Business Architecure (cont.)

Knut Hinkelmann

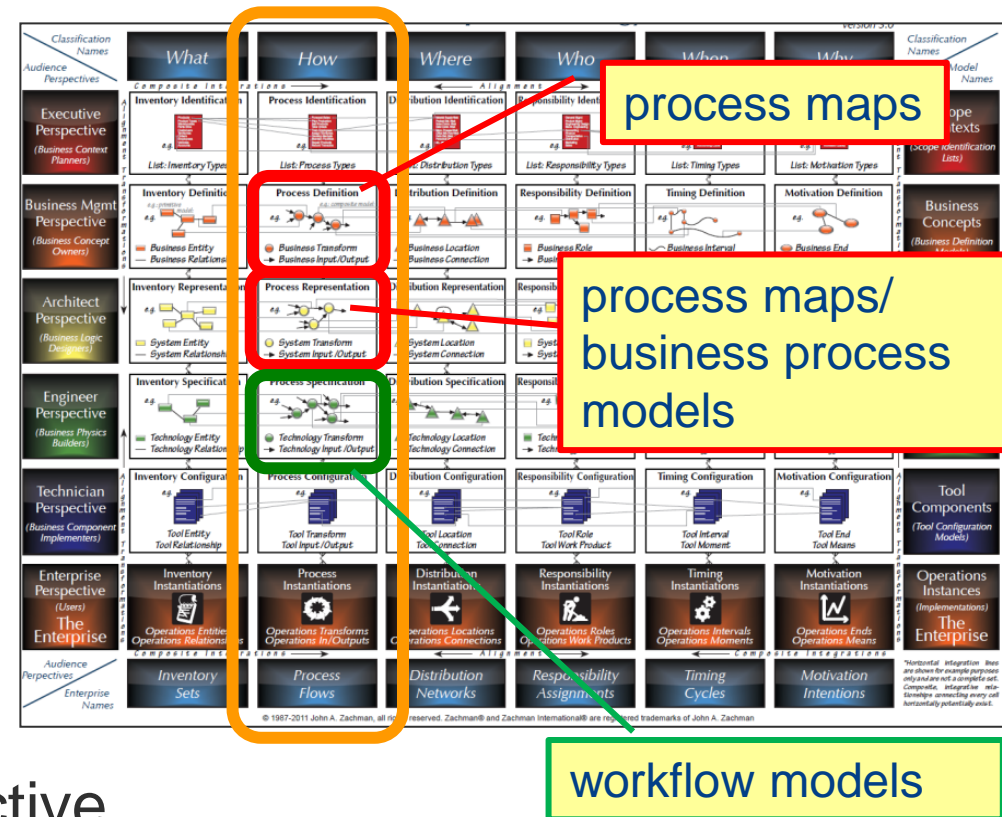# The Business Process Perspective on Enterprise Architecture

- From the *business process perspective*, enterprise architecture achieves enterprise integration through

  - ♦ capturing and describing processes, strategies, organisation structures, information and material flow, resources etc.

  - ♦ concentration on how to perform core business processes in an organisation

  - ♦ considering the information and material flow in the entire process

- In this sense, business process management (BPM) relies on enterprise architecture

(Bernus et al. 2003, p. 9f)

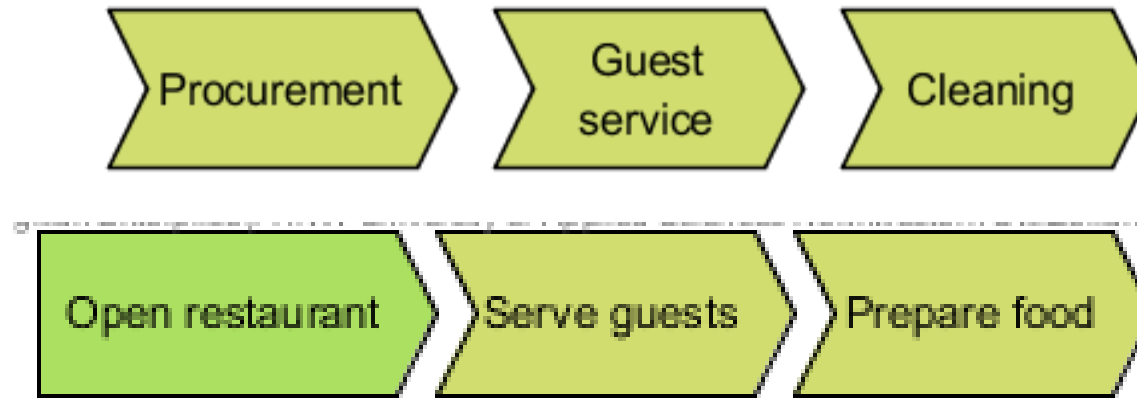# Zachman Framework: Business Processes in different Perspectives

■ Vertical Relationships relate the business process represented in the different perspectives

♦ A "process map" is an overview of the enterprise's business processes linking them to the value chain

♦ A "business process model" is a process diagramm from the business perspective.

♦ A "workflow model" or "process implementation" represents the process from the IT perspective

process maps

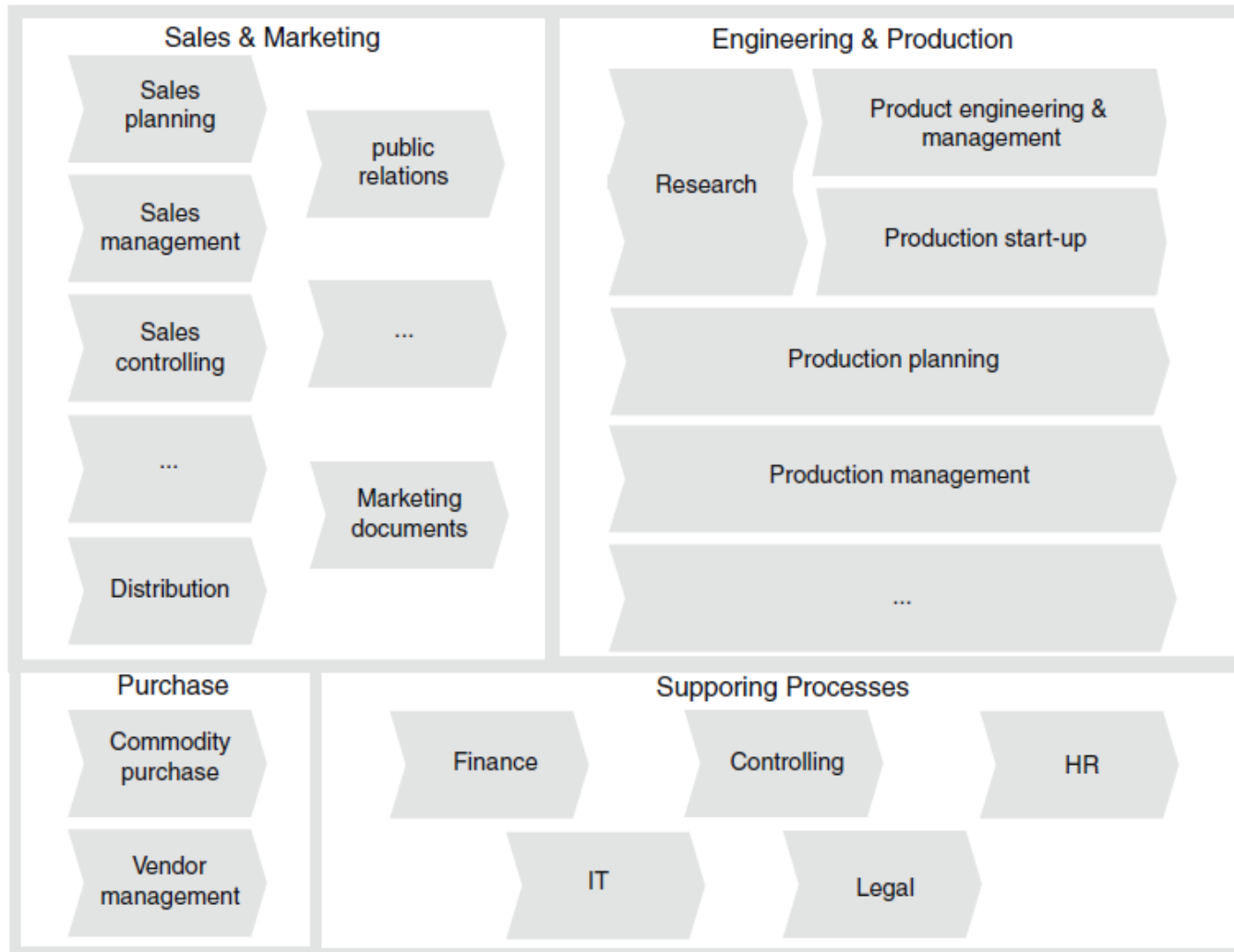process maps/ business process models

workflow models

The Workflow Management Coalition defines "workflow" as the automation of a business process

Process Maps

- Process maps give an overview of the business processes on a high level of abstraction

- Each element of a process maps represents a business process

- Process maps represent relationships between processes

  - ♦ grouping processes

  - ♦ logical ordering (e.g. procurement → production → sales)

- But: process maps do not represent control flow, i.e. a predecessor does not necessarily trigger ist successor

Example of a Process Map

- This example represents a process map as a cluster diagram.

- Business processes on the value-chain level create the "umbrella" clusters, each of which contains a set of sub-processes.

- For example, the sub-process "sales planning" is assigned to its parent process, "sales and marketing".
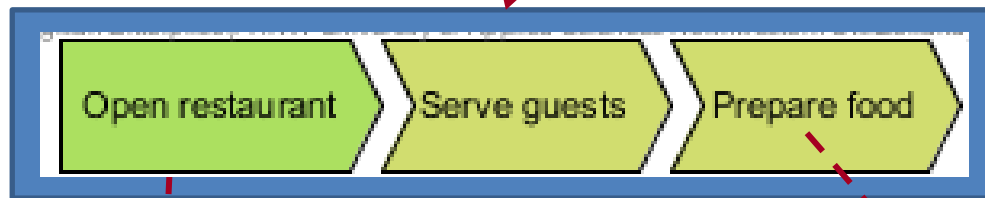
(Hanschke 2010, p. 75)

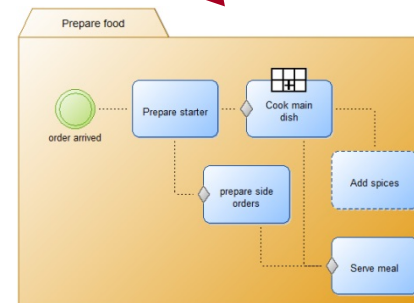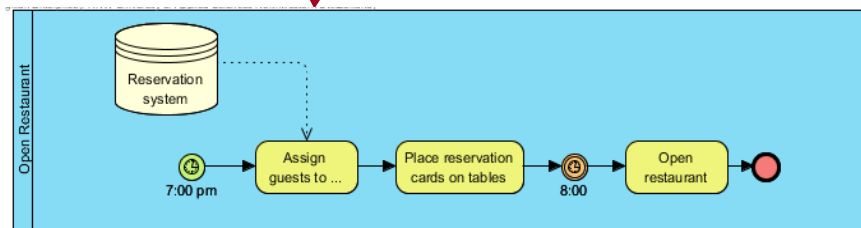# Hierarchical Process Maps

Level 1: Process map

Level 2: Process maps

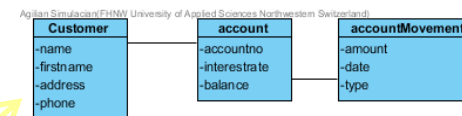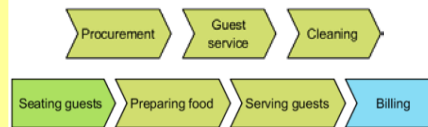Level 3: Business processes

- Process maps can be organized hierarchically. An element either represents
  - ♦ another set of processes (i.e. a process map)
  - ♦ a business process (e.g. in BPMN)

Business Processes and Their Context

References in BPMN

- Process models represent the flow of work.
- Processes are related to other aspects of business
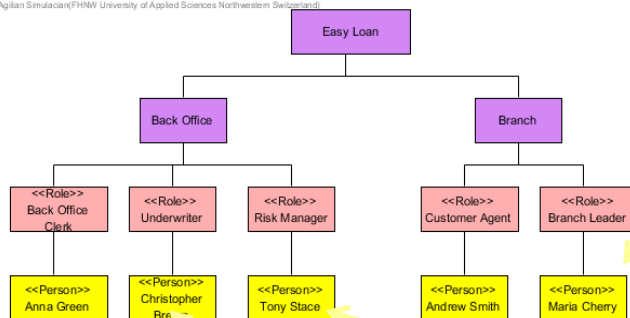- These are represented by references to other models.

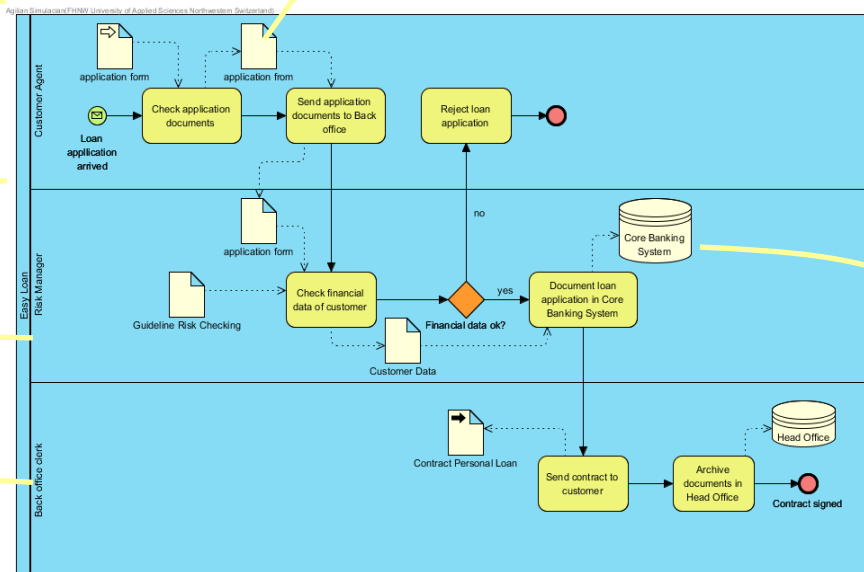*An element in a process map corresponds to a process diagramm*

Data Objects can refer to
- *data models*
- *document models*

Data stores may refer to applications

Lanes refer to elements in an organisation model

Relationships from and to Business Process Diagrams

There are two kinds of relations from/to BPMN

■ Relations **to process models** as a whole from

   ♦ Process maps

   ♦ Business motivations

■ Relations **from process model elements** to elements in other models

   ♦ data objects in document models and data models

   ♦ organisation units or roles in organisation models

   ♦ products in product models

   ♦ applications and application services in IT models

   ♦ business rules

References in BPMN

There are two important references from BPMN

- Data objects can represent different kinds of data
  - ♦ Structured data
  - ♦ Documents
  - ♦ Data store (applications)

- Lanes and pools represent organisational elements
  - ♦ Organisation units
  - ♦ Roles
  - ♦ People

Data and organisation are modeled in their own models; their elements can be referenced from BPMN