

Case Study

Web-Application Refactoring for SpareParts



Slide 1 19. August 2011

Kai Schwidder

The objectives of the Case Study are the following



- 1. Understand the customers business requirements
- 2. Explore the possible solution alternatives from an outside-in approach
- 3. Design the solution based on your identified decisions and findings
- 4. Present your solution to different stakeholders (CEO, CFO, CIO, Developers)
- 5. Create a customer-ready documentation



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SpareParts has the following objectives which have to be addressed

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Overview

- Leading international European trading company for automotive spare parts
- Provide comprehensive knowledge and services with a high degree of flexibility
- Delivery of spare parts within 2-3 hours after order has been received
- Self-written ERP System based on Oracle-Technology (Oracle-Forms, PL/SQL)
- Application availability/ performance is mission critical for their business
- Sophisticated Web-Enablement

Key-Figures

- Handling over >= 200.000 spare parts (high growth YoY)
 - Serving >= 30.000 partners (increasing YoY)
 - Peak hours between 7:00 a.m. and 2:00 p.m. (Mission critical)
 - ~800 Employees
 - FTE's

- $3-4 \rightarrow \text{Operation}$ - $10 \rightarrow \text{Development}$ - $3-4 \rightarrow \text{Support}$

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■ ~600 Oracle Forms

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Customer Profile (cont.)

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Technology Stack (Actual)

Challenges

- Oracle 8i
 - Oracle-Forms for the sophisticated Rich-Client Front-Ends
 - PL/SQL as programming language (Web/Non-Web) Oracle 4-GL Development
 - Tools
- Citrix
 - Deployment of Oracle-Form applications
- Hardware
 - Set of standard xSeries Pizza-Boxes
 - HP Superdome for Oracle

- Trading with Partners is key and emerging
- Life-cycle of the application portfolio is reached (Oracle-Forms)
- Need to define the strategic platform for the future (SAP, Microsoft, Oracle, others)
- Re-Use of existing Assets
- Time to Market
- Flexibility to "Build for Change"



Goals to be achieved

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Business

Development

- Faster Time-To-Market

- Strong Focus on Business Processes Service oriented approach High flexibility to reach-and-extend New country enablement planned #1 CH, #2 A, #3 Spain, #4 Russia

Re-Use of the ERP-Business Logic/Objects

- **Rapid Application Development**
 - Integrated Testing Performance Tuning Rapid Deployment Team Development Consistent

 - Documentation

Operations

- Streamlined management of the infrastructure with low TCO
- Monitoring of Business-Services
- On-Demand management of system resources

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The following key requirements have been defined



Standards

- Java Enterprise Edition for mission critical applications
- Oracle as the Database engine
- LDAP User Registry & Sync
- Eclipse-based tooling
- Web-Standards such as XML, HTML, HTTP/S Standards
- Open Source Standards
- Server Virtualization

Others

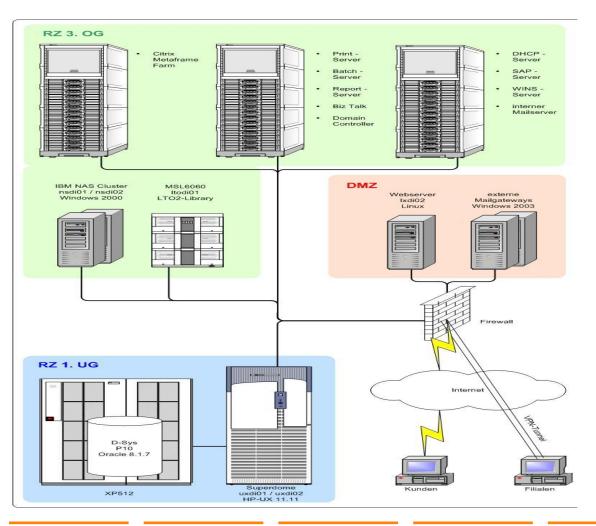
- RUP Method
- A key building block is the content management system
- Rich Client Support with minimal deployment footprints
 - Simplified Management and Deployment Activities
- Multi-Channel Support



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SpareParts has a sophisticated network topology as follows

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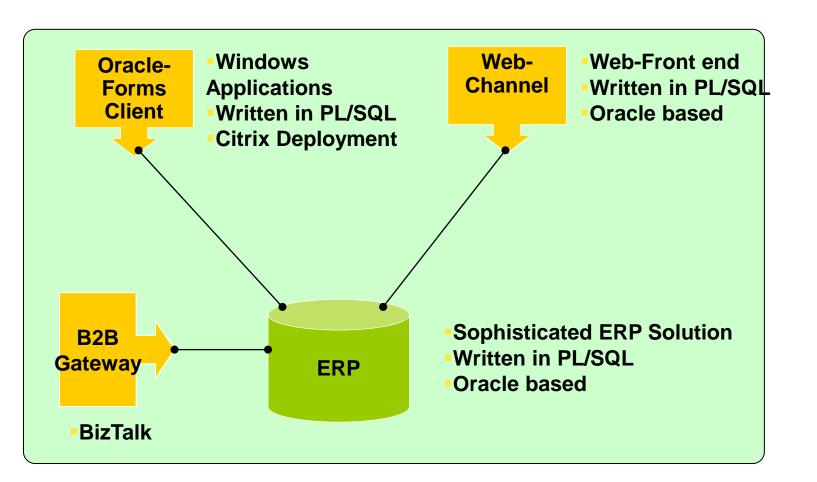




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The current high-level application context is as follows



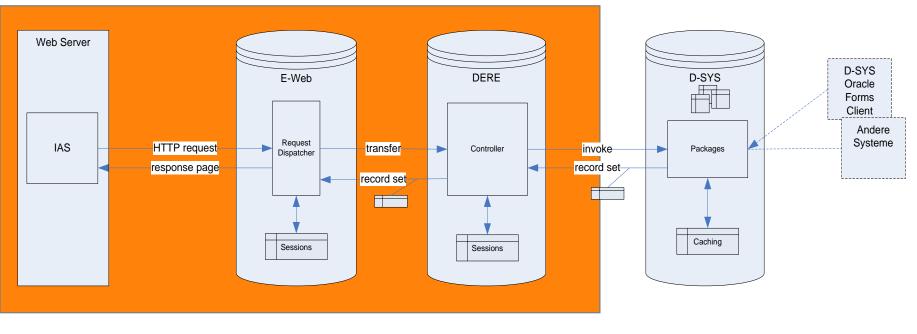




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The project-scope is high-lighted as follows





Presentation

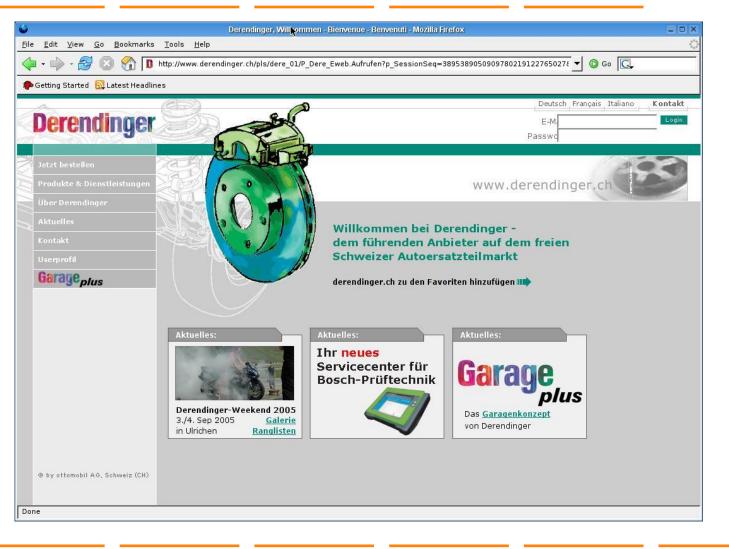
Business Logic and Data



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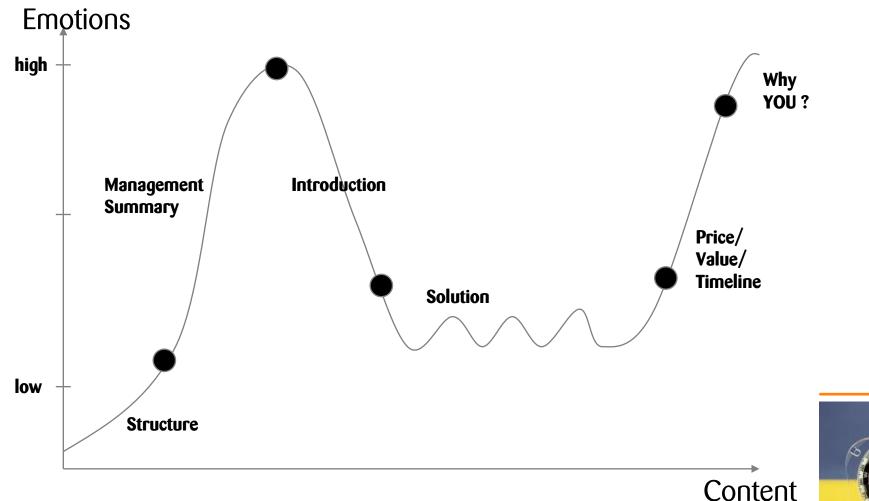
As an example please have a look at <u>www.derendinger.ch</u> for further details

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Transport emotions associated with the key customer benefits of SpareParts



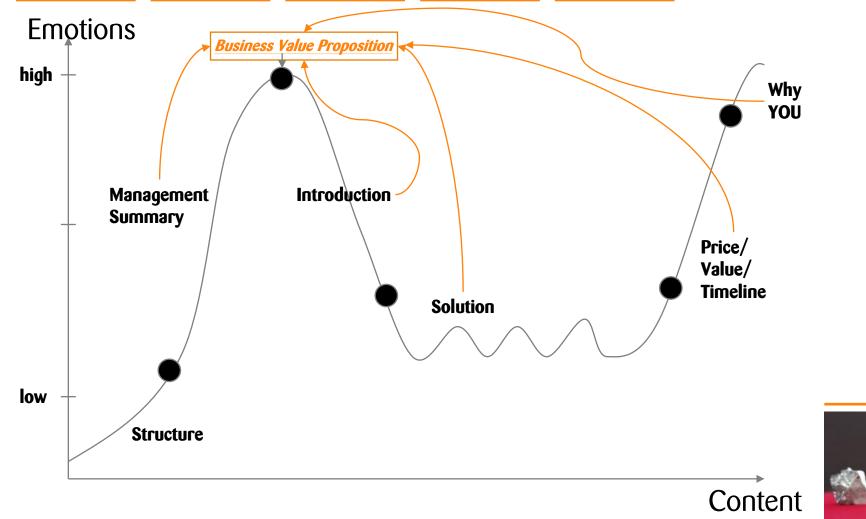
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Link the emotions to the identified stakeholder business value propositions of SpareParts



Your presentation and documentation should address the following key topics for SpareParts

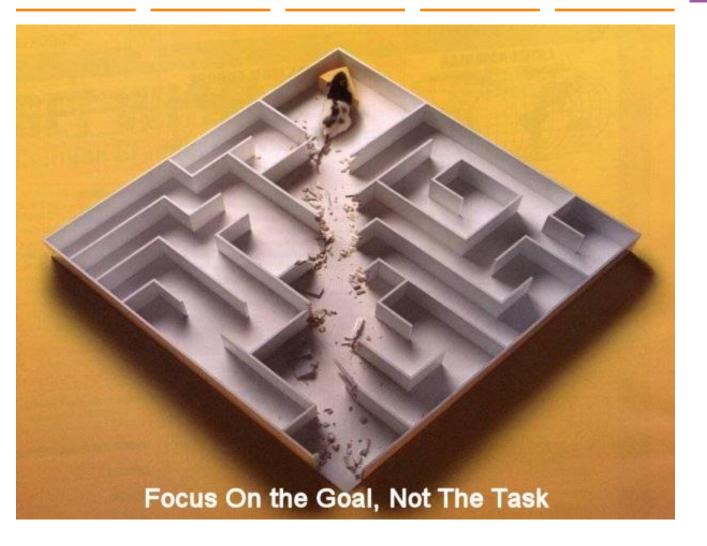
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- 1. Management Summary
- 2. Solution outline
- 3. **Project Schedule Time to Market**
- 4. Why XYZ Your benefits
- 5. Your investment



Thank YOU

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