Workshop Concept Development

Lecturer: Alexander Wiethoff & Andreas Butz
Tutorials and Organization: Sebastian Löhmann
External Lecturer: Kalle Kormann-Philipson (Google)
Guest Examiners: Alexander Peters & Simon Biemer (Designaffairs), Kalle Kormann-Philipson (Google)
OVERVIEW
Week 1

Intro & User Research
Week 2

Data Analysis

Monday Tuesday Wednesday Thursday Friday
Week 2

Mid Presentation w. Guests
Research
Recap:
A diagram illustrating various research methods categorized by their focus on either explicit or latent opportunities and needs, and by whether they are statistical or interpretive.

- **Statistical** methods focus on macro techniques (many people) and include:
  - **SURVEYS**
  - **VIDEO ETHNOGRAPHY**

- **Interpretive** methods focus on micro techniques (few people) and include:
  - **FOCUS GROUPS**
  - **OBSERVATIONAL TECHNIQUES**

**Source:** [8]
ANALYSIS
Definition of the system
What is the problem?

EVALUATION
Possible alternatives
What future do we want?

SYNTHESIS
Design of final solutions
What do we implement?

The designer is a ‘problem-scouter’
The designer is a ‘story-teller’
The designer is an ‘executor’

source: [4]
Tools of Trade:
Interviews

**Unstructured** - are not directed by a script. Rich but not replicable.

**Structured** - are tightly scripted, often like a questionnaire. Replicable but may lack richness.

**Semi-structured** - guided by a script but interesting issues can be explored in more depth. Can provide a good balance between richness and replicability.
Running the interview

- **Introduction** – introduce yourself, explain the goals of the interview, reassure about the ethical issues, ask to record, present any informed consent form.

- **Warm-up** – make first questions easy and non-threatening.

- **Main body** – present questions in a logical order

- **A cool-off period** – include a few easy questions to defuse tension at the end

- **Closure** – thank interviewee, signal the end, e.g, switch recorder off.

source: [8]
Structuring frameworks to guide observation

- The person. **Who?**
- The place. **Where?**
- The thing. **What?**

- **The Goetz and LeCompte (1984) framework:**
  - Who is present?
  - What is their role?
  - What is happening?
  - When does the activity occur?
  - Where is it happening?
  - Why is it happening?
  - How is the activity organized?
Day 1:
Morning Session:
1.) 9:20 Course Organization & Introduction Lecture
2.) 5 Minute Presentations

Afternoon Session:
3.) User Research in the Field
To Get 6 ECTS:

1.) Mandatory attendance
2.) Presentations (two with guests)
3.) Be an active member of your team
4.) Hand in the presentations and the video prototype
5.) Document, Document, Document
Blog:

1.) http://conceptdevelopment.lmu.wordpress.com
   * each team creates an account @ wordpress.com
   * use this suffix: cd2013x (x is your team no.)
   * all accounts will get access to create posts
2.) Three posts: User Research, Concept, Videoprototype
Design challenge

The best project wins a non-cash prize sponsored by designaffairs
First Blog Post

* one photo & about 150 words abstract
* categories: WS1213; User Research, Team X
* deadline: friday 23:59
After the presentation:

Do field research (today & tomorrow)
Gather back here: Monday 9:00 (c.t.)
Thanks & Have Fun!

Monday Bring:

* Videos & Audio
* Each team one laptop with the data
* Transcript interviews (printed)
* Camera (one per team)
References:

Innovate
Agenda

Day 1  Concept Development & Tools

Day 2  Tools

Day 3  Mid presentation
Agenda

9:15 - 10:00  Introduction

10:00 - 12:30  Breakout Session 1

12:30 - 13:30  Break

14:00 - 15:30  Breakout Session 2

15:45  Presentation
Brief: Chains of Interactions to Support Work Processes.

Smart Services and Devices
Back Stage
Getting the right Design and the Design right...
Elaboration (opportunity seeking)

Design Process

Reduction (decision-making)
1. Brainstorming Webs

2. Tree Diagram

3. Flow Diagram
Brainstorming Webs

Used when developing a central concept or question. Can be built by identifying the center first, then all of the extensions.
Flow Diagram

Represent a series of events, actions or processes of different actors
Usually have a beginning and an end point
Affinity Diagram

Communicate a hierarchy or relationships between main and supporting ideas
Can be constructed from “bottom up” or “top down”
Tool: “Zoomed out vs. zoomed in”
Zoomed Out vs. Zoomed In

‘Zoom Out vs. Zoom is a way of design thinking. Interactions designers are often facing increasingly complex situations.

Zooming in and out makes them flexible and helps to define on which level to intervene.
“Brainstorming Rules”
In the late nineteen-forties, Alex Osborn, a partner in the advertising agency B.B.D.O., decided to write a book in which he shared his creative secrets. At the time, B.B.D.O. was widely regarded as the most innovative firm on Madison Avenue. Born in 1888, Osborn had spent nearly all of his career in New York, where he started out working in newspapers, and his life at B.B.D.O. began when he teamed up with another young adman he’d met volunteering for the
Avoid too early judgment

There are no bad ideas at this point. There is plenty of time to judge later.
Bring in also crazy ideas

It’s the wild ideas that often provide the breakthroughs. It is always easy to bring ideas down to earth later!
Place ideas of on top of each other

Think ‘and’ rather than ‘but’.
Keep the focus on the topic

You get better output if everyone is disciplined.
One conversation at a time

That way all ideas can be heard and built upon.
Get visual

Try to engage the left and the right side of the brain.
Foster quantity

Set an outrageous goal and surpass it!
This is just your starting point.

After you try out some of your ideas, with some expected success and failure, you can always come back to the pool of brainstorm ideas and try out a new concept.
References:

What is Concept Development?
Definition & Focus

Concept Development is a rapid-creative session where all participants work and iterate through a design-led process to create valuable and tangible results.

It is made to generate product ideas, validate and enhance existing products or ideas, and to find solutions to all sorts of problems.
Related fields

Creativity
HCD/UCD
HCI
Design Thinking
Strategic
Innovation

Future Studies
Decision Making
Lean
Product Design
Service Design
User Experience Design
Teamwork/Collaboration
User Experience Design
User Experience Design

Focus is on the use/customer/people.
Takes business requirements into account.
Follows the User Centered Design process.

UX is a combination of several design disciplines.
User Experience Design

- Technology
- Design
- Business
- UX
User Experience Design

http://semanticstudios.com/publications/semantics/000029.php
User Experience Design - Process

http://www.sapdesignguild.org/resources/ucd_process.asp
What is LeanUX?
What is LeanUX?

Lean UX embraces the idea of **short iterations** focused on **measuring and learning to tackle complexity**.

It removes departmental constraints on design and communication, allowing you to get truly close to product strategy.

Design solutions **no longer** become buried and diluted through **bloated deliverables**.

http://epicbagel.com/defining-lean-ux/
What is LeanUX?

10 Principles from LUXR

Design + Product Management + Development = 1 team

Externalize!

Goal-driven & outcome-focused

Repeatable & routinized

FLOW: think -> make -> check

Focus on solving the right problem

Generate many options

Decide quickly what to pursue & hold decisions lightly

Recognize hypotheses & validate them

Research with users is the best source of information & inspiration

http://luxr.co/10_principles_of_lean_user_experience
What is LeanUX?

Design Thinking
Design Thinking

Design thinking refers to the methods and processes for investigating ill-defined problems, acquiring information, analyzing knowledge, and positing solutions in the design and planning fields.

Design thinking is generally considered the ability to combine empathy for the context of a problem, creativity in the generation of insights and solutions, and rationality to analyze and fit solutions to the context.
Design Thinking - Process

1. Understand
2. Observe
3. Point of View
4. Ideate
5. Prototype
6. Test
Concept Development
Process
Research

- Get to know your problem/subject
- Gather insights into the user and their life
- Collect artifacts & impressions
- Record processes
Innovate

Make sense of your data
Identify important facets
Keep all players in mind
Collect and prioritize ideas
Develop & validate solutions
Prototype

Tell a story
Make it tangible
Concept Development
5 Principles
Concept Development
5 Principles

1 - Stay user/consumer focused
Look what they are doing, what their daily problems and hurdles are, 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 always 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 have a limited amount of time available your output and work will be more focussed and you will not be distracted by too many influences.

This principle lets you stay focussed!
5 - Show and tell as often as possible

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

Gather feedback and make use of it in the next iteration
Tool-Kits

2009 Series

A/B Testing
#33

Affinity Diagram
#34

Collaborative Inspection
#35

Concept Model
#36

Diary Study
#37

Five Sketches™
#38

GOMS (Goals, Operators, Methods, Strategies)

Concept Video

Participatory Design

nForm

http://nform.com/tradingcards/
Concept Development
Tool-Kit
Creative tools to solve wicked problems

- Opportunity Box
- Affinity Diagram
- Swim-lanes
- Opportunity Matrix
- Solution description & validation
- Business Model Canvas
- Scenarios
- Storyboards
Opportunity Box
Opportunity Box

What?
A box to collect identified solutions, ideas and thoughts while working through the Concept Development process.
Opportunity Box

Why?
This collection replaces your memory and makes space for new things while working through the process.
Opportunity Box

Guidelines
Every time you have a solution for your problem in your mind add it to the box.
Affinity Diagram
Make sense of collected data

http://wiki.fluidproject.org/download/attachments/2395197/100_1885.JPG
Affinity Diagram

What?
A method for sorting and making sense of data.

Data points can be recorded on sticky notes and sorted into logical groups. It could be employed as an individual or group exercise.
Why?
You can experiment with different arrangements to see which makes the most sense.

Affinity Diagramming helps to expose crucial relationships and patterns in data that may not be initially apparent.
Affinity Diagram

Guidelines

Every little counts!
Use all data you gathered and cluster it into meaningful groups.
Have your user in mind and also try to shape their personas as you add, cluster and think about your data.
Swim-lanes
Map identified processes
Swim-lanes

What?
A diagram that shows parallel streams for user, business, and technical process flows. Arranged for each core product scenario or activity. Provides foundation for use cases.
Swim-lanes

Why?

Ensures alignment and integration of task flow with business process and technical requirements. Allows understanding of all components of a specific process in one document, while allowing clearer separation, responsibility, and delegation.
Swim-lanes

Guidelines
Identify involved people, systems and tools
Break the process into single steps/actions
Visualize the process
BREAKOUT SESSION 1
10:00-12:30
gather back at 13:30
Opportunity Matrix
Opportunity Matrix

What?
Prioritize collected ideas and features by user need and benefit to focus on the important ones.
Opportunity Matrix

Why?

Used to get an unbiased outcome, as common group-based prioritization often reflects personal taste.
Opportunity Matrix

Guidelines
Be as unbiased and focused on the user needs as you can.

Use the content of your solution box for prioritization.
Solution description & validation
Solution description & validation

What?
A short description of the core idea and a look at its User need, Approach, Benefit, and Competition.
Solution description & validation

Why?
Writing a pitchable summary of the idea and looking at its User need, Approach, Benefit and Competition forces us to think about the idea and to develop a pitchable and tangible description.
Solution description & validation

Guidelines
To create a good summary of your idea you need to name the idea’s most valuable and core solutions and facets which makes it unique.
Prepare a 5 min presentation for 15:45

Send slides to Sebastian till 15:30
BREAKOUT SESSION 2
14:00 - 15:30
gather back at 15:45
Presentations
Gather back tomorrow at 9 c.t.
Agenda

9:15 - 9:45 Recap and Tools
9:45 - 11:00 Breakout Session 3
11:00 - 12:30 Presentation
12:30 - 13:30 Break
13:30 - 14:15 Tools
14:15 - ... Breakout Session 4
Recap

What happened yesterday?
Business Model Canvas

Business Model Canvas

What?
The BMC is a way to think through your business idea in a more visual and collaborative approach than writing a business plan.
Why?
To be able to talk about your solution you need to be able to name certain aspects of its business.
Business Model Canvas

Guidelines
Be creative and honest!
Try to fill out each business aspect as good as you can to gain a good understanding of your business.
Prepare a **5 min** presentation of your **BM** for **11:00**

Send slides to Sebastian till **10:50**
BREAKOUT SESSION 3
9:45 - 11:00
Presentations
Gather back at 13:30
Scenarios
Scenarios

What?
A scenario is a story about someone (usually your users) using whatever is being designed to carry out a specific task or goal.
Creating a scenario sets you into the users position and helps you to understand and the user’s experience.
Guidelines

Scenarios can be very detailed, all the way to very high level but should at least outline the *who*, *what*, *when*, *where*, *why*, and *how* of the usage.

In the end it has to be a story that let the reader understand and engage with the user and the proposed solution.
Shot 1
Note: Zoom out as cyclos come down the hill.

Shot 2
Note: As the cyclist walk thier bike around us filming.

Shot 3
Note: Close up of the Flag Carrier following the car.
Storyboards

What?
Storyboards are the basis to understand a solution within the world of your users. It adds real-world contexts that involve place, people, and other potentially informative ambient artifacts to an identified process of your solution.
Storyboards

Why?

Storyboards enable to learn about unexpected things, and embedding that context into your design efforts helps keep them grounded in the reality of the users’ lives.

Further it lets you focus on the core aspects of a process.
Storyboards

Guidelines

Be simple! Use your Scenario as a basis and reduce it to six key aspects you need to show.

Communicate what your idea is about. Focus on one or two core solutions and tell your audience about the impact your idea has and when it will be used best.
Mid Presentation (tmr)

5 Minutes + 5 Q&A with Guests
- Present the Process
- User Research and User Group, Problem Space
  50 %
- Concept & 6 Keyframe Storyboard
  50 %
Deliverables:

Deadline UniWorX 13.03.13 9:00
-PDF Slides

Send 3 Photos “User Research” 12.03.13 17:00
-E-Mail to Sebastian