

Modeling Business Architecture

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Business Architecture

Business Architecture

Data
Architecture

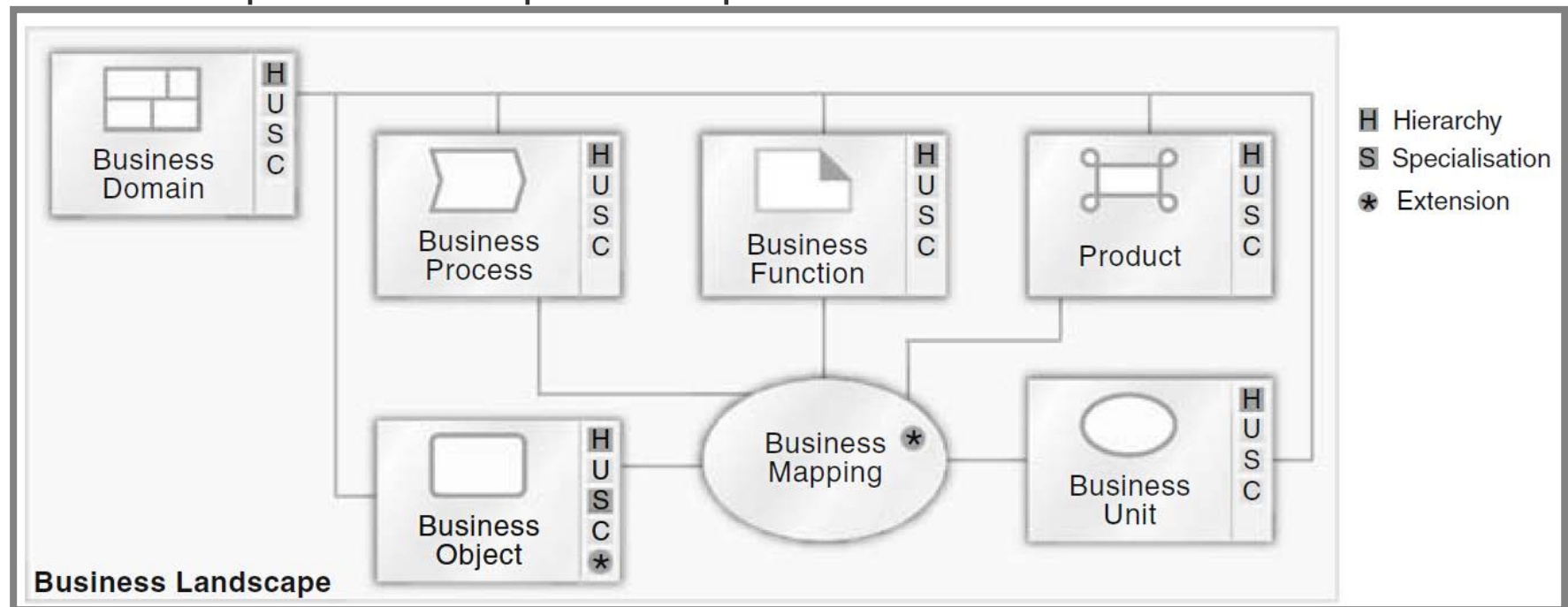
Application
Architecture

Technology Architecture



Metamodel of a Business Landscape

- All the building blocks in the business architecture model can be linked by means of relationships, e.g. business object can be assigned to the business processes, which handle it
- Further details can be given, e.g. whether a business object is used in the business process as input or output.



(Hanschke 2010, p 91)

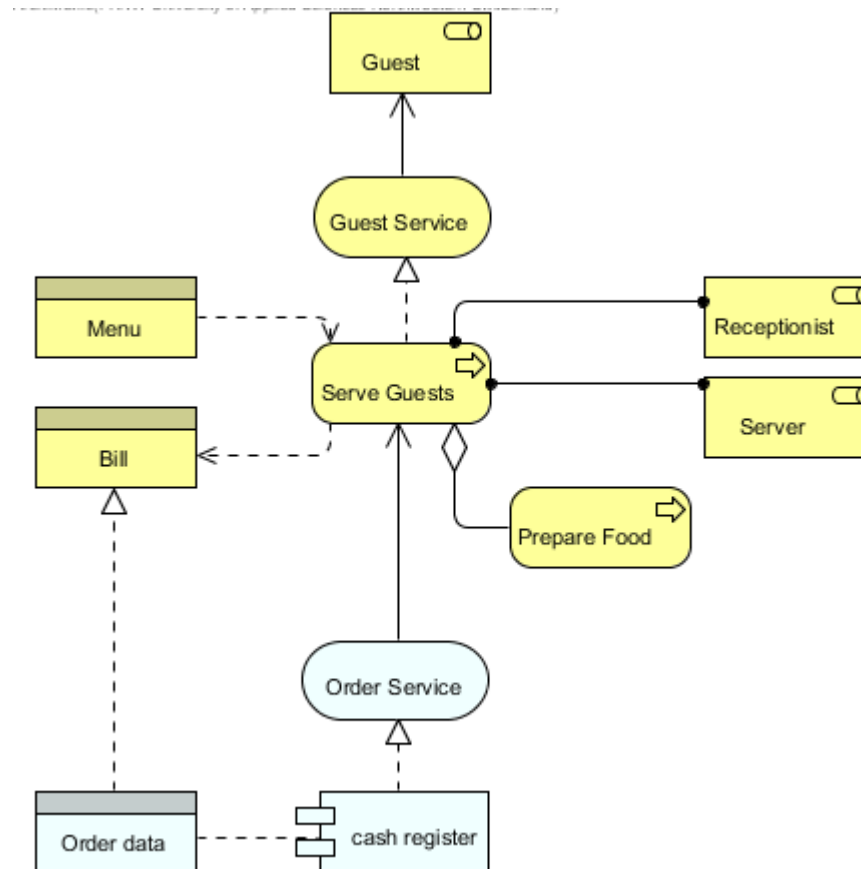
Representing Relationships

- The following types of diagrams are particularly appropriate for mapping between building blocks
 - ◆ **Business Conceptual Model:** References between business objects (e.g. business objects as input/output for processes – see ArchiMate)
 - ◆ **Business cluster diagrams** for presenting hierarchical structures (e.g. process maps)
 - ◆ **Mapping tables** present functional dependencies between two building blocks
 - ◆ **Landscape diagrams** representing dependencies between building blocks

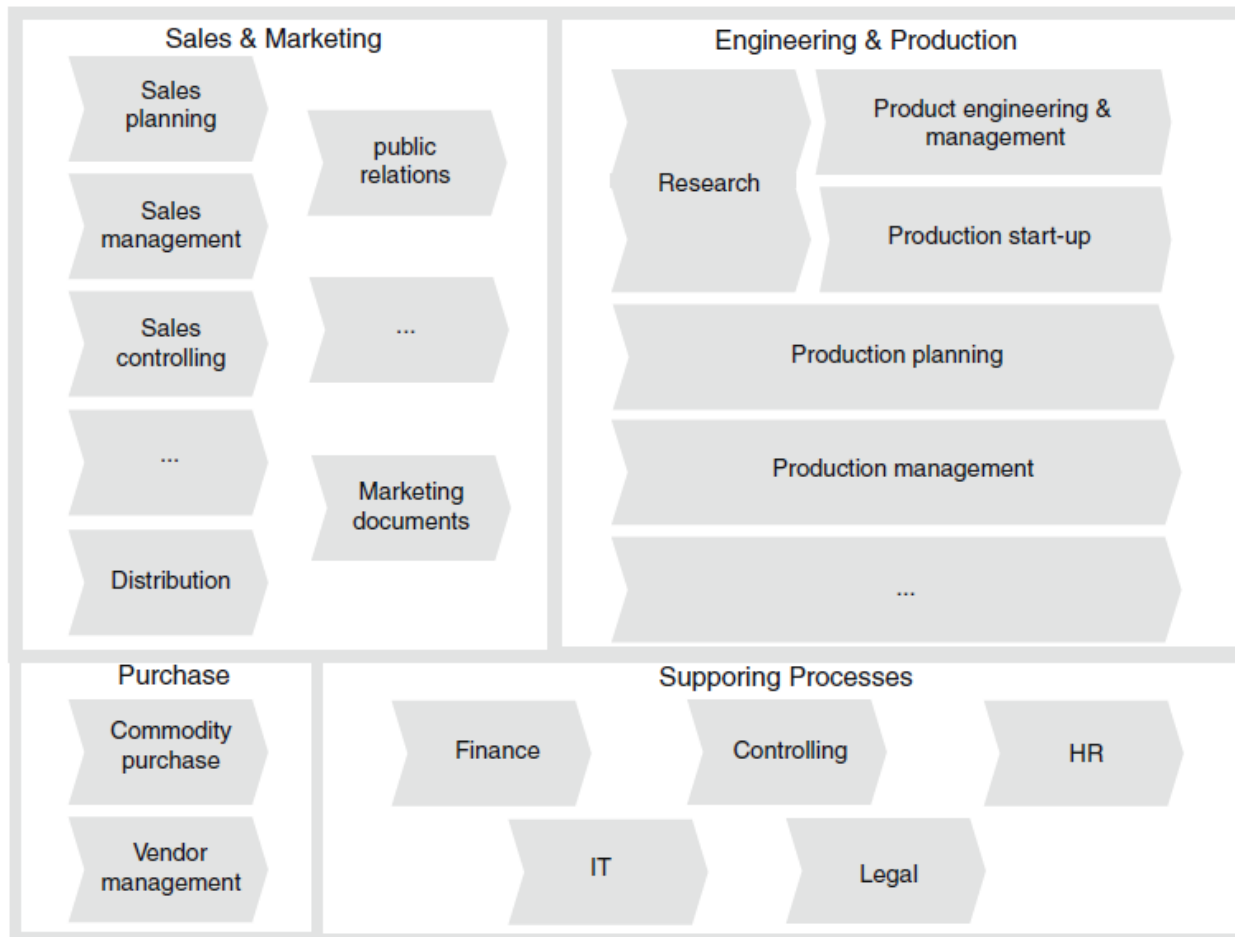
(Hanschke 2010, p. 71f)

Relationships on Architecture Level

Conceptual Relationships



Business Cluster Diagram: Process Map



- This example represents a process map as a cluster diagram.
- Business processes on the value-chain level create the “umbrella” clusters.
- For example, the process “sales planning” is assigned to its parent process cluster “sales and marketing”.

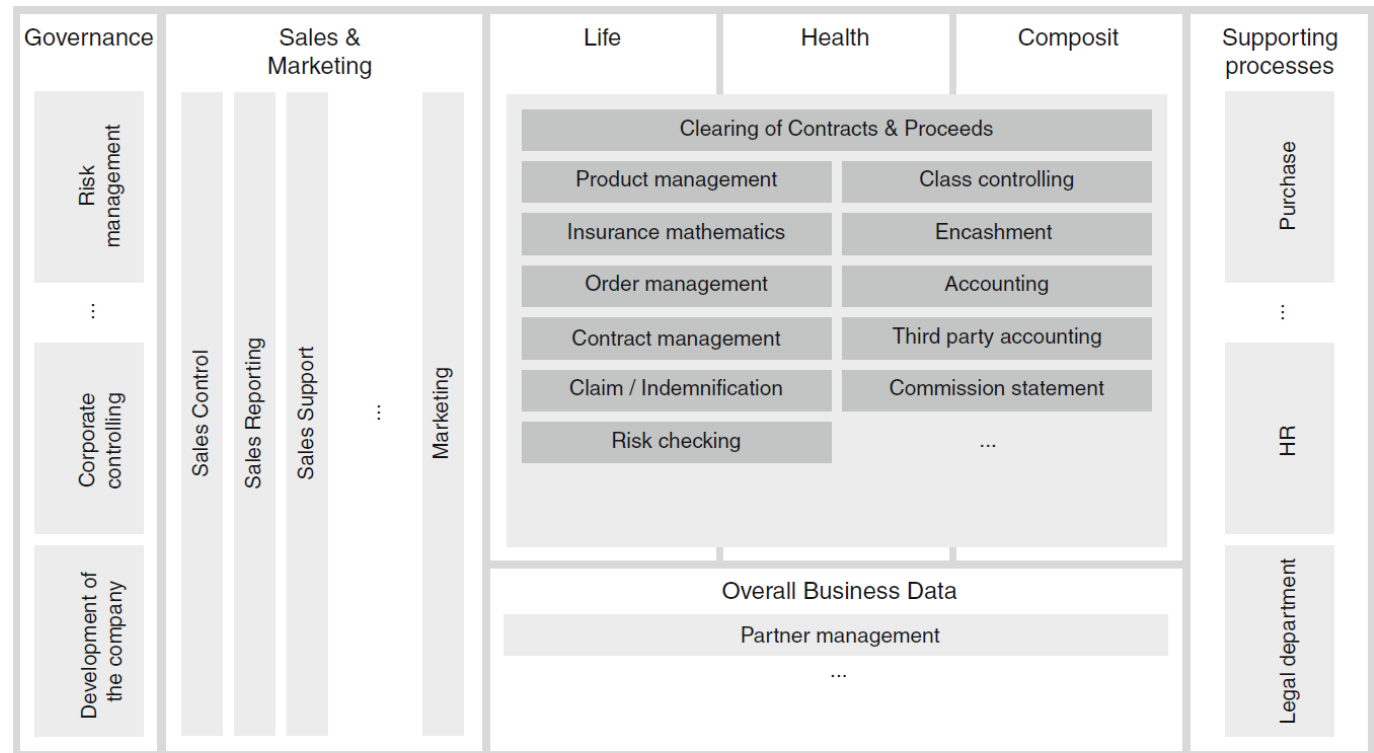
(Hanschke 2010, p. 75)



Business Reference Models

- A business reference model gives recommendations for structuring business processes or functions
- They are a kind of landscape diagram.

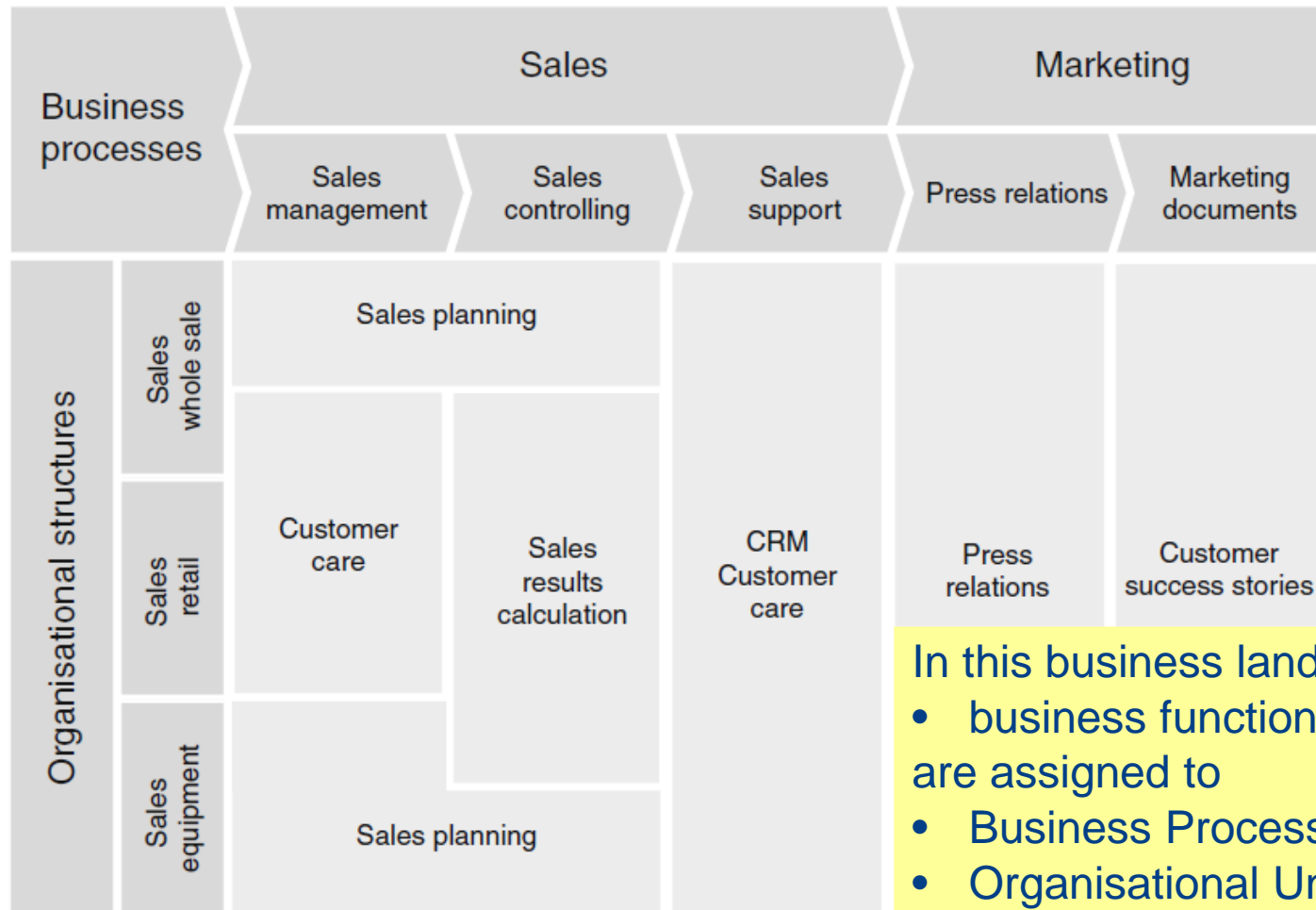
Example:
Reference model from
the insurance industry

Here products and core
business processes are
used as the overarching
structural criteria



Legend:  Functional cluster  Business Functions

Example: Business Landscape Diagramm



- In this business landscape diagramm
- business functions (cells of the matrix) are assigned to
 - Business Processes (x-axis))
 - Organisational Units (y-axis)

Representing Relationships with a Mapping Table

This mapping table assigns business objects to business processes.
 The mnemonic “CRUD” summarises the ways in which business objects are used in business processes

		Business processes				
		Disposition	Production management	Factory planning	Resource planning	...
		BP1	BP2	BP3	BP4	...
Business objects						
Sales order	BO1	R				
Production order	BO2	CUD	CUD	R		
Factory order	BO3			CUD	R	
Stock location	BO4	R	R	R		
Goods receipt doc.	BO5			R		
Storekeeper	BO6				R	
...	...					

CUD Create, Update, Delete

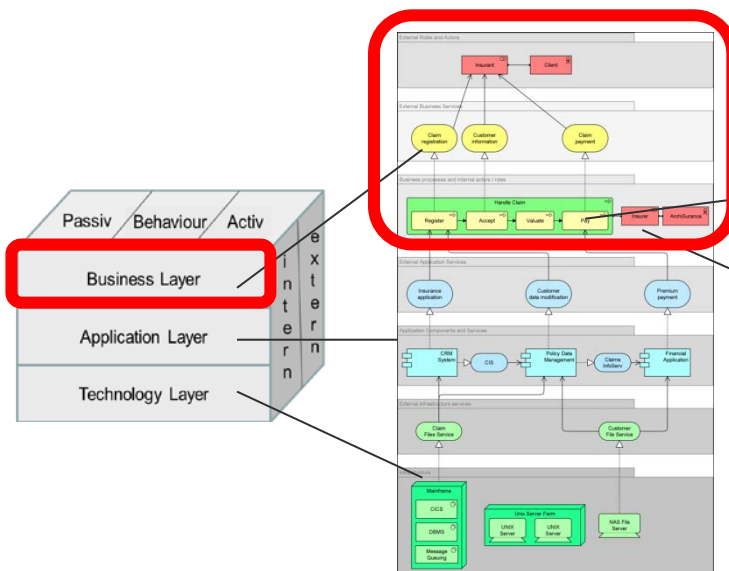
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Model Kinds for Detailed Modeling

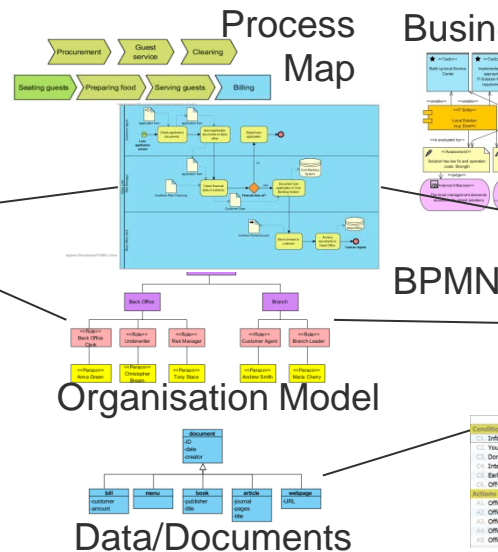
Modeling Details of the Business Architecture

- Specific aspects of an architecture can be modeled in more detail using specific model types (e.g. process models, data model, organisation models)
- Detail models can
 - ◆ represent details of elements in an ArchiMate model
 - ◆ be related to the cells of the Zachman Framework

Overview: ArchiMate



Detailed Models

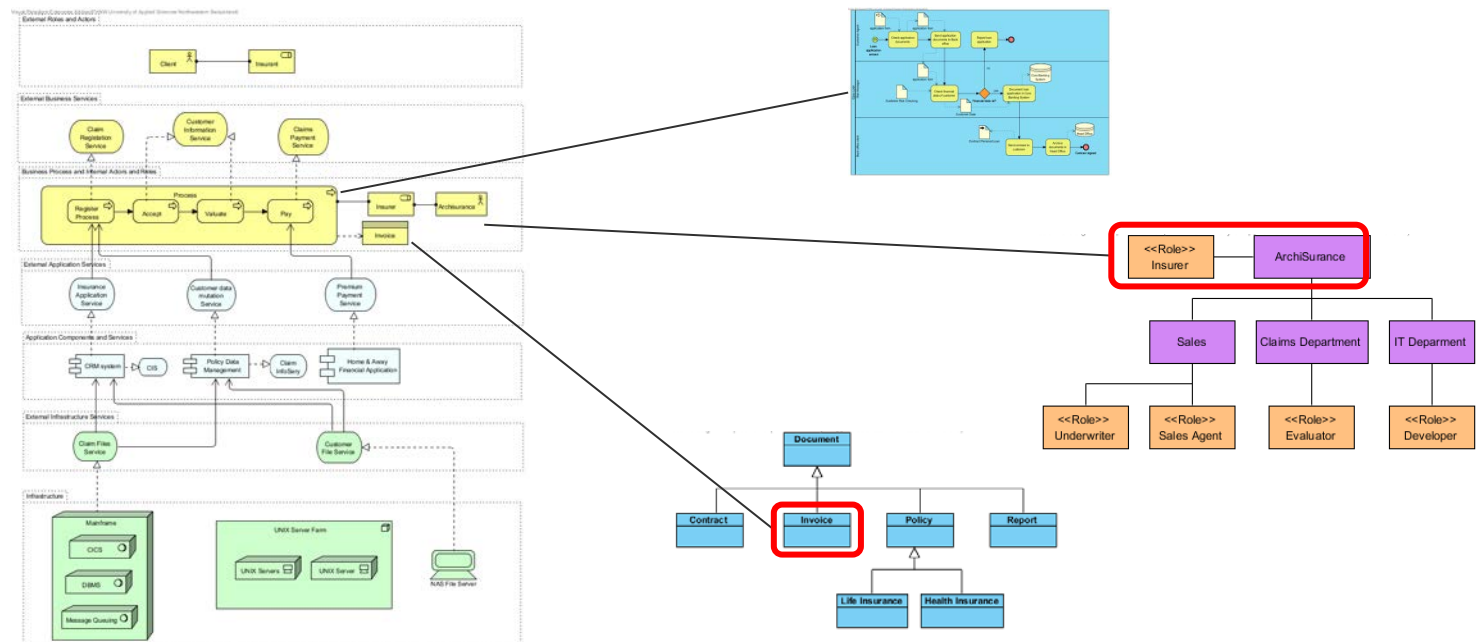


Overview: Zachman



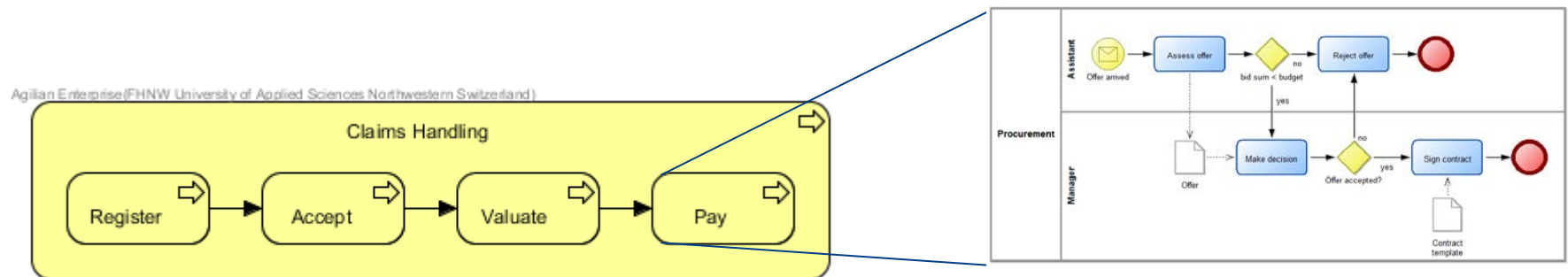
Referencing Detail Models from ArchiMate

- ArchiMate represents an overall architecture
- Elements in an ArchiMate model can be modeled more detailed in a separate model (e.g. modeling conditional flows and events of a business process in BPMN)
- Detail models can show the context of business architecture elements (e.g. actors and roles are part of an organisation model, business objects are part of a data model)



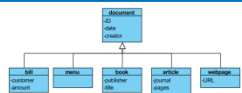
Business Process Models and ArchiMate

- An ArchiMate Model is an overall representation of an Enterprise Architecture
- To model details of elements (e.g. conditional flows and events of a process) one can use specific models
- Example: Modeling the flow of a process in BPMN

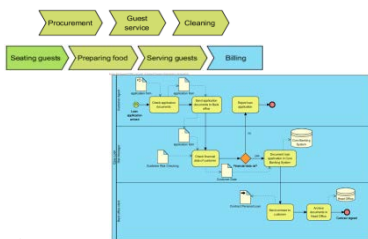


Referencing Detail Models from the Business Perspective of the Zachman Framework

data models



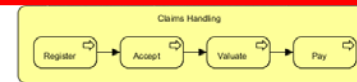
business process models



process maps



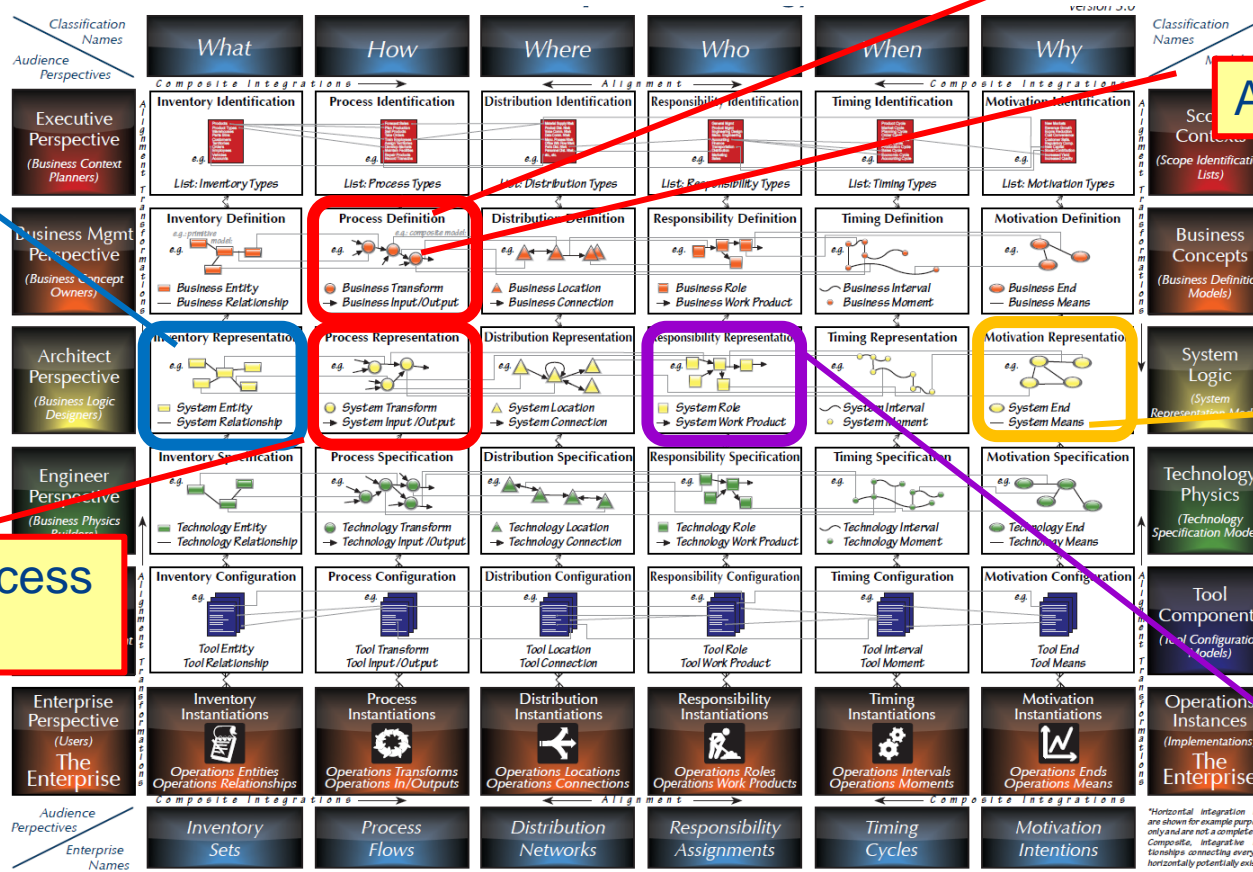
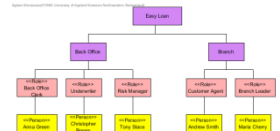
ArchiMate overview



business motivation models



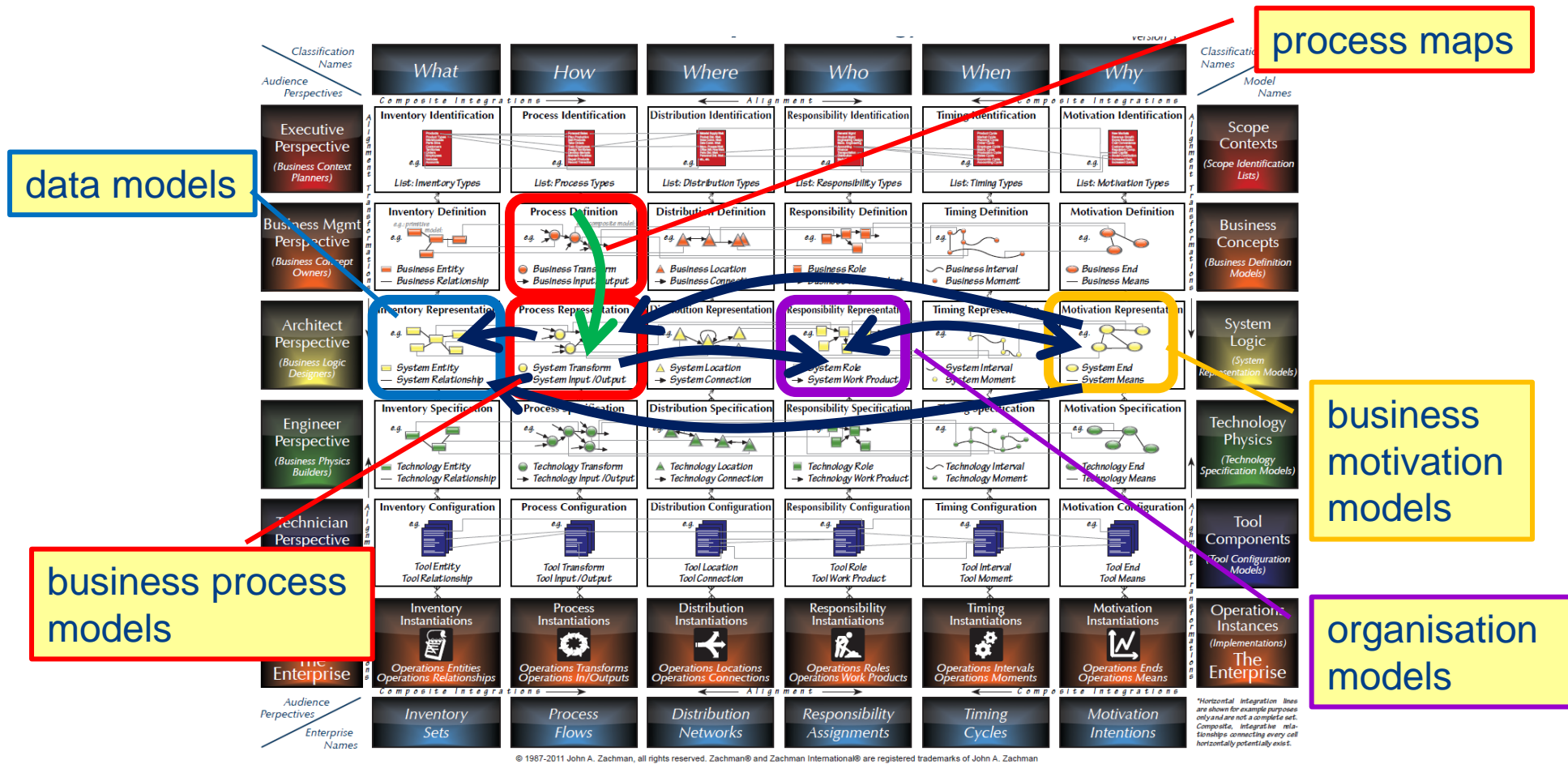
organisation models



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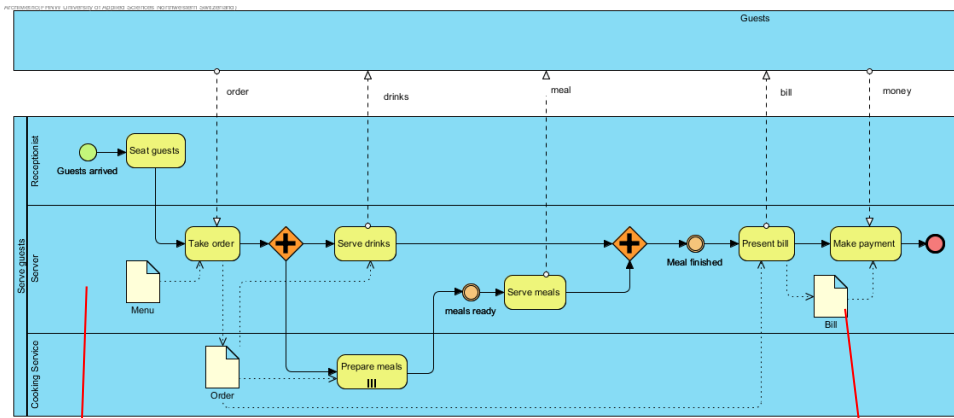


Horizontal Relations between Processes and other Aspects on the Business Perspective



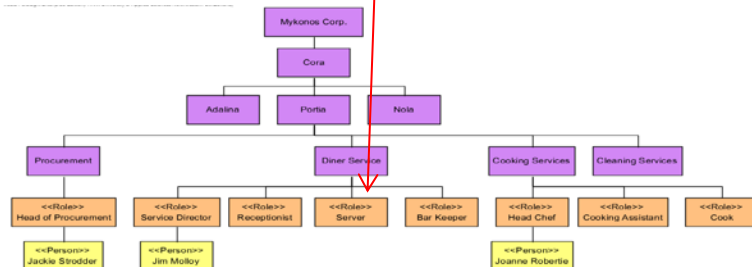
Relations between Models and Model Elements of different Abstractions

Relationships can also be represented on detailed level via references/links



BPMN models flow relations between activities and events

Lanes refer to elements in an organisational model



Data objects are linked to elements in the data model or document model

