



31.10.16

Designworkshop II

Deliverable 1: Problem Framing & Research Presentation

Until 31.10.16

DELIVERABLE 1: 30 mins per group, PDF presentation

- PROBLEM FRAMING

Describe the specific challenge you want to solve by using an exemplary use case based on your self-testing research with DriveNow/ BMW Museum.

What particular problem/ use case do you want to solve for in-car interactions? (e.g. navigation, entertainment, temperature/ air conditioning,...)

For whom? (e.g. driver, passenger, children, elderly, ...)

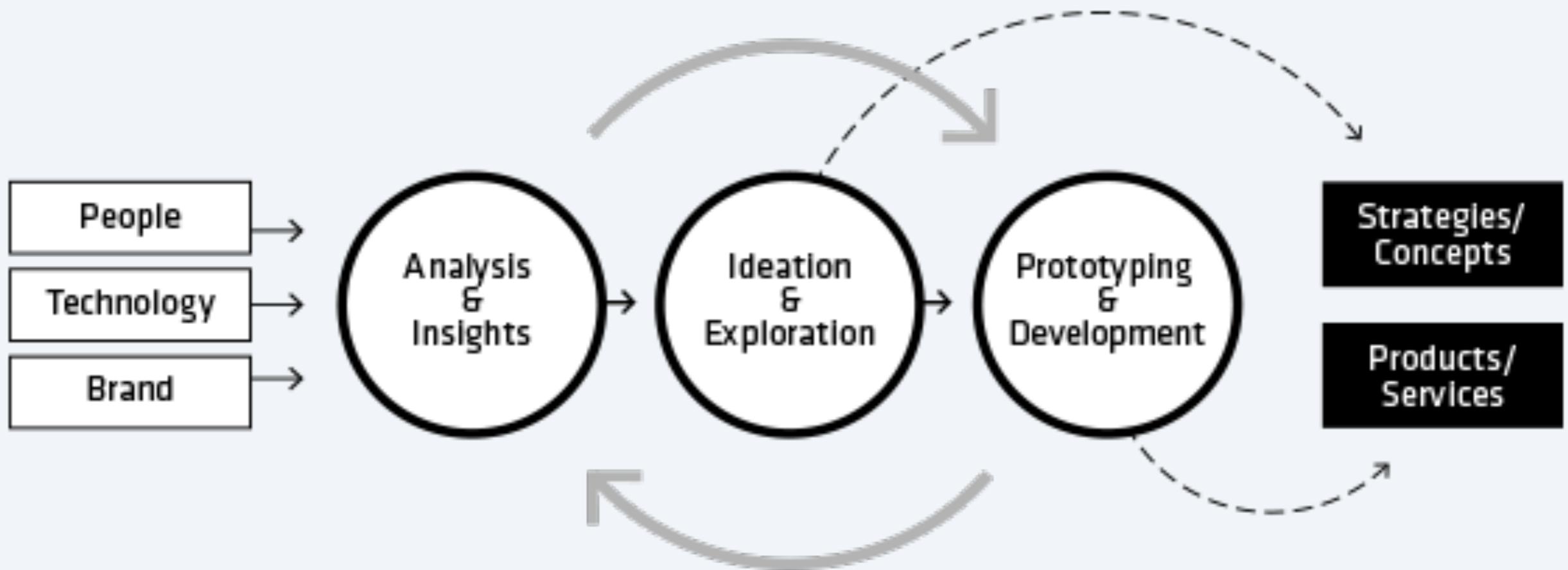
- SUMMARY DESK RESEARCH

Interaction concepts & existing applications (mobility context and beyond)

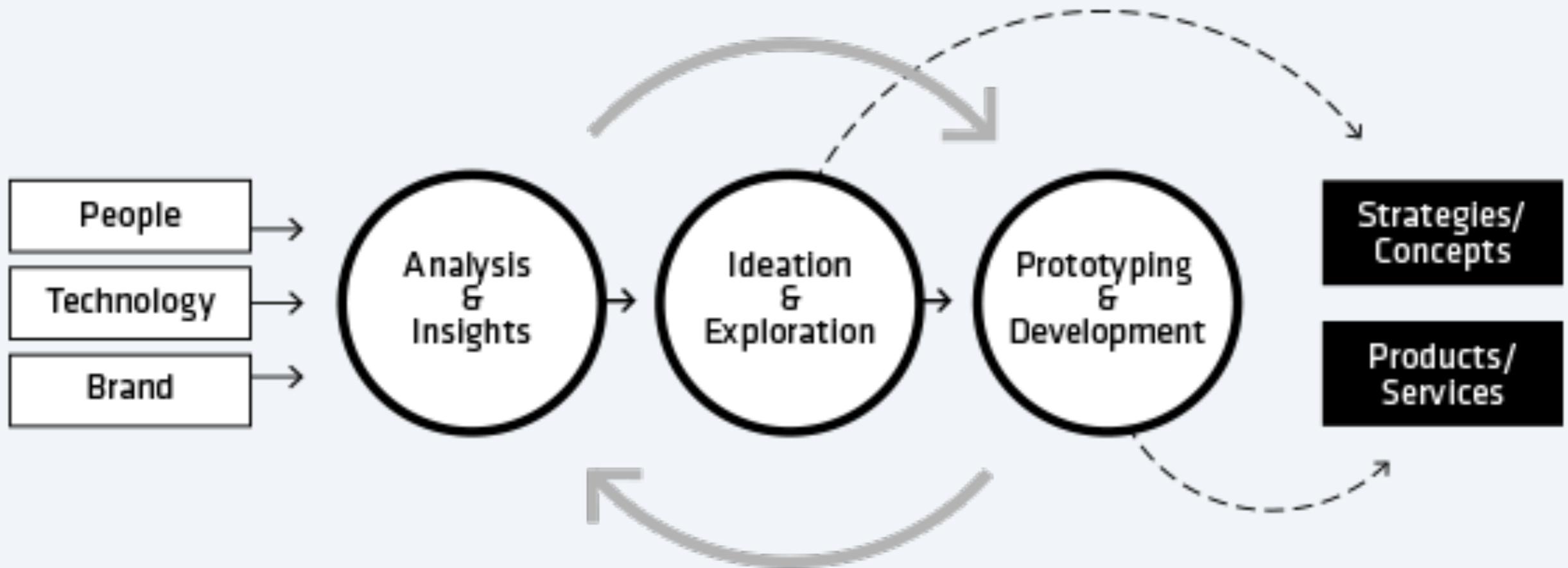
e.g. that merge hard-/ software // that rethink in-/output mechanisms /// that try to increase the emotional experience

Structure your desk research (minimum 15 examples) into groups and give them each group a title describing the grouped examples' innovative approach to interaction design

Human Centered Design - Process



Design Disciplines +



BUSINESS DESIGNER
STRATEGISTS
MARKETING
PRODUCT DEVELOPMENT

DESIGN RESEARCHER
MARKET RESEARCHER
FUTURE RESEARCHER
PSYCHOLOGISTS

VISUAL DESIGNER
INTERACTION DESIGNER
PRODUCT DESIGNER
INTERIOR DESIGNER
...

CREATIVE TECHNOLOGISTS
SOFTWARE ENGINEER
HARDWARE ENGINEER
MECHANICAL ENGINEER
MODEL MAKER
3D MODELLER
...

EXPERT INTERVIEW



IN-HOME INTERVIEWS



CULTURAL PROBES



What is an insight?

AN INSIGHT IS A NEW, OVERALL FINDING („ERKENNTNIS“) THAT ORIGINATES FROM SEVERAL INDEPENDANT RESEARCH SOURCES. INSIGHTS FORM THE BASIS OF YOUR IDEA DEVELOPMENT.

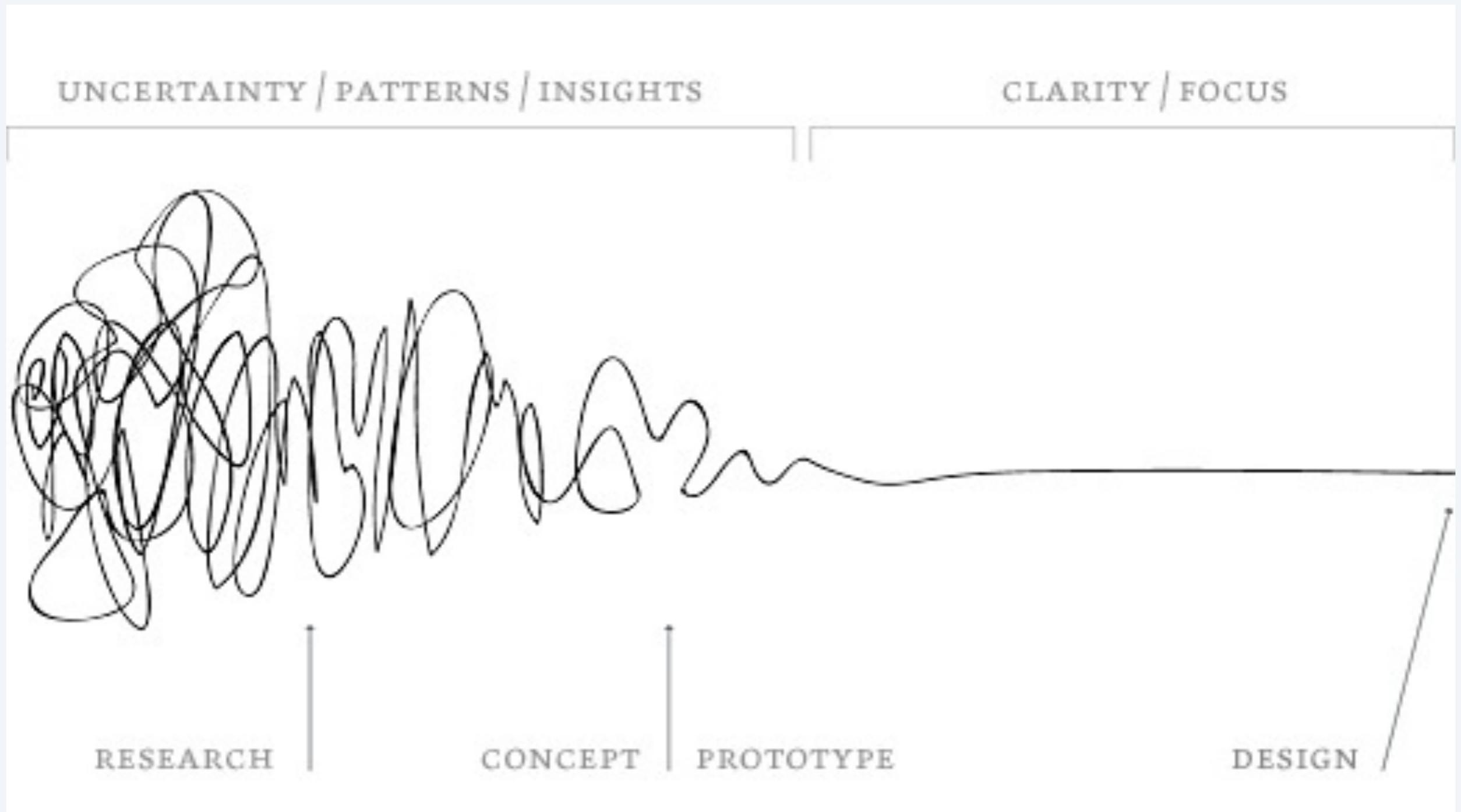
RESEARCH ANALYSIS & INSIGHTS

AFTER THE RESEARCH AND THE ANALYSIS OF ALL THE MATERIAL, YOU SHARE ALL THE DATA YOU GATHERED AND ANALYSE THEM INTO MAJOR INSIGHTS.

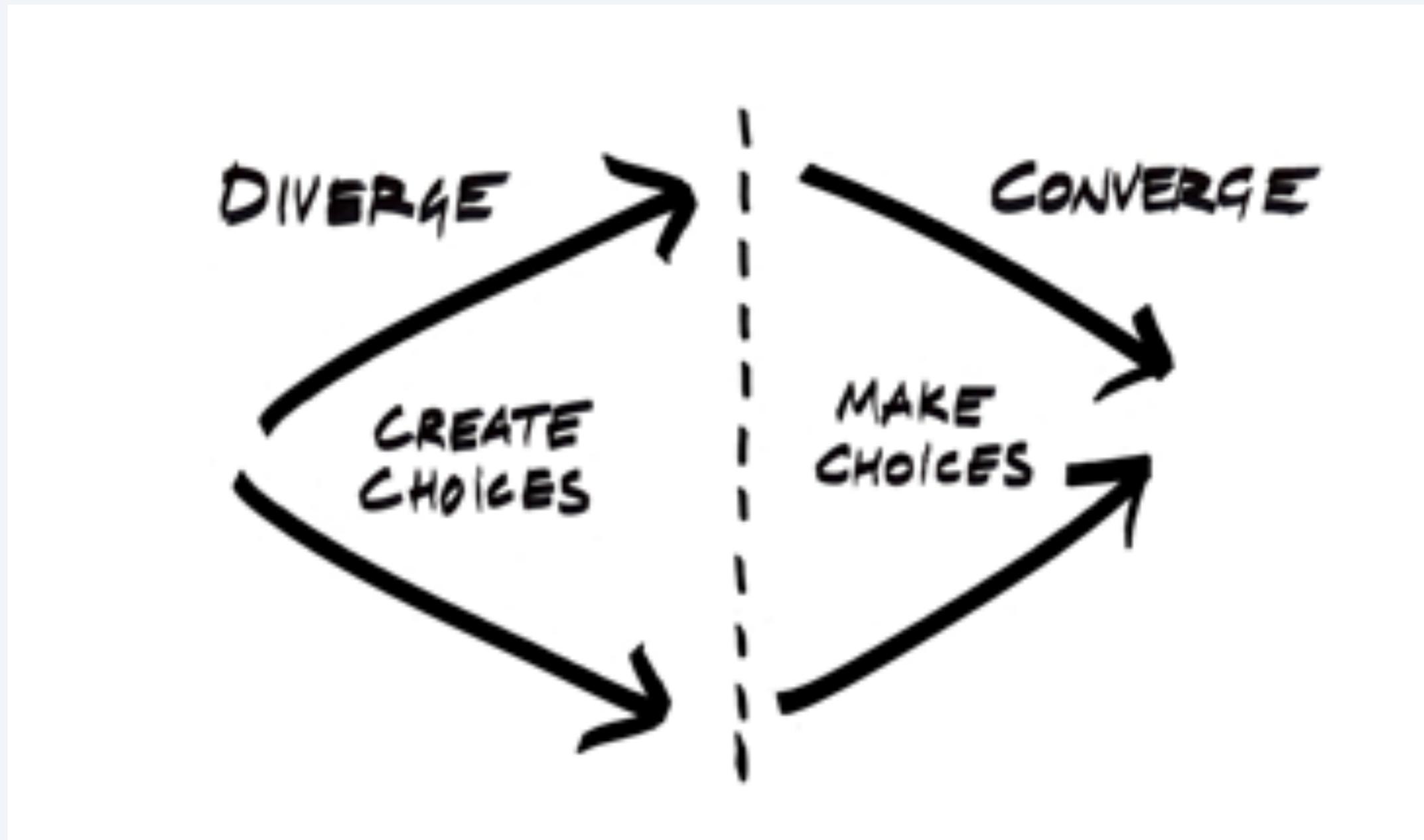
HOW:

ALL RESULTS FROM THE ANALYSIS PHASE WILL BE JOINTLY DISCUSSED, SUMMARIZED AND DOCUMENTED, WITH THE AIM OF ORGANIZING AND PRIORITIZING USER INSIGHTS.

The creative process.



Double Diamond



Concept Development

5 Principles

Concept Development

5 Principles

1 - Stay user/consumer focused

Watch them. What are they doing? What are their daily problems and hurdles?

Focus and follow on their needs.

Try to identify their habits and their workarounds to make their lives easier.

Concept Development

5 Principles

2 - Gather a diverse team to succeed

It is good to have multiple perspectives to the world!

Only a diverse group of people is able to look at a problem from different perspectives as their backgrounds and experiences are different.

Concept Development

5 Principles

3 - Be flexible / Stay low-fi as long as possible

Do not waste energy by creating hi-fi work as you are working through the CD process!

If you are not emotionally attached to a piece of work you can easily let go.

Concept Development

5 Principles

4 - Short time frames

Set yourself constraints!

If you set a time limit your output and work will be more focussed and you will not be distracted by too many influences.

This principle lets you stay focussed!

Concept Development

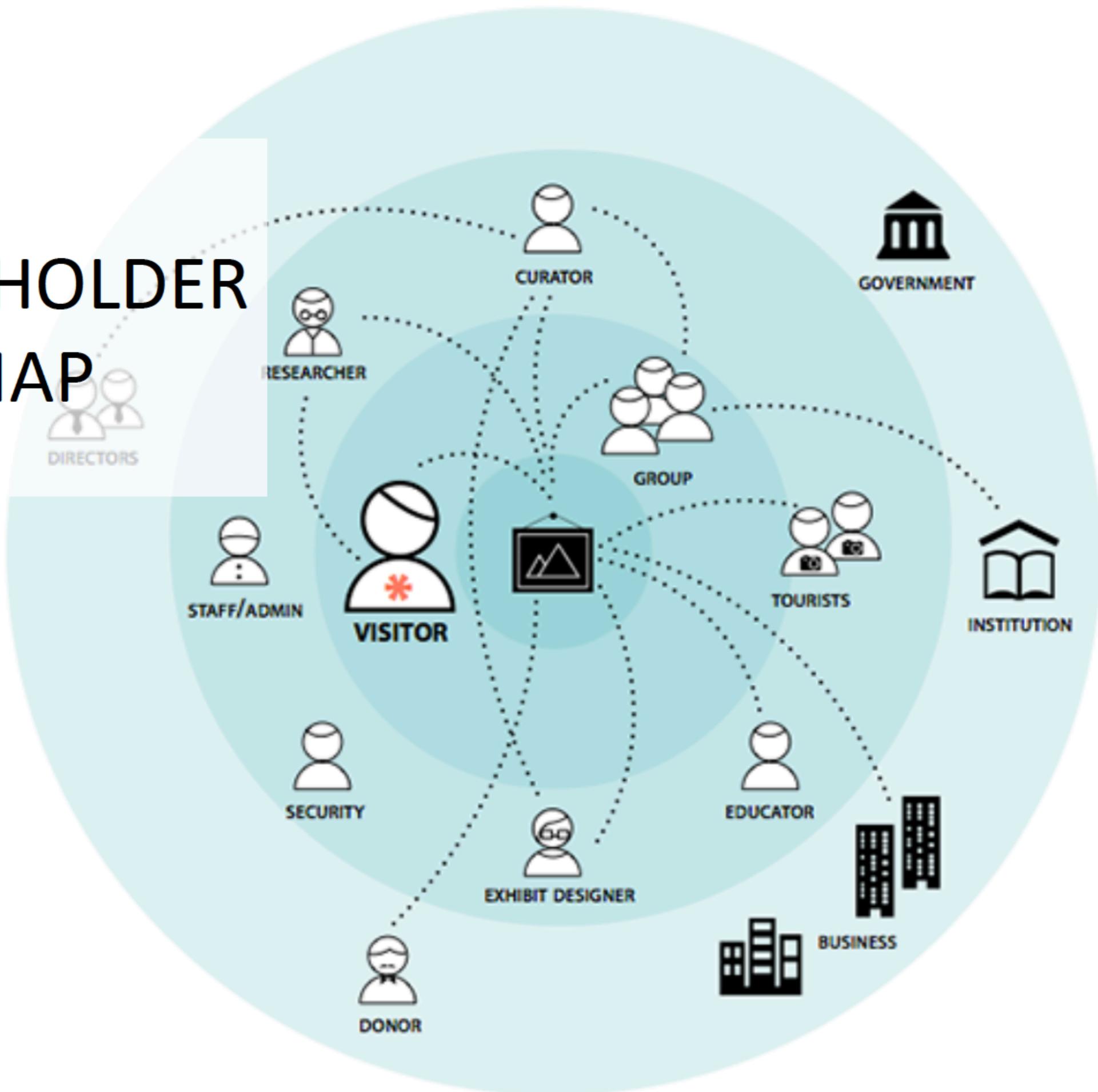
5 Principles

5 - Show and tell as often as possible

Present your ideas and findings often to the whole group or others.

Gather feedback and make use of it in the next iteration

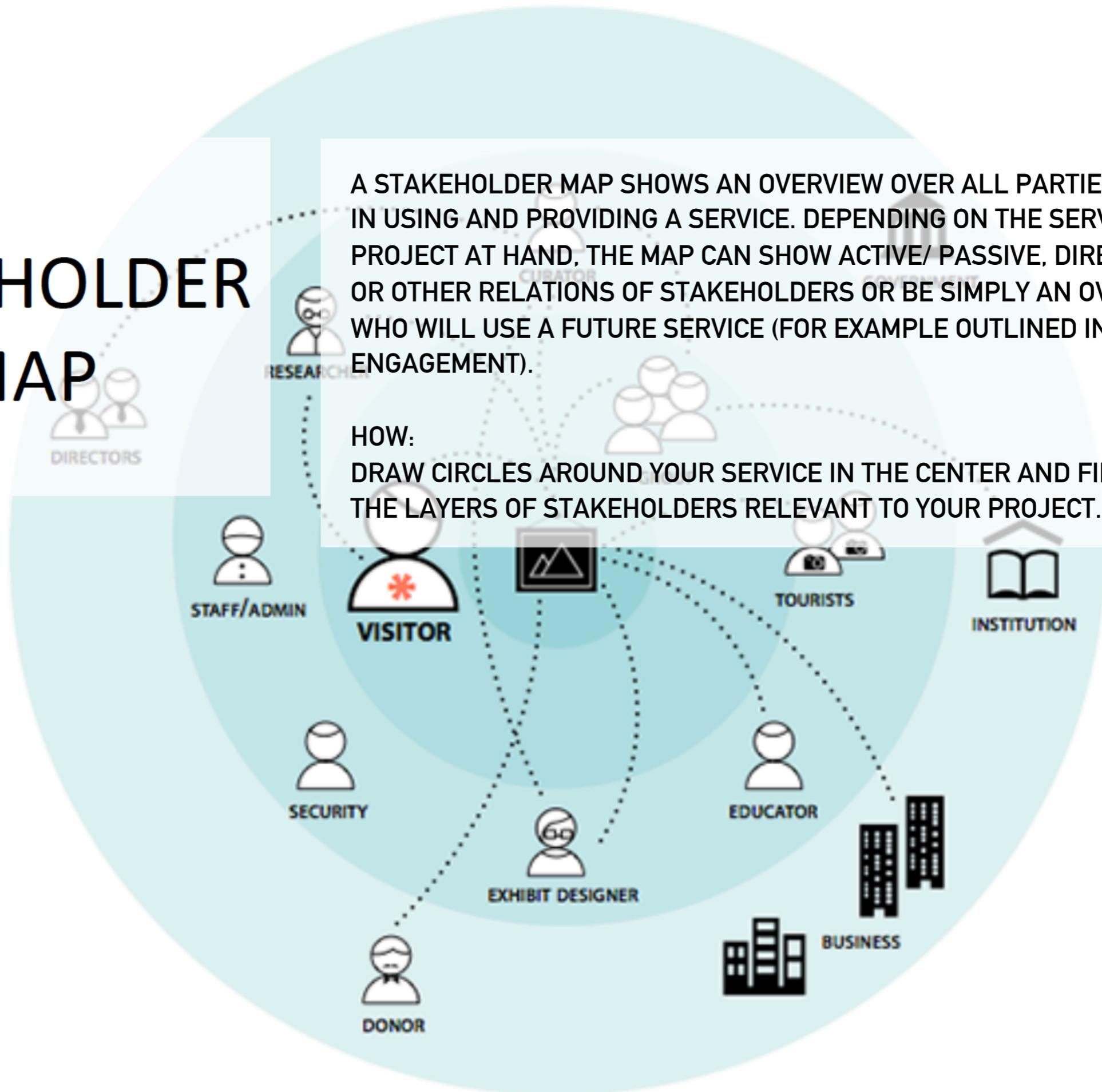
STAKEHOLDER MAP



STAKEHOLDER MAP

A STAKEHOLDER MAP SHOWS AN OVERVIEW OVER ALL PARTIES INVOLVED IN USING AND PROVIDING A SERVICE. DEPENDING ON THE SERVICE AND THE PROJECT AT HAND, THE MAP CAN SHOW ACTIVE/ PASSIVE, DIRECT/ INDIRECT OR OTHER RELATIONS OF STAKEHOLDERS OR BE SIMPLY AN OVERVIEW ON WHO WILL USE A FUTURE SERVICE (FOR EXAMPLE OUTLINED IN CIRCLES OF ENGAGEMENT).

HOW:
DRAW CIRCLES AROUND YOUR SERVICE IN THE CENTER AND FILL THEM WITH THE LAYERS OF STAKEHOLDERS RELEVANT TO YOUR PROJECT.



USER GROUP DEFINITION

KNOWING THE KINDS OF PEOPLE WHO USE A SERVICE (I.E. THE DIFFERENT USER GROUPS) IS CRUCIAL IN UNDERSTANDING WHO WE ARE DESIGNING FOR AND HOW THEY WILL BE INVOLVED IN IT.

HOW:
PERSONAS IS A GREAT METHOD TO USE FOR YOUR USER GROUP DEFINITION.



PERSONAS/ NEED TYPES

A PERSONA IS A FICTIONAL CHARACTER DESCRIBING A SPECIFIC USER GROUP. SHE COMBINES DIFFERENT ASPECTS LIKE DEMOGRAPHICS, NEEDS, WISHES, HABITS AND CULTURE. PERSONAS HELP TO GUIDE THE DESIGN PROCESS ALONG THE USERS' NEEDS.

HOW:
PERSONAS RESULT FROM USER RESEARCH AND OTHER DATA COLLECTED DURING THE RESEARCH PHASE ABOUT THE POTENTIAL USER GROUP.

Build a persona

Draw your persona:



Name: _____

Age: _____

Where do they live: _____

What do they do during the day?

What do they value?

How do they use the library?
What are their key experiences?

What are their needs?

DESIGN THINKING WORKSHOP | Zaana Howard | 24

Libby S. Customer / Companion User

Concerned Daughter



“My mother has trouble keeping track of her medications, such that I am always having to call her up to make sure she takes them and check on her in general.”

Age: **40** Gender: **Female**

Location: **Chicago, IL**

Occupation: **Teacher**

Technology: _____

Concerns

- With her mother's ability to use technology
- No immediacy in her knowing her mother's current routine
- With older technology her mother currently has

Challenges

- Works 9-5
- Tries to visit mother 1x a week
- Enjoys running in free time

Motivations

- One main technology for her mother
- Autonomy for her mother
- Peace of mind in accurate readings

Summary

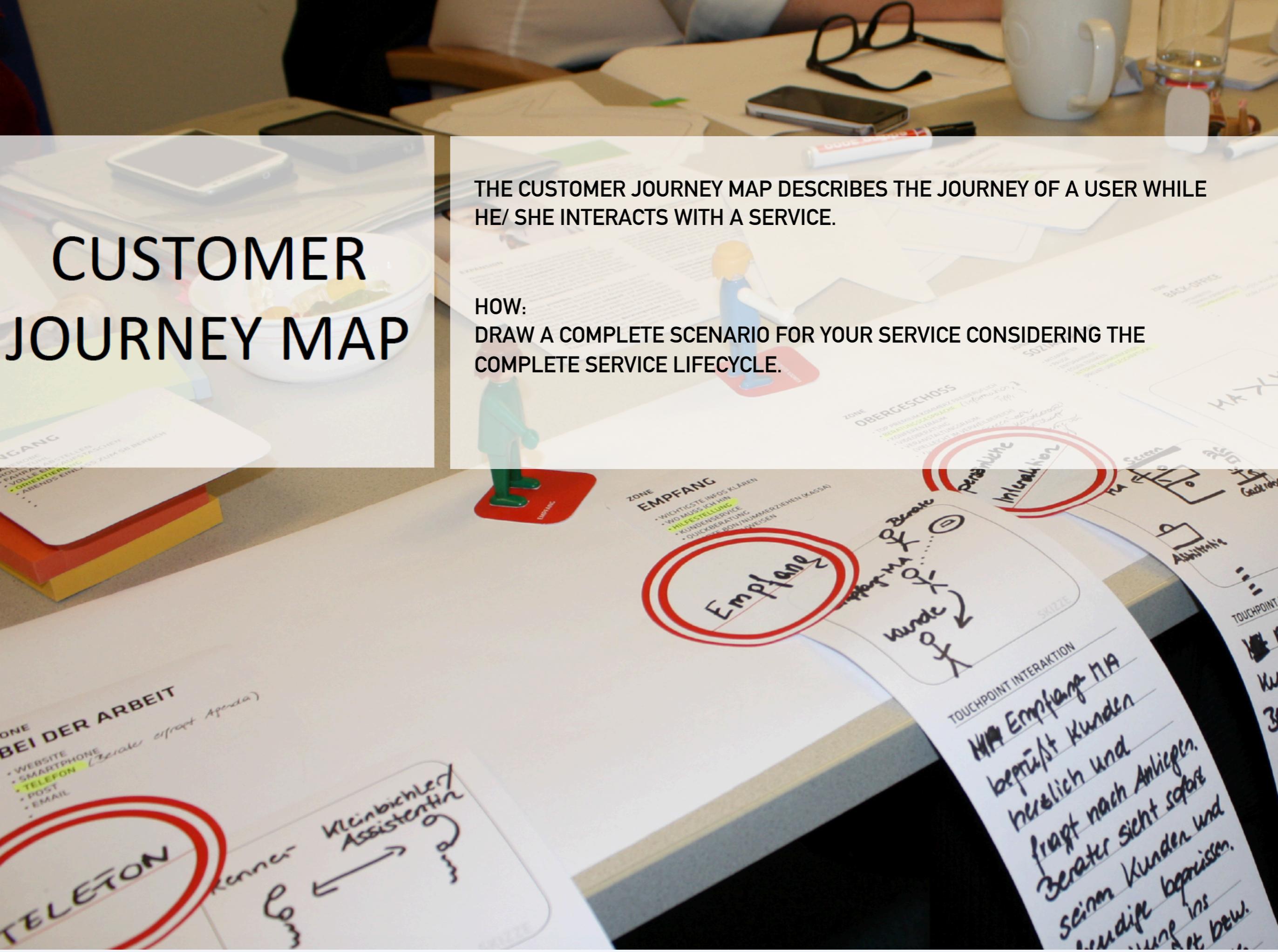
Libby is a full-time elementary school teacher. Between work and caring for her own kids, she doesn't have time to drive to her mother's house to check on her, or call her twice a day. She would really like a streamlined process to remind her mother to take her pills and likes the vital tracking feature she heard about from the local nursing home.

CUSTOMER JOURNEY MAP

THE CUSTOMER JOURNEY MAP DESCRIBES THE JOURNEY OF A USER WHILE HE/ SHE INTERACTS WITH A SERVICE.

HOW:

DRAW A COMPLETE SCENARIO FOR YOUR SERVICE CONSIDERING THE COMPLETE SERVICE LIFECYCLE.



IDEATION



A CENTRAL ELEMENT OF THE INNOVATION PROCESS IS AN IDEATION WORKSHOP, OFTEN CARRIED OUT WITH ALL STAKEHOLDERS. IN THE IDEATION WORKSHOP, THE TEAM WILL WORK THROUGH THE RESULTS OF THE INSIGHTS PHASE. THEY WILL DEFINE A FUTURE VISION AND GENERATE A WHOLE RANGE OF NEW IDEAS.

HOW:

BASED ON THE PREPARATION (MARKET AND DESK RESEARCH, INSIGHTS GAINED THROUGH WORKING WITH END-USERS, SELF-EXPLORATION) ALL PARTICIPANTS WILL GENERATE MANY IDEAS AND CONCEPTS, PRIORITIZE THEM AND WORK THE MOST IMPORTANT ONES OUT IN MORE DETAIL. AT THE END OF THE WORKSHOP, THE ROADMAP FOR THE NEXT STEPS WILL BE DEFINED AND RESPONSIBILITIES WILL BE ALLOCATED TO THE VARIOUS STAKEHOLDERS.

HOW MIGHT WE...?

H.M.W ALLOW THE
COMMUNITY OF
CAFÉ TO
MAINTAIN IT

IT IS A WAY TO TRANSLATE INSIGHTS FROM YOUR RESEARCH INTO OPPORTUNITIES. „HOW MIGHT WE“ TRANSLATES USER RESEARCH FINDINGS AND INSIGHTS INTO OPPORTUNITY AREAS AS A FIRST STEP TOWARDS IDEAS. IT HELPS TO CREATE A BROADER PERSPECTIVE ON A TOPIC AND CHALLENGE AN INSIGHT IN DIFFERENT WAYS FIRST - BEFORE CREATING IDEAS.

HOW:

TAKE A SPECIFIC INSIGHT/ PROBLEM YOU HAVE ENCOUNTERED DURING YOUR RESEARCH AND RE-PHRASE IT STARTING WITH „HOW MIGHT WE...“. THEN BRAINSTORM IN THE TEAM SOLUTIONS FROM DIFFERENT ANGLES.

How might we ...?



„I have to go to several supermarkets to get everything I need in an organic quality.“

How might we ...?

Your insight: „Buying organic is not as convenient as regular food“



„I have to go to several supermarkets to get everything I need in an organic quality.“

How might we ...?

„How might we design better food packaging?

How might we ...?

How might we design better food packaging?

How might we help people to manage using up food before expiry?

How might we ...?

How might we design better food packaging?

How might we help people to manage using up food before expiry?

How might we improve access to a broad range of organic food?

How might we ...?

These are all fields to innovate in!

How might we ...?

These are all field to innovate in!

We call them „opportunity areas“.

How might we ...?

Each opportunity area can be filled with many ideas – the solutions to the challenges!

Challenge = HMW = Opportunity Area
Solution = Idea

How might we ...?

How might we design better food packaging?

How might we ...?

How might we design better food packaging?

... by investigating in bio-degradable plastics

How might we ...?

How might we design better food packaging?

... by investigating in bio-degradable plastics

... by freezing milk and selling it in ice cube blocks

How might we ...?

How might we design better food packaging?

- ... by investigating in bio-degradable plastics

- ... by freezing milk and selling it in ice cube blocks

- ... by offering a home delivery service

How might we ...?

How might we design better food packaging?

... by investigating in bio-degradable plastics

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IDEA NAPKIN

THE IDEA NAPKIN IS A TEMPLATE THAT HELPS TO SHARPEN AN IDEA AND IS USED TO QUICKLY AND SIMPLY DEFINE THE IDEA – LIKE IN AN ELEVATOR PITCH.

HOW:

DESCRIBE THE IDEA IN A SHORT AND CRISP WAY AND THINK ABOUT WHICH PROBLEMS GET SOLVED OR NEEDS GET ANSWERED. HOW DOES THE IDEA WORK? WHAT COULD BE INTEGRATED? GIVE IT A SHARP TITLE.

Manages
View



Compact
Status display

indicator
depends

Give your idea a sharp and catchy title!

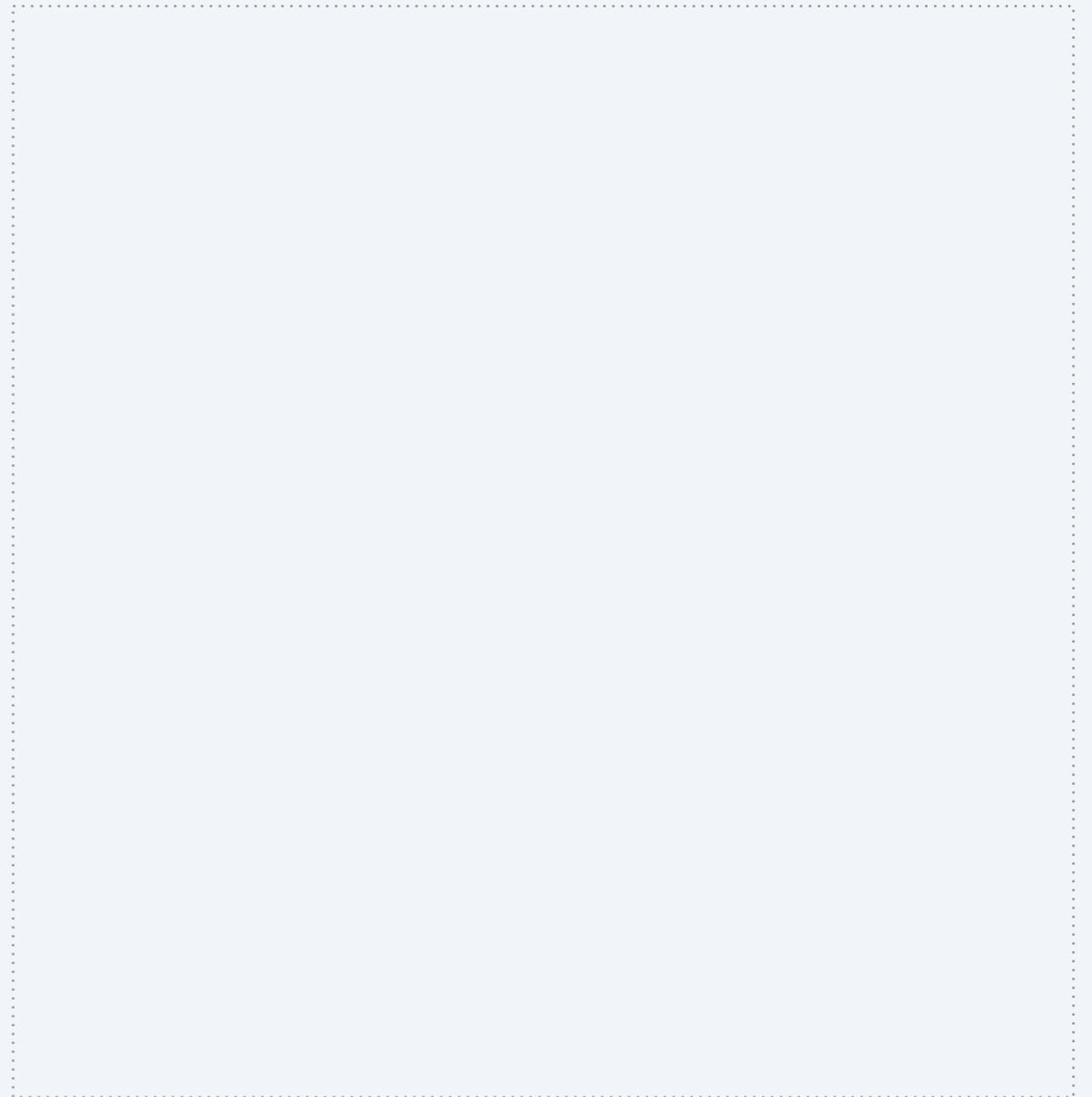
Describe your idea in max. 3 sentences!

Who is your idea for?

Describe in 1 sentence what problem your idea solves.

How will people recommend it to their friends?

Draw a brief sketch to visualize your idea!



USE CASE 1 // FIRST USE

USE CASE

A USE CASE DESCRIBES A SPECIFIC SITUATION IN WHICH A USER USES THE SERVICE.
USE CASES CAN HELP TO ANALYSE AN EXISTING SERVICE OR DESCRIBE A NEW IDEA.

HOW:

DESCRIBE THE SITUATION AND HOW THE USER INTERACTS WITH THE SERVICE IN EACH SINGLE STEP. USE TEXT AS WELL AS IMAGES TO DEPICT ALL DETAILS.



Maria has her own delivery service
& 2 kids. She wants to spend as
much time as possible with them
but also has to deliver the food.

Maria compares different car-
sharing services & registers herself
at Drive Now.

ALL THIS CAN BE DONE BY YOURSELF –
OR TOGETHER WITH STAKEHOLDERS
AND FUTURE USERS

→ IN **CO-CREATION**

WHY CO-CREATION?

- SHORTENING THE INITIAL PHASE IN THE DESIGN PROCESS
- CREATING HIGHLY RELEVANT INNOVATIONS FOR USERS
- QUICK FEEDBACK ON PROBLEMS AND POTENTIALS
- ENSURING THE SOLUTION MEETS THE STAKEHOLDERS` NEEDS

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

Until 7.11.16

Review Concepts

Show at least three different approaches to solving the problem you framed in Deliverable 1:

- IDEA: THE HUMAN PERSPECTIVE

Which challenges, problems or needs from your user group did you tackle how? How can your idea solve these issues? How is their experience better with your idea applied?

How does it merge hard- and software?

How does it make in- and output mechanism easier?

How does it increase the emotional experience?

- A POTENTIAL REALISATION/ TECHNICAL SOLUTION

Describe **roughly** how your idea could be realised/ what technological or design requirements are needed for realising it, e.g. smart fabrics, threedimensional screen, context-sensitive UI design, ...

Until 7.11.16

Review Concepts

Show at least three different approaches to solving the problem you framed in Deliverable 1:

- INSIGHT FROM RESEARCH & YOUR FRAMED PROBLEM
- HOW MIGHT WE (HMW) QUESTION

Selection of at least 3 solutions/ideas to answer your HMW:

- IDEA
- POTENTIAL REALISATION

Questions?