

PORTFOLIO

Elmar Stroomer

Strategic Designer

+31628652112

elmarstroomer@gmail.com

www.elmarstroomer.nl

Our Mobile Generation Feb. 2010 - Apr. 2011

Our Mobile Generation (OMG) is a Wow! project of Enviv. The project targets the mobile telecom industry, and aims to co-create inspiring sustainability solutions for this growing sector that covers 4 billion users on our planet. Enviv aims to inspire its community of young professionals, students, and volunteers to develop innovative concepts and designs in the following fields:

- Prototype of a user generated sustainable phone
- Prototypes for add-on equipment
- User generated sustainability apps
- Innovative sustainable business models

Our Mobile Generation aims to inspire the industry to adopt the outcomes of this project and continue development for inclusion in their future business. Furthermore, Enviv aims to translate the results of OMG to one or more social business models for new Enviv start-ups.

I have been responsible for setting up the online co-creation platform on which ideas and concepts are shared. Afterwards I focused on generating ideas for the different challenges. I added ideas myself and guided 5 graduation students and 12 student groups in their processes.

One of my concepts, the Soil Checker, is a device to attach to a phone that measures characteristics of soil for efficient fertilization and crop recommendation. The concept aims to improve agriculture in developing countries. The concept is taken forward by the Wageningen University (WUR) and Kenya Agricultural Research Institute.



powered by **enviv**

Change the mobile phone industry!

Win amazing prizes!

Share your ideas at our open innovation platform to make the mobile phone industry more sustainable.

Deadline: March 30

 our mobile generation.org



powered by **enviv**

You can change the mobile phone industry

New concept posted

 **Add-on Technology**
Concept #2: Soil Checker

 our mobile generation.org

Open source 3D printer (Reprap) Oct. 2009 - Jan. 2011

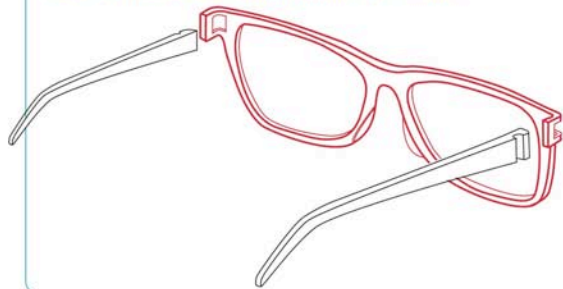
I participated in an open source 3D printer community and built my own printer. My goal was to get into 3D printing as the characteristics of this manufacturing technique are very promising. I also wanted to learn what it was like to participate in an open source hardware design community.

I experimented with the software to get the best results. The 3D printer prints products in ABS with a maximum size of about 10x10x10 cm.



3D printing custom fit, low cost glasses July 2010 - Apr. 2011

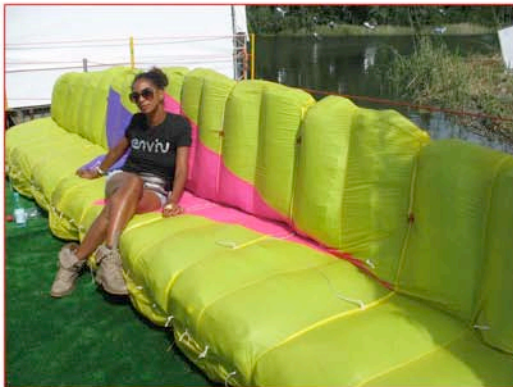
3D printing has advantages compared to mass production. For example it is easier to produce custom fit products and to produce them locally; diminishing transport and being closer to users. Although 3D printing is a new and relative expensive technology I believe this has many opportunities to produce low cost and custom fit glasses. Theoretically they can be printed for less than \$5. As long as the surface is flat even the lenses can be printed using see-through varnish, correcting all kinds of eye defects. To reduce parts a frame can be produced without hinges. It is possible to improve eye care by offering cheap, but fashionable eye-wear!



Eco-Lounge Furniture Jan. 2010 - Sep. 2010

Eco-Lounge Furniture pieces were crafted from discarded materials. I made chairs, beanbags and a couche from bathtubs, canopies and old sailcloths.

The furniture pieces were displayed and used during Lowlands 2010, Hollands largest music and art festival. Among them was a 5 meter canopy-couch.



In-/outdoor Furniture Alluxco Dec. 2008 - Sep. 2009

During this project I designed several furniture pieces for Alluxco. This Vietnamese based production company was in need of refreshing product designs. By using new materials and manufacturing techniques new products can be added to their portfolio. Among them was a chair that would fit and last in- and outside the house.



The Hybrid Tuktuk Project July 2007 – July 2009

In the Hybrid Tuktuk Project, teams of students from colleges and Universities in the Netherlands (4 teams) and in India (3 teams) will enter a battle against each other in order to design and produce the cleanest, cheapest and most practical upgrade system for existing tuktuks with a 2-stroke engine in India.

The goal of this international project is to raise the income level of the large number of drivers in India by at least 35%, to reduce the levels of CO2 emissions by at least 40% and to improve the air quality in Indian cities.

During a final race in India in July 2009 the student teams will present their prototypes and business plans. The winning prototype will further be developed into a marketable product. The goal is to convert 1 million tuktuks!



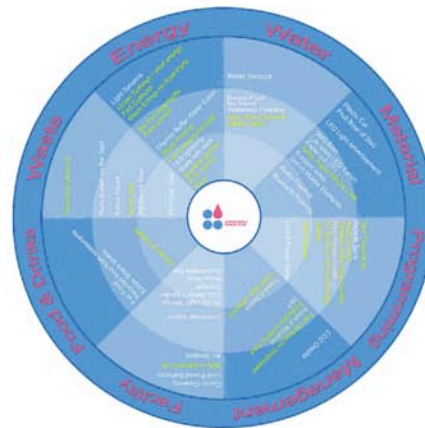
SDC and the CUP8

January 2007 - January 2008

The Sustainable Dance Club (SDC) is a creative concept of Rotterdam based organizations Enviu – 'innovators in sustainability', and Döll – 'atelier voor de bouwkunst'. The project focuses on integrating sustainable design, technologies and entrepreneurship in a club environment. WATT is the first 'SDC' and opened its doors in September 2008.

Next to an 'energy generating dance floor' a lot of other ideas, concepts, events, and technologies originated. The many ideas (around 70) came from creative sessions visitors of the website. These are gathered, structured and prioritized correctly in order to decide which ideas deserves elaboration first (see the 'cd').

The idea of a 'Personal Cup' received a high score and is developed into a concept that received the name CUP8. The CUP8 is a carton, 8-shaped, printable gadget and cup holder, which assists users to bring along an Eco-cup during events and festivals. Cups can be attached to belts, bags, sweatbands, pants, etcetera.



Oce; Rejuvenating the Brand November 2005 - February 2006

This Design Strategy Project is done for Océ (worldwide provider of printer solutions). The overall goal is to rejuvenate the brand through design.

An analytical approach is taken to explore the future in order to get insight in what might happen in Océ's business. Especially trends are researched that influence the context of exchanging information. Based on trends, 3 future scenarios for in the year 2026 are visualized.

The scenarios are visualized in booklets that contain moodboards, interiors, articles, timelines, personas and stories. Within these scenarios suitable and feasible products and strategies are designed and formulated, such as:

- Computer and advertisement screens using digital ink
- Co-branding strategies
- Recycle machines
- Wall printer, including sent features



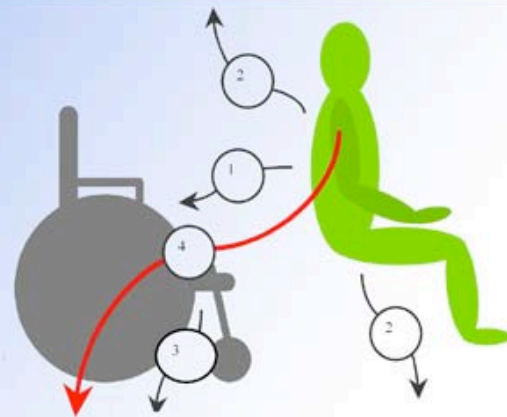
Wheelchair Fastener February 2006 – July 2006

This project is done for PERFIX and Insigne. PERFIX is a small company that develops spray-hood fasteners. Insigne is a manufacturer of plastic products and parts.

The goal is to develop a new promising product-market combination for the protected PERFIX fastening principle, which is used on the spray-hoods as well. The principle incorporates an user friendly and safe way to fasten canvas to a solid surface.

An opportunity had to be found which involved elements as safety and fastening. After extended research many problems were spotted in the taxi-business, when wheelchairs had to be transported and secured. The fastening principle seemed perfect for a new system that is able to quickly and safely fixate a wheelchair and its passenger.

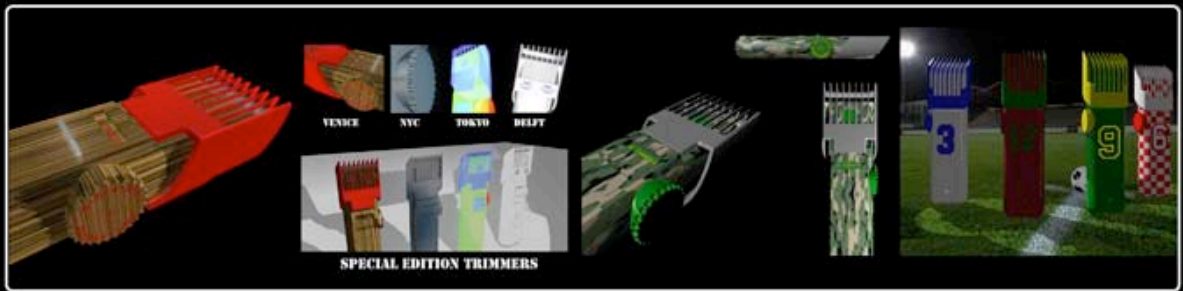
The exact design is under construction and is secret.



Beard Trimmer

March 2006 – July 2006

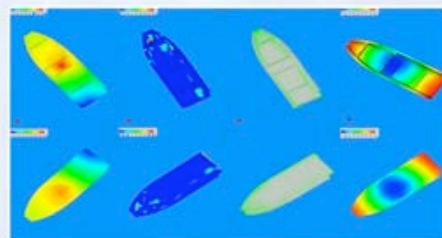
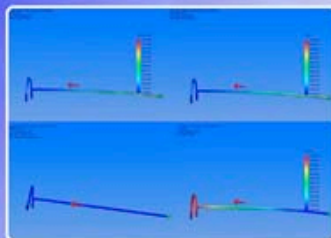
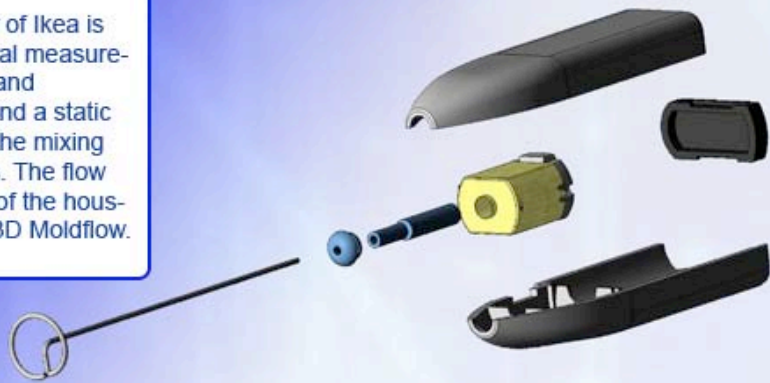
Creative drawing- and CAD-applications are used in this case to truthfully model a beard trimmer of Panasonic. Some parts are modeled in Maya, others in Solid Works. Different materials, looks, shadows and surroundings are applied in order to create several presentation, advertisement and 'blend in' visualizations.



Solid Works and CAD-applications

September 2005 – December 2005

During this project a milk mixer of Ikea is modeled in Solid Works. Several measurements are performed on parts and sketches. A strength analysis and a static forces-analysis are done onto the mixing bar (left), using Cosmos Works. The flow behavior of the chosen plastic of the housing is analyzed with the aid of 3D Moldflow.



Magazine Rack

September 2004 – October 2004

In this project a trendy magazine rack is designed for bars and clubs. One of the unconventional design approaches is used, named; Semantic Design.

A plain package of requirement and two moodboards are developed. Second step is to build the image, by deriving adjectives from the moodboards. For example: fun, futuristic, soft, fashionable. From these words the characteristic features are derived, within several dimensions; Orientation, Distribution, Proportion, Plasticity, etc.

For each dimension is determined what the words from the moodboards mean. This leads to a matrix of characteristic features. The final design should contain these features.

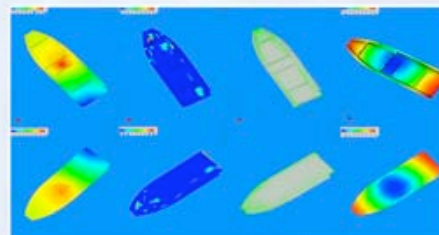
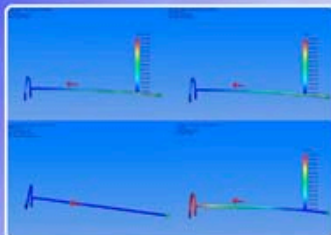
The housing is manufactured by PVC vacuum plate forming. The coated, wooden box has 4 spots, hanging in the upper side, shining onto the magazines.



Solid Works and CAD-applications

September 2005 – December 2005

During this project a milk mixer of Ikea is modeled in Solid Works. Several measurements are performed on parts and sketches. A strength analysis and a static forces-analysis are done onto the mixing bar (left), using Cosmos Works. The flow behavior of the chosen plastic of the housing is analyzed with the aid of 3D Moldflow.



Road Marking Obstacles

February 2004 – July 2004

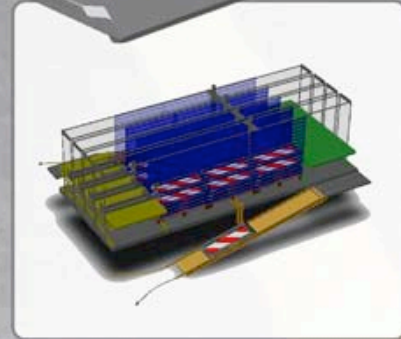
During an internship at Heijmans N.V. a new type of road marking obstacle (RMO) is designed, even as a system which (semi-) automatically places and picks the RMO's on and off the road.

The most important advantages are:

- Flexible shield and increased stability
- Hinged mechanism, no separate parts
- Compact, less buffer space required
- Easy assembling
- Light weight and user friendly; less and safer work for road workers

Transporting the RMO's from the buffer to the road is done by regular transport components. A pallet packing systems is used for storing and handling the RMO's. An important part of the transport process is the accelerating and slowing down the RMO's, which is done by rolling road.

Heijmans continues to develop the product and system and is currently testing prototypes.



Cybermango

Take a leap into the future.....



Webdesign

March 2003 – August 2003

During an internship in Suriname I worked at Cybermango in Paramaribo, Surinam. Cybermango is the largest website and graphic studio of Surinam.

My tasks were very diverse:

- Writing business plans for new websites (J&K and The Ware Tijd)
- Acquisition
- New product development, EZ-web (mini, low-priced websites)
- Promotional activities, by doing tv and radio interviews
- Website evaluation with regard to usability
- Contentment research among clients

