Trends and Concepts in the Software Industry II
Analyzing Customer Adoption of Enterprise Cloud Platforms

Prof. Hasso Plattner, Michael Perscheid, Ralf Teusner, Franziska Dobrigkeit
Introduction 28th October 2021

Image courtesy of www.bluecoat.com/
Goals
Trends and Concepts in the Software Industry II

- Learn about cloud transformation projects
- Identify enablers and barriers to cloud transformation in general and the adoption of the SAP Business Technology Platform in particular
- Develop concepts to lower the adoption barriers and enhance the development experience
## Course Overview
Block Week: February / March 2022

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activity</th>
<th>Dates</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pre Phase</td>
<td>INTRODUCTION</td>
<td>28.10.2021</td>
<td>Introduction and information session</td>
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<tr>
<td></td>
<td>2-DAY KICK-OFF WORKSHOP</td>
<td>18.11. &amp; 19.11.2021</td>
<td>• Expert Sessions</td>
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<td>• Hands-on Exercises</td>
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<td>• Preparation for case studies</td>
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<td>SELF DEPENDENT GROUP WORK &amp; EXERCISES</td>
<td>December January February</td>
<td>• Your own schedule</td>
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<td><strong>Case studies, identify positive experiences and issues in your cases</strong></td>
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<td>• User and Expert interviews + further desk research</td>
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<td>• Synthesis of results</td>
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<td>• Your own schedule</td>
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<td>INTERMEDIATE PRESENTATIONS</td>
<td>Feb 2022</td>
<td><strong>Present your insights</strong></td>
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<td>• Short presentation and discussion</td>
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<td>Block Week</td>
<td>SEMINAR WEEK BUILDING &amp; PRESENTING A SOLUTION</td>
<td>Feb / Mar 2022</td>
<td>• Presentation: case studies and insights, initial prototype ideas</td>
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<td>• Expert sessions: technology aspects</td>
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<td>• Ideation and Implementation of a prototype</td>
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<td>• Test / evaluation with case study contacts</td>
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<td>• Final presentations</td>
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<td>• 5 days</td>
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<td>Post Phase</td>
<td>DOCUMENTATION</td>
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<td><strong>Document your work</strong></td>
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<td>• Written report</td>
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<td>• Video or screencast to experience your prototype</td>
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Course Overview
General Information

- 6 ECTS points
- Modules
  - IT-Systems Engineering MA
    - ITSE-Analyse
    - ITSE-Entwurf
    - BPET-Konzepte und Methoden
    - BPET-Spezialisierung
    - BPET-Techniken und Werkzeuge
    - OSIS-Konzepte und Methoden
    - OSIS-Spezialisierung
    - OSIS-Techniken und Werkzeuge
  - Data Engineering MA
    - DATA-Konzepte und Methoden
    - DATA-Techniken und Werkzeuge
    - DATA-Spezialisierung
    - SCAL-Konzepte und Methode
    - SCAL-Techniken und Werkzeuge
    - SCAL-Spezialisierung
  - Digital Health MA
    - SCAD-Concepts and Methods
    - SCAD-Technologies and Tools
    - SCAD-Specialization
    - APAD-Concepts and Methods
    - APAD-Technologies and Tools
    - APAD-Specialization
  - Cybersecurity MA
    - IDMG-Konzepte und Methoden
    - IDMG-Techniken und Werkzeuge
    - IDMG-Spezialisierung

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Teaching Team
General Information

Prof. Dr. h.c. mult. Hasso Plattner
Franziska Dobrigkeit
Dr. Michael Perscheid
Dr. Ralf Teusner
Cindy Perscheid
Tobias Wuttke
Preparation
Enterprise Clouds and Cloud-Native Development

- Knowledge about enterprise clouds and cloud native development is beneficial

- Materials
  - MOOC: Enterprise Goes Cloud
  - EBook Collection "Kubernetes up and running"
  - Reznik, Dobson & Gienow: Cloud Native Transformation Practical Patterns for Innovation [https://cnpatterns.org/](https://cnpatterns.org/)
  - Scholl, Swanson & Jausovec: Cloud Native Using Containers, Functions, and Data to Build Next-Generation Applications
Preparation
Enterprise data management and in-memory databases

- Prior knowledge about the fundamentals of in-memory database technology & enterprise data management is beneficial

- Materials
  - MOOC: In-Memory Data Management
  - Plattner: A Course in In-Memory Data Management
    The Inner Mechanics of In-Memory Databases
  - Plattner & Leukert: The In-Memory Revolution
    How SAP HANA Enables Business of the Future
# Trends and Concepts in the Software Industry II

## Recap

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<tr>
<th>On-Premise</th>
<th>Infrastructure-as-a-Service</th>
<th>Platform-as-a-Service</th>
<th>Software-as-a-Service</th>
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<tr>
<td>Applications</td>
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<td>Data</td>
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Cloud

- **You manage**
- **Service provider manages**

*Slide 8*
Platform for extending, integrating, and getting the most value out of business applications.

Cloud for running and managing provided services.

Different business applications run an enterprise.

Enterprise

Cloud

Platform
Business Technology Platform

Cloud

- Procurement (SAP Ariba)
- Human Resources (SAP SuccessFactors)
- Customer Relations (SAP C/4HANA)
- Enterprise Resource Planning (SAP S/4HANA Cloud)
- Travel and Expenses (SAP Concur)
- Workforce Management (SAP Fieldglass)

On Premise

- Enterprise Resource Planning (SAP S/4HANA)

Business Technology Platform

- Apps & Business Services
- Low Code / No Code Development
- Domain Model
- Analytics and Planning (SAP Analytics Cloud, SAP Data Warehouse Cloud)
- Data Management (SAP HANA Cloud)
- Integration Foundation, Kernel Services, Technical Re-use Services, …
- Platform Core
- Multi-Cloud: Kubernetes managed by Gardener

Infrastructure

- Microsoft Azure
- Amazon Web Services
- Google Cloud Platform
- Alibaba Cloud
- SAP / Customer

In-Memory Database (SAP HANA)
Trends and Concepts in the Software Industry II
Case-Study with Real Customers

Based on your **study of a real customer scenario**, what are barriers and enablers to cloud transformation and the adoption of the SAP Business technology Platform? **How can the adoption barriers be lowered, and the development experience enhanced?**

- How are customers currently supported when adopting an enterprise cloud platform?
- What tools, tutorials and examples are available?
- What are use cases for moving to an enterprise cloud platform?
- Why are cloud transformation projects slow or even come to a halt?
Trends and Concepts in the Software Industry II
Goals and Learning Experience

Participants will

- Learn about **fundamental principles** behind enterprise cloud platforms
- Become familiar with real businesses and **how a cloud offering can transform their use cases**
  - Understand the need for customer-side development on cloud-based enterprise applications
  - **Requirements analysis, problem-solving, and consultancy** (for your customer and SAP)
- Improve teamwork, self-organization, presentation and **pitch skills to Executives**
Course Overview
Schedule

- **Kick-off Workshop**
  - 18th / 19th November

- **Group Work & Prep**
  - February

- **Intermediate Presentations**
  - February
  - Depending on Prof. Plattner’s Availability

- **Block Week**
  - February / March
  - tba

- **Deadline Documentation Submission**

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Contacts

- Franziska Dobrigkeit
  - Email: franziska.dobrigkeit@hpi.de

- Ralf Teusner
  - Email: ralf.teusner@hpi.de

- Michael Perscheid
  - Email: michael.perscheid@hpi.de

HPI Campus II
Villa, Room: V-1.19, V-2.18