users as

A hands-on approach to Creative Research

designers

waag society

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art
science
technology

Prologue

This publication describes Waag Society's approach to social innovation. It is a creative approach in which design is better suited to society's needs, there is a balance of power between institutions and end users, and technology can sidestep existing paradigms. This approach is called Users as Designers.

Current technology enables and demands a different kind of education, a different healthcare system, and a changing role of civilians with respect to the society they find themselves in. Technology can be a great help, but only if it is designed and developed together with its users, and answers their specific requirements and demands. Applying the Users as Designers methodology helps in this respect, as it automatically builds reciprocity and trust into the systems that surround us.

Waag Society has over 16 years of experience in developing creative technologies for social innovation. Over this period we have experimented with new forms and practices, collaborated with hundreds of institutions and thousands of people, built numerous prototypes, and given birth to numerous spin-off products, companies and institutions. Most importantly, Waag Society has functioned as a connector, as a neutral ground on which people from different backgrounds and with different interests can meet and innovate together.

We believe that Waag Society's methodology can be a useful tool in a wide variety of domains, challenges and opportunities. We have elaborated on our philosophy and methods in publications such as Open Design Now: Why Design Cannot Remain Exclusive (Abel, van 2011), examining current developments in the emerging open design movement and looking ahead to its future, and Connected! LiveArt (Doruff 2004), a catalogue of the Connected! Programme researching mediated telepresence in both its serious and its more playful forms, which ran at Waag Society from 2003–2005.

In this publication Waag Society focuses on a hands-on description of its methods. With it we hope to spread the use of Users as Designers, improve our own understanding by sharing and learning from the responses, and to sow and grow the seeds of change we hope will flourish.

We invite you to use it, to share it, to extend it, and to give us your feedback.

Marleen Stikker
President of Waag Society

Part 1 gives a theoretical framework of Creative Research and how Waag Society employs it. The three types of Creative Research practice – form, context, and transformation research – are described and illustrated by means of case studies.

part 1
framework

introduction to waag society

'Waag Society uses existing technologies and recombines their elements. It grabs and repurposes technology initially intended for a specific domain and explores its use in a different domain. Waag Society uses technology as a tool or strategy, not as a goal in itself.'
(Demeyer 2011)

Waag Society is a Dutch institute for art, science and technology that had its start in the Digital City of Amsterdam in 1994. The Digital City made the then new Internet freely available to the people of Amsterdam, and far beyond, extending the public domain beyond the streets, squares and buildings of the city. Since then, Waag Society has been designing for the real needs of real people by bringing together artists, designers, scientists and prospective users.

Waag Society develops products, services and practices, using existing technologies from a cultural and creative perspective for social and cultural innovation. It creates innovative applications within the domains of healthcare, civil society, culture and education, bridging virtual and real world experiences. Its research agenda includes tangible interfaces, narrative structures, gaming principles, semantic web, mediated collaboration, locative media and design methodologies.

Waag Society employs Creative Research: experimental, multidisciplinary research that puts artists and users at the heart of development, giving all of them a stake in the end result. It currently comprises a research and development programme, a public events programme, an academy, and several facilities. These include the Amsterdam Fablab, a rapid prototyping facility for the public to come in and turn their own ideas into reality; the first European CineGrid 4K Studio, where the audience is invited to explore very-high-quality digital media; and a Dialogue Café that brings together people from around the world to learn,

share and collaborate on projects. It also has its own commercial incubator, Media Guild, which supports innovative start-ups in the creative industry.

Over the last 16 years this has lead to many ideas, prototypes, pilots and products – from playful educational adventures and serious interactive games for the elderly, to location-based routes for museums. Waag Society keeps setting the agenda: on its innovative approach to the accessibility of technology, by opening up the Internet for citizens through the Digital City metaphor in 1996; on learning, by creating the first learning game in 2002, long before the term 'serious gaming' was introduced; on emergent design, by introducing GPS into the cultural domain (also in 2002); by exploring the potential of personal fabrication in the Fablab since 2008; and most recently by opening up the debate on genetic modification through its Bio Art programme.

This publication allows us to share the knowledge we have developed and give you a hands-on description of the methods we use.

waag.org

why we need a user-centred approach

'We have to enhance the ability of all citizens to engage in a meaningful dialogue about their environment and context, and foster new relationships between the people who make things and the people who use them.' (Thackara 2005)

Technology continues to expand at an incredible rate (Kelly 2010). Think of the increasingly rapid invention of steam power, electricity, cars and transport infrastructure, film, radio, television, the telephone, nuclear power, the modern database, spreadsheets, the Internet, mobile phones and GPS, to the latest innovations in genetic modification and quantum computing. All of these technologies can be used for the good of individuals and society, if they are designed according to people's present and future needs.

Technology is defining the rules of our society. It creates possibilities but it also sets the boundaries of what people, organisations and corporations can do. At the same time, society is undergoing rapid change. We are facing changes in demographics, globalisation, the rapid depletion of natural resources, and the steep decline of structures that governed life just a few years ago, making life increasingly uncertain for those who depend on them. Change for the good does not happen by itself – it needs committed parties to bridge the gaps that exist between technology and society, and it also needs cultural change.

This requires the implementation of new practices, starting from fundamental research studies and inventions, their extension and development with the help of practice-based research methodologies, and their release into society. Technology can be a great help, but only if it is designed and developed with users' specific requirements and demands in mind.

Waag Society's Users as Designers research and design philosophy comprises a set of methods that help to reinstate the attitude of the designer in everybody, including the desire and dedication to improve the world we find ourselves in, by developing design solutions that can be beneficial for a few individuals, to larger groups of people, or to society as a whole.

FairPhone

Frequency 1150

ScratchWorx

(Un)limited Design Contest

Operation Sigismund

Creative Commons Netherlands

Wisselkabinet

Mobile Storytable

StoryBOX

Storytable

sample projects
by
waag society

The Island

Pop UP

Monstermedia
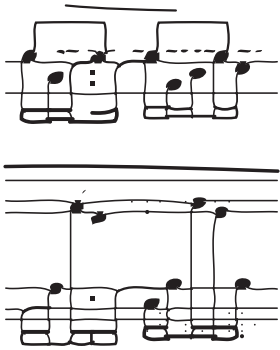

Open Design Now

Teylers Bètalab


Yesterday's Register

MyOV

the philosophy of creative research

In 1976 the Dutch composer Simeon Ten Holt finished Canto Ostinato, literally 'stubborn song'. The exact musical arrangement is free and ranges from one piano to four pianos and marimba. Only the essence of the score is written down, and many of the performance decisions are left to the musicians. Performances of the work are often events at which pianists and audience take turns, as the piece can continue for hours. Because of the free flow of the performance, when the musicians enter the next section it feels like a release, opening a new musical and imaginary space.
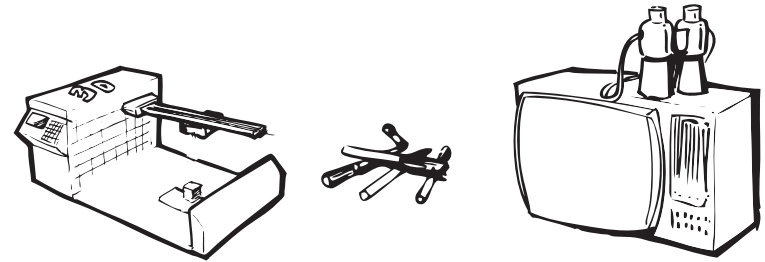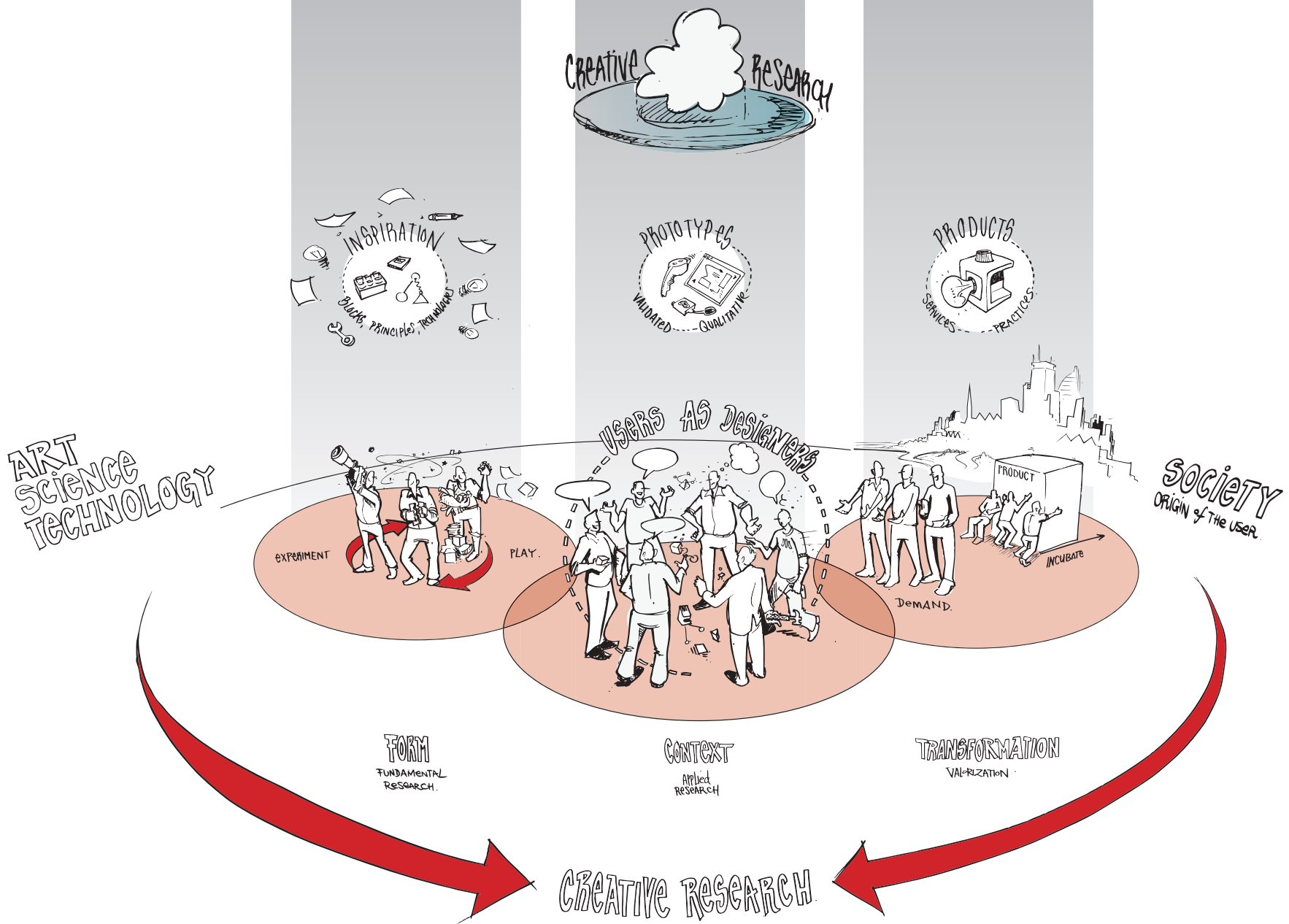
Ten Holt's example illustrates a flow that resembles Waag Society's method of working, called Creative Research, which has the same free-flowing nature. Creative Research has a strong philosophy and a range of methodologies at its core, but many choices are made during execution itself, depending on the empathies of researchers and subjects, contexts, and the participation of users, creating relationships and dialogues between a design team and the future users of their designs. The openness of the approach empowers individuals and offers possibilities for tackling all kinds of social problems, such as ageing, new ways of learning, or social cohesion.

'The results of creative research may include publications, designs, objects, performances or systems, but they can also involve public debate or dialogue between new partners. Investigating and building, thinking and acting, are inextricably linked, as are intervening, networking and sharing.'
(Raad van Cultuur 2010).

Creative Research is characterized as disruptive, practice-based, iterative and intuitive in its approach, and open in terms of its results. The term 'practice-based' refers to the practice of making and creating; the results of the research are practical and tangible. Creative Research aims to involve a variety of stakeholders in co-creative acts; these include universities, research centres, schools, museums, archives, healthcare organisations, network providers, governments, artists, living labs, innovative small and medium-sized enterprises, and large corporations. By 'co-creation' is meant the creativity shared by two or more people who create something collectively (Sanders 2008).

From form to context to transformation research
Creative Research comprises three types of mutually reinforcing practices: form, context and transformation research. This publication focuses on Users as Designers as a form of context research. But before we get started, we want to give you some more background detail on the area of Creative Research.

CREATIVE RESEARCH

INSPIRATION
BLOCKS, PRINCIPLES, TECHNIQUES

PROTOTYPES
VALIDATED — QUALITATIVE

PRODUCTS
SERVICES — PRACTICES

ART
SCIENCE
TECHNOLOGY

USERS AS DESIGNERS

SOCIETY
ORIGIN OF THE USER

EXPERIMENT   PLAY.   DEMAND.   INCUBATE
PRODUCT

FORM
FUNDAMENTAL
RESEARCH.

CONTEXT
APPLIED
RESEARCH

TRANSFORMATION
VALORIZATION

CREATIVE RESEARCH

form research

'New techniques and instruments open new registers of perception. Artists explore these and suggest a new visual language that brings the relevant experiences within the range of perception and interpretation.'
(Kockelkoren 2005: 46).

Form research comprises experiments with structures, forms, materials and ideas to create new opportunities. Artists as well as designers and scientists follow their authentic questions; they learn by doing, using the creative process to come up with a unique and highly personal vision, a punctuation mark in the enormous sea of possibilities.

Art can be considered the R&D department of society. Most artistic research does not focus primarily on the production of knowledge (Borgdorff 2009). It could be a by-product, but is often not intended as such. However, artistic research is the starting point for broadening the artistic universe by providing new ideas, experiences, images and stories. Much artistic research is not hypothesis-led but guided by a process of continuous discovery, in which the researcher undertakes a quest, based on intuitions and experiments, with unexpected insights and views as the result.

Artistic research is more open and fluid than ordinary scientific practice. Involving artists in the process of making, or giving space to an artist-in-residence within the organization, can be of added value because of their broad discursive practice, their aesthetic approach, and their capacity to widen the perspective on the fundamentals of design problems and possible solutions. Artistic research is of immense value to Creative Research, in creating new opportunities that cannot be predicted in a more logical way.

'Art practice cannot be reduced to standardized dichotomies of cause and effect, input and outcome, or process and product', [...] the experiences we have in our studios, communities, and cultures are the kind where mind and matter merge.'
(Sullivan 2005: 146-147)

Form research is embedded at Waag Society, in working with artists-in-residence and in stimulating chance encounters. Room for thought is essential, and experiments are key to producing out-of-the-box, potentially disruptive ideas that can change the way individuals and societies function.

form research at waag society

Labyrinth Psychotica – Jennifer Kanary (artist-in-residence at Waag Society)
What is it like to be psychotic? In the past, LSD was often taken by doctors in order to better understand their patients' hallucinations. As such an act would be considered taboo today, Jennifer Kanary and Waag Society's Creative Care Lab explored the possibility of developing an 'empathy tool' that could communicate what it is like to suffer from a psychosis. Existing psychosis simulators developed in a scientific context tend to focus on objective illustrative aspects of the experience. By developing an artistic Reality Distortion Wearable experience, a form of 'digital LSD', Labyrinth Psychotica aims to focus on the more subjective aspects, such as an altered sense of self in time and space.
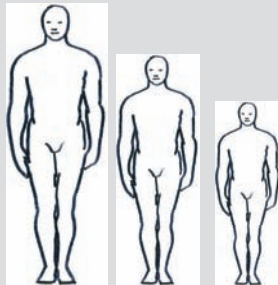
The Incredible Shrinking Man – Arne Hendriks (artist-in-residence at Waag Society)
More than ever before in the history of mankind, our bodies will become the clay with which we mould our participation in life. Scientific possibilities, social behaviour, and artistic visions will merge with and redefine what we consider to be human. The Incredible Shrinking Man is a speculative design research project about the consequences of downsizing the human species to 50 centimetres. Historically, it is a long-established trend for people to grow taller. As a direct result we need more energy, more food and more space. But what if we decided to turn this trend around? What if we used our knowledge to become much smaller? The Incredible Shrinking Man maps the possible scenarios for a future mankind that would be willing to take extreme measures in order to preserve and redefine life.
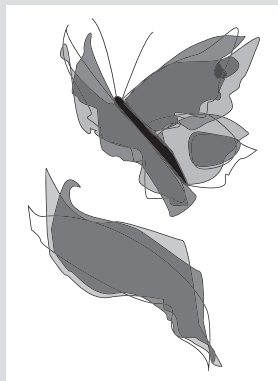
Designers & Artists 4 Genomics Award (DA4GA) – in collaboration with the Netherlands Genomics Initiative, Centre for Society
The Designers & Artists 4 Genomics Award (DA4GA) is the first Dutch competition in which art, design and the life sciences are brought together. It aims to promote Bio Art and make visible the significance and diversity of Genomics Research. Bio Art is an art practice in which the medium is living matter and the works of art are produced in laboratories and/or artists' studios.
One of the award-winning projects is 2.6g 329m/s. Jalila Essaïdi and the Forensic Genomics Consortium Netherlands made a bulletproof skin by implanting transgenic spider silk into human skin. The project deliberately aims to fuel the debate about the relativity of safety and whether this technological innovation is socially desirable. The dermatology department of Leiden University Medical Center decided to further research the possibilities of using silk as a matrix for skin transplant models, the result of an artistic research question about safety.
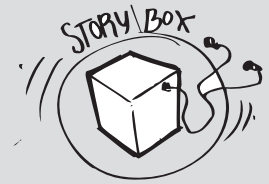
context research

Context research is part of applied research, as it appears in science, co-developing new, validated prototypes of products, services or practices with prospective users. The input for this research consists of the needs experienced in society and selected individuals and the ideas, inventions and ways of thinking that come from free experiments. These go through an elaborate process of questioning the question (Ask), thinking through making (Make) and testing and evaluating (Try), while putting users and other stakeholders at centre stage. The user experience plays an important role here: how does a person feel about using a certain product or service?

Waag Society conducts context research in close cooperation with stakeholders, whether they come from education, healthcare, culture or other sectors. The added value of technology in a specific context is actively explored by building demonstrators and prototypes and evaluating them in real-life situations. Context research is influenced and strengthened by the experiments of form research and is considered the basis for the adaptation, scaling and implementation that is central to transformation research.

In part 2 of this book we examine this phase in more detail and give practical guidelines on how to carry out context research. The description of this type of research will be centred on the Users as Designers principle which guides all research at Waag Society.

'Context research consists of the actual path of a product in a local system consisting of diverse partners, organisations and users. It aims to map and solve the problems that appear in this context – that might be a museum, a podium, an archive or a neighbourhood, a school, a hospital etc.' (Raad van Cultuur 2010).

context research at waag society

Operation Sigismund

The diary of an 18th-century Dutch aristocrat by the name of Sigismund van Heiden Reinestein is the starting point for an educational adventure in the basement of the monumental building of the Archive of the province of Drenthe. The project combines innovative perspectives on learning and gaming with formal learning goals and expert knowledge from the archival staff, thus creating a stimulating ground for learning, team collaboration and wonder. Children are drawn in by an exciting story and are asked to protect an important private collection against all kinds of dangers like dampness, fire, and ink corrosion. And to solve the mystery of Sigismund….

The concept of an adventure game is used to create a learning environment in which the private records of Sigismund are naturally embedded and connected to formal primary school learning goals. The narrative structure gives information on the archive, its role and its collection in a logical and appealing context, thus creating stimulating ground for learning.
Since 2007 the interactive environment has attracted some 2000 pupils per year. The project has also resulted in the publication of a model for heritage education.

Operation Sigismund is a collaboration between Drents Archief and Waag Society, supported by Mondriaan Stichting, Provincie Drenthe, VSB fonds, Prins Bernhard Cultuurfonds, NOT Fonds and Stichting Telematica Drenthe.

StoryBOX

StoryBOX focuses on language education for primary school pupils. It aims to support the non-technical aspects of language education for special needs children (e.g. those with dyslexia). In StoryBOX a playful approach to language learning is developed by addressing creative, collaborative and spatial skills. At the start of the project, game and play elements were researched in relation to an existing educational format, Veilig Leren Lezen. During the development process a group of experts – teachers, language education researchers and special needs teachers – was continuously involved.

The first prototype consisted of tangible, technologically enriched objects, which enable children to learn to auditively recognize characters, construct small words, automate word recognition and play with language structures. The first prototype was tested in a series of four feedback sessions with children aged six and seven. During the observations, no specific game rules or competitive elements were introduced. The children explored what the blocks could do and what they could do with the blocks. The educational developer observed the behaviour the children displayed. There was no right or wrong, they played freely, and their play served to inspire the development of a language learning tool kit. With this open approach it was possible to let the children engage in play by themselves. The results of the first testing phase were used for the design of the second prototype that has more functionality – a small ecosystem that is consistent in appearance and interaction and refers to creative and production systems, challenging pupils to be the producers of their own content.

StoryBOX is supported by the GATE project, funded by the Netherlands Organization for Scientific Research (NWO) and the Netherlands ICT Research and Innovation Authority (ICT Regie).

transformation research

Transformation research maps 'the scaling of pilots and monitors the social-cultural effects. It involves the scaling of context research to the daily practice of institutions, organizations and civilians, inside and outside of the cultural sector. This kind of research aims to enlarge the reach, appropriation and implementation of products and other results beyond the scope of the cultural sector itself.'
(Raad van Cultuur 2010)

Transformation research takes what has been developed in context research and implements it in the real world, either by incubation, sharing, disseminating or educating. The innovation is carefully nurtured, then released into the world and allowed to transform society. From this, new insights, questions and possibilities arise which will flow back into form and/or context research.

Many innovations scaled from context research die before or at the start of the transformation phase, making this possibly the most critical phase of all. It takes a lot of targeted effort to develop these innovations into actual implementations enabling meaningful, real-

world change. Independent validation of effects, sustainable business models, investors, entrepreneurs, communication strategies and interpreters are all needed to make the change graspable for those of us who cling to the present, or even the past.

Over the years Waag Society has undertaken different approaches to this matter, including:

Impact analysis: in order to facilitate change within organisations or systems such as education or healthcare the impact of innovation needs to be assessed. As soon as relevant (academic) institutes outline the specific effects of novel tools or processes, a different debate is facilitated, helping organisations take on new positions or new roles.

Incubation of spin-off companies: incubation strives to generate maximum impact from research and development by growing fruitful ventures out of promising ideas and giving focus to potential adoption. Since the Users as Designers method results in innovations that typically demand new mindsets and a rethinking of business models and organizational contexts, the resulting ventures need careful support and enough time in a safe environment before they can stand on their own.
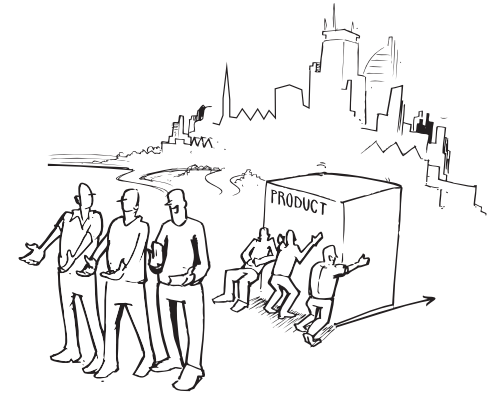
Platforms & festivals: a good way to support change is to facilitate meaningful encounters between like-minded, interdisciplinary and multidisciplinary groups of people. These platforms allow new ideas to spread, cross-fertilize, and influence society in a profound way.

Contests & prizes: depending on how they are framed, contest and prizes call for ideas, prototypes, products, services or practices, either free-format or constrained, such as using specific kinds of techniques or resources (e.g. data or tools). By opening a call for proposals, an arena is created where people compete on equal terms and show their work to the world.

Education: education is a powerful tool for transformation at all levels. This is done by developing curricula for existing educational formats, such as primary, secondary or higher education, or by providing alternative learning paths, as in the Fab Academy (www.fabacademy.org). Education should put students at the centre and stimulate creativity in its rawest and most disruptive forms.

How to support transformation?

The Open Book of Social Innovation (Murray 2010: p. 108-109) lists strategies for systemic change, including:

- The formation of progressive coalitions that bring together different partners.

- Intensive processes to build up shared diagnoses and visions.

- Efforts to grow a critical mass of practical examples.

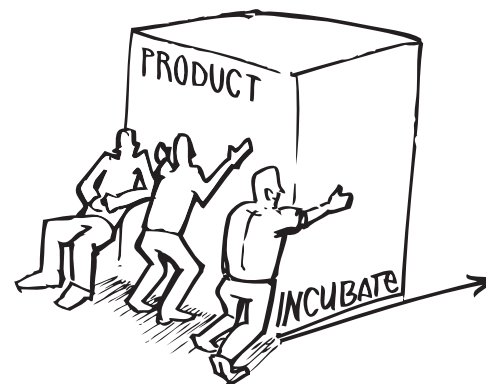- Training a group of professionals and practitioners with new skills and attitudes.

- Pre-empting inflexible conventional technologies that freeze disruptive forms of innovation.

- Implementing legal and regulatory devices to embed change.

- Empowering the beneficiaries of the new system.

transformation research at waag society

Storytable
Storytelling and self-expression can be the starting points for social connectivity. The Storytable is a user-friendly interface developed for and with elderly people to allow them to share stories and interact with one another. The core of the Storytable is a database of audiovisual material from the 1920s to the 1980s. With only two buttons, users can activate historical media, such as film footage or music, and view them on integrated screens. It also includes the possibility of adding user comments and stories to the table. The table was designed by Waag Society and artist Hans Muller together with elderly users to suit their abilities.
The Storytable became a commercial product in 2005, manufactured by the Heutink company. It is used in numerous institutional elderly care facilities, including over 75 retirement homes in the Netherlands.
Research has confirmed that the Storytable increases the quality and enjoyment of life in retirement and residential homes. Users feel more positive about themselves, experience greater self-confidence, have reduced feelings of depression, and feel more connected. Additional benefits of the Storytable are decreased social isolation and improved memory.
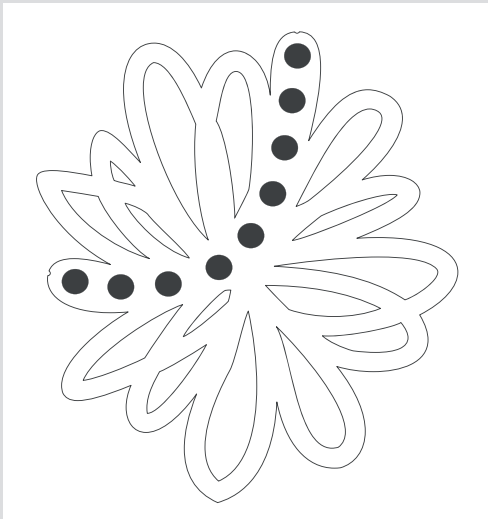
**Open Design - (Un)limited Design Contest**
The (Un)limited Design Contest is an experiment in open design – the sharing of creative work in the manner of open source software. Amateurs and professionals alike can enter their designs on unlimiteddesigncontest.org. Normally, copyright does not permit using existing designs without the maker's permission. But these designs share an out-of-the-ordinary quality: each design is available as a free download, so anyone can manufacture it on computer-driven production equipment like that found in Fablabs, special public workshops around the world. It allows you to use the designs made by others, copy them, and even adapt them, on condition that you attribute your work, do not use it commercially, and use the same license yourself. For this reason, apart from the designs themselves, the blueprints and instructions relating to the submissions are also published on the competition website. This is made possible using a free Creative Commons license.
In the 2009 edition more than 80 designs were submitted, with a winner chosen in each category - Form, Food, and Fashion. These designs were used in the 2010 edition of the contest to make derivatives – Fusion products.
Un)limited Design Contest is a project by Premsela, Waag Society and Creative Commons Netherlands, in collaboration with Fablab.

**open design
transformation
research**

lemon**bow**
swimwear
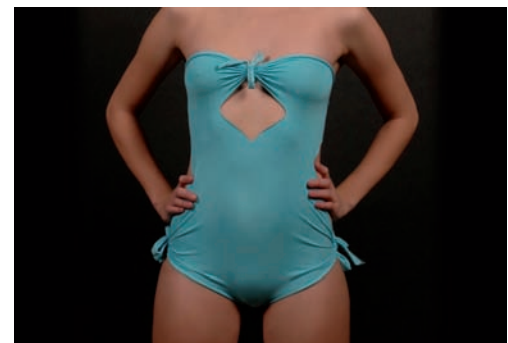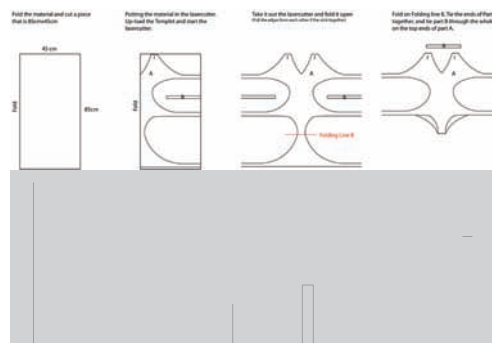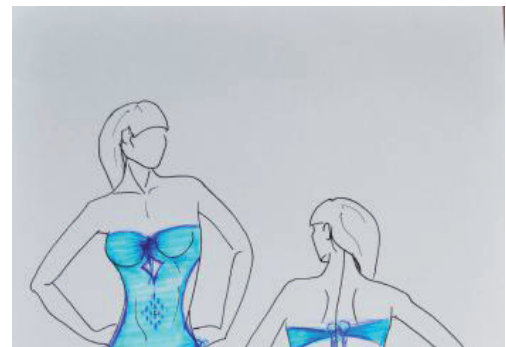
Part 2 focuses on the applied aspect of Creative Research: context research. First the main principles for getting into the mindset of Users as Designers are described. Then the three phases of Waag Society's development process are depicted: Ask, Make and Try. Each phase is illustrated by a set of methods, tips & tricks, and case studies.
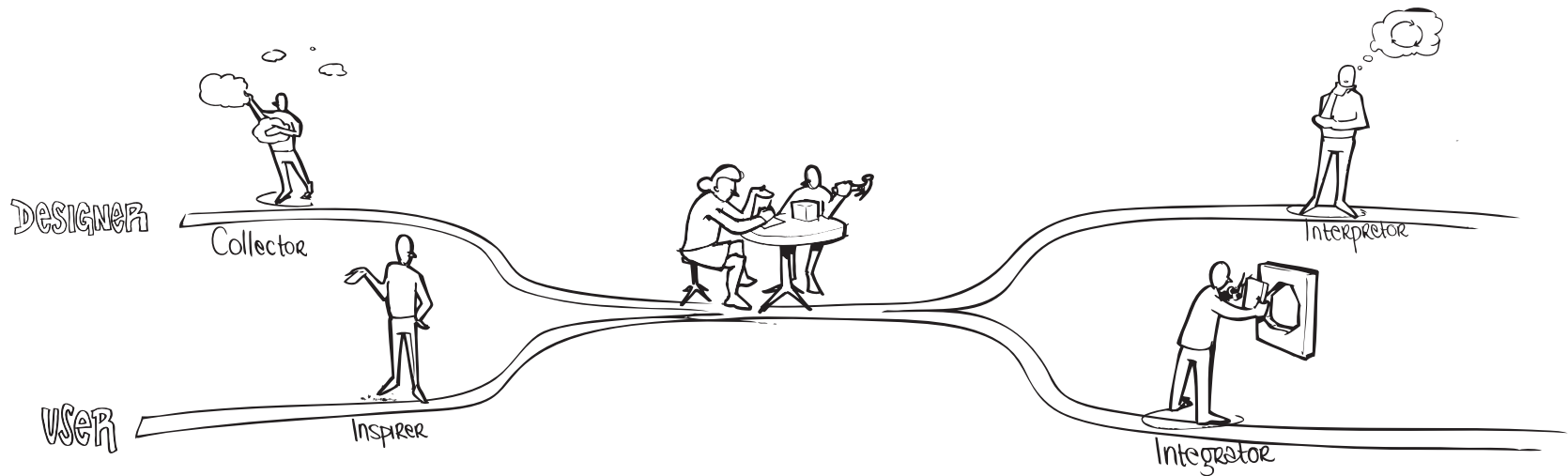
USERS AS DESIGNERS

part 2
this is how we do it!

users as designers – the rules of the game

In Part 2 we take a closer look at context research. Waag Society refers to this form of research as Users as Designers. Users as Designers is a combination of existing and customized participatory and empathic design methods that have a qualitative nature and are drawn from art and social science. Based on the nature of a project, a decision is made on how to relate to users and how intensive their involvement can be. This design philosophy is particularly appropriate when more challenging user groups are involved, such as mentally handicapped persons or seriously ill children. Inspirational research methods help to facilitate the dialogue needed to elicit personal and contextual information that helps define users' needs and desires.

Get initial inspiration and feedback from a small number of users

The main principle of this qualitative approach is an intimate dialogue with a select number of users, referred to as n=2. By listening carefully to their stories, feelings, beliefs and wishes, users give us rich insights into their real needs and contexts. The details of their personal stories uncover inspiring design insights leading to new solutions. This intimate dialogue makes the user part of the design and development team, and the signatures of the designer and the user appear both in the development process and in the developed product or service.

Involve users early and continuously in the design process

Involving the same users throughout the design and development process helps developers to build a strong relationship and intimate connection with those exemplary users. During the design process, the number of users involved increases. Starting from a dialogue with a few users to refine the research question, concepts are developed and evaluated with a select number of users in an iterative process. When validating real-life implementation the population becomes considerably larger, with up to several hundred participants, depending on the project.

Visualise and prototype your ideas as early as possible to test them

The technical development process supports this design process, which allows speedy iteration from idea to prototype, combining techniques from rapid prototyping, physical computing and tinkering. Early ideas can easily be visualised by means of simple paper prototypes, foam models, click demos, etc. To prototype more advanced models, Fablab machines such as the 3D printer, the laser cutter, etc. can be supportive to this process.

Work in multidisciplinary teams and share the knowledge

Working in multidisciplinary teams and brainstorming with other project members having different backgrounds can help us to see how we can use technology in new ways to design new social applications and practices. The design team members all have specific areas of knowledge, but they share broad interests. By being open to new developments, the team absorbs external knowledge, finds new questions, and shares new, outside knowledge within the team. Attitude is crucial: the desire to learn, the will to explore your own boundaries, to listen to your intuition, and to deal creatively with new knowledge.

When users and designers work together in accordance with this design philosophy, both take on multiple roles throughout the design process. The designer starts out as a collector, taking information and insight from the environment of the user, the inspirer, and creating an understanding of and empathy for their life and life stories. In the next phase, the designer and the user both take on the roles of maker and expert, materializing ideas, making and exploring early solutions, and conducting technical iterations. The user is the expert on their own life and experience, and the designer is the trained disruptive force. Both their signatures are valuable in the process. The user is triggered by the designer's ideas, and feeds the designer with more suggestions and feedback on the usability and experience of the prototype. Next, the user becomes the integrator and introduces the prototype into their own environment, defining new strategies and routines around the novel application, taking it into their own realm. The designer takes on the role of interpreter, using these new insights to evaluate and enhance the prototype still further.

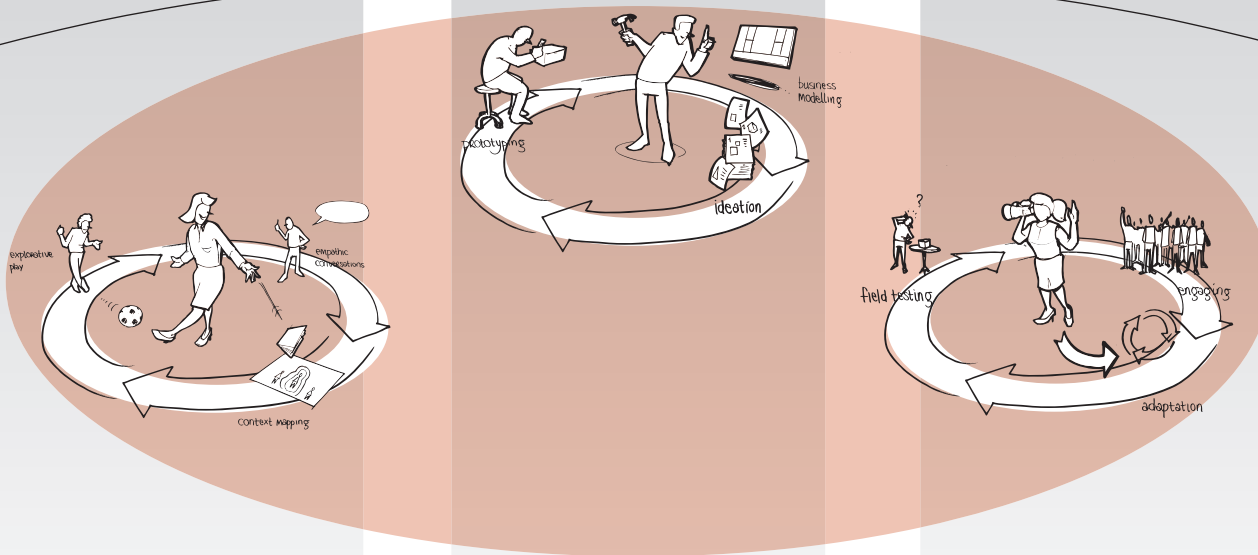## Get in the head of your future user and let the user experience new possibilities

ASK

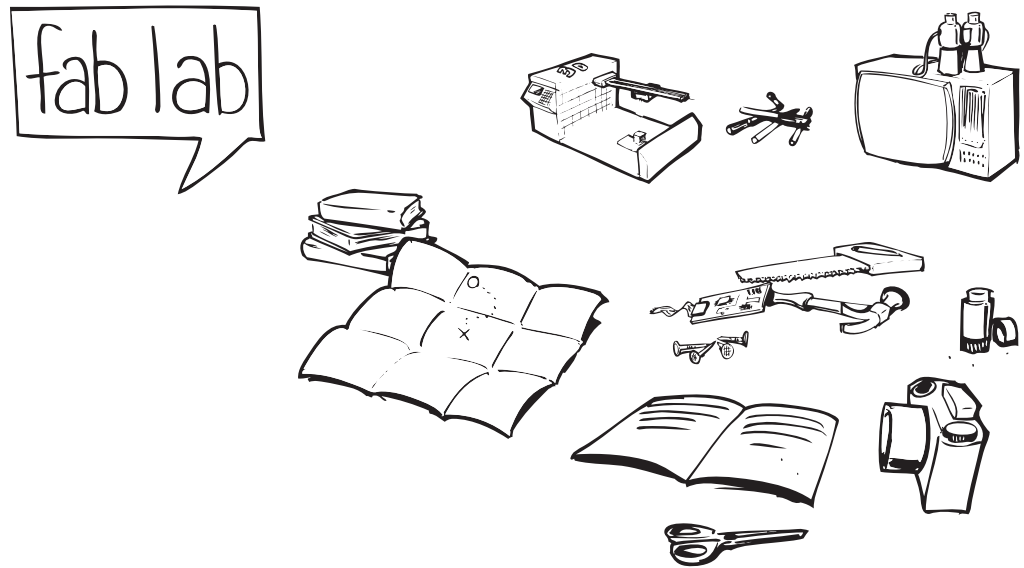QUESTIONING THE QUESTION

MAKE

THINKING THROUGH MAKING

TRY

TESTING & EVALUATING

explorative play

empathic conversations

context mapping

prototyping

ideation

business modelling

field testing

engaging

adaptation

into practice

This chapter describes the three main phases of Waag Society's development process: Ask, Make, and Try. Each section illustrates a selected number of methods useful for these phases and complements these with some tips taken from our own experience and best practice.

The Ask – Make – Try sequence is the core of context research at Waag Society. The process means going through the three phases consecutively, and sometimes several times, iteratively.

ask – questioning the question

In the initial stages of a project you challenge the question at hand. To do so, the involvement of users and other stakeholders is crucial: as a basis for inspiration, as a way of gaining insights, and as a sounding board for initial ideas. The nature of this dialogue allows you to step into the shoes of those you are designing for and with, to see the context from the point of view of those who will use the applications and services being designed.

What are the needs of the user? Where can we make a difference? What are we going to develop?

The outcomes of this phase are:
• user insights (profiles, context, skills, needs)
• a design brief (problem description, proposition, requirements)
• opportunities (design direction, first ideas)

The main methodologies we use can be categorized as:
• Empathic Conversations
• Explorative Play
• Context Mapping
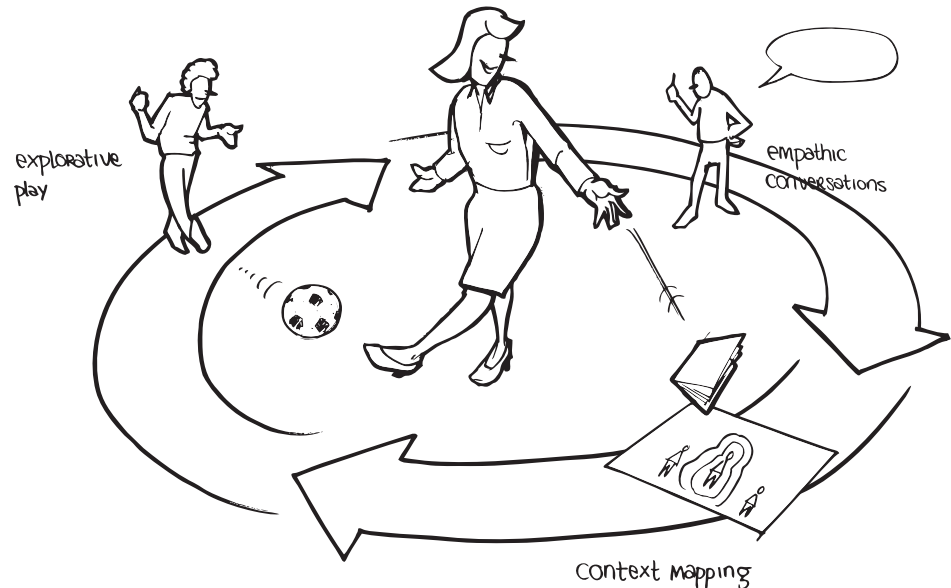
empathic conversations

Empathic Conversations (Raijmakers 2009) are a way of building relationships between a design team and the future users of their designs; an ongoing process, with an open, empathic and intuitive approach. Since conversations only work if at least two sides take part, and if both sides can contribute to the conversation, this can be understood as a form of co-creation. What is created is a deeper understanding of each other's views, context, possibilities and limitations, with the shared aim of using this understanding to develop new services together. Conversations can take the form of research into the context of the future users, but conversations can also be held with the design team and future users. Throughout a project, these conversations should keep flowing with the aim of empathising with each other. This is not an easy process, but it helps us to remain focused on the question at hand.

Relevant methods:

In *(semi-structured) interviews*, users answer questions about their daily routines, their social environment, and objects that are important to them. Conducting interviews in the comfort of a user's home provides additional insights into their specific environment and home situation. Observations and pictures of their home environment enhance the gathered information.

Appreciative inquiry employs a deeply explorative way of discovering information, by concentrating on the positive experiences of the users: what are their best / strongest / most impressive experiences concerning a specific topic? As a result, positive associations enhance the success and adaptation of future products and services.

The *Socratic dialogue* is a form of structured conversation or debate between individuals having contrasting viewpoints. Asking questions stimulates critical thinking and unlocks wisdom in the participants in order to clarify thoughts and illustrate ideas. By compelling participants to rephrase previous speakers' views, deep listening is stimulated, which in turn enables the creation of new, joint knowledge.

Understand the context:

Interview users at home, in their own comfort zone: this is more likely to elicit authentic and personal information, as well as insights that come from simple observation of the home situation and its routines.

A conversation is not just a starting point, but also a process in itself. Share your interpretations and conclusions in an open way with the users; seek and use their advice and response. Keep them involved.

Get to the latent needs of the users, by observing users in their real-life contexts rather than by just asking them.

Involve both men and women as participants to ensure gender balance. Think consciously about cultural backgrounds, age, etc.

exploratory play

'Play is a structuring activity, the activity out of which understanding comes. Play is at one and the same time the location where we question our structures of understanding and the location where we develop them.' (Hans 1981)

To be playful – both as researcher, designer, user or other stakeholder – is an important part of getting to the bottom of things. Play is a natural and enjoyable way to learn, to use your senses, and to undergo new experiences. It develops imagination and creativity. It is sometimes easier to get to the core of a question without using words. Openness and flexibility characterise this approach. Being open to new experiences supports divergent thinking, opens new routes, and supports the potential of creativity.

'Once you start drawing or making things, you open up new possibilities of discovery. Doodling, drawing, modelling. Sketch, make things, and you're likely to encourage accidental discoveries. At the most fundamental level, what we're talking about is play, about exploring borders.' (Kelley 2001)

Relevant methods:

Real Play is a workshop in which users are invited to play and build with various materials such as toy blocks. It brings out creativity and helps participants to express their insights actively. By building associations and ideas, participants can sidestep the domination of words. The workshop and its outcomes form the basis for the subsequent design process. An example of this method is Lego's 'Serious Play' (www.seriousplay.com).

Doodling is an unfocused drawing or sketch, like cartoons, or simply patterns and shapes that are made while thinking or daydreaming. Doodles are mostly simple drawings without a deep meaning that help us to think in a visual way (Roam 2009). Doodles can form an excellent basis for conversations.

case

Real Play in action - Express to Connect

The Express to Connect (E2C) project addresses the overall European challenge of preventing loneliness and isolation amongst elderly people. The oldest part of the population is at particular risk of becoming isolated and lonely as they grow older and their work-related networks erode. Waag Society is part of a European consortium which is looking to develop an innovative solution for an emerging EU market, the growing population of elderly people age 65+, to provide 'preventive social technology'. The project started with a series of workshops with participants selected in four of the participating countries (Denmark, Finland, Sweden and the Netherlands) to join a Real Play workshop, using toy blocks as a means of supporting the process.

We wanted the seniors to share with us some of their personal experiences and perspectives on questions like:
• What spoils or challenges social relations in seniors' lives?
• What do seniors do to maintain and create social relations?
• What are the barriers to escape loneliness, when it is there?

Why use toy blocks?

We used toy blocks as a means to support the process and to stimulate the hand-mind connection. The workshops helped the participants to overcome the barrier of not being able to define, express and share tacit insights and perspectives from their everyday lives. The toy blocks also stimulate the development of a shared language: participants gain a better understanding of each other's points of view and personal experiences. Since talking about personal loneliness and social isolation is widely perceived as a taboo subject, we talked about the opposite; positive factors, namely social activities and social relations. The facilitator played an important role in addressing these sensitive issues, by creating a trusting atmosphere, paying attention to the personal stories, and valuing the perspectives of all the different participants.

E2C is funded by the European Ambient Assisted Living Joint Programme. Waag Society is collaborating with Copenhagen Living Lab, Substanz, Heutink, Verhalentafel BV, Halmstad University, Halmstad municipality, Forum Virium Helsinki and Laurea University of Applied Sciences. www.express2connect.org
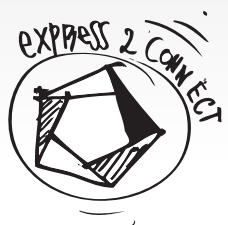
Facilitate good teamwork:

Mix and connect designers, artists, developers, researchers, users and other relevant stakeholders in the process of data interpretation.

Work in multi-disciplinary teams and schedule brainstorming sessions.

Make your documentation as visual as possible. Facilitate knowledge transfer and empathy to others in the process – in later stages, as well.

Seek experts for the knowledge you do not have. If you cannot find it on the Internet, this does not mean the knowledge does not exist. Talk to experts individually or in a panel session.

context mapping

Context mapping comprises tools and techniques for gathering and visualising user experiences. This procedure helps to get to know the user better by collecting tacit knowledge about the user's context and their interactions with their environment. The information gained is mapped and visualised to make insights transferable within design teams and to let users and other important stakeholders participate in the design process (Sleeswijk Visser 2009).
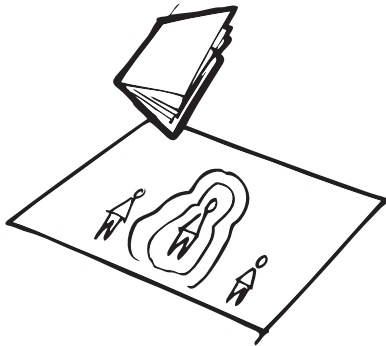
Relevant methods:

Cultural Probes are a direct way to get insights into user thoughts. By means of self-reported diaries, with text, photos and drawings, users document their lifestyle and their interactions with certain products or services. Often, the guiding questions for the user are not based on cognition, nor do they directly respond to the research questions at hand. Their value comes from the wide range of insights that is collected.

A *social map* is a diagram depicting the social environment of the user, including their friends, family, neighbours, colleagues, etc. The user appears in the middle of the diagram, demonstrating the social relationships with the other contact persons. This social map can be developed during an interview with the user and gives insights into communication patterns, routines, technologies used, physical and emotional distances, etc.

A *user profile* consists of photos of the interviewed participant and their environment, defining quotes, and other interesting statements. These profiles are used during or as preparation for a workshop to cluster the gathered information about a user.

Get in the user's shoes:

Personal experience is your first filter for every type of information. Put yourself in the user's shoes. How would it feel for you to be in their role?

Did you ever try to immerse yourself in the context? For a day, or a whole week? Ask participants to depict their context and experience by giving them diaries, or a disposable camera with instructions.

Use 'real' users rather than personae in this stage of the process. Address them by their names. Keep user profiles visible in your process. Connect back to them in your brainstorms.

case

Context Mapping – Zuidzorg

Commissioned by a consortium of healthcare institutions in the south of the Netherlands (the municipality of Geldrop-Mierlo, PuntExtra, Zuidzorg and Ananz), STBY and Waag Society conducted a study to identify the needs among older people for new services supporting independent living at home. The aim of this study was to get a better understanding of how elderly people live independently, perhaps with the help of relatives or friends, but without the aid of professional institutions.

Some of the important questions raised in the study were:
• Why do elderly people prefer to stay independent?
• What kind of difficulties do they encounter in their situation?
• What support do they get from their social environment?

We looked at psychological and social aspects as well as practical issues, as these all come together in everyday life. Notes of the conversations, drawings and photographs were used as input for a workshop with the client team to discuss the insights from the research and to identify opportunities for new support services. To enable the client team to communicate the study results to others in their organisations, a booklet entitled Working together on the future was made, documenting these insights by means of profiles, social maps, stories and opportunities. This was followed by a co-creation workshop to develop new concepts for services to support the elderly at home, bundled in From chances to concepts which described the process of involving users and stakeholders. A service blueprint was part of the output.
The client team felt that the engagement with seniors was enhanced by being part of the research process and that it gave them a different, empowering, perspective on stories that they knew but had not used in this way before.

The project was a collaboration between Waag Society, STBY and the multidisciplinary team of Woon Service Gemeenschap Geldrop-Mierlo, supported by the Province of Noord-Brabant.

Tips & Tricks for a brainstorm

- Clearly define the objective and subject of the brainstorm

- Invite people who are highly enthusiastic about the subject, and have a diversity of background and expertise

- Get a good mix between gender, age, and organisational level

- Invite the problem-owner

- Create an open, inspiring and welcoming environment

- Provide enough food and drinks (and lots of snacks)

- Plan and structure the process to keep up momentum (get an egg timer), but remain open to improvisation and feedback from the group

- If the group gets a little tired or lacks inspiration, do an active physical game

- Combine different techniques to keep everyone active

- Hire someone who can visualise ideas; it's a great way to communicate ideas in the group and document the brainstorm

- Activate all participants, but don't stress them out

- Have fun!

make – thinking through making
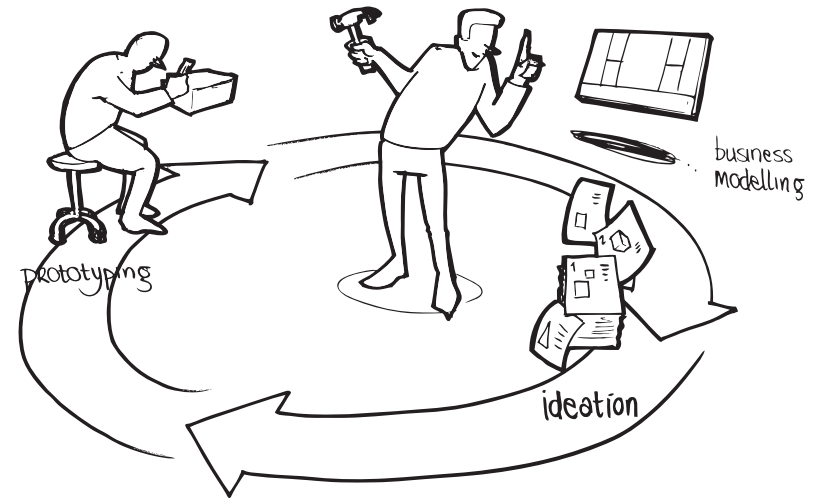
'In creative research the process of 'making' is central to the design process. This is done in a transdisciplinary way, starting from tangible, real-world problems. Solutions are devised in collaboration with multiple stakeholders.'
(Klein 2001:7)

Materialising ideas and thoughts needs to begin early on in the process. Materialising concepts instead of merely talking about potential design directions triggers creativity and overcomes potential language barriers. Users are usually open-minded and creative in filling in the blanks with their own imagination; it helps to explore interaction with a (limited) set of functionalities.

Letting users express their personal situation in a physical way makes it much easier to identify their underlying, latent needs – the needs behind the needs – and wishes. Visual communication is a strong medium to express not only ideas, but also feelings and desires. In addition, during the making process new ideas will develop that would not have come up in a purely verbal process.

Outcomes of this phase are:
• Concepts
• Demonstrators, alpha and beta prototypes
• Rich experience information
• Service Blueprints
• Business Models

The main methods used can be categorized as:
• Ideation
• Prototyping
• Business modelling

ideation

The ideation phase is the creative process of generating, visualising and developing new ideas and concepts. It is an essential phase in the design process, as insights gained from the first phase are translated into first design solutions.
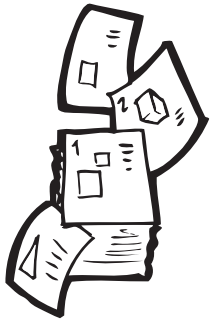
Relevant methods:

Early in the design process, host *co-creation workshops* with a transdisciplinary group of end-users, experts, clients, and key stakeholders. Mixing different stakeholders initiates dialogues between them (e.g. a senior and a public authority, a child and a school principal etc.). In this way, users become part of the design & development team.

Tinkering is an iterative design process which involves making sketches, first drafts, and models, but also taking things apart to see how they work and making new objects out of the elements. It is a way of externalising your thoughts. By playing around, you start making things before you know what you want to achieve: you think through making. So don't be afraid to get lost and to redefine your goals.

Community building & open design: by opening up your design process and sharing it on social media platforms such as Instructables (www.instructables.com) or other community sites, other users and designers can comment and make suggestions. By the same token you can get inspiration from other designs posted. In this way, users becomes producers.

Tips & tricks for a creative session:

Tell participants in advance what is going to happen during the session so they will understand the purpose of the different parts of the session.

Participants might be shy; try to have everyone give their input and encourage them to do so. Think of a story object that people are familiar with and can bring to the session.

Talk about what has been made (during a rapid prototyping session, for example), to understand the deeper thoughts behind it.

When brainstorming, try to avoid the word 'but' and don't dismiss things too quickly. In the beginning it's about quantity, not quality

If your target group consists of seniors, use small groups (around 6 people), and create a warm and inviting space. Also, keep in mind that elderly people are not equally energetic at all times of the day.
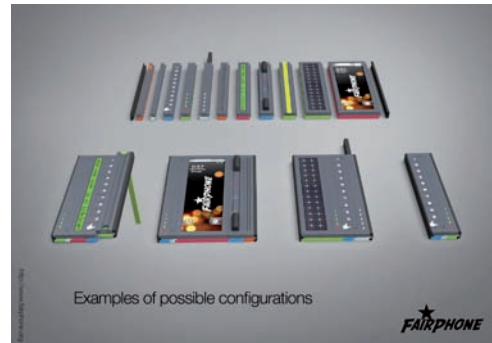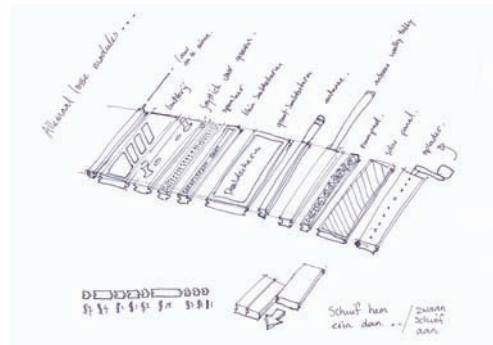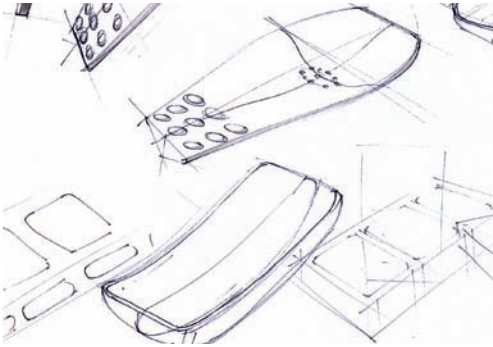
community building - fairphone

case

Community building – the FairPhone

FairPhone is the first collective, non-profit mobile phone producer in the world. Everyone, from Europe to Africa, can participate in creative challenges on the FairPhone website, from designing your favourite phone to promoting the final product. Together with Niza, Waag Society developed an online platform to make the production process of the mobile phone more transparent, to work together with national and international consumers through open-source software, and to activate and mobilize people to collectively develop an alternative for the conventional mobile phones that use key minerals from mines where working conditions are deplorable. FairPhone facilitates both the participants' search for better mines and their petition to phone brands to contract those better mines. FairPhone taps into modern mentality, by creating an internet community that people can enter and leave at will; by inviting and enabling each person to use their own creative talents in completing a collective project; and by posting design and campaign challenges online, inviting participants to comment and build on each other's ideas. The project is not primarily about developing a prototype of the first fair mobile phone. Rather, it is about bringing people together, inspiring all telephone brands to 'go fair', and fighting injustice the most effective way possible: together, as a collective.

Fairphone is an initiative of Waag Society, NIZA and Schrijf-schrijf and is supported by Stichting Doen and NCDO. fairphone.com

prototyping

Prototyping is another entry point to a dialogue with users and other stakeholders. By building and testing prototypes you can get direct feedback on functionalities as well as user experiences, in user sessions, expert panels and user groups.
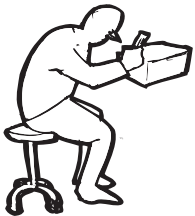
Relevant methods:

Experience prototyping provides a basic visualisation of the experience process of your product. Paper Prototypes, for instance, can be made to shape your concept, make it communicable for the user, and simplify complex problems to test how the user will experience the product. Ask questions like: how would it feel to use a service like this? Where would you like to use it? With whom would you be communicating? Use the feedback to improve your design and continue testing.

Usability prototyping can be employed to test the usability of the different parts and of your product as a whole. Build your prototype to a point that users can give feedback on button size and whether or not it is easy to hold, for instance. Define the flow you want the user to evaluate. Make sure the flow is clear and easy to understand.

Functional prototypes: a functional prototype is made in order to test the working or functionalities of a concept. Decide which functionalities you want to test and make a working prototype of those functions of the product. This allows you to make technical changes and enhance the functionality before the prototype becomes a working product.

Engage your team members:

Create a level playing field: everyone is an expert. Everyone brings something to the table. Formulate practical design questions in prototyping sessions. Approach it as a design problem, not a socio-cultural problem in order to keep it manageable. Invite participants to let go of methods they are accustomed to and start new ways of thinking. Get past the talking.
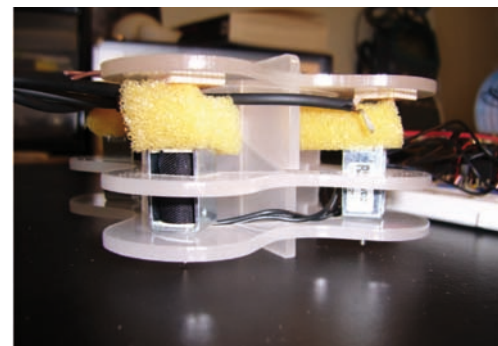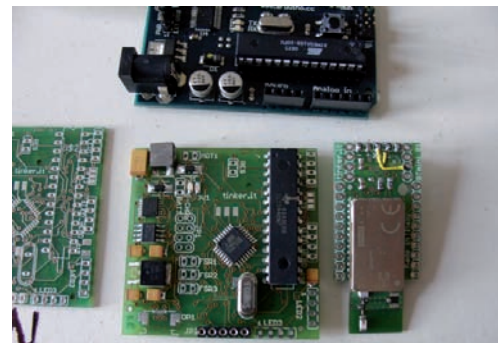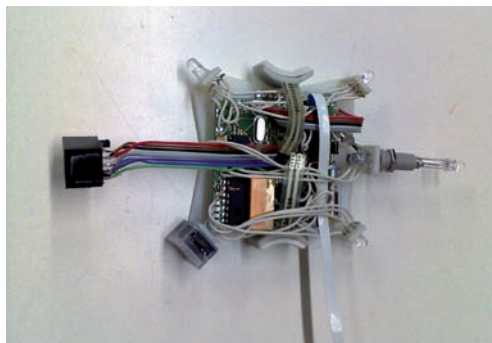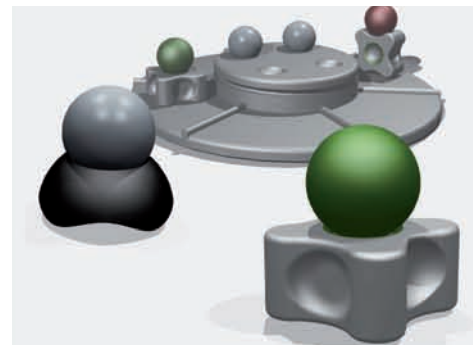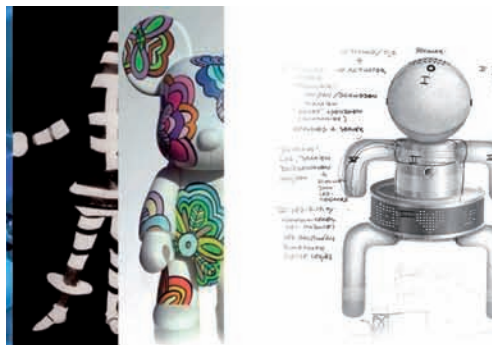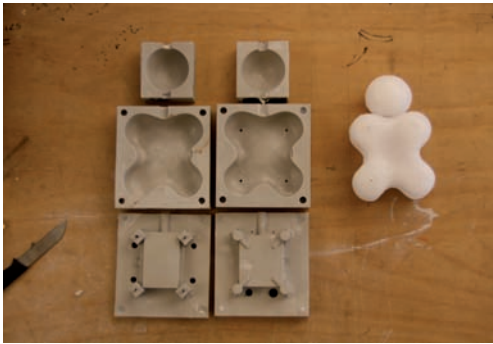
Engage team members during the whole process, not just in one phase. Work in a 'trans-disciplinary' way: let researchers prototype, let policy-makers draw, let designers make business decisions.
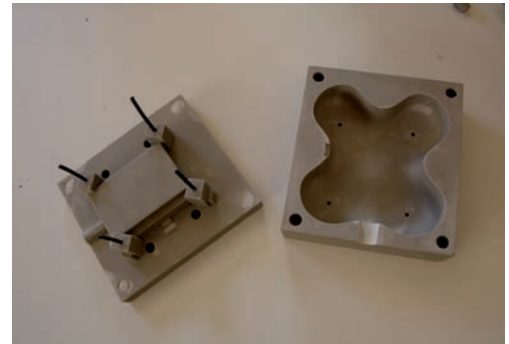
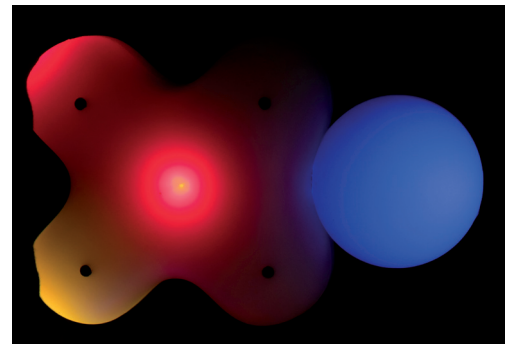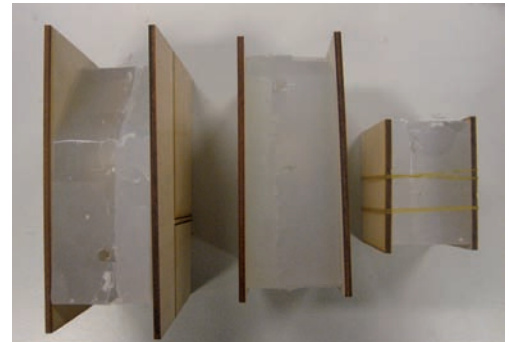Schedule regular meetings or scrum sessions to keep the momentum going. Think of using the moments between sessions…

prototyping - scottie

SCOTTIE

case

Fablab is an example of a rapid prototyping lab, which can be used for off-the-shelf fabrication, sharing and learning. This international community started at MIT, Massachusetts and can now be found in more than 50 countries around the globe. Fablab is a place for engineers to work on real-life design problems and to bring technology to communities that would otherwise be unable to create consumer items (fab.cba.mit.edu).

Prototyping – Scottie
Scottie was developed to increase social connectedness between people who are physically or geographically separated, such as children who have to stay in a hospital for a longer period of time, and are separated from their parents and friends at home. The main design challenge was to create intimacy by affective implicit communications, expressions of affection, like a pat on a child's head by a mother.
Quick prototyping and iterative testing plays a crucial role, especially when exploring playful interaction. And by quickly materializing concepts, new ideas are generated so the concepts become more focused.
During the project the Scottie prototype underwent several changes in an iterative design process which employed functional demonstrators, paper prototypes or interactive 'black boxes' that illustrated an idea rather than a design. Observing how users responded to these prototypes led to new and improved versions of Scottie. The final prototype of this project was a 'family' of three Scotties that could be used by the child, family members, or friends. Light patterns and tap sequences allow people to play and implicitly communicate with one another. The open interaction engages users to create their own personal forms of communication.

The intended participation of hospitalized children turned out to be a challenge for several reasons: it is difficult to anticipate hospitalization, hospitalized children are often physically not well enough to participate, and their parents are too emotionally stressed to take part in a pilot. The user evaluation resulted in a shift of interest in participants, away from hospitalized children and towards elderly people living in nursing homes who are disconnected from their social circle of family and friends.

business modelling

When working towards the business model of your product you have to envisage how it will be implemented in real life and how it will sustain itself. Your business model is part of your business strategy. What does the market of your product look like, who will be involved and who can be involved? What value does the product create, for whom and why? Who is going to invest and pay, and what is the flow of monetary reward?
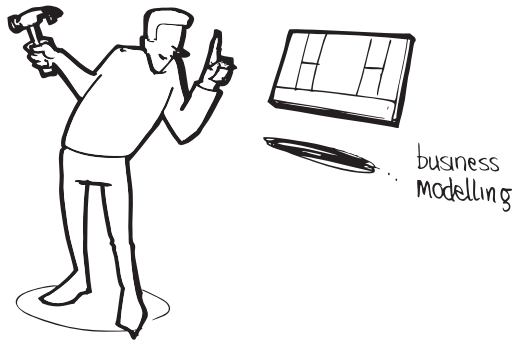
Relevant methods:

A *service blueprint* aims to develop a service prototype by looking at all the conditions to ensure the technology works in real life and not just in the testing environment. An entire road map is developed, from a marketing and communication plan to support the introduction of the service, to the help desk, illustrating step-by-step how the service works, and which tasks are of importance to make sure the service does what it has to do. Like a storyboard, the service is analysed from the user perspective.

A *business model canvas* is an effective tool for thinking about how to create value for the user, and at the same time how to build new business or transform your organization. It is a strategic management tool based on a visual template that helps to sketch, develop and discuss business model elements within your team. Read more on www.businessmodelgeneration.com (Osterwalder 2010).
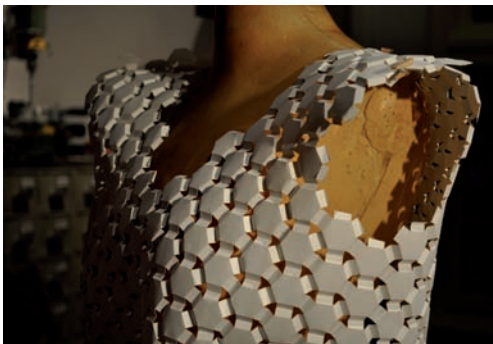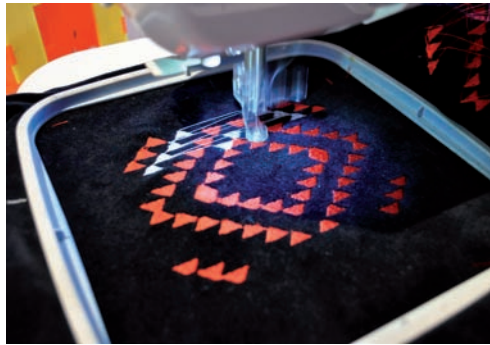
Share your ideas:

Don't be afraid of someone stealing your ideas. As soon as you have it out in the open, people will know it's yours and can contribute to your project more easily.

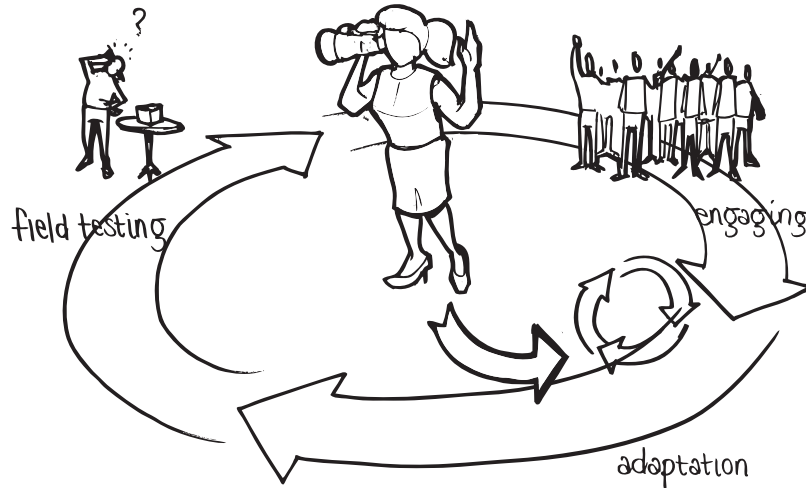Listen to your intuition and deal creatively with new knowledge.

business modelling

personal fabrication - fablab

try – testing and evaluating

Test and evaluate your prototypes with users to make sure they meet user needs. The aim is to find out whether a product or service could be successfully used by a larger group. At the same time the product, service or practice is refined and enhanced. There are variety of viable ways to reach this goal.

At the start of the evaluation process, carry out tests with smaller user groups; iteratively, at every step more users are involved. Depending on what you want to investigate and the complexity of the product or service to be tested, you focus on the research questions. These questions define the group size, time and money needed.

As a researcher you remain as neutral and objective as possible in order to receive more reliable outcomes. Critical and negative feedback is especially important, so people should feel safe about giving this.

In a good pilot, the users involved are highly and intrinsically motivated. This can be achieved by making the entry barrier low, communicating well about the aim of the pilot, being available for questions, and immediately solving possible problems.

Outcomes of this phase are:
• Test protocols
• Prototype optimization
• Plans for further uptake

The main methods can be categorized as:
• Field testing
• Engaging
• Adapting

field testing

During field tests, the testing and evaluation of prototypes takes place in the actual context in which they will be used. In field tests, users are often seen as passive subjects. To overcome this, 'living lab' methodologies can be beneficial as they involve users more actively in testing, evaluating and also improving ideas in a real-life context. In general, the living lab approach translates into very different traditions and types of lab, but the central idea is always that the user is the key to successful innovation and development of a product or service.

In a field test you explore the following:

User experience testing researches a person's feelings about using a certain product, system or service. What are the meanings, values and interactions with the product or system? User experience is very subjective and can change over time. In order to obtain authentic and credible results, subjective user data (interviews, questionnaires) should be combined with objective data (log data, sensor data, observations).

Large-scale functionality testing allows the prototype to prove itself in the real world. Does it work like it did in the lab? Does the product work in the actual context? Does it work as intended?

A crucial aspect of *larger-scale field testing* is to research the actual impact of the prototype on society. By means of observation and immersion in the real-world context, first statements can be made on to the reactions that the intervention invoked in a rich, qualitative way. For larger-scale quantitative testing it is advisable to involve an external research institute to get an objective evaluation.

Prepare the feedback session:

Consider the flow of the feedback sessions carefully: what do you want to happen? When do participants need to step into the process? Create momentum and flow.

Create a script with technical, functional and strategic goals and test them before you go into the field. So make sure everything works and that your questions will lead to answers that will provide you with the information needed.

When carrying out an interview or a user test, it is recommendable to work in pairs. One can ask the questions, while the other makes observations, takes pictures and notes. No more than 3 researchers should be present, so as not to overwhelm the participant.

Look at what users do, not just at what they say! Also, combine user feedback with quantitative data. For example, keep log data of the use of your prototype.

case

Impact testing – Frequency 1550

Frequency 1550 is a mobile city game that actively teaches history to secondary school pupils. With the help of the Internet, smart phones and GPS technology, Amsterdam is turned into a medieval playing field. The aim of Frequency 1550 is to bring the Middle Ages to life for pupils within the context of their history lessons. The reactions to Frequency 1550 have been overwhelmingly positive, both from the participating schools and the general audience. When the game came out in 2005 the technology was so new that it didn't attract the attention of a wide audience, but Frequency 1550 nevertheless made it to Dutch TV news because of its innovative and applied nature.

For the pupils playing the game, the technology was not the only attractive aspect. The impact of the experience was raised both by the use of game elements and by the fact that they navigated the centre of Amsterdam on a medieval map. Looking at familiar surroundings with this different view gave the pupils a stronger experience than any textbook could provide.

In 2006–2007 Frequency 1550 was played ten times, each time with a slightly modified educational concept, and its learning effects evaluated. The main outcome was that the students who played the game scored significantly higher on the test than students in regular education. In 2008 the mobile game received a SpinAward in the 'best gaming concept' category. At the end of 2009 the content of Frequency 1550 became part of the Games Atelier educational programme.

Frequency 1550 was realised in cooperation with Montessori Scholengemeenschap Amsterdam, Open Schoolgemeenschap Bijlmer, IVLOS (UU), ILO (UvA) and KPN.

Manage expectations:

Manage expectations and make participants confident about using the prototype. If something doesn't work or the participant uses the prototype in the 'wrong' way, make clear that it is not their fault, but caused by the premature state of the design. You are testing the prototype, not the user. There's never a wrong answer!

Acknowledge the time and effort that people invest to test your ideas. Think about a present or compensation and keep them updated on the further development.

Share your story and experiences and build up a good network of supporters.
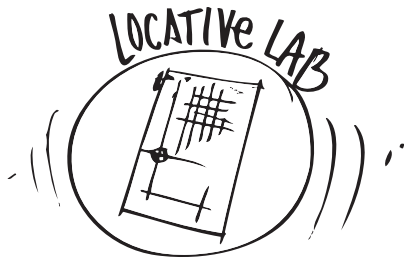
engaging

An important part of developing novel solutions is creating awareness and acceptance for their adoption. Outsiders can provide useful information on different levels and parts of the project, whether this concerns design or new knowledge.

Relevant methods:

*Blogs, social media and project website*s allow knowledge to be shared and disseminated amongst users and other stakeholders in order to create ownership and engagement in the process. Creating a website or a blog during the development of a product involves users from an early stage. The website can, for example, publish results and photos of community workshops. Even before the product is launched, enthusiasm can spread and outsiders can join in with suggestions.

Engaging – MuseumApp
The MuseumApp, developed by Amsterdam Museum and Waag Society, is a first step in creating a GPS-based, location-aware heritage platform in which museums can create their own multimedia city tours and location-based games: connecting history and current events to locations in the city in an interactive and entertaining way, allowing users to be the curators of their own experience. Users can publish their own images, comments or suggestions related to the tour for other audiences on (social) platforms such as Facebook and Twitter.
The MuseumApp has two intended audiences: end users (the cultural audience) and museum professionals. The development of the MuseumApp in the 'Locative Lab' – short, repetitive, interdisciplinary/transdisciplinary, intense collaborations, two days per week, for six concurrent weeks – is a unique meeting of curators, librarians, media professionals, concept developers and technical colleagues of the Amsterdam Museum AM and Waag Society. The format provides heritage professionals with direct knowledge, experience, and possibilities for unlocking innovative content. At the same time technical professionals learn about the skills and limitations of an audience. The joint development is based on experiment: rapid prototyping and exploring the interaction principles by demo testing of city tours, and on-the-spot content development with real stakeholders and real users. The experiences of the labs are shared publicly via the blog www.museumapp.nl. A large proportion of Lab participants were prototyping on the fly: they researched content, tested and adjusted storylines, and explored the route themselves. Locations were chosen on the basis of what they contributed to an understanding of the city's identity, looking for opportunities to turn facts into experiences, using elements of daily life as it used to be lived, and the connections to the current day, choosing between story, chronology and convenience to construct an enjoyable walk.
MuseumApp was developed by Amsterdam Museum, Waag Society, 7scenes, Stichting DOEN and the Bank Giro Lottery.

impact testing -
frequency 1550

engaging - museumapp

adapting

Based on user feedback, business evaluation, and other input, the prototype is refined and evolves into a final prototype. At this stage, the requirements for adoption are defined and relevant actors involved. This phase, between piloting and implementing, is essential for evaluating the choices made in the optimization of the final prototype. It involves the planning of the subsequent steps, communicating the idea to people who can help to realize it, and documenting the process.

Relevant methods:

Small-scale manufacturing. Before the commercial adoption of a tested prototype becomes realistic, a small series of prototypes needs to be manufactured and tested for a longer period of time. In this process a blueprint or mould is realized that can be used as a basis for the production of a larger series.

A *future scenario* is a way of making a flexible plan by describing what might happen. It helps to make people aware of uncertainties and opens up their imagination. These scenarios can be used to test and evaluate concepts.

Prepare for incubation by identifying potential spin-in or spin-out business opportunities. Design a strategy to accelerate those business opportunities; this could entail networking, devising marketing plans and financial strategies, and finding investors. To get this started there are also options of participating in contests and incubator programs.

Incubation – 7scenes
7scenes is a community platform for multi-user real-time gaming with mobile and location-specific technology. The city is full of stories, experiences and memories. Something has happened on every street corner, every cobblestone has been trod upon countless times, and every blade of grass can be linked to an event from the past. 7scenes allows people to make these stories visible, to give form to the way they view the world and to share it with a select few or with the world at large: to learn, to make contact, to suggest things or simply as entertainment.

7scenes – a subsidiary of Waag Products – is a spin-off company established in 2007 as a result of Waag Society's work in the field of locative media. 7scenes can be played everywhere: in the Netherlands, Europe and the rest of the world. 7scenes is used actively in the domain of education and culture, by Parsons New School of Design, Stedelijk Museum Amsterdam and the Amsterdam Museum, amongst others.
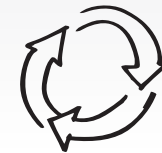
This is where your story starts!
We look forward to your feedback, your
comments and your own experiences!
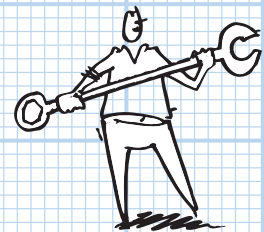
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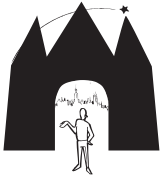
Epilogue

Take five dedicated people from various backgrounds and lock them in a room, up in a tower, in the middle of a buzzing square in the center of Amsterdam. Four days without busy diaries, desks, regular meetings and the rest of their colleagues. But with loads of inspirational books, Easter eggs, lots of coffee from the Italian café, pens, pencils, markers, Post-its, and notebooks running Dropbox and Googledocs scattered across the big round table in the middle. Outside, a live band is playing 1920s songs, and people are cheering in the merry-go-round. In our heads, we mix them with songs like 'This is how we do it'. During these four days, years of experience were combined to form a short book. A book on Creative Research: Users as Designers, on how Waag Society developed this method – to give you some hands-on background information and tools for your own Creative Research project.

Before we started this book sprint, we interviewed other colleagues to gain insight into the methods they used. And, as we are not the only ones doing Creative Research, we looked at other existing methods, articles, books and organisations working this way. By questioning the question, through intense discussions and brainstorms filled with doodles and schemes, we came to a working plan. We set tight time limits and exchanged written pieces with each other to evaluate, delete and complement. On the second day, two visualisers from JAM came to strengthen the team and help clarify things, not just for the reader, but also for us. The third day evaluation evoked strong reactions: 'What went wrong here?', 'Where does this come from?', 'Much shorter!' Post-its flew everywhere.

By the end of the fourth day the results were promising: loads of pages of content, packed with inspiring methods and visions – not including illustrations or layout! Over the next few months the editing process started… the book became shorter and shorter, and again longer until we finally completed it and got the right balance. Now it was time to send it to our designer to make it into an actual book.

And here it is! However you use it, we hope this book will help you with your own Creative Research practice.

Users as Designers is the main design philosophy of Waag Society. It states that real users should be the ones to define design requirements. When the user and designer work together according to this design philosophy, they both take on multiple roles throughout the design process. This philosophy relies strongly on empathy, subjectivity of interpretation, personal intuition, human interaction and trust, with research integrated in the development process and development being the focus of its research. By involving prospective users in the design process, the results are likely to bring meaningful perspectives and options into the hands of people. This leads to better systems that are designed with the user in mind. Adoption and appropriation of the results become far more likely than by using traditional methods of development.

In this publication, Waag Society focuses on a hands-on description of its methods. Hereby, we hope to spread the use of Users as Designers; improve our own understanding by sharing and learning from the responses, and eventually sowing and growing seeds of change that we hope will flourish.