clothing
smart
mainstream
people
garments
specialized
everyday
successful
commercially
markets
clothes
interaction
sense
garment
phone
thesis
wear
time
stay
rather
combine
purposes
electronic
computing
people's
need
activities
personal
broad
development
cyborgs
natural
effortless
life
fashionable
fashion
improve
wearable
needs
accessories
lives
point
view
shirt
lot
envision
requirements
fulfill
still
mobile
consumer
ubiquitous
products
Smart
close
aspects
technology
power
functionality
seamless
assist
comfortable
functional
feels
carry

Intro

> Smart clothing is distinct from wearable computers in that smart clothing emphasizes the importance of clothing while it possesses the sensing and communication capabilities.
> (Cho, Lee and Cho, 2009, p. 583)

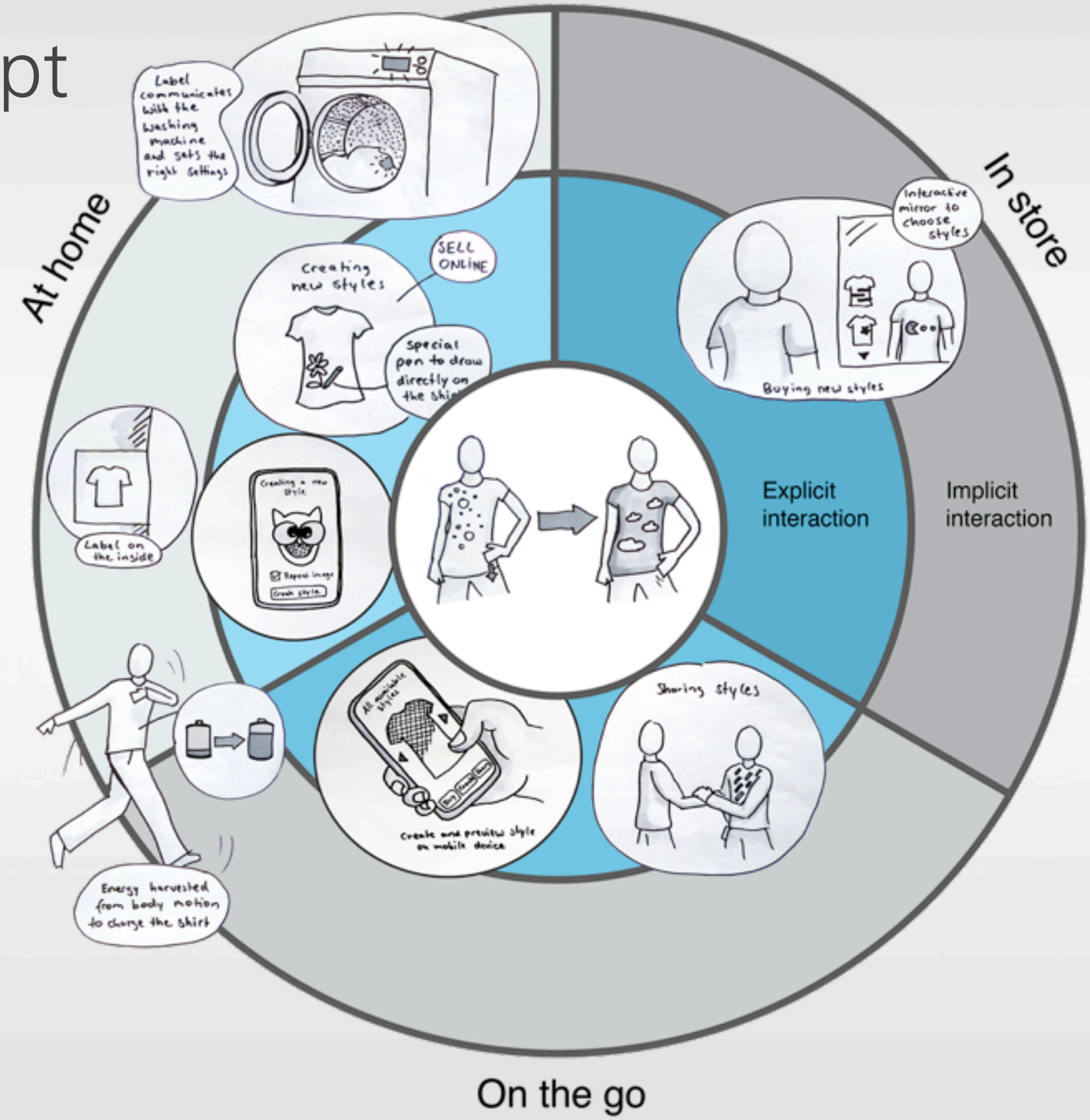
Smart clothing as mainstream products - something that could appeal to a lot of people

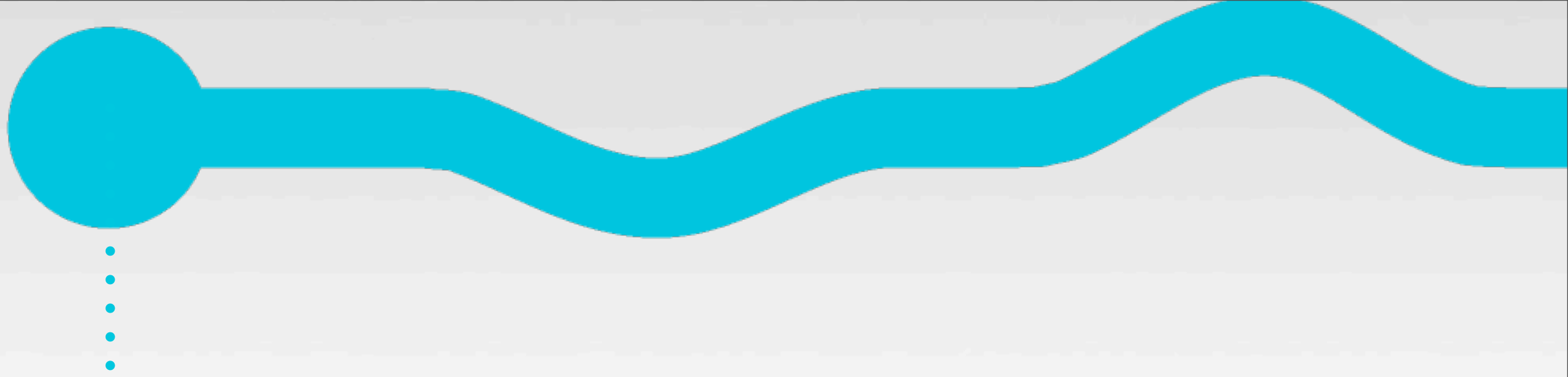
Demo

Concept

What it could look like

Concept


At home
In store
On the go
Explicit interaction
Implicit interaction
Label communicates with the washing machine and sets the right settings
Creating new styles
SELL ONLINE
special pen to draw directly on the shirt
Label on the inside
Interactive mirror to choose styles
Buying new styles
Sharing styles
Energy harvested from body motion to charge the shirt



Point of departure

- Explore the design space
- Search for the killer app in smart clothing
- Bring IxD methodology to smart clothing to find out user needs and possible futures

Literature

Why is smart clothing not in the mainstream so far:

- It's not wearable
- User needs have not been recognized
- Smart clothing requires multiple disciplines working together
- The compartmentalization of the industry is obstructive

Projects

Online study

> I guess I would like a clothing where I could download patterns and customize it how I wanted it to be. Photos of friends on the garment would be awesome and stupid at the same time. But a clothing that could keep me creative with it. Make me do illustrations to place on it.

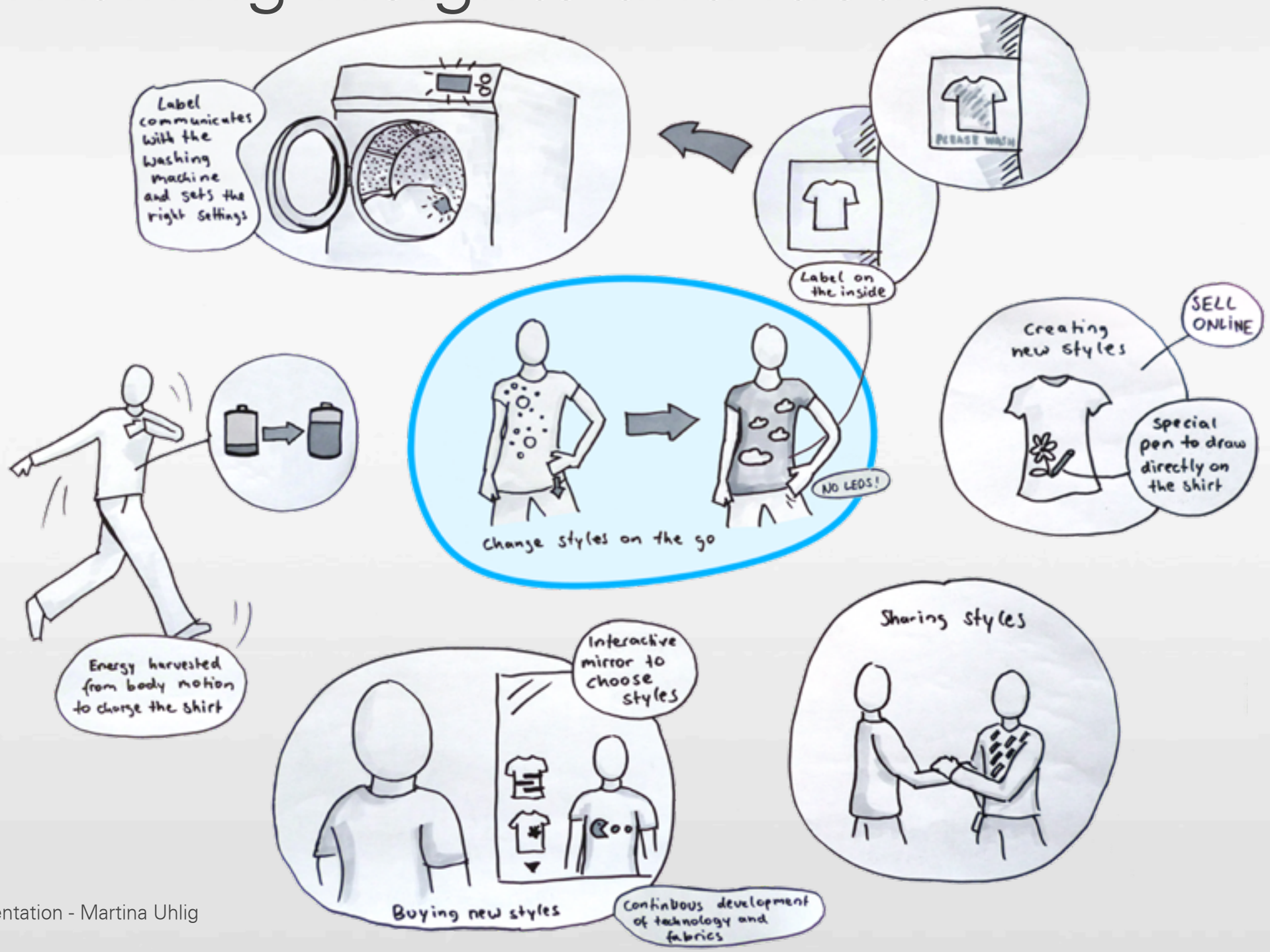
> I hate clothes with special washing instructions because I have bought a lot of clothes I like only to find that the washing instructions are complicated and time consuming [...].

> If I'm bursting with energy and if I'm feeling good, I like to wear red. If I'm not feeling so good (just tired or even sad), I wear something comfortable with darker colors...

Workshops

Mood sh
by
"say it w
when hav
The more
more wi
appear -
Charging the Electronic devices
Movement of our body
absorbing the Energy"

Combining insights and ideas



Feedback

> I especially like the fact that I can create my own patterns and use/share it with others. This would be a nice way to personalize my clothes and express myself through what I'm wearing. I also like the fact that you can change pattern and adapt to different situations fast [...].

> I like that the garment is an open material, which allows the user to implement their meaning and values to it, more freely than by just buying a garment.

> I also think it is important that the clothing is powered by me, for the sake of the environment. Sounds like something I would definitely love wear.

Arrival

- There is no killer app
- Concept potentially adding to a killer lifestyle
- A sketch of a possible future
- Interaction with clothing in the future
- Clothing becomes a canvas for the wearer's creativity
- Fashion would change to become more individual and democratic
- Fashion design and desktop printing

Reflections on the process

- No functionality has been taken out of the computer but technology has been added to a non-technical field
- Designing for self expression instead of needs
- UCD + PD =

Smart clothing in the mainstream

Implications of technology in the context of clothing

Martina Uhlig