



Kai Schwidder
Distinguished IT Architect – Career





Kai Schwidder
Distinguished IT Architect – Hobbies....





Kai Schwidder
Distinguished IT Architect

Enterprise IT Architectures

Term Paper Introduction

What we expect from YOU : A solution END-2-END

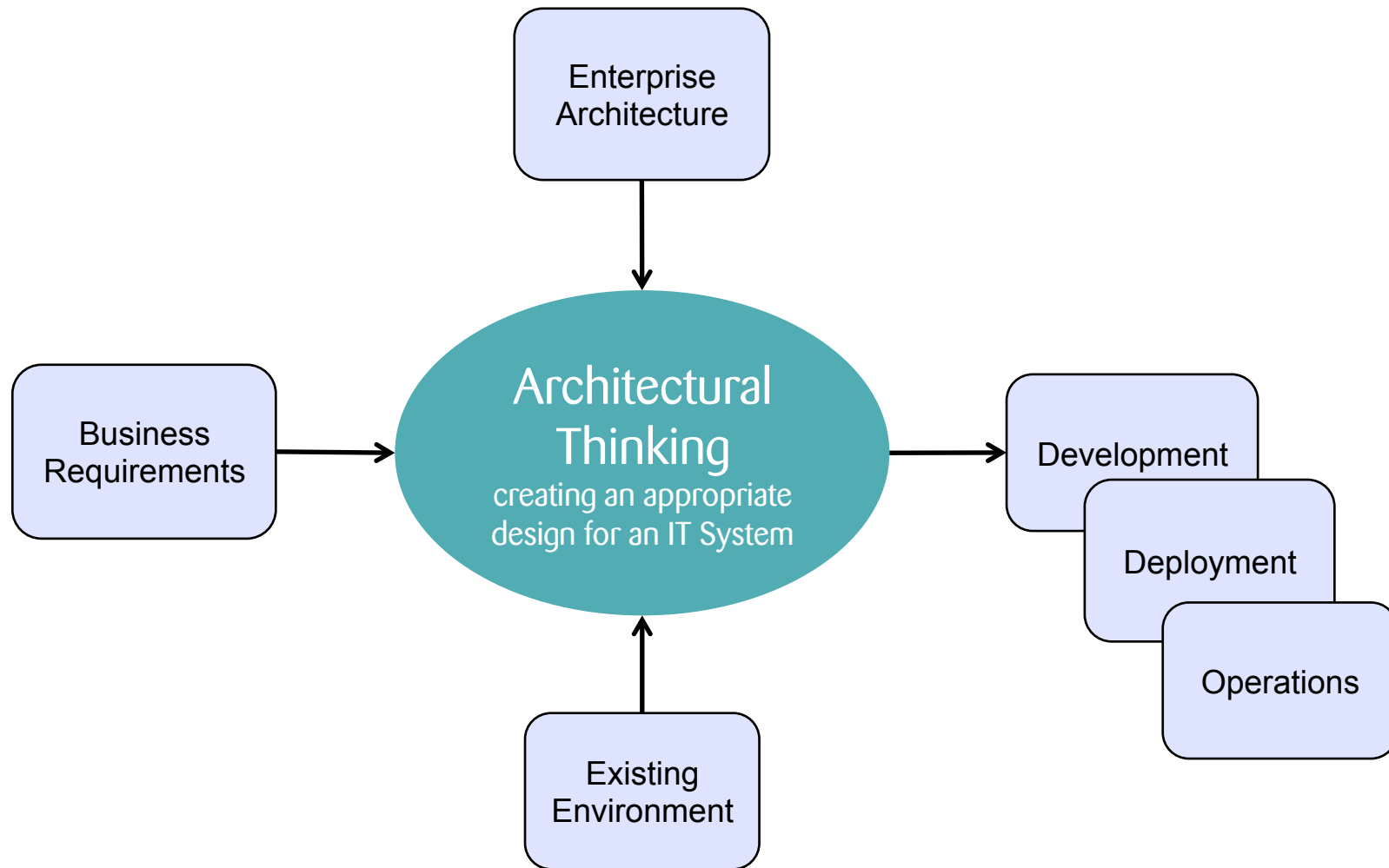


Workgroup Objectives

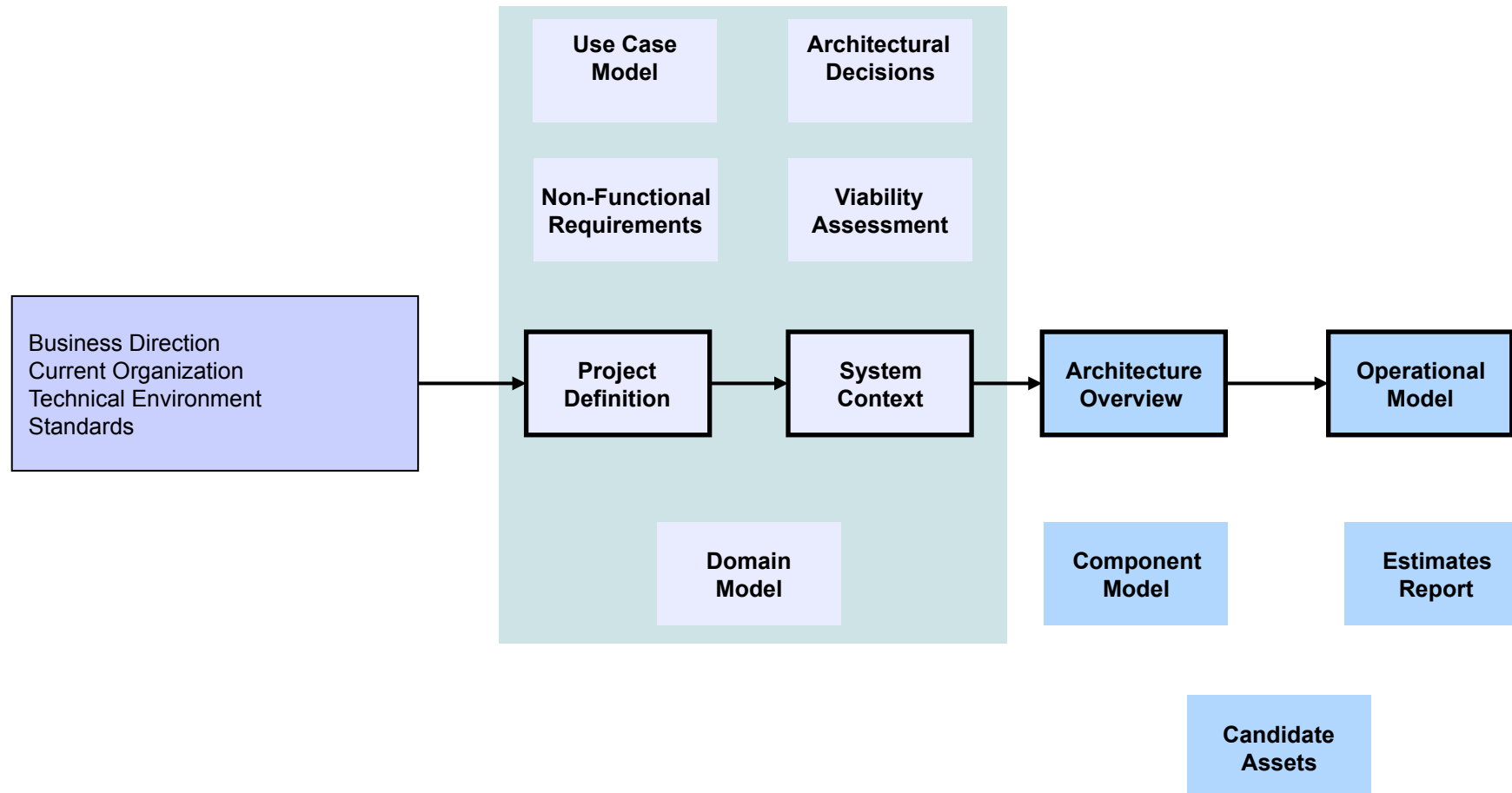
- **Prepare „Your,, Solution Outline**
 - **Focus on your Approach and Roadmap**
 - **What are your Hardware/Software Recommendations**

- **Present „Your“ Solution Outline**
 - **Present your High-Level Architecture**
 - **Explain your Selection of Infrastructure Components (HW/SW)**
 - **Explain the rational behind it**

Architectural Thinking : Balancing many forces



The critical path of a solution design and its work products

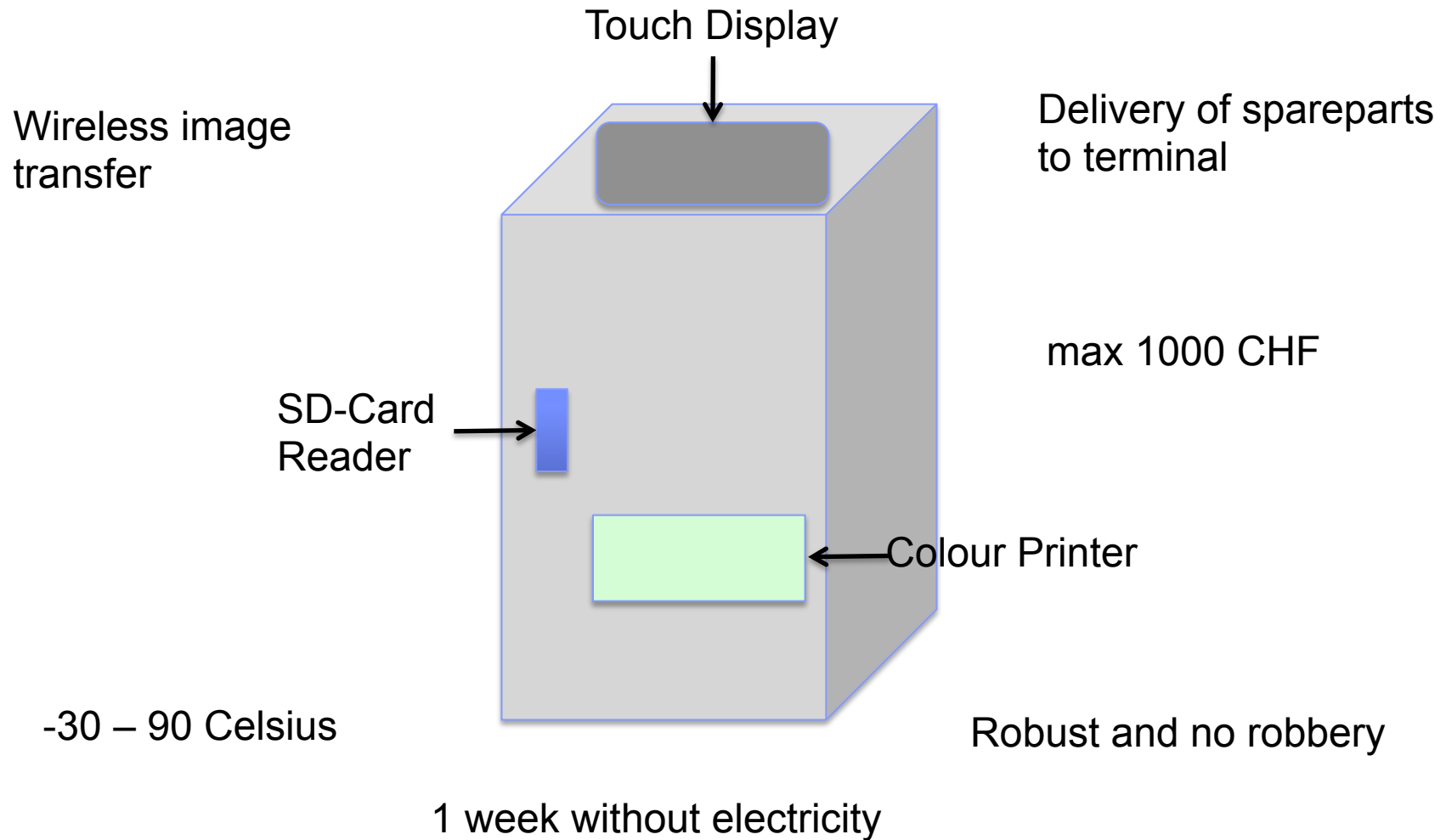


Exercise 1

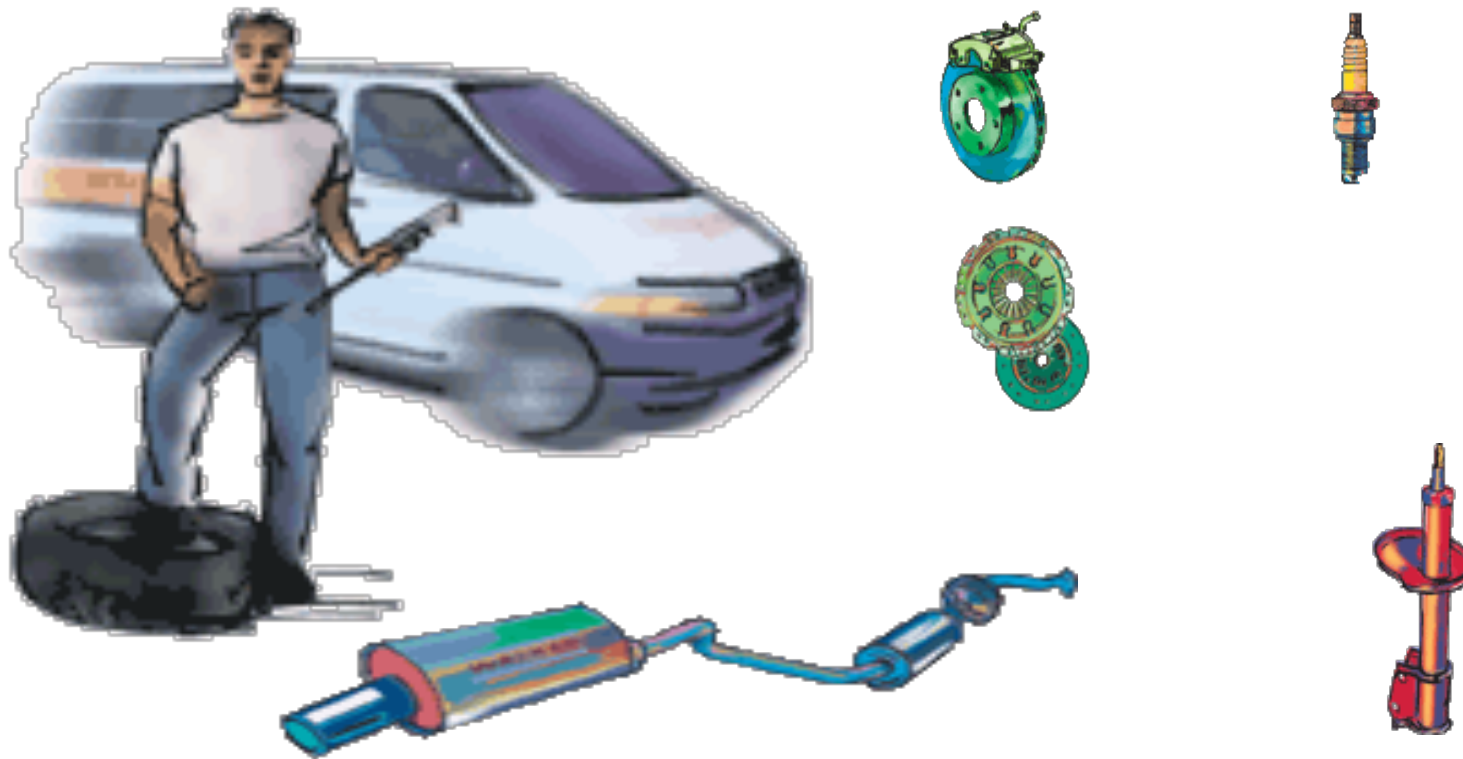
- Listen and gather
- Reflect what you have heard
- Let's start

Exercise 2

The World-Wide Sparepart Terminal

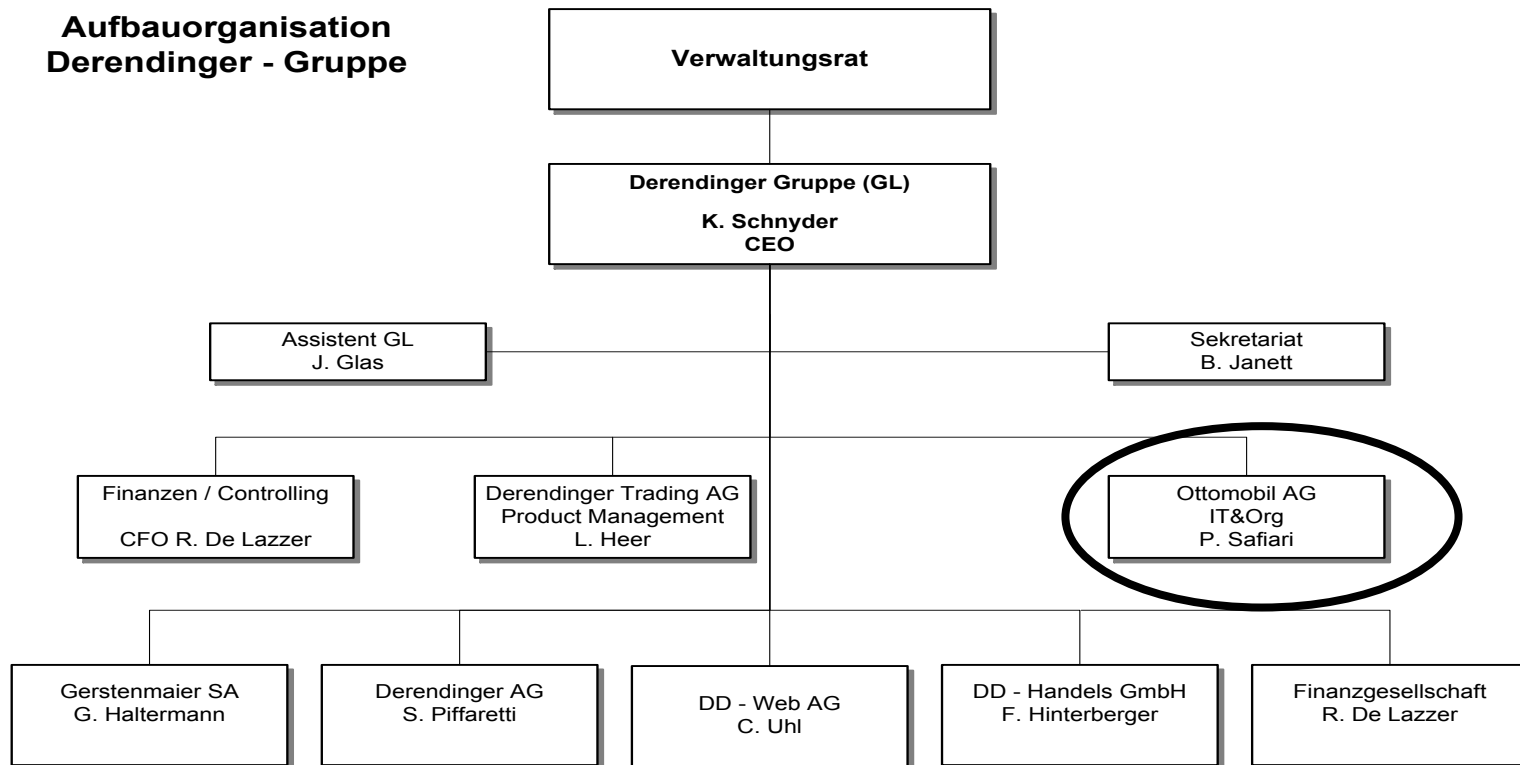


The Case



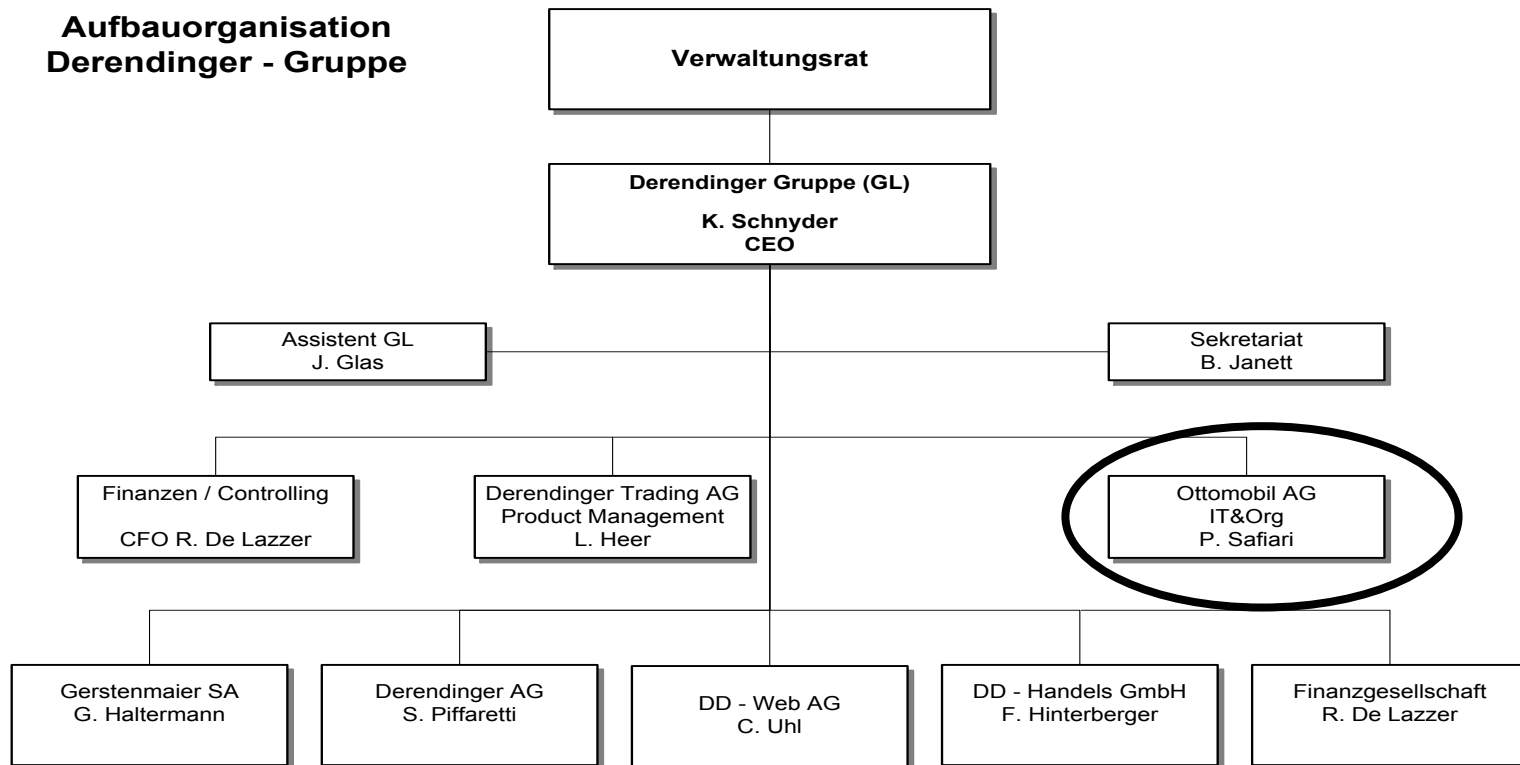


Aufbauorganisation Derendinger - Gruppe





Aufbauorganisation Derendinger - Gruppe



Customer Profile

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 → Operation**
 - 10 → Development**
 - 3-4 → Support**
- **~600 Oracle Forms**

Customer Profile (cont.)

Technology Stack (Actual)

- **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

Challenges

- **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

▪Business

- **Faster Time-To-Market**
- **Strong Focus on Business Processes**
- **Service oriented approach**
- **High flexibility to reach-and-extend**

▪Operations

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

▪Development

- **Re-Use of the ERP-Business Logic/Objects**
- **Rapid Application Development**
 - **Integrated Testing**
 - **Performance Tuning**
 - **Rapid Deployment**
 - **Team Development**
 - **Consistent Documentation**

The following key Requirements have been defined

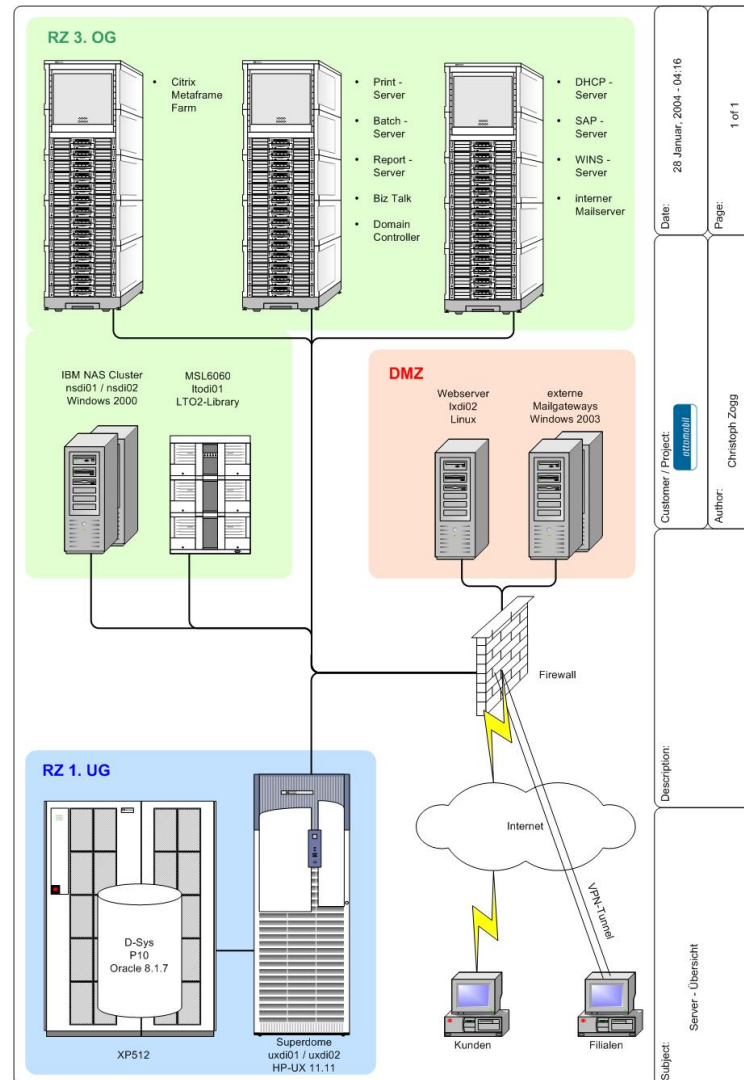
▪Standards

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

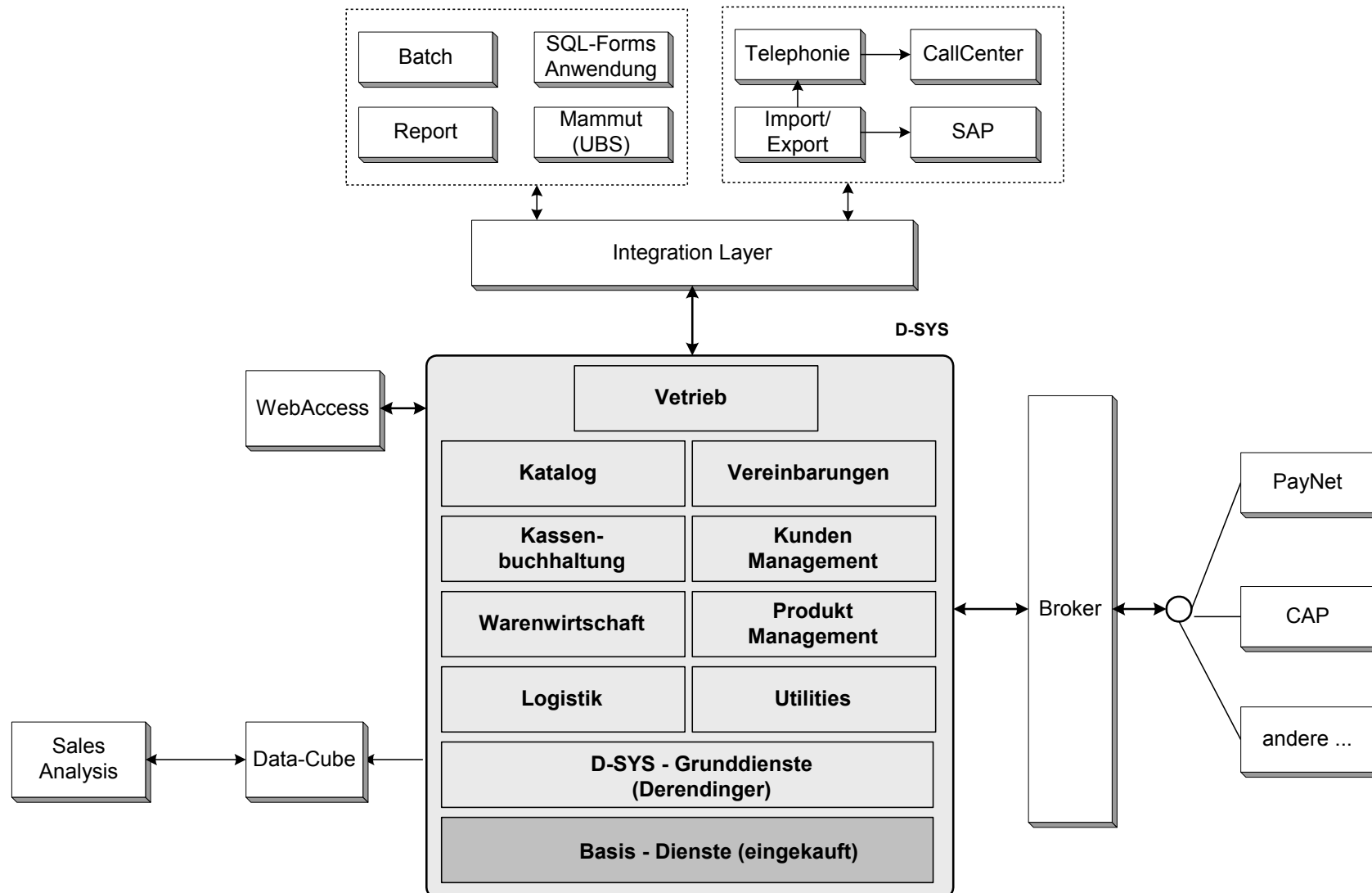
▪Others

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

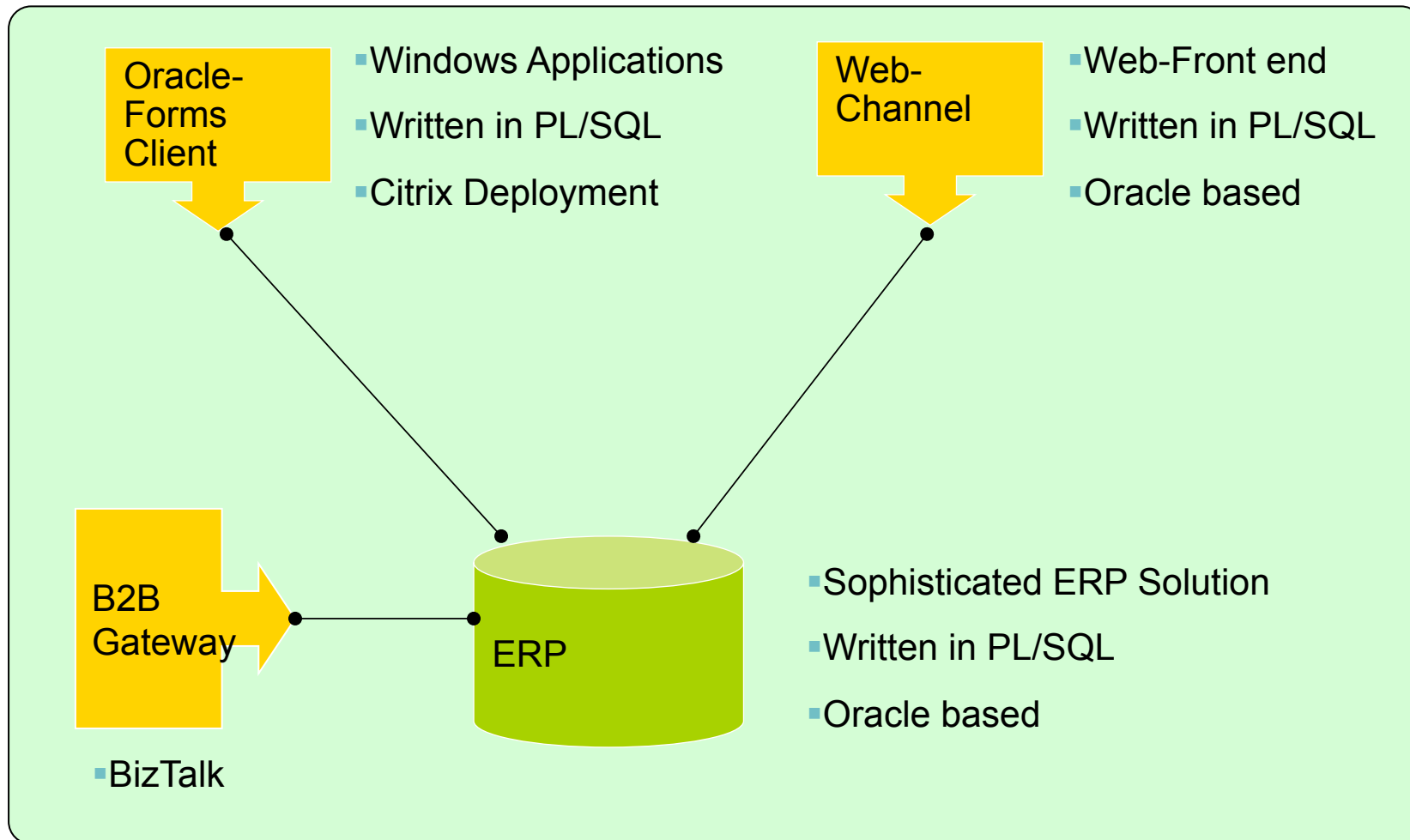
Current Network Topology



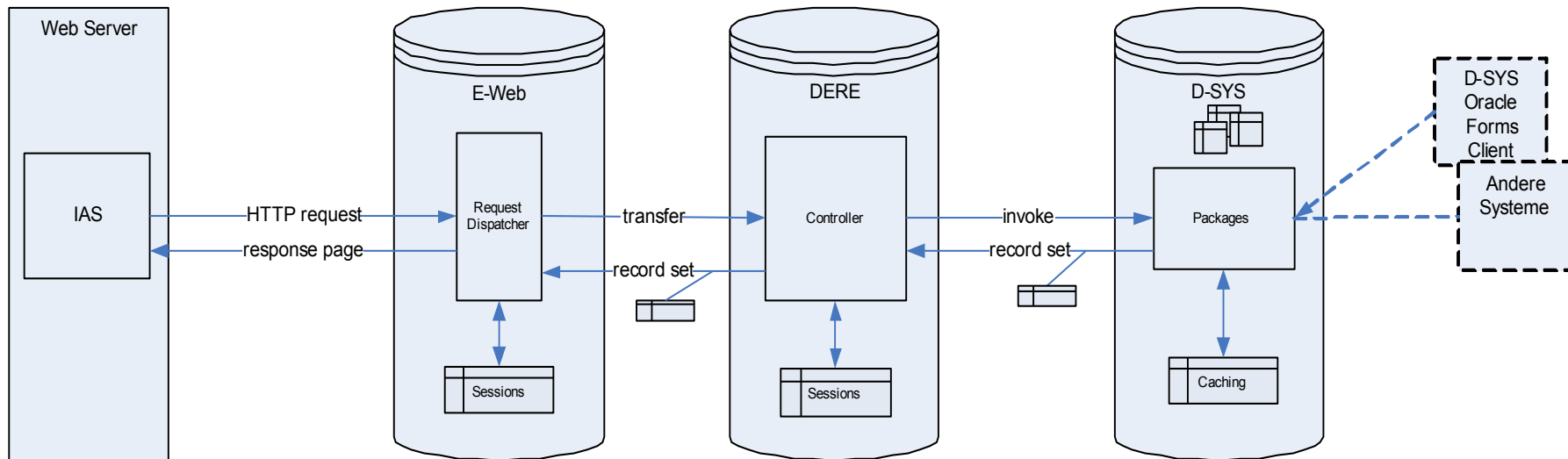
High-Level Architecture As-IS



Current Application Landscape



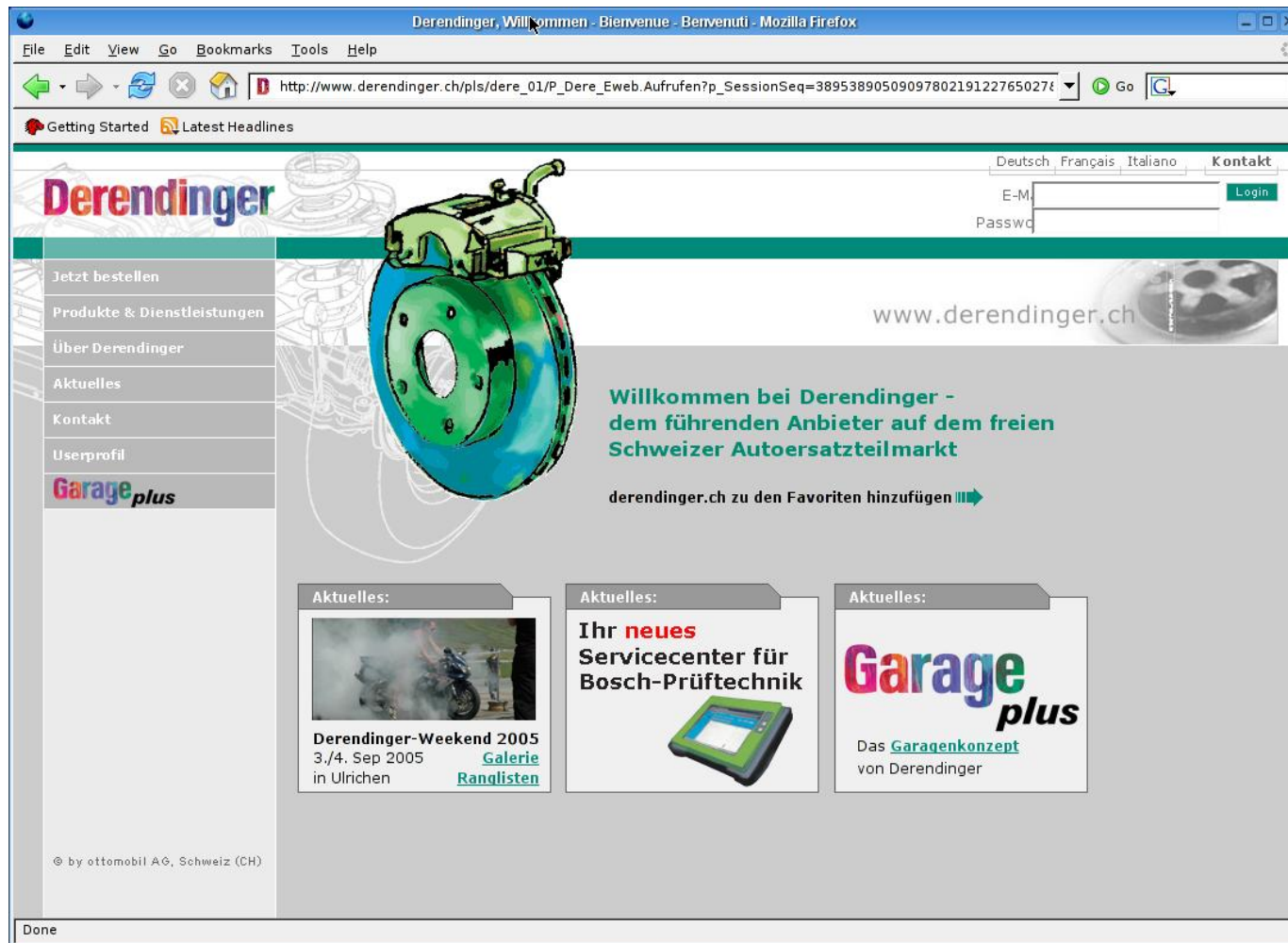
Current Web-Channel



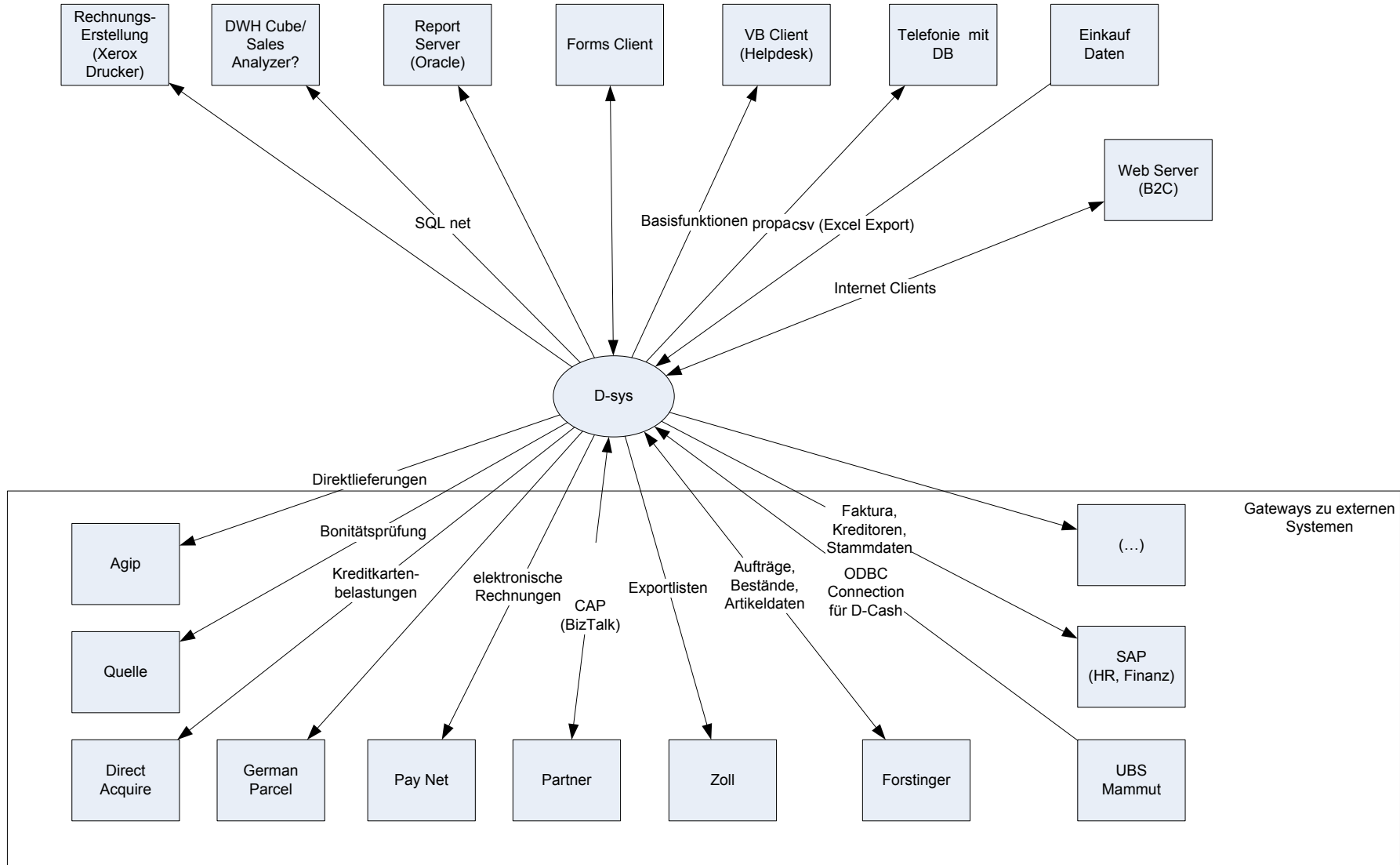
Presentation

Business Logic and Data

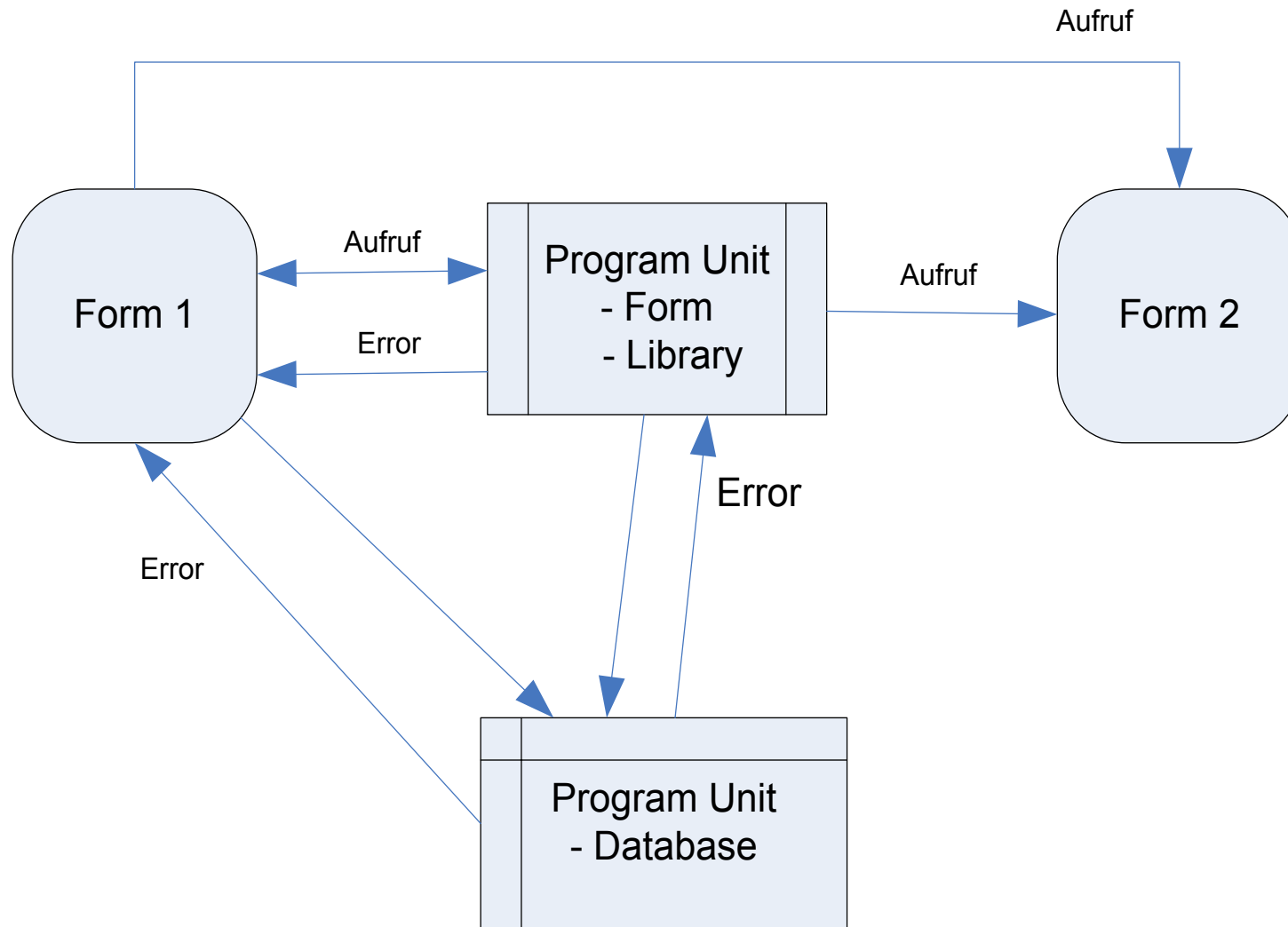
Targeted Web-Channel Look & Feel



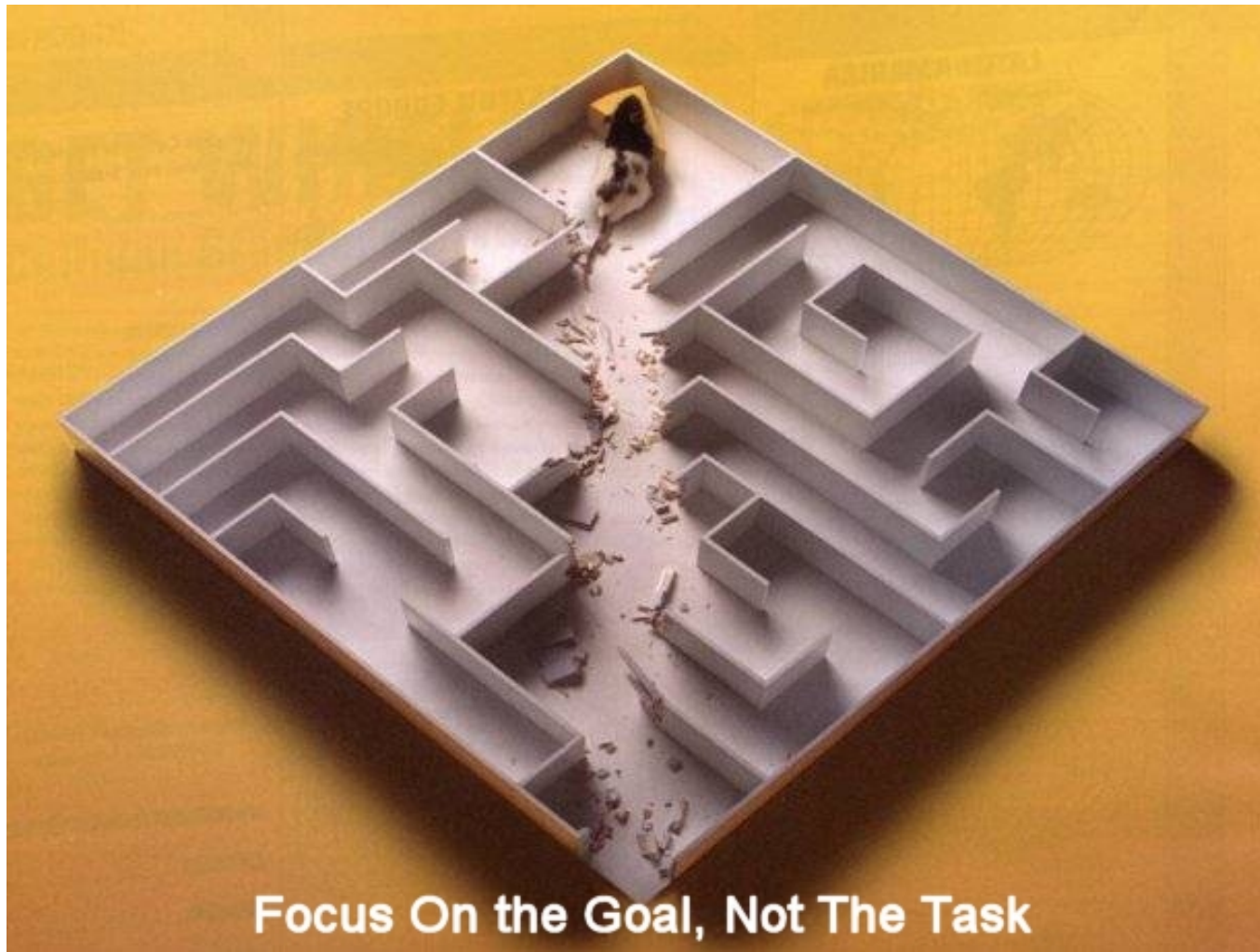
System Context



PL/SQL Forms Application Flow



Thank YOU



Questions

