



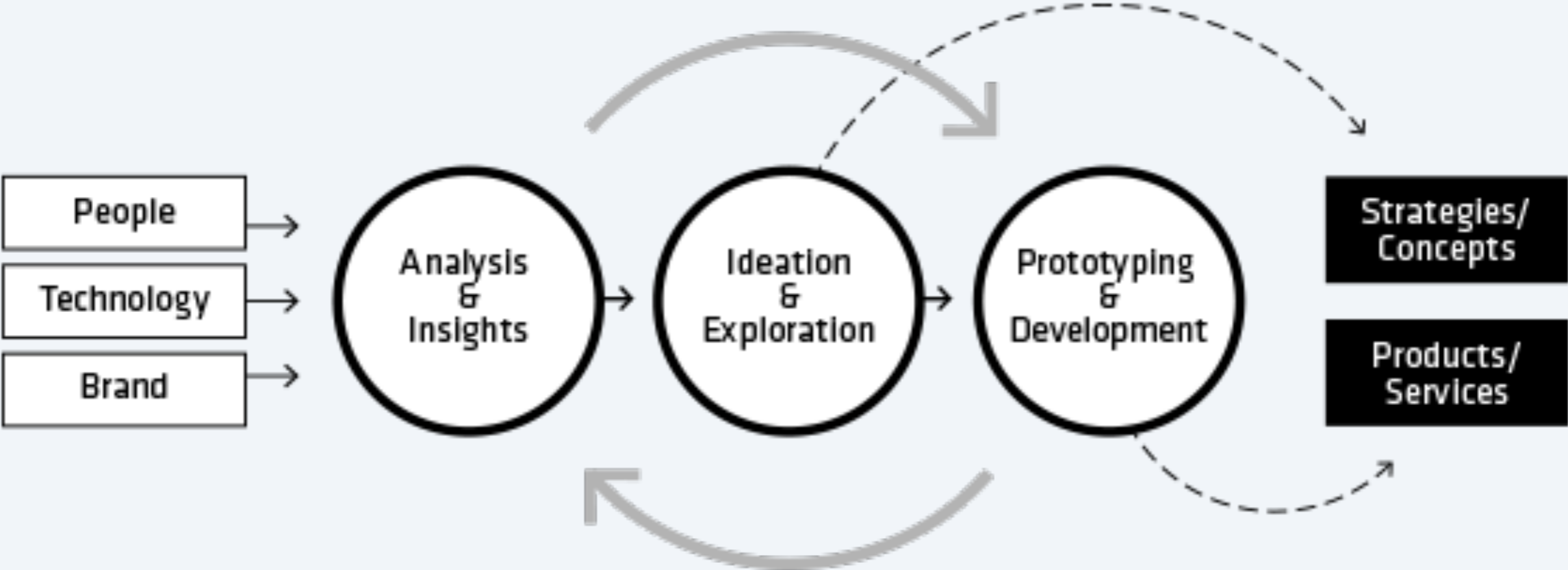
21.11.16

Designworkshop II

Deliverable 2: Presentation Concept

PROTOTYPING

Human Centered Design - Process



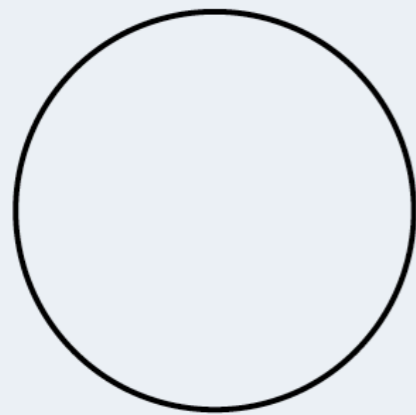
WHY PROTOTYPE?

- // Validate and improve new ideas and test initial assumptions
- // Make an idea tangible to share with and convince others

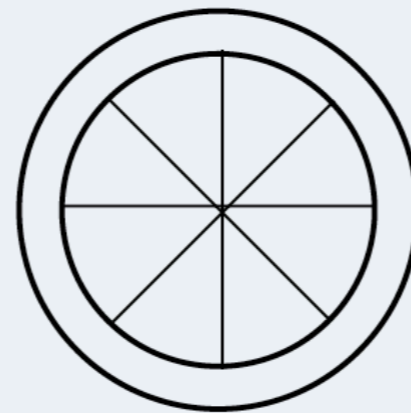
BENEFITS

- // Low resource and time investment
- // Faster feedback and a participatory approach
- // Early Validation in the development life-cycle

Fidelity v. Resolution



low resolution
low fidelity



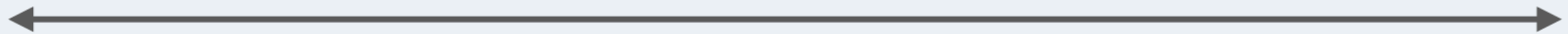
high resolution
low fidelity



high resolution
high fidelity

Low Fidelity

High Fidelity



Open Discussion

Sharp Opinions

Prompting Required

Self Explanatory

Quick and Dirty

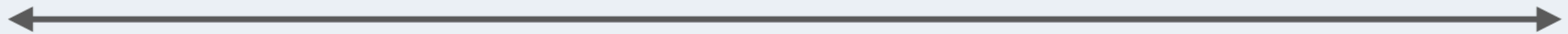
Deliberate and Refined

Early Validation

Concrete Ideas

Low Resolution

High Resolution



Less Details

More Details

Focus on core interactions

Focus on the whole

Quick and Dirty

Deliberate and Refined

Early Validation

Concrete Ideas

JUST ENOUGH PROTOTYPING

A prototype can be a result. Often, it is a **working tool** during the course of a process.

As with any other working tool, **perfection is not necessary**. It only needs to help you **achieving the next step**.

JUST ENOUGH PROTOTYPING

To find the right fidelity and resolution, ask yourself:

// Who is your audience and what level of fidelity/ resolution do they need to understand (and potentially judge)?

// What resources do you have available?

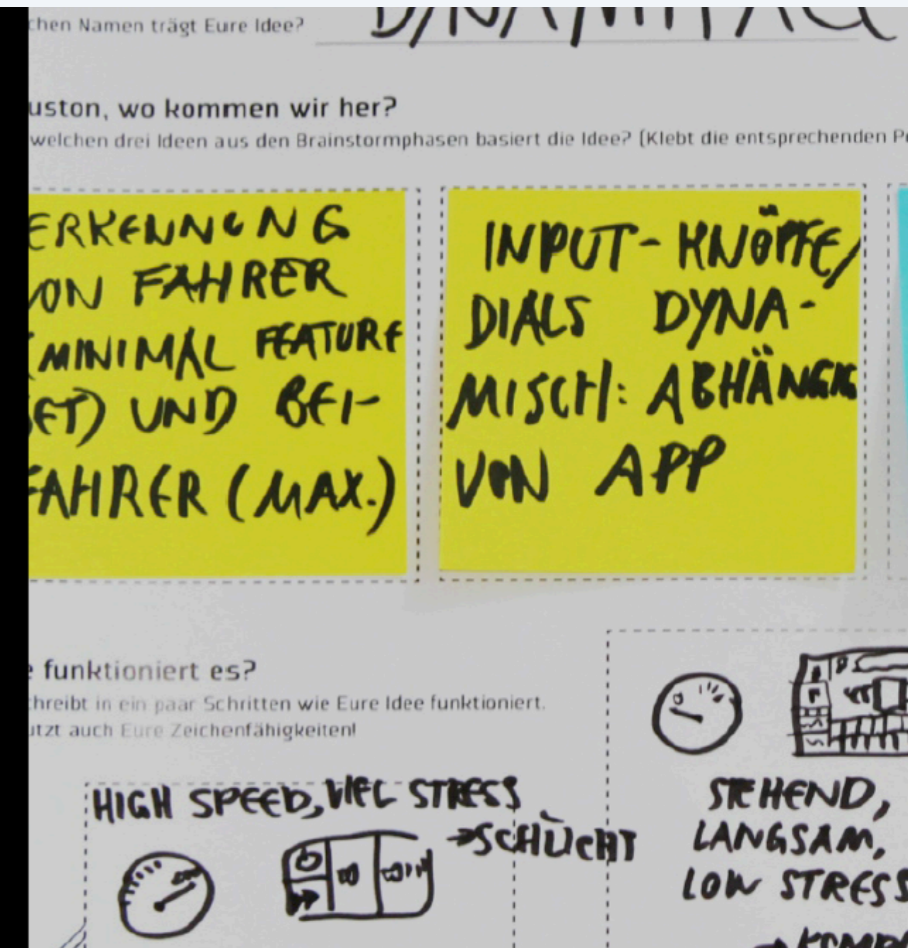
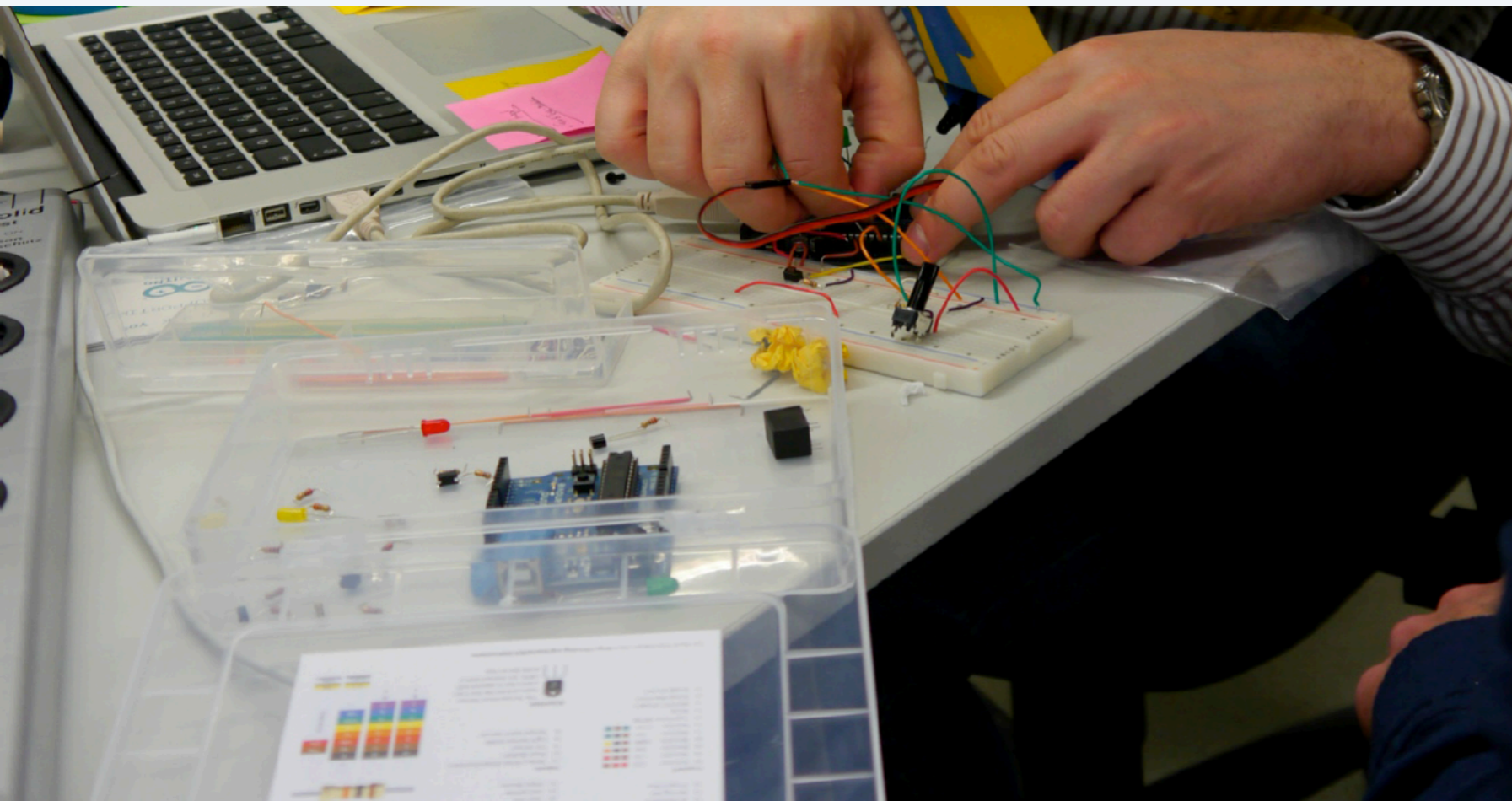
// How much time do you have available?

// What practicalities do you need to respect (e.g. transportability, replaceable parts, etc.)?



PHYSICAL THINKING:
DEVELOPPING IDEAS
THROUGH
PROTOTYPING

HANDS-ON INNOVATION WORKSHOP IXDS FOR VOLKSWAGEN



CHALLENGE

“Thinking with the material” is a traditional way to approach design. VW asked us to facilitate this approach – but using interactive electronics and sensors.

APPROACH

We conducted a one-day hands-on workshop on electronics, interleaved with brainstorming sessions related to the technology and to relevant directions in academic research.

RESULT

Not only did the participants get a feel for how to work creatively with electronics, they identified 3 areas for innovation which they are now focusing on.

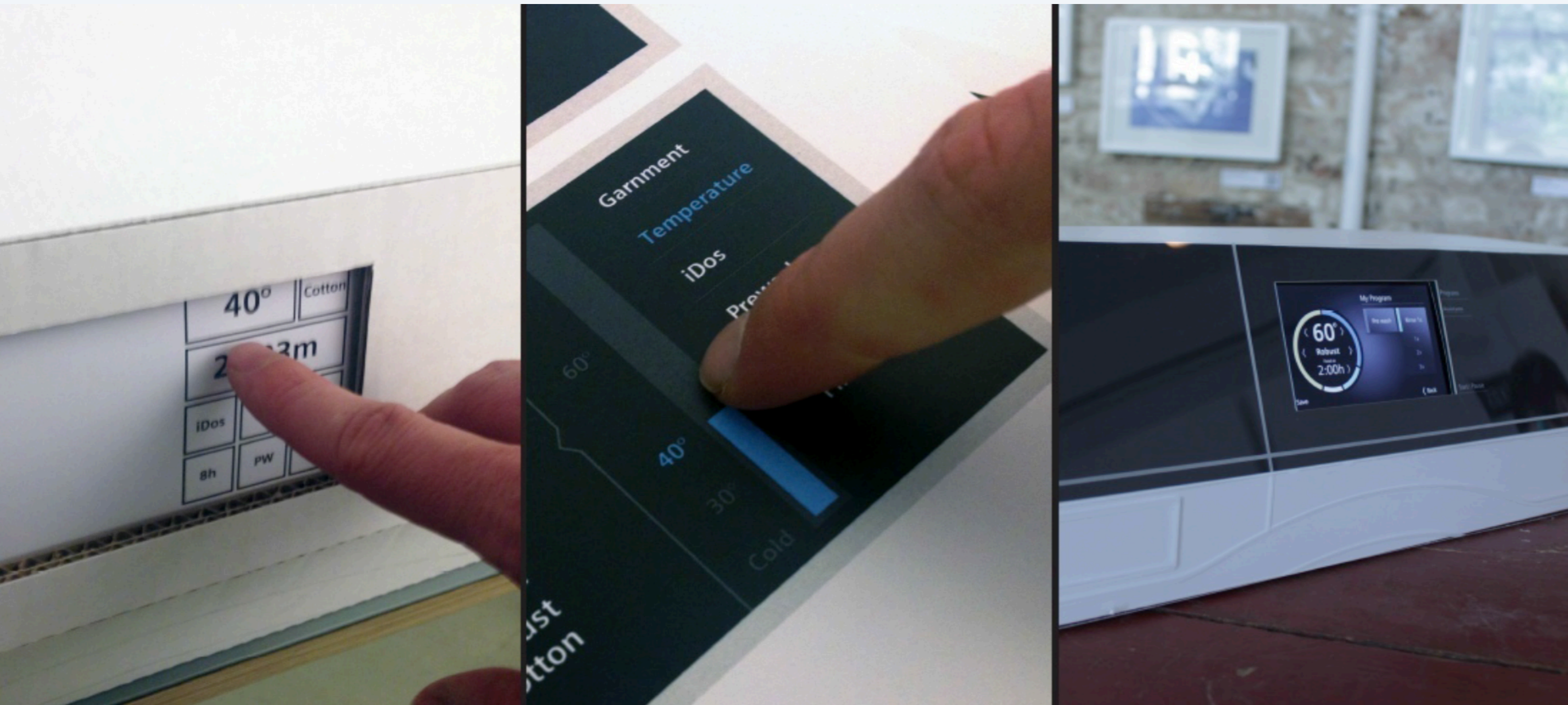
PAPER OR CODING?

THE MOMENT IN THE

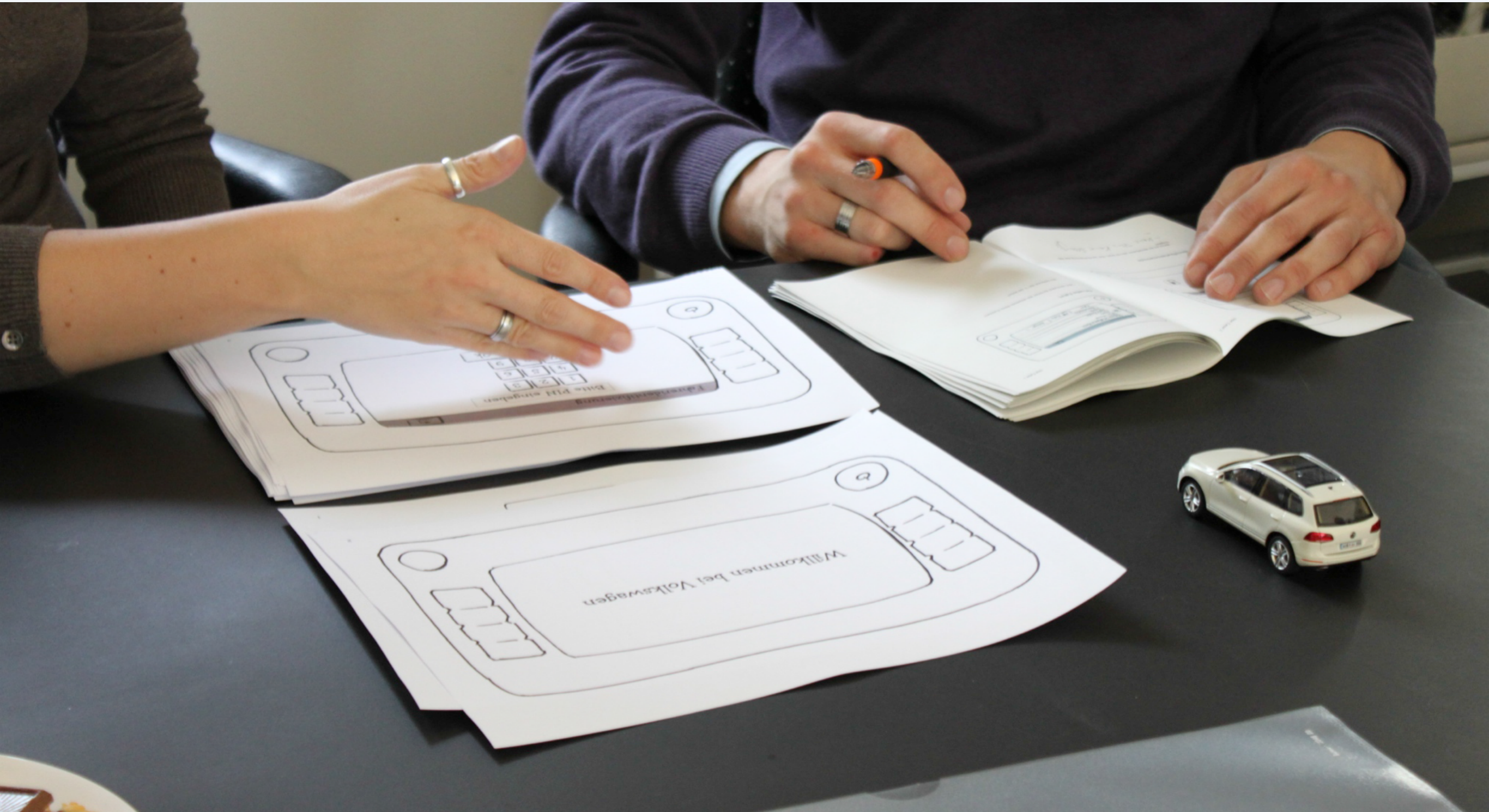
PROCESS DEFINES

THE FIDELITY

FROM LOW- TO HIGH-FIDELITY



JUST ENOUGH PROTOTYPING



LOW-FIDELITY PROTOTYPES VISUALISING IDEAS

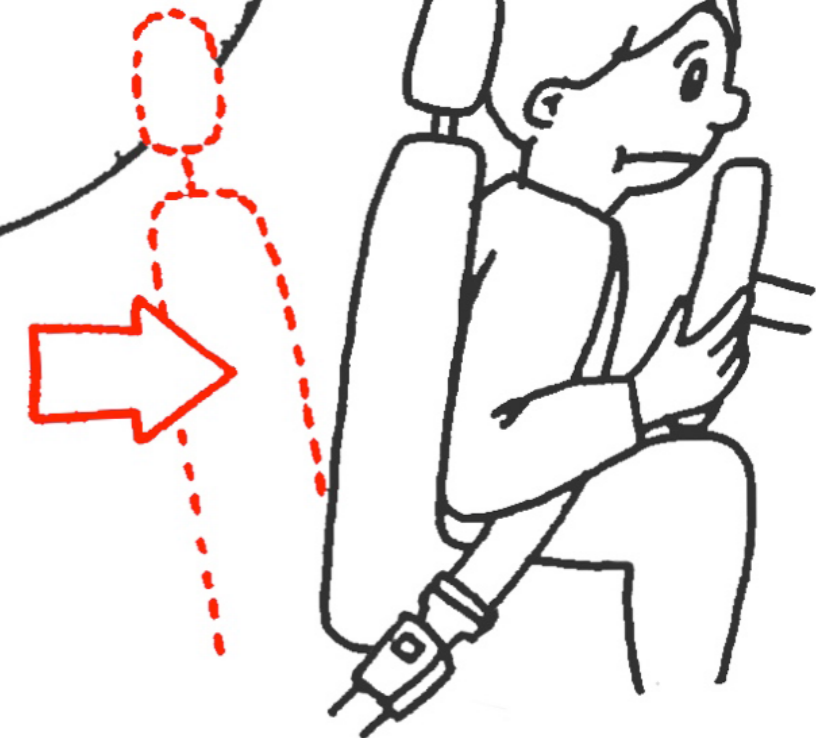
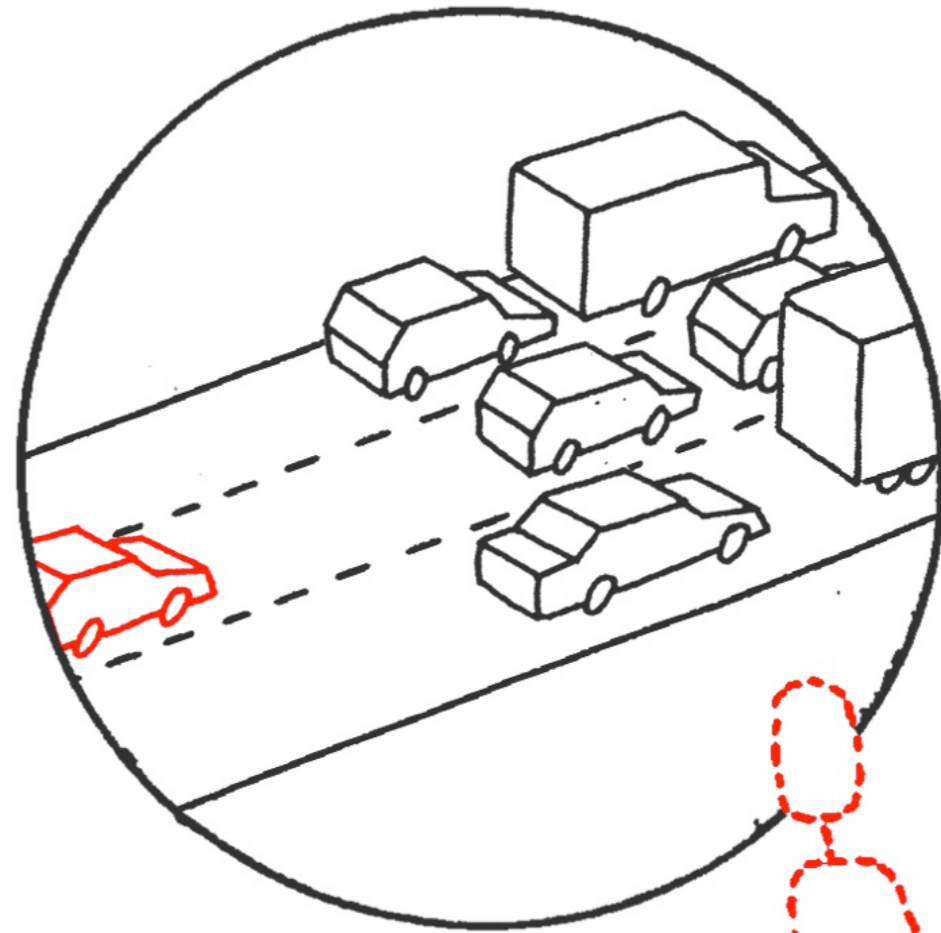
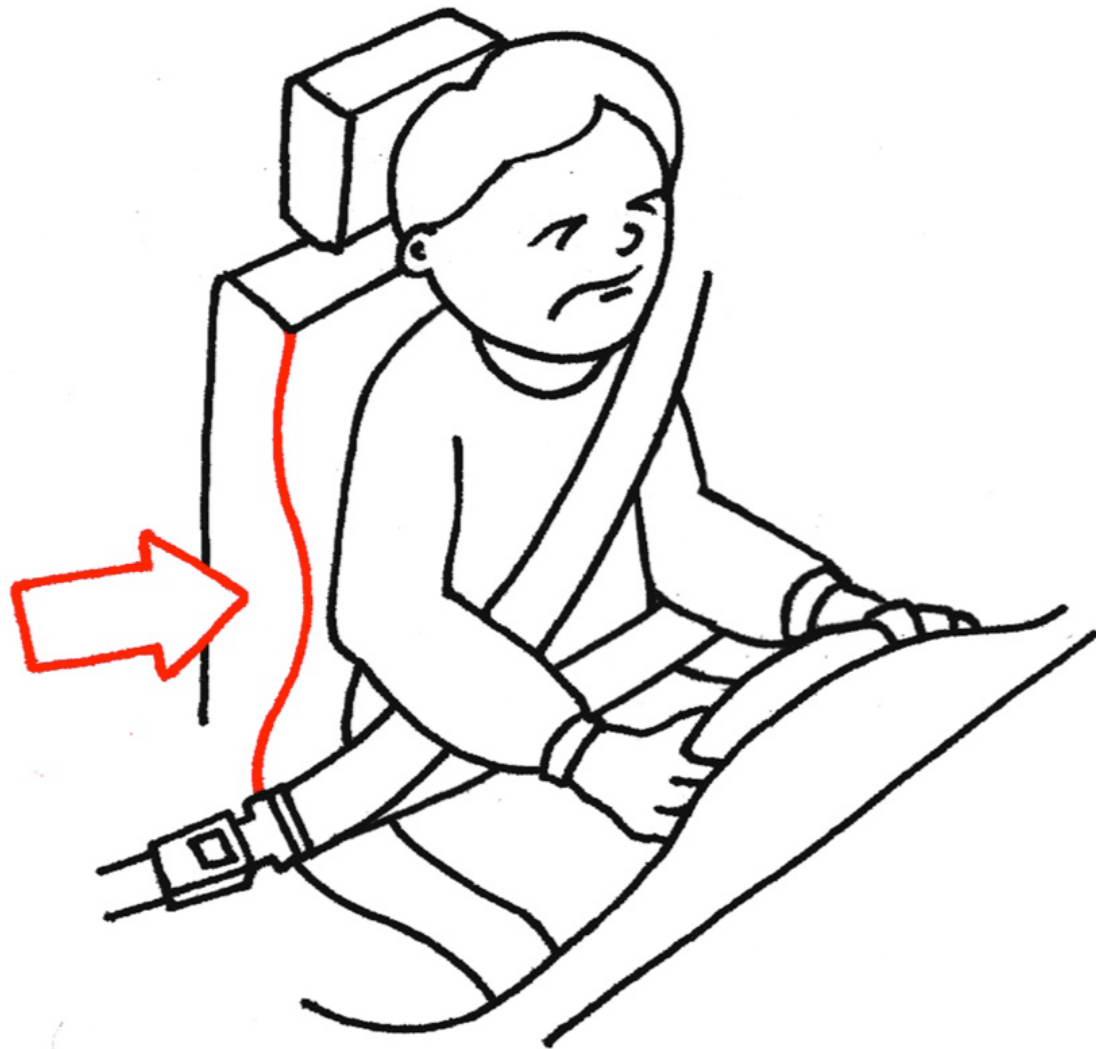


EXPERIENCING AN
IDEA: EXPERIENCES
AREN'T DESIGNED IN
THEORY

AMBIENT INTERACTIONS IXDS FOR VOLKSWAGEN



LOW-FIDELITY PROTOTYPES VISUALISING IDEAS



LOW-FIDELITY PROTOTYPES VISUALISING IDEAS



IN CONTEXT: ONLY
TESTING DONE IN THE
ACTUAL CONTEXT WILL
DELIVER REAL
FEEDBACK

Firefox OS – User Experience Studie

IXDS for FIREFOX OS / TELEKOM INNOVATION LABORATORIES



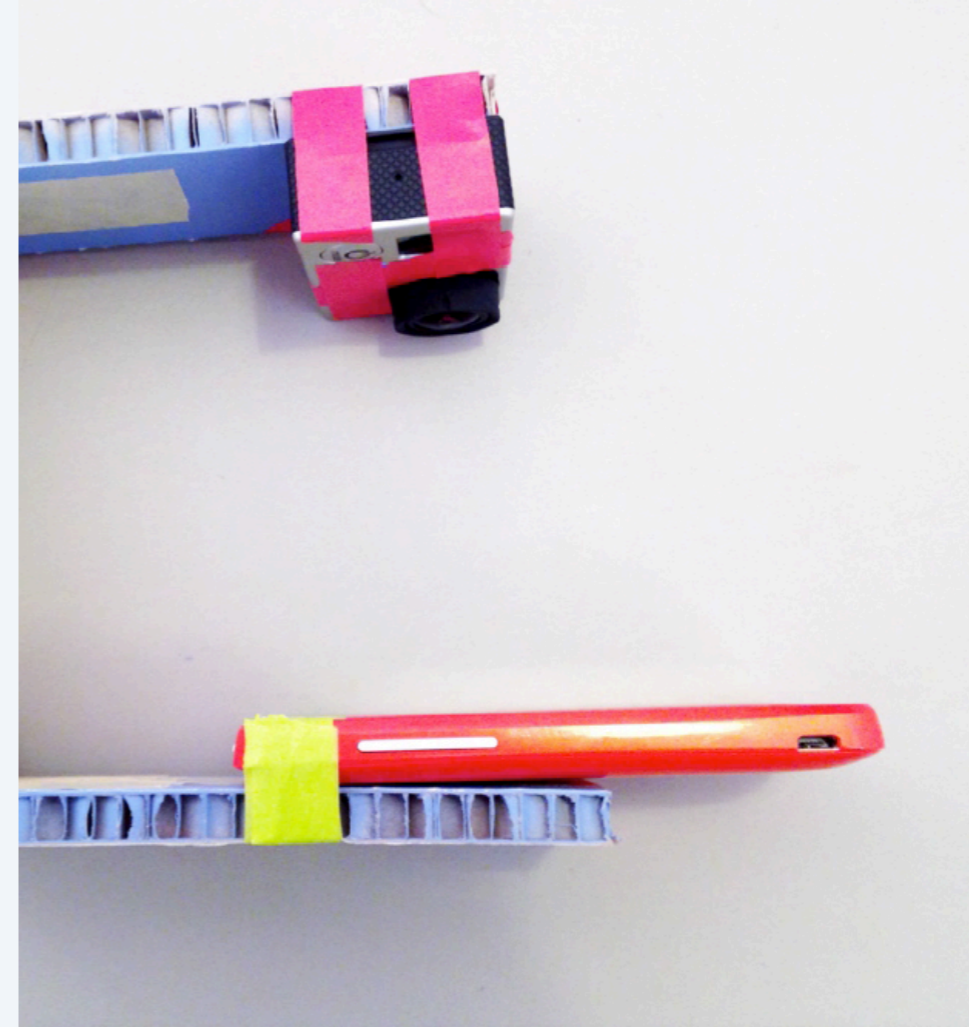
Firefox OS – User Experience Studie

IXDS for FIREFOX OS / TELEKOM INNOVATION LABORATORIES



CHALLENGE

Understand how first time users of Firefox OS perceive the new operating system and how this perception evolves over a period of 3 weeks. Identify differences between users who already have experiences with smartphones and first time users who own a feature phone.

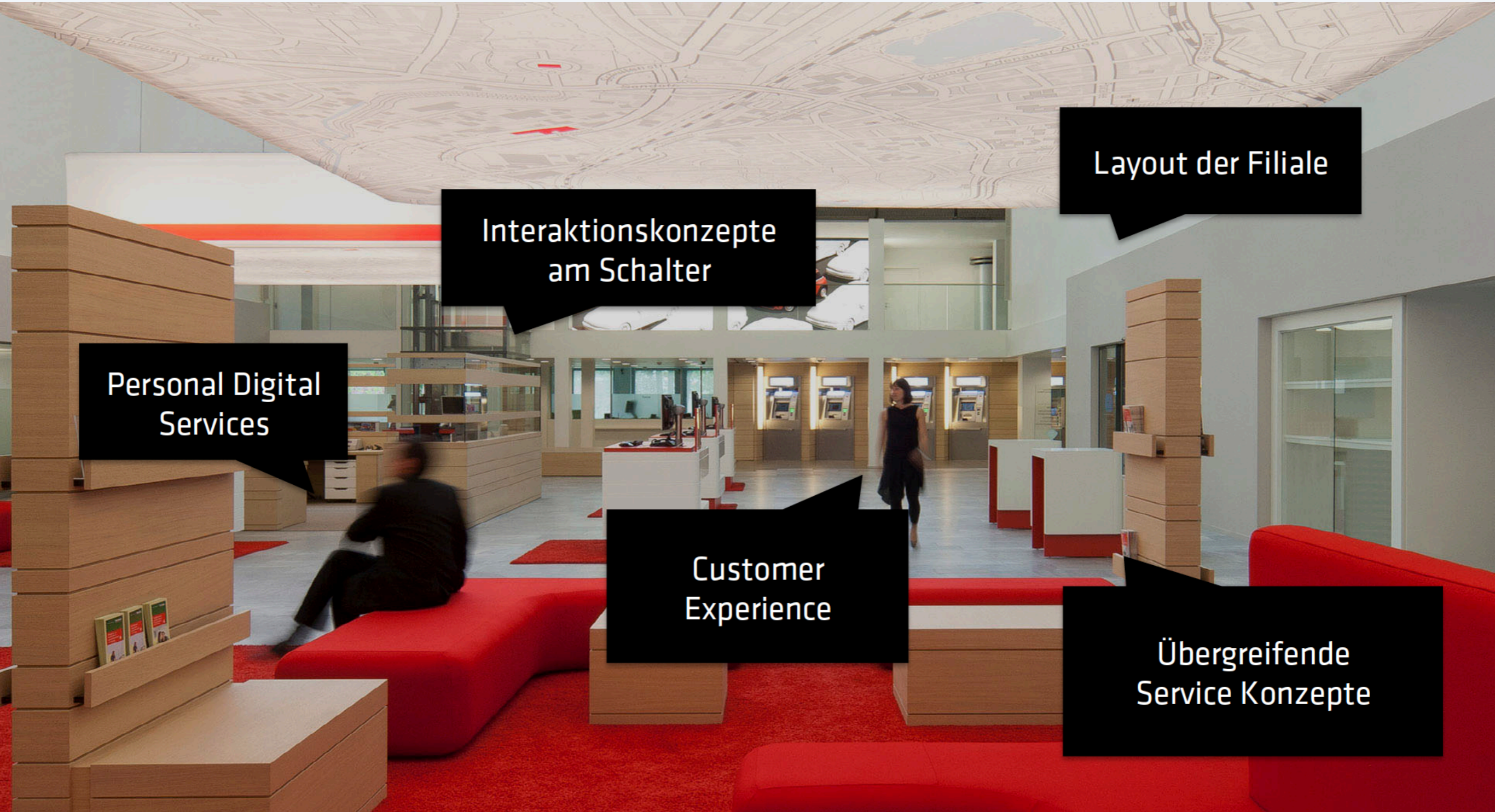


APPROACH

We captured the first experience of using the phone, then let participants use and explore it over 3 weeks. We compared how user behavior and perception changed during and after this period compared to users' initial perception.

LIVE PROTOTYPING: TESTING IDEAS IN REAL AND ADAPTIVE ENVIRONMENTS

TESTING IN REAL ENVIRONMENTS: TESTFILIALE BANK



Layout der Filiale

Interaktionskonzepte
am Schalter

Personal Digital
Services

Customer
Experience

Übergreifende
Service Konzepte

TESTING IN REAL ENVIRONMENTS: TESTFILIALE BANK



THE TEST ENVIRONMENT ITSELF IS A CONSTANTLY EVOLVING PROTOTYPE.

interaktionskonzepte am Schalter

Layout der Filiale

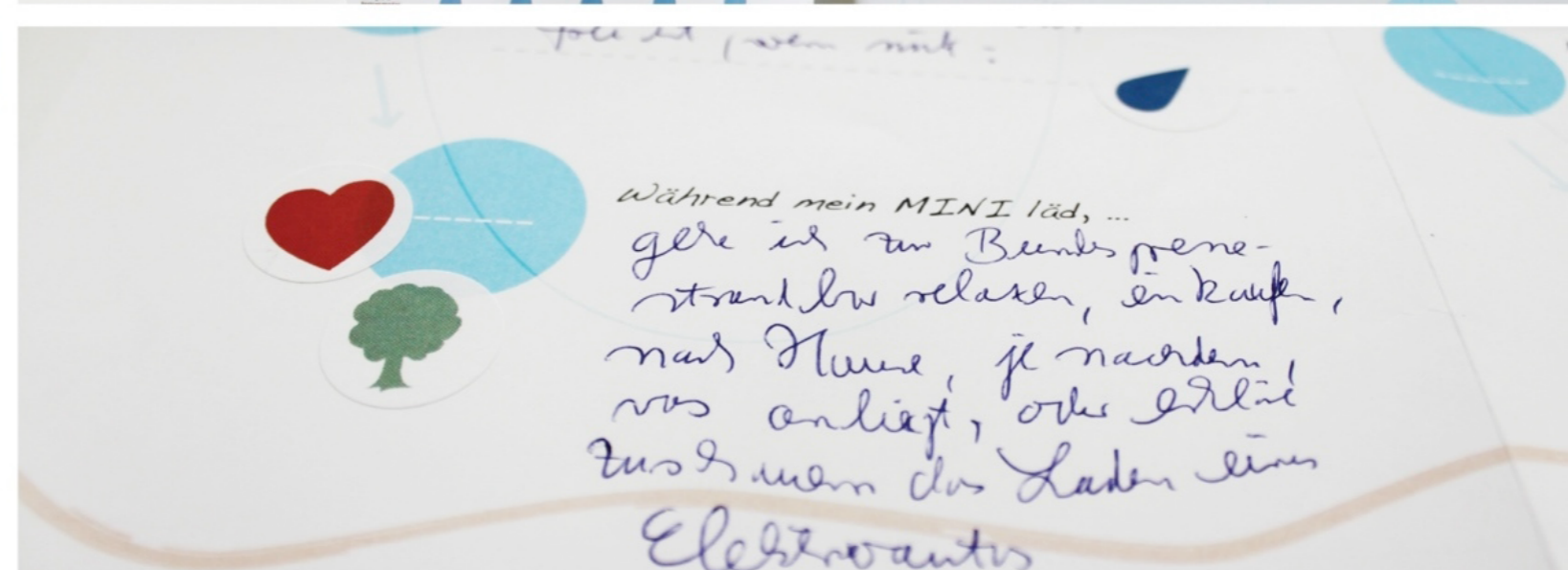
Personal Digital Services

Customer Experience

Übergreifende Service Konzepte

USER TESTING

SELF-DOCUMENTATION



PERSONAL ENVIRONMENT/ NATURAL SITUATION



Milestones & Deliverables: Concept

Concept Development

07.11.16 Review Concept

14.11.16 Review Concept

21.11.16 **Deliverable 2:** Presentation Concept with Storyboard & Planning of Prototyping

21/11 Concept Presentation

October

November

Dezember

January

Milestones & Deliverables: Low-Fi Prototyping

Low-Fidelity Prototyping

28.11.16 First Draft Prototype & User Test Planning

05.12.16 Review Results User Testing & Concept Iteration

12.12.16 **Deliverable 3:** Low-Fidelity Prototype based on User Feedback

12/12 Low-Fi Prototype & User Testing

The diagram features a horizontal timeline with a green line and a grey background. The months 'October', 'November', 'Dezember', and 'January' are labeled below the line. Two red triangles mark specific dates: one at the end of November and one at the end of December. A blue line connects the December triangle to a callout box containing the text '12/12 Low-Fi Prototype & User Testing'. An orange bar highlights the period from the end of November to the end of December.

October

November

Dezember

January

Until 28.11.16

- Refine your concept
- Create a low-fidelity prototype that allows to test the major parts of your concept
- Show a plan how to do user testing: with whom? In what situation? For how long? What is your goal for the testing? Methods, questionnaires etc.

Questions?