

„Business Process Technologies“ [0] Introduction and Organisation

Teacher



■ Vita

- 2000 Diploma in Business Information Systems at University of Cologne
- 2007 PhD Degree in Computer Science at University of Cologne
- 1998-2010 Co-Founder & CEO in a Consulting and Implementation Company in Bonn
- 2007-2010 Chief Architect and Release Manager at sd&m, Munich
- Since 2010 Professor at HFT Stuttgart, special interest area Business Process Management

■ Contact

- Office in 2/545, consultation hours Thursday 9-9:45 a.m.
- Email: gero.lueckemeyer@hft-stuttgart.de
- Phone: +49 711 8926 2519

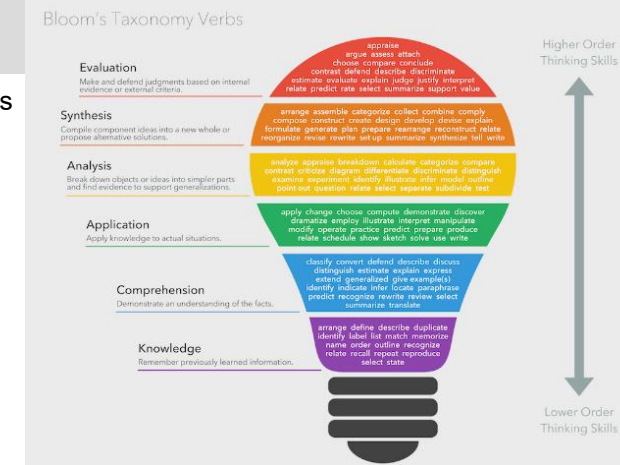
Students' Introduction: short oral presentation

- Name
- Country of origin
- Previous studies and jobs (what and where)
- Self Assessment
 - Programming skills (Languages and platforms)
 - Knowledge/experience in the area of BPM and SOA
- Goals for this module

Lecture Content

- Business
 - Organisation striving for profit – shall include public authorities here
- Process
 - Composed activities contributing to a goal by converting input to output
- Technologies
 - The interesting stuff ;-) supporting business processes and their management

Bloom's Taxonomy Verbs
by [Fractus Learning](#),
Lizenz: CC-BY-SA 4.0



Learning Goals

- ✓ Select and apply appropriate technologies to support the management of analysed business processes
- ✓ Develop and implement digital business processes – strategy to workflow management & tools

Success via

- Active participation
- Lecture material from Moodle
 - Bring and take notes
 - recap
- Individually work on exercises

Mode per SPO 2020

- Method of Teaching
 - Lecture with practical exercises
- Weekly Contact Hours: 4h
(2h Lectures + 2h Exercises/Presentations)
- Student Work Load 180h Total:
 - Lectures (68h)
 - Self Studies (112h)
- Required Knowledge
 - Programming, Middleware Technology, Basic internet technology

- *Method and Extent of Examination*

- Written examination, 90 minutes
- 1 original self-handwritten A4 Sheet allowed (both sides)

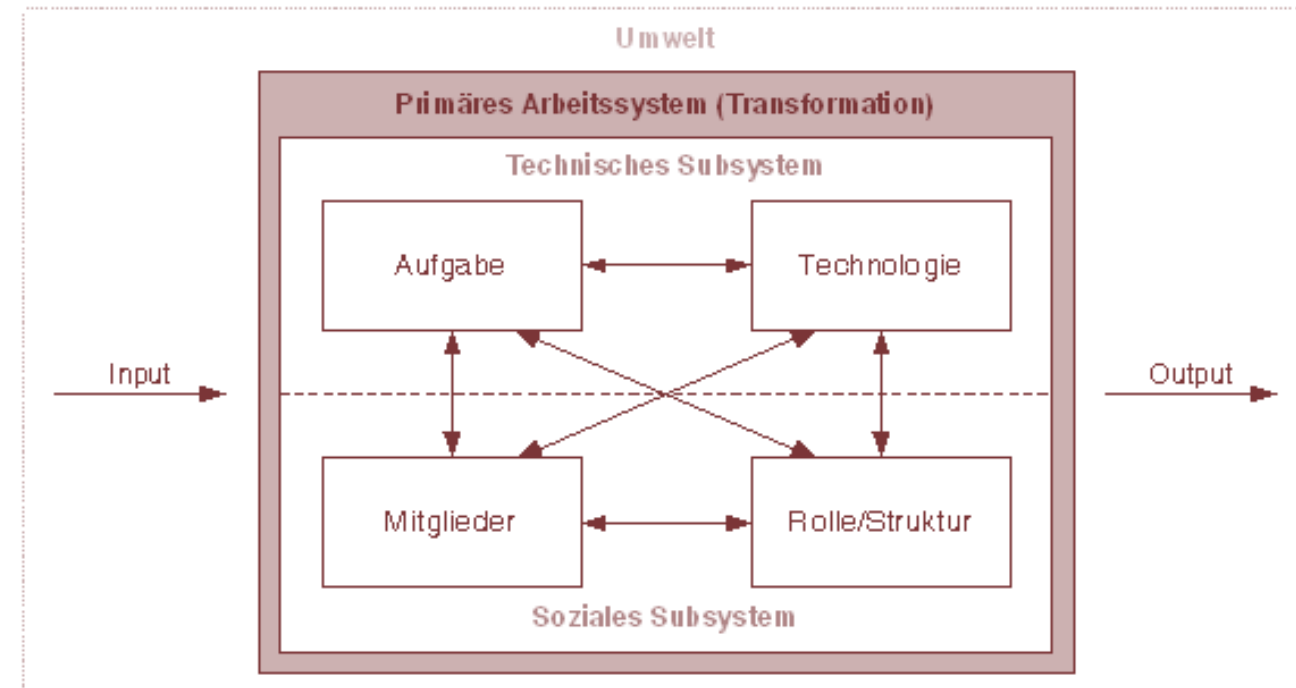
- *Pre-Exam Requirements*

- 3 Assignments from Exercises, small (Moodle) knowledge Tests
- 1 Short presentation on a defined topic
- 50 % of the points necessary

Value: 6 ECTS Points

Companies as socio-technical systems

- A company is a socio-technical system with configured interaction of
 - People
 - Values
 - Abilities
 - Organisation
 - Static (structure, roles, responsibilities)
 - Dynamic (processes, workflows)
 - Culture
 - Technology



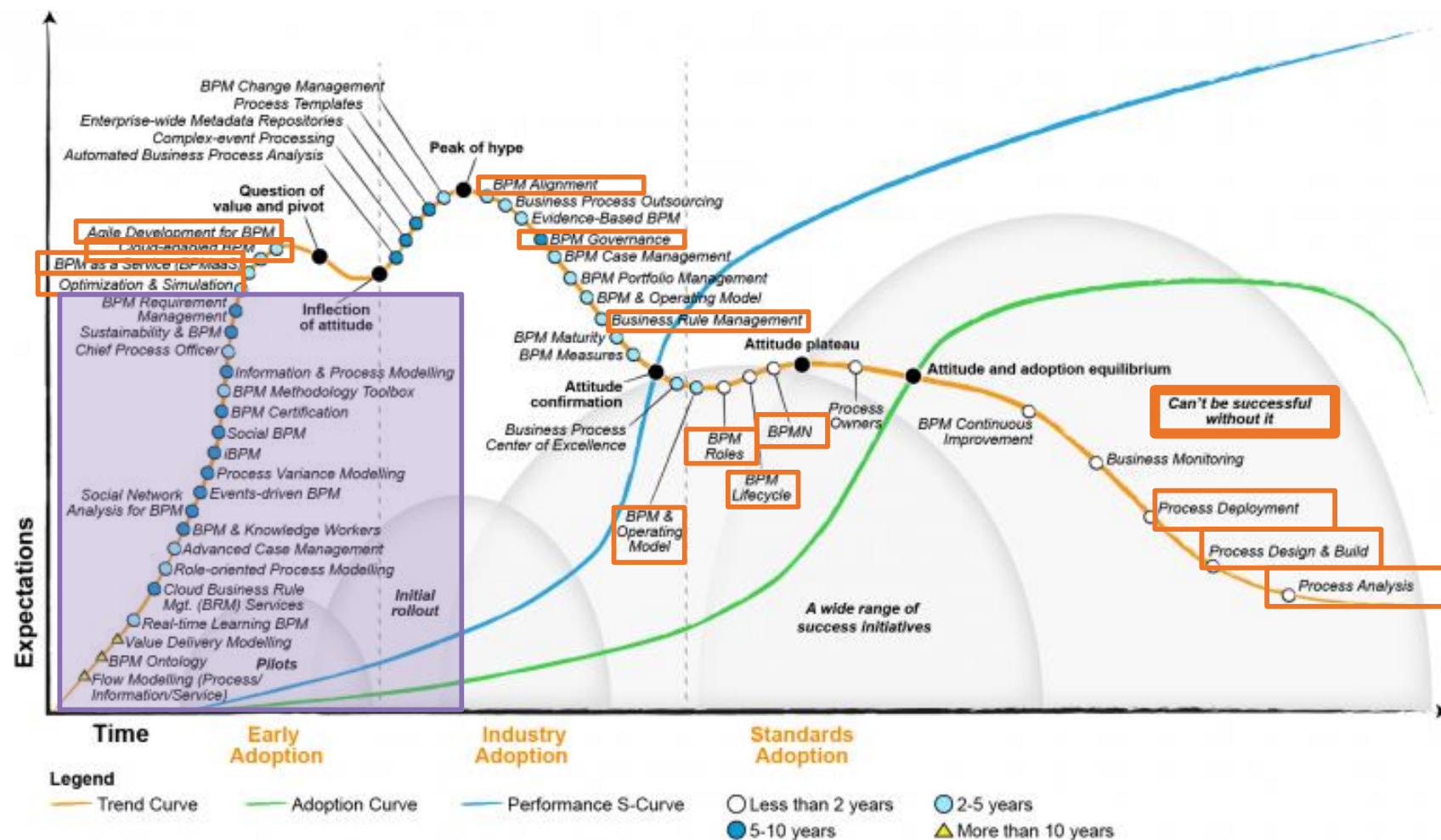
Business process management = Management of business processes

- Set of activities
 - with factual and time dependencies
 - connected by trigger and resulting events
 - Requiring one or more inputs
 - Creating a valuable result (output) for addressees
- Special form of dynamic organisation
 - Specifies business strategy
 - Links it to IT systems
 - > connecting element between strategy and IT/system development

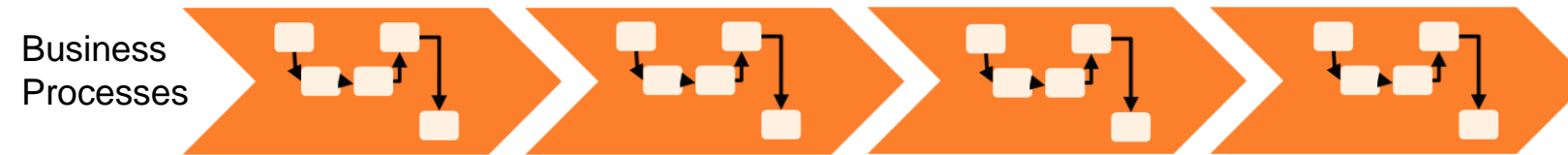
[Österle 1995]

[derived from Hammer/Champy and Scheer]

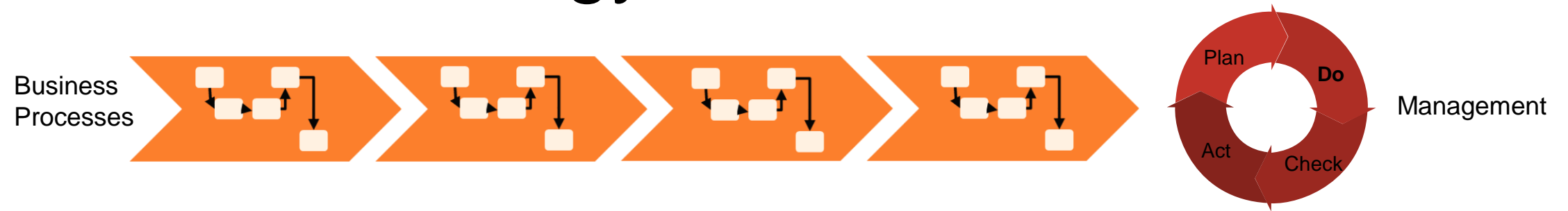
Business Process Management Trends



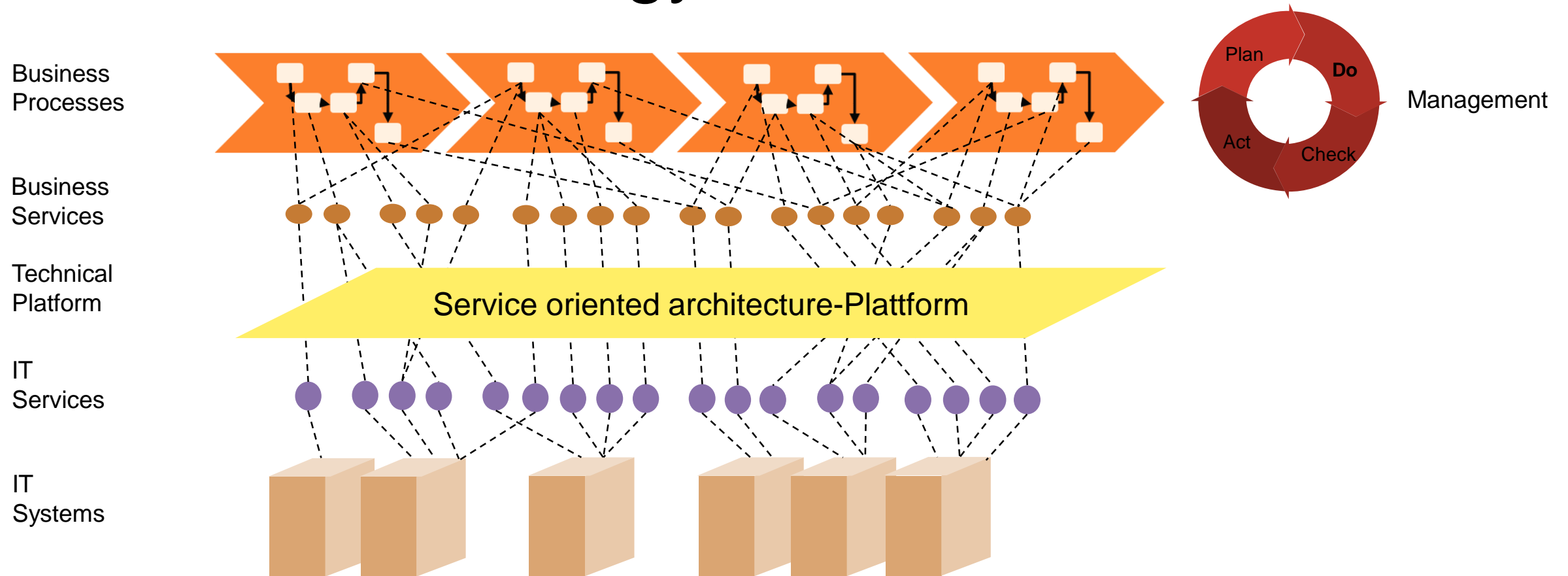
BPM Terminology Links



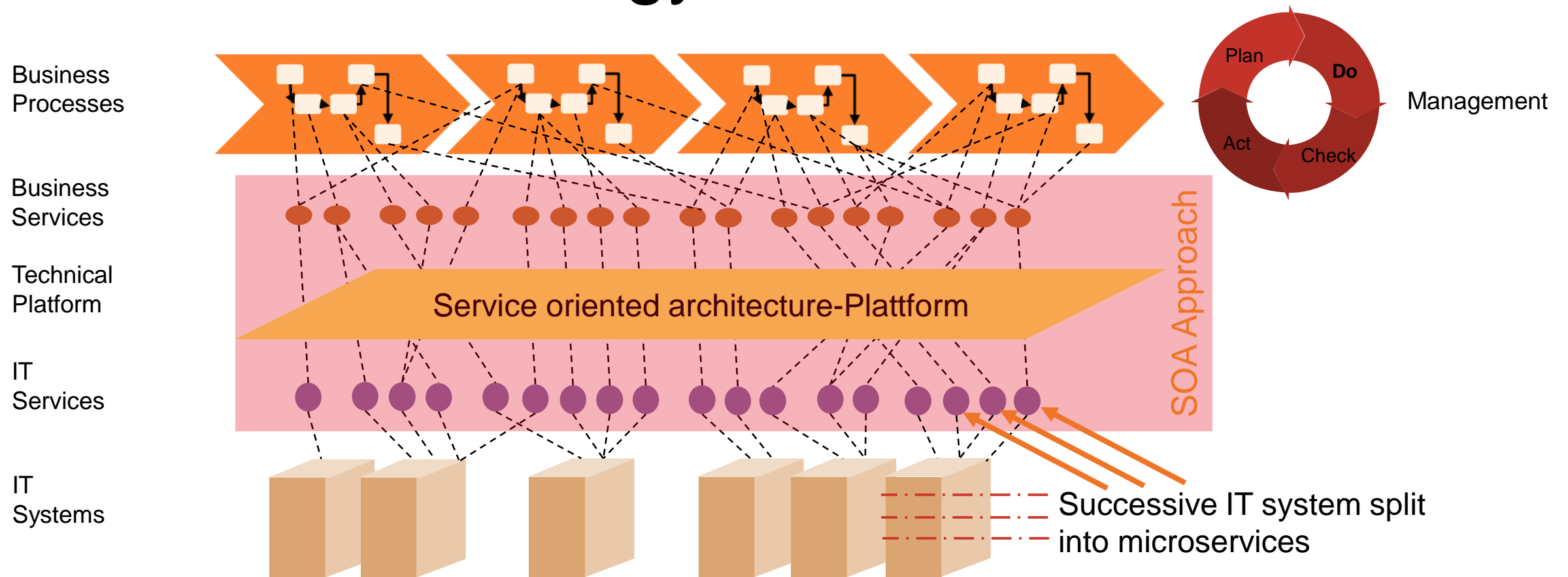
BPM Terminology Links



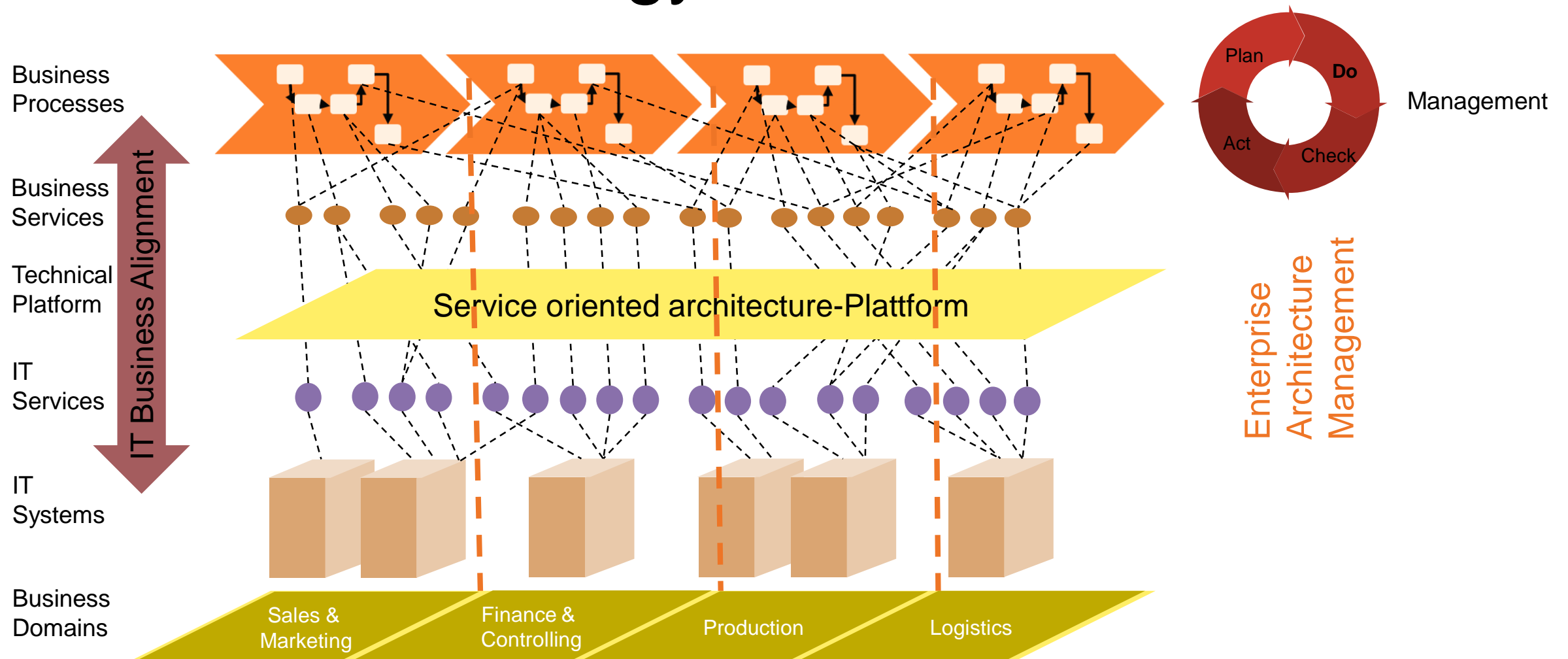
BPM Terminology Links



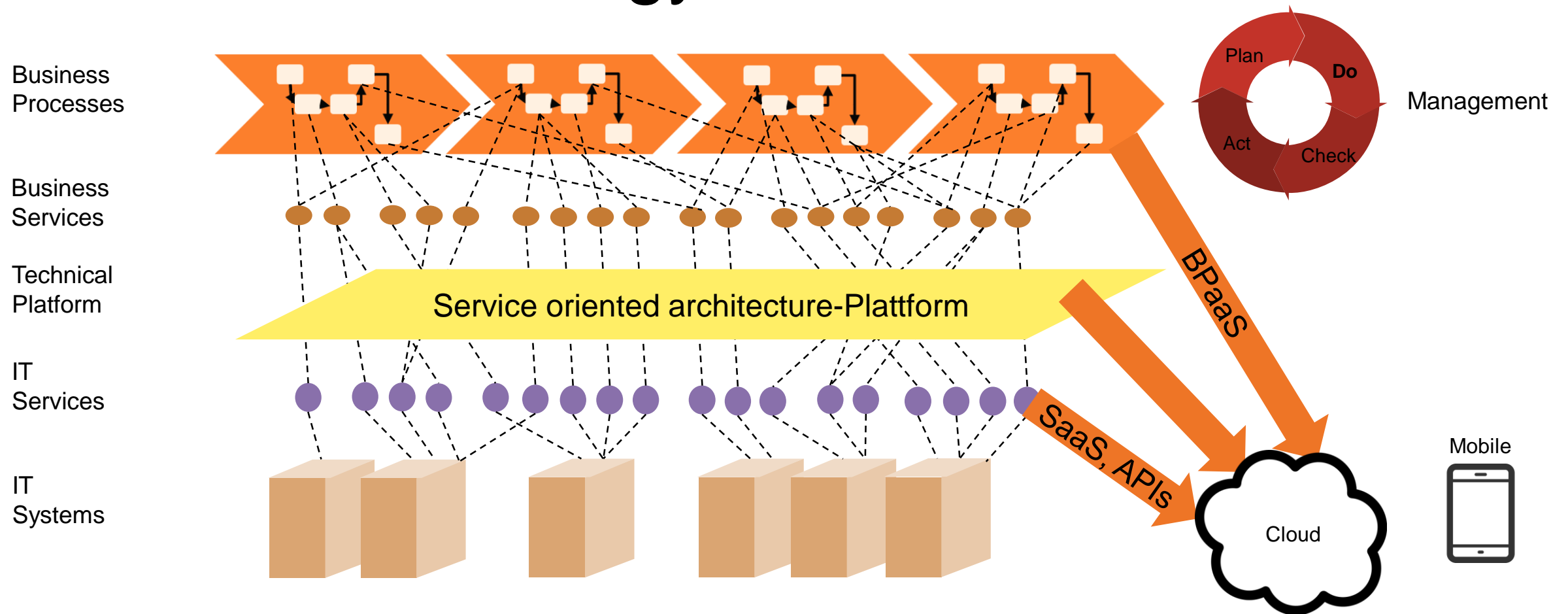
BPM Terminology Links



BPM Terminology Links

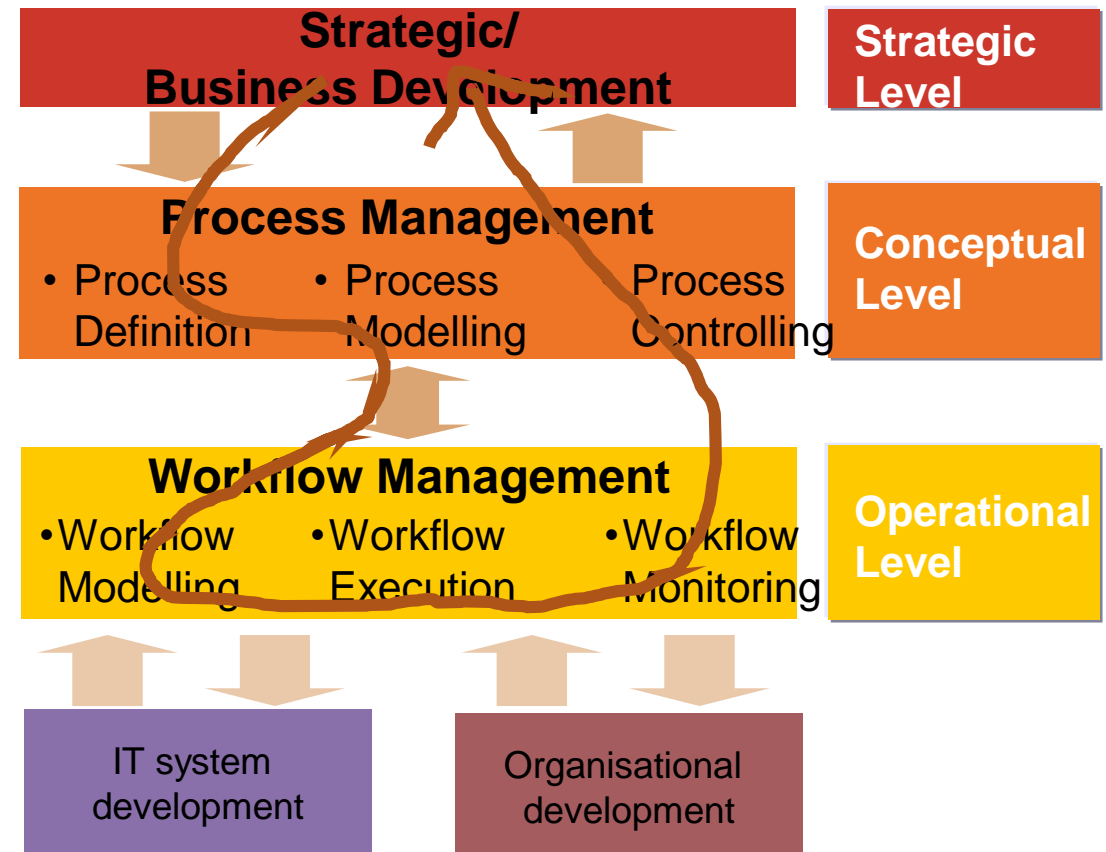


BPM Terminology Links



Agenda

- Foundations
- Business/Factual Level
 - Process modeling methods and tools
 - Analysis/Simulation
- Operational Level
 - Foundations Workflowmanagement
 - Methods and tools
 - Integrated platforms (e.g. camunda)
- Strategy Level: Digital processes
- Advanced
 - Business rules management
 - Service oriented architekture (SOA)
 - Cloud & Business-Process-as-a-Service
 - ...



Overview (preliminary)

Agenda by Week			Exercises
7.10.	1 Basics & Terminology	1 Basics & Terminology	Speech Topic Selection
14.10.	2 Business Process Modeling	2 Business Process Modeling	Business Process Modeling
21.10.	2 Advanced Modeling	2 Advanced Modeling	Advanced Modeling [E1]
28.10.	3 Process Analysis	3 Process Analysis	Process Analysis [E2]
05.11.	See Speech Preparation Feedback	See Speech Preparation Feedback	Speech Preparation
12.11.	4 Webservices Recap	4 Webservices Recap	Webservices
19.11.	5 Workflows/Process Execution	5 Workflows/Process Execution	Workflows/Process Execution [E3]
26.11.	5 Workflows/Process Execution	5 Workflows/Process Execution	Workflows/Process Execution
02.12.	Project Week	Project Week	Speech Preparation
09.12.	6 Business Rules Management	6 Business Rules Management	Business Rules Management [E4]
16.12.	7 Service Oriented Architecture	7 Service Oriented Architecture	Speech Preparation
23.12.	Your Speeches	Your Speeches	
12.1.	8 Digital Process Development	Wrap-up & Questions	
19.1.	8 Digital Process Development (Lab)	8 Digital Process Development (Lab)	Exam Preparation

Current Trends: integrated platforms – Camunda

Camunda Cockpit Processes Decisions Deployments Reports Demo Demo

Dashboard » Processes » Invoice Receipt

Information Filter

Definition Version:
2

Definition ID:
invoice:2:480d4031-054c-11e6-adb9-86658bdf3f07

Definition Key:
invoice

Definition Name:
Invoice Receipt

Tenant ID:
null

Semantic Version:
null

Deployment ID:
47fe731e-054c-11e6-adb9-86658bdf3f07

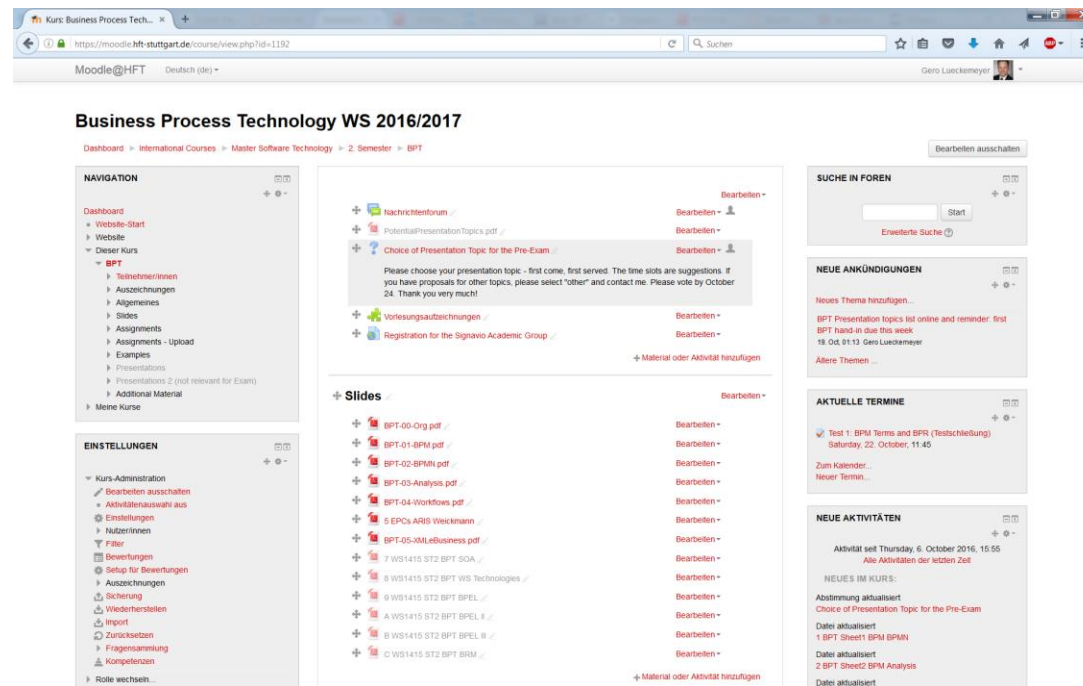
Instances Running:

- current version: 6
- all versions: 12

Process Instances Called Process Definitions Job Definitions

State	ID	Start Time	Business Key
●	912fae6a-175c-11e6-93dc-0242644791c7	2016-05-11T11:41:42	
●	915251ec-175c-11e6-93dc-0242644791c7	2016-05-06T11:41:42	
●	9139246d-175c-11e6-93dc-0242644791c7	2016-04-27T11:41:42	
●	496e086c-054c-11e6-adb9-86658bdf3f07	2016-04-18T11:59:48	
●	499e407e-054c-11e6-adb9-86658bdf3f07	2016-04-13T11:59:49	
●	497b27ef-054c-11e6-adb9-86658bdf3f07	2016-04-04T11:59:48	

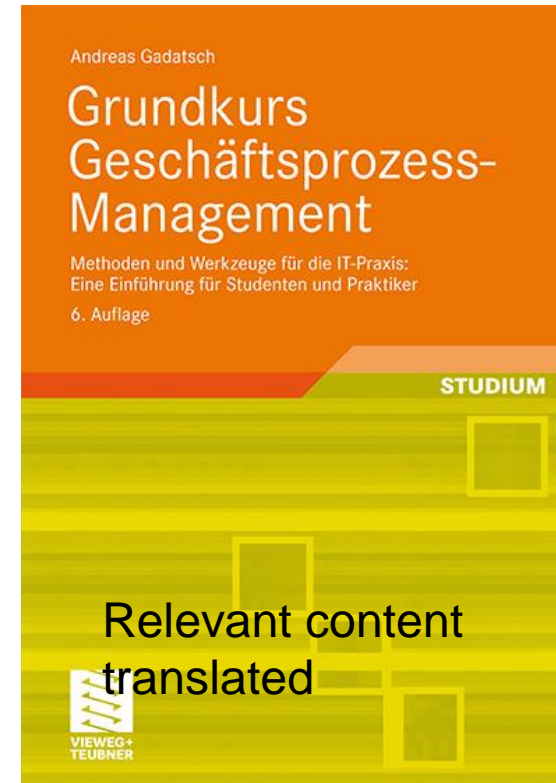
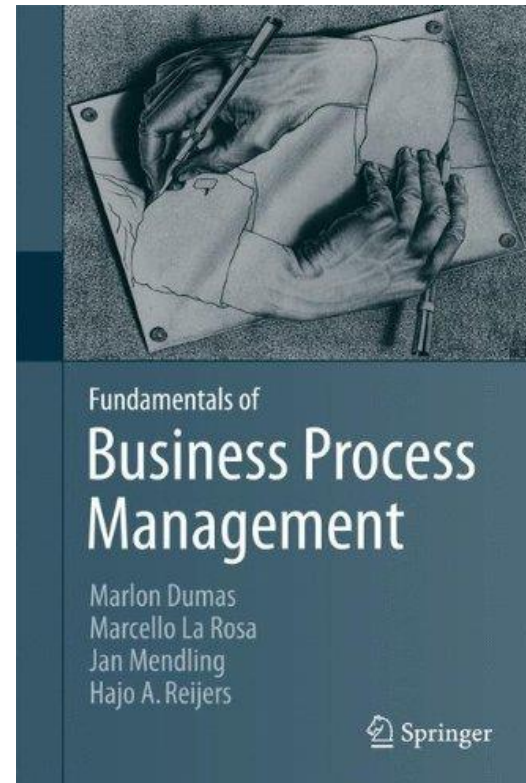
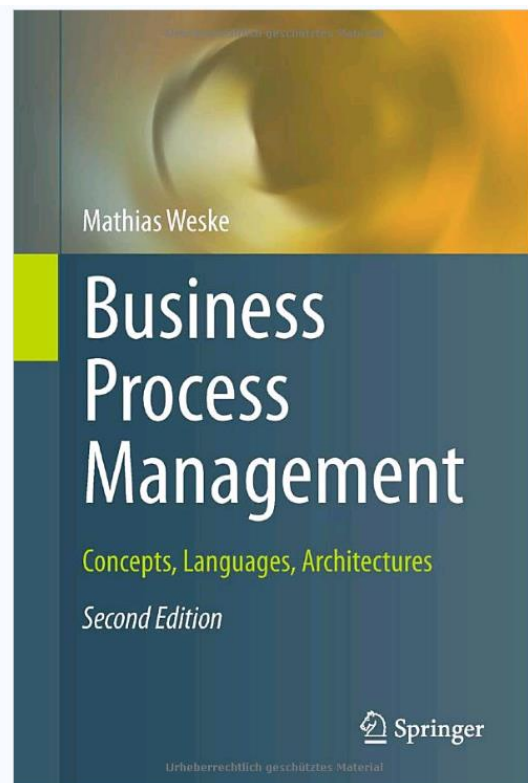
Module site



■ <http://moodle.hft-stuttgart.de/course/view.php?id=1192>

■ Self-enrolment necessary!

Literature



To be updated with specific material for future topics...

Thank you

For your attention!