Design and Implementation of a Workflow-based Software Solution to Support IT Project Management at Sky Deutschland AG

05.08.2013 | Jenny Cheng
Agenda

1. Sky Deutschland AG
2. Motivation – Problem Analysis
3. Goals
4. Method
5. IT Project Management Process
6. Conceptual Overview
7. Data Model
8. Workflows
9. Live Demo
10. Outlook
Sky Deutschland AG

- Media company based in Unterföhring
- ~ 3,4 mio. customers
- ~ 2000 employees
- ~ 80 employees in the IT Department
- ~ 180 concurrent running IT projects at all times
- ~ 200 IT projects finalized last year
- 9 IT Demand Manager
Motivation – Problem Analysis

- High number of projects running in parallel
- Many media breaks within the process
  - Digital: Word, Excel, Email, SBM
  - Physical: Transaction Approval Form
- No centralized information source
- Redundant data storage

→ Error-prone, limited reporting abilities, limited invoice matching abilities
Goals

- Create a single point of truth
- Give users easier access to real-time data
- Eliminate the amount of media breaks
- Enable collaborative working throughout the company
Method

- Conceptual Phase
  - Define stakeholders, key process steps and application requirements through interviews
  - Define a data structure and workflows

- Implementation Phase:
  - Development using Serena Business Manager (SBM): A software platform for process application prototyping and development
  - Consists of a composer (application development), an administrator (configurations) and a web interface (UI)

- Post-Analysis Phase:
  - Analyze user acceptance of the application
IT Project Management Process

<table>
<thead>
<tr>
<th>Business</th>
<th>Sky IT</th>
<th>Approval Instance</th>
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<tbody>
<tr>
<td></td>
<td>Request for estimation</td>
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<tr>
<td></td>
<td>Classification (offline: call, online: meeting)</td>
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<td>Estimate effort, cost &amp; timeline</td>
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<td>Review other offline: team, online: meeting</td>
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<td>Check budget situation</td>
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<td>Request budget</td>
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<td>Budget not yet requested</td>
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<td>Request budget</td>
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<td>Budget already approved</td>
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<td>Order</td>
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<td>Propose project plan &amp; timing</td>
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<td>[Ray] Priorisation</td>
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<td>Create technical concept</td>
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<td>Review technical concept incl. feasibility (testing if necessary)</td>
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<td></td>
<td>Implementation</td>
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<td></td>
<td>UAT Test</td>
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<td>Integration test</td>
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<td>UAT</td>
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<td>Acceptance (incl. test documentation from business)</td>
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<td>Transfer to production (incl. knowledge transfer to O&amp;M &amp; Dev)</td>
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<td>Trial operation</td>
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IT Project Management Process
IT Project Management Process

1. Request budget
2. Check budget situation
3. Budget approval (CAPEX M.)
4. Request for TA
5. Transaction approval
6. Order
7. Request budget (budget not yet requested)
8. Budget already approved

5. August 2013  Bachelor Thesis Final Presentation
Conceptual Overview

Diagram:
- Item
- Project
- Application
- Table
- Section
- Workflow
- Form
- State
- Transition
- Field
- Data Type
- Owner
- User
- Group
- Role
- Privilege

Relationships:
- Item contains Project
- Project consists of Application
- Application has Table
- Table consists of Section
- Workflow has Item
- Item has Workflow
- Workflow has State
- State restricts Transition
- Transition has Form
- Form has Owner
- Owner is a User
- User has Group
- Group has Role
- Role has Privilege
- Table has Field
- Field has Data Type
- Data Type has Table
- Table restricts Section
Data Model
Workflow – IT Projects
Workflow - Budgets
Workflow – Transaction Approvals
Workflow – Transaction Approval Order Items
Live Demo
Outlook

- Work collaboration with Commercial Finance
- Invoice matching for IT Controlling
- Extensive reporting possibilities for management
- Entry point for the upcoming corporate Transaction Approval Process
Questions?
Thank you for your attention!
## Backup – IT Project Life Cycle I

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<tbody>
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<td>3 Request for estimation</td>
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<td>4 Clarification (offline / telco / meeting) (if necessary, e.g. for bigger projects)</td>
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<td>6 Estimate effort, cost &amp; timeline</td>
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<td>8 Review offer (offline / telco / meeting)</td>
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Backup – IT Project Life Cycle II

1. Request budget
2. Check budget situation
3. Budget approval (CAPEX M.)
4. Request for TA
5. Transaction approval
6. Order

- Budget not yet requested
- Budget already approved
Backup – IT Project Life Cycle III

13. Propose project plan & timing

14. (Re-) Priorisation

15. Create technical concept

16. Review technical concept incl. mockups [Meeting if necessary]

17. Implementation

16. UAT Kickoff

19. Integration test

20. UAT

21. Acceptance (incl. test documentation from business)

22. Transfer to production (incl. knowledge transfer to OSM + Dev)

23. Trial operation
Backup – Release Workflow