calls with caretakers).
How did we do it?	Spoke about and advocated for design-driven innovation, which uses empathy to find and create new meanings for technology with the people who will use that technology.
Why did we do it?	To demonstrate that the digital contact between patient and caretaker does not need to weaken in care at a distance, if we learn from other examples of online communication.
Who was it for?	Financial newspaper
At this time...	Virtual platforms for (elderly) care were becoming the norm, but there were serious concerns if this was an adequate method for this type of communication.

Smart Bathrooms // 2021

What did we do?	Explored health-conscious consumers' thoughts and perspectives towards the user experience of a smart toilet and its accompanying service app.
How did we do it?	Conducted prototype tests of the smart toilet among the target group in four different countries.
Why did we do it?	To understand what features of the smart toilet resonated with customers in order to make further design decisions and bring the product to market.
Who was it for?	Home product company
At this time...	Technology was everywhere in the home – even in our bathrooms. And, it carried the promise of helping us understand our bodies and health better.

Digital Identity

Ebook at Ultra Factory Kyoto // 2012

What did we do?	Explored how people enjoy and struggle with the differences between their online and offline identities.
How did we do it?	Had students create design documentaries about their online and offline identities and share these in an exhibition of stories.
Why did we do it?	To understand the complexity of people's identity in contemporary culture through the use of video as an engaging form of data.
Who was it for?	Design lab
At this time...	The lines of online and offline were blurring. Younger people, especially, were learning to deal with this double existence.

Strategic scoping for new governmental intranet // 2014

What did we do?	Explored the needs, preferences and priorities of different users of the Dutch government's intranet system.
How did we do it?	Hosted user labs with civil servants, which resulted in over 100 key individual user journeys of a wide range of tasks.
Why did we do it?	To inform new design decisions that work for everyone who uses the intranet system (100,000+ civil servants in various departments, external vendors and suppliers).
Who was it for?	Government

At this time...	The Dutch government's intranet needed a serious overhaul to bring key services up to speed with the current digital needs of policy makers and support staff.
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Future-focused Gen Z Co-Creation // 2021

What did we do?	Helped bring the perspectives of Gen Z'ers into the development of future digital services.
How did we do it?	Hosted co-creative sessions with participants and their friends (all Gen Z) to explore future concepts made by the client and the researchers together.
Why did we do it?	To inform the client about how Gen Z-ers' values, wants and needs impact society and influence changes in digital behaviours.
Who was it for?	Audio streaming company
At this time...	Gen Z was the first generation to be truly digitally native. They have taken an important role in driving how businesses and organisations interact with people.

OpenDoTT // 2022

What did we do?	Explored how to build a more open, secure, and trustworthy Internet of Things.
How did we do it?	Mentored academic researchers in field research, provided training for workshops and edited a publication of findings with other researchers, academics and technologists.
Why did we do it?	To inform future leaders who work across sectors to advocate for responsible IoT.
Who was it for?	Government
At this time...	IoT was rapidly integrated into our lives (homes, cities, personal devices) over the last few years. Many were beginning to ask how we could build these technologies more responsibly.

Smartphones

CitiTag // 2004

What did we do?	Participated in two pilots of a multiplayer, city-based mobile game that merges virtual and physical reality.
How did we do it?	Captured the experiences of players on video while they experimented with the mobile game in the city.

Why did we do it?	To explore the boundaries of how digital experiences in the virtual world can influence social interactions in the physical world.
Who was it for?	Academia
At this time...	There was early experimentation with how interactive tech in urban space could enhance in-person interactions in the city. Early adopters were shaping this exploration.

Future usage of mobile internet services // 2009

What did we do?	Explored the future of mobile internet services and how they would impact day-to-day life.
How did we do it?	Led co-creative user labs to discuss future scenarios with mobile-internet users and non-mobile-internet users, plus had them experience these scenarios out in the world.
Why did we do it?	To improve the future concepts so they optimally respond to the motivations and concerns of (future) mobile internet users.
Who was it for?	Phone company
At this time...	Mobile phones were commonplace and internet connectivity was beginning to enter this space. Adoption of this feature was growing steadily.

How do people use smartphones in their everyday lives? // 2011

What did we do?	Explored how and why people use their smartphones in daily life.
How did we do it?	Conducted studies in India, China and the UK with 26 participants in total, using a mix of observation, user commentary and in-depth interviews.
Why did we do it?	To inspire innovation by developing a better understanding of how people use smartphones in their daily lives and what the added value is.
Who was it for?	Phone company
At this time...	Smartphones hit the scene and were gaining popularity over regular mobile phones. This was changing the way people went about their days.

Connected Cars // 2012

What did we do?	Explored the role that digital technology, in particular smartphones, can play within the car.
How did we do it?	Hosted a workshop with researchers and designers from the client team to look at existing design documentaries through the new lens of

	car/smartphone interaction.
Why did we do it?	To inspire innovative ideas about how to create a connected car that improves the comfort, safety and ease of drivers' experience on the road.
Who was it for?	Phone company
At this time...	Smartphone users were taking their devices with them everywhere, including into their cars. This offered new opportunities to integrate the two and improve the in-car experience.

Exploring listening experiences // 2020

What did we do?	Did exploratory research about people who put low effort into finding music and how they wish to consume audio through their personal devices.
How did we do it?	Conducted a week-long diary study followed by co-creation workshops with prototype testing to uncover underlying motivations, needs and frustrations while consuming music.
Why did we do it?	To inform a new radio-like app that was being designed; it learned listeners' preferences and tailored music for them.
Who was it for?	Audio streaming company
At this time...	Many people got music from an app on their smartphone. It was common for people to create their own playlists, but some people found this to take too much effort.

Wearables

PLANTS // 2003

What did we do?	Generated plausible scenarios for the application of biosensors that enable communication between humans and plants.
How did we do it?	Coordinated a creative workshop with an international group of experts from various fields (academia, design, and engineering) to explore the scenarios.
Why did we do it?	To learn from these human-plant communication experiments and present them at a showcase that explores this kind of technological implementation.
Who was it for?	Government
At this time...	There was early exploration and play going on

	with biosensors and how we could turn our (and other organisms') physiology into digital data.
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Smart Textiles // 2007

What did we do?	Explored two scenarios with smart textiles: how they could help people while wandering around a city and how they could enrich the experiences of swimmers in an indoor pool.
How did we do it?	Created design documentaries and hosted creative workshops with several design and engineering professionals from the industry.
Why did we do it?	To experiment with how smart textiles could enhance people's experiences with the outside world.
Who was it for?	Tech conference
At this time...	A positive sense of future possibilities with smart textiles was emerging. This was based on early experiments by artists and engineers.

The future is here: wearable technology // 2014

What did we do?	Explored how people currently use wearable technologies and identified underlying needs around these devices and related services.
How did we do it?	Conducted in-depth interviews with early wearable adopters and created design documentaries to use in a 2-day client strategy workshop.
Why did we do it?	To identify opportunities about how to deliver improved, differentiated, innovative, long-lasting and meaningful experiences for the future of wearables.
Who was it for?	Tech company
At this time...	The wearable technology industry was in its infancy but was brimming with opportunities to be explored; it was predicted to be worth 10 billion euros in 5 years.

What can we learn from lead patients using wearables? // 2015

What did we do?	Explored lead user's experiences with self-measurement wearable health technology in their daily lives.
How did we do it?	Conducted in-depth interviews with patients who have chronic diseases about how they manage their health with self-measurement technology.
Why did we do it?	To inform healthcare professionals and policy

	developers on the use of health-based wearables and inspire further development of new concepts for the wider population.
Who was it for?	Healthcare consortium
At this time...	The Dutch government advocated for an increased focus on e-health, with the aim that more people would monitor and manage their health through smart technologies.

AI

Algorithms and personal taste // 2018

What did we do?	Identified how people develop their personal preferences for music/audio and explored mechanisms of how to learn about someone's taste to provide relevant recommendations.
How did we do it?	Ran user labs with individual reflection, group discussions and a speculative exercise asking participants to 'build' their own dream suggestion-generating machine.
Why did we do it?	To help the client understand how to get to know users on a human level and make meaningful recommendations.
Who was it for?	Audio streaming company
At this time...	Companies were using big data and artificial intelligence to scope out users' tastes in order to deliver them customised recommendations that were relevant every time.

Understanding digital skills // 2021

What did we do?	Explored the everyday experiences of people with limited digital skills and drew insights from their online behaviour.
How did we do it?	Did desk research to gain an understanding of the challenges people with limited digital skills face and interviewed these people about their everyday experiences with digital devices.
Why did we do it?	To inform more inclusive web design with integrated AI detection and support mechanisms to ensure that everyone can equally take part in the digital society.
Who was it for?	Government
At this time...	2,5 million people in the Netherlands were still experiencing difficulties with digital devices

	(computers, smartphones, tablets). Digital inclusion was a top ambition of the government.
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Exploring remote teamwork & digital tools // 2022

What did we do?	Explored the use of digital tools, including generative AI, for remote teamwork across virtual and hybrid teams.
How did we do it?	Conducted individual and group interviews to create scenario-based user journeys that captured how users interacted with digital products.
Why did we do it?	To identify opportunities to better support ongoing team productivity, communication, and alignment.
Who was it for?	Tech company
At this time...	Work lives have increasingly moved to (many) virtual spaces, as people work collaboratively across the world. AI promised many ways to help ease this way of working.

AI & design research // 2023

What did we do?	Sought out new generative AI tools that could help us during our design research process.
How did we do it?	Did desk research about new AI tools and tried the ones that were most relevant to our workflow.
Why did we do it?	To understand how design research might be impacted by this recent tech breakthrough, to expose possible ethical concerns and to educate ourselves for future projects in this space.
Who was it for?	Stby R&D
At this time...	ChatGPT recently launched, and many digital companies were racing to create tools of their own that utilised generative AI.