

# Business Modeling

Prof. Dr. Knut Hinkelmann





### Literature

This chapter is short summary of the following literature:

- Bridgeland David M.; Zahavi, Ron (2009): Business Modeling
  - A Practical Guide to Realizing Business Value. Morgan Kaufman Publishers. Chapters 1 and 2

## Why Business Modeling

- Business and IT Alignment
- Business Transformation
- Managing Change
- Managing Complexity



### Business Value of Business Models

- Communication between people
- Training and Learning
- Persuasion and selling
- Analysis of a business situation
- Compliance Management
- Development of Software requirements
- Direct execution in software engines
- **Knowledge Management**

## Modeling Fundamentals

- «All models are wrong. Some models are useful» (George E. P. Box)
- To kinds of Model Fidelity
  - ◆ The fidelity of models is a measure how closely the model approximates the real world
  - ♦ The higher the fidelity the «less wrong» is a model
- Model Validity
  - ♦ A model is valid if it meets all the constraints (semantical correctness)
  - Validity is a property of the model itself





## Complexity Size of Models

- If a model is too big (has too many model elements and associations) it is hardly to be comprehended
- Reduction of complexity:
  - Viewpoints/views reduce complexity of a model (cp. ArchiMate)
  - Separation of concerns separate complexity by
    - modeling specific aspects/perspectives in separate models
    - relations between elements of different models

(cp. Zachman, Best Practice, ARIS, plugIT etc.)





### Attractiveness of models

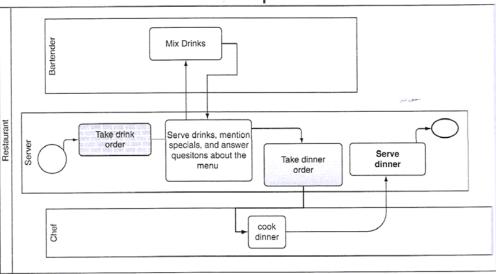
- Arrange the modeling elements in a way that is visually appealing
  - aligning elements in position, size
  - follow a prefered modelling direction (e.g. model process flow either left-to-right oder top-to-bottom)
  - use clear color scheme
- Consistence in labeling: Naming conventions
  - ◆ Use consistent names for the some objects in different models
  - Use naming conventions (e.g. name activities with a verb and an object/resource like «check reservation»).



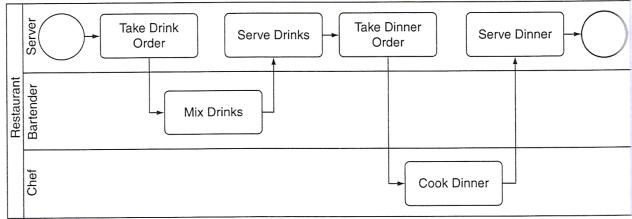


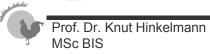
### Attractiveness of Models

#### Non-attractive business process model



### Attractive business process model





(Bridgeland and Zahavi 2009, pp. 27ff)



## Modeling Diagrams

- Any model element should have
  - a name
  - a description
  - ♦ (specific) attributes
- Descriptions allow names to be short, so model elements can be easily referenced
- Graphical representation should have specific appearance
  - specific form, color, marker, etc.
  - not only standard forms (like rectangle, circle)



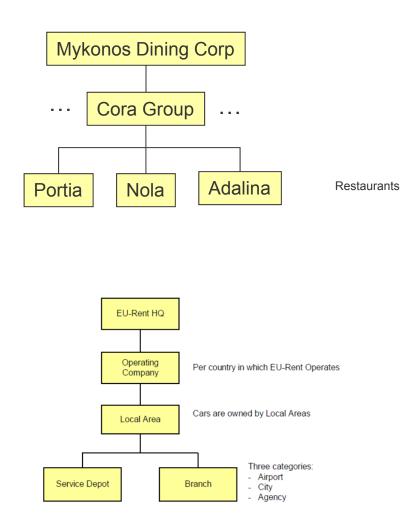


## Business Model Disciplines

- We will have a more detailed look on different business modeling disciplines
  - Business Motivation Modeling
  - Business Process Modeling
    - Relations to IT, data, organisation, products
  - Business Rules Modeling
- These business models cover important aspects of an enterprise architecture



## Example Enterprises



The modeling of Business Motivation Model, Business Rules and Business Process are explained with examples from two enterprises.

#### Mykonos Dining Corp. and Cora Group

- Mykonos Dining Corp. is a company which acquired Cora Group, a company which owns several restaurants in Washington DC.
- ♦ Cora's flagship restaurants is *Portia* which has the mission of cooking meals fresh.
- Nola is another restaurant of Cora Group that just opened.
- A third restaurant in the Cora Group is Adalina, a fairly new restaurant with only eight tables.

#### **EU-Rent**

*EU-Rent* is a world-wide operating car rental company. Customers are individuals or companies. Different models of car are offered, organized into groups.