Divide and Conquer – How to Subdivide and Test Design Problems

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- Project Introduction
- Analysis Stage - Overview
- With Participants: Interactive Session
- Our Approach to Conceptual Interaction Design
- Discussion
Project Introduction
The Project

- Redesign project at Zürcher Kantonalbank
- Presenters were part of the project team (internal/external employee)
- Goals of the project
  - Redesign the existing systems to raise the user experience
  - Bring together the silos of today into a coherent user interface
  - Having a conceptual design of the new customer frontend
Vision: Bring Together the Silos of Today

Existing systems … … combined together

... but how?
The Existing Systems

ZKB.ch website
- Product information
- Newsletters
- Opening hours of branches
- Calculators and checklists
- About the company
- ...

Onlinebank
- Check your account
- New payments
- Stock exchange trading
- Bank documents
- ...

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Analysis Stage - Overview
Tasks in the Project

Personas
High level scenarios
Detail scenarios
Key topics breakdown
Competitors analysis
Initial project vision

Stakeholder meetings (legal, security, etc.)

Sketches of alternative solutions for key topics

Usability test with competitors’ solutions

Prototypes of redesigned systems

Usability tests with prototypes

Pattern library and styleguide

Specification of redesigns

Specifications of redesigns

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Sketch of Initial Project Vision

Grüezi Peter Muster - Willkommen in Ihrer ZKB Online Welt

Mitteilungen und Hinweise
Tabelle mit neuen Einträgen seit letztem Login

Geschäfte
Übersicht Geschäfte strukturiert nach Inhabe

Buchungen und Aufträge
Personas of the Project

- **Bruno Hausmann**: Manage his family's asset
- **Maximilian Wellingner**: Want to maximize his profits
- **Alex Fong**: Asset manager
- **Irma Heriard**: Is looking for new main bank
- **Reto Bamberg**: Chief financial officer
- **Salz Brodner**: Accounting clerk
- **Sandra Schreiber**: Journalist
- **Marina Föz**: Is looking for her dream job
Bruno Hausmann
Verwaltet das Geld seiner Familie.

Bruno (43) ist Teamleiter bei der BigTelco AG und lebt mit seiner Frau Elena (38) in einem Reihen-
familienhaus in Russikon. Die beiden haben zwei
Söhne: Tom (11) und Ben (7). Elena schaut für die
Kinder, macht den Haushalt und arbeitet einen Tag
in der Woche in einer Papierei.

Bruno muss den Überblick über die Finanzen der
ganzen Familie behalten – die Zahlungen sowie die
Hypothek. Weiter möchte er ihr gemeinsames Geld
solide verwalten.

Ziele
- Finanzen der ganzen Familie effizient verwalten können

Allgemeine Anforderungen
- Überblick über die Finanzen der ganzen Familie
- Möglichst automatisierte Zahlungssperre

Typische Szenarios
- Zahlungsverpflichtungen 1x monatlich (Zahlungen, Kurscheck von
  Haushaltsbudget)
- Mithilfe der Internet
- Beiträge zu digitalem Finanzmanagement
- Schutz der Datenkontinuität
- Verwaltung von Finanzen
- Reguläre Überwachung der Finanzen
- Automatisierte Zahlungen
- Effiziente Finanzverwaltung

Eigenschaften
- delegiertes Verhalten
- Partizipative Entscheidungsfindung
- Selbständigkeit
- Keine Finanzplanung
- Keine Finanzkontrolle
- Keine Finanzführung
- Keine Finanzberatung

Tätigkeit
- Notariat als Privatanwalt
- Schutz der Datenkontinuität
- Verwaltung von Finanzen
- Reguläre Überwachung der Finanzen
- Automatisierte Zahlungen
- Effiziente Finanzverwaltung

Häufigkeit von Tätigkeiten
- Geldberatung
- Anlage
- Finanzierung
- Dialog mit der ZKB
- Produkteinformation
- Informationen über ZKB

6 Personalelektro-Auskunftstelefonie, V.1.7 | Juni 2013
Scenarios: Storyboards and Experience Maps
Search for Best Practices
Scenario: Order a Deposit Account
With Participants: Interactive Session
Why Define Key Topics?

Our «key topics» are aspects of the user interface, which influence all other aspects.

They are the foundation of everything else.
A Generic Breakdown such as the “Iceberg” is not Enough
On What Aspects Would You Focus?

What are the key topics you would address first? (Time: 10min)

Existing systems …

... combined together

... but how?

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Our Approach to Conceptual Interaction Design
Tasks in the Project

- Initial project vision
- Personas
- High level scenarios
- Detail scenarios
- Competitors analysis
- Stakeholder meetings (legal, security, etc.)
- Sketches of alternative solutions for key topics
- Usability test with competitors’ solutions
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- Specification of redesigns
- Specification of redesigns
- Specification of redesigns
Sketch of Initial Project Vision
... but a generic approach was not enough.
Our Three Key Topics

**Combination of the Systems**
What will change as a result of the individual systems being amalgamated? How do they come together overall?

**Login Framework**
What are the mechanisms of registration and login (process, changing of status, etc.) and their impact on the new system?

**Navigation Framework**
What is the structure and mechanisms of navigation for the new system?
More variants …

Combination of solutions
Feasibility of alternatives
Other aspects (e.g. screen sizes)

Structure
Behavior
Presentation
Structure
Behavior
Presentation
Structure
Behavior
Presentation
Structure
Behavior
Presentation

Personas and high level scenarios
Combination of the systems
Detail scenarios
Login framework
Detail scenarios
Navigation framework
Detail scenarios

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Breakdown of “Combination of the Systems”

**Detail scenarios**
All scenarios, which focus on the fact that the systems will be combined in the future.

**Presentation**
How to represent this visually?

**Behavior**
What are possible behaviors?

**Structure**
How to merge 2 structures into 1?

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Alternatives
Combination of the Systems – Example 1

- Personal navigation
- Public navigation
- Actual content – personal or public
Combination of the Systems – Example 2

Public navigation

Hint to personal content

Public content
Combination of the Systems – More Aspects

- Which information of both systems should always be visible?
- How should you design the personal area (Onlinebank) to be recognizable as personal?
- How to enhance and communicate security?
- How can you combine a transaction (Onlinebank) and an information (ZKB.ch) system?
- Should the personal area look different to enhance the sense of security?
- …
Breakdown of “Login Framework”

Detail scenarios
All scenarios, which have to do with login, changing login status, moving between areas of different login levels etc.

→ Presentation
Showing of login status, areas, etc.

→ Behavior
Different possible behaviors

→ Structure
Structure of different login areas?

Alternatives
Login Framework – Example 1

High security login

Login/password only
Login Framework – Example 2
Login Framework – More Aspects

- At which moment in the workflow is a login required?
- How can you communicate different login states (simple logins and twofold security logins)?
- Should it be possible to upgrade from a simple login to a twofold security login? Or will this cause distrust?
- Which login information should always be visible (login name, login time, TAN, time to log out …)?
- ...

## Breakdown of “Navigation Framework”

<table>
<thead>
<tr>
<th>Detail scenarios</th>
<th>Presentation</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>All scenarios, which have to do with navigation in the different areas and between them.</td>
<td>Possibilities to integrate in layout</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behavior</td>
<td>Behavior of status changes etc.</td>
</tr>
<tr>
<td></td>
<td>Structure</td>
<td>Unified information architectures</td>
</tr>
</tbody>
</table>

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Navigation Framework – Example “Mega Dropdown”
- How to combine two different information architectures?
- Should users see navigation items that are only available when they are logged in?
- Is there a need for different navigations for the transaction area (Onlinebank) and the information area (ZKB.ch)?
- …
The Key Topics Worked Out and Combined

- Combination of the systems
  - Detail scenarios
    - Presentation
    - Behavior
    - Structure

- Login framework
  - Detail scenarios
    - Presentation
    - Behavior
    - Structure

- Navigation framework
  - Detail scenarios
    - Presentation
    - Behavior
    - Structure

- Feasibility of alternatives
- Combination of solutions
- Other aspects (e.g. screen sizes)
- More variants ...
Sketch of Possible Solution ("Starship")
Sketch of Possible Solution ("Sheets")
Tasks in the Project

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Decision to redesign the individual systems for now
Learnings from Usability Tests with Competitors’ Solutions

- Most users had the impression that their personal information would **not be as secure** as in the solution with two silos.
- Less experienced users often **got lost in the public space** and could not find their way back to their personal information.
- More experienced users criticized the similar terms in the navigation for personal and public information (e.g. accounts) and **irrelevant information** that increased the complexity of the site.
Tasks in the Project

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- Decision to redesign the individual systems for now

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Discussion
 Overall Learnings

- The rigorous focus on the key topics helped to fail as early as possible with the initial vision.
- Stakeholder meetings used up a lot of our time, we didn't have to evolve the design.
- A faster and more systematic change of the design focus would have helped to speed things up even more.
- User testing with a competitor's solution helped to test some of the assumptions very early.
- Testing with this real system showed a lot of issues we probably wouldn't have found with a wireframe prototype.
- Design rooms rock!
Thank you for your attention!
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