BPMN and Business Architecture from a Business Analysts View

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About me

I’m a speaker, writer, coach, teacher, business analyst, CBPP, ...
Standards for Enterprise Models

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How we look on BPMN today ...

- Elements provided by the standard
- BPMN as the “universal" process language
- Discussion about a „better BPMN“
- Discussion often dominated by „Gurus“
- How do we learn and adopt a notation?
Posters and Books – Are they helpful?
Before you learn and use a notation ask yourself

Who will use my models?
How we adopt a notation

The problem of unwanted learning:

• How do we learn?
  (Tomato soup example by Prof. Dueck)
• How are standard notations taught and adopted in practice?
  – BPMN Certification Programs
  – Notation Books
  – …

A notation is needed to present content, but the content defines which notation and which elements we need.
Start from the correct end!

First decide which **content**
you want to show for your target audience!

Then ask about which notation and elements to use.
What is the content of a BP Model?

• What is a Business Process?
  – What are the essential characteristics of a Business Process?

• Which views on a Business Process are of interest?
  – Logical flow of activities
  – Communication between participants
  – Responsibility for Activities
  – ...

• Which views does BPMN address?
Process Models and BPMN

• Which elements do we need?
  – Process Participants/Roles

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– Business Events

"Catching"

- Message
- Timer
- Error
- Conditional

"Throwing"
Process Models and BPMN

- Which elements do we need?
  - Activities
    - Perform Customs Procedure
    - Record Shipment Information
  - Business Objects
    - Delivery Note
Process Models and BPMN

- A process models shows all possible instances of the process. We need to show
  - Alternative Scenarios
  - Optional Scenarios
  - Parallel Scenarios
Process Models and BPMN

- Misunderstood elements: Sequence Flow

- A Sequence Flow is not a Control Flow.
- Control Flow $\equiv$ Sequence Flow + other conditions

- What is needed in addition to describe the Control Flow?
# BPMN 2.0 for Business Analysts

"The OTHER Poster"

## Events

- **Start Events**
  - Start Event
  - Message Start Event
  - Timer Start Event

- **Intermediate Events**
  - Boundary Event
  - Intermediate Catching Event
  - Message Intermediate Catching Event
  - Timer Intermediate Catching Event

- **End Events**
  - Boundary End Event
  - Cancel Event
  - Terminate Event

## Basic BPMN 2.0 Elements

### Task Types

- Task
- Manual Task

## General Process Patterns - Examples

**Follow Up:**
- **Start Description:**
  - An information or an object is requested from another participant. A due date is set.
  - The process continues its normal flow if the information is received in time.
  - This case is aborted if the requested information or object is not received before the due date.

## BPMN 2.0 - Business Process Model and Notation

### Aktivitäten

- Conversation Diagrams
- Collaboration Diagrams

### Ereignisse

- Boundary Events
- Intermediate Events

### Daten

- Data Objects
- Collections of Data Objects

## Communication within Business Processes / Message Flow
Business Process Modeling

- Process Pattern improve model acceptance.
A model is more than a picture! Part 1

• Model elements need to be described in detail.

• Which details are of interest for an Activity?
  – Is the Activity executed repeatedly?
  – Is the Activity automated or supported by an IT system?
  – IGOE (Input/Output, Guidelines, Enablers)
  – Cost
  – Resources
  – ...
Sometimes BPMN doesn`t help ...

• BPMN is no panacea.
• What we really miss in BPMN:
  – Activities executed by multiple participants („Four-Hand-Assembly“)
  – ?

• Look for other notations if
  – Flow is not important at all (Case Management)
  – Your primary interest are the details of the single activities.
Why to think about Business Architecture?

Complexity is the enemy (in developing and maintaining business processes and models).

Is it?
Complexity in Business Models

• Our processes and enterprises are complex.
• Complexity is good!
  – Stability
  – Flexibility
• Complexity is bad for our brain ...

We can’t avoid complexity – we have to manage it!
Architecture, Method, Process, Tools

- **Tools**: support Process, Method, Architecture
- **Process**: application of the method in projects
- **Method**: planned step-by-step-procedure
- **Architecture**: set of descriptive representations

Source: I. Jacobson, Object-Oriented Software Engineering „A Rational Enterprise Philosophy“
The Zachman Framework for EA

Source: Zachman International™
www.zachman.com
You need a Business Architecture:

To decide which content you need to show

To manage complexity
A model is more than a picture! Part 2

- Model elements are linked to other models and model elements:
  - To refine elements (Process Decomposition)
  - To connect to other views (e.g. Business Rules, Organizational Chart)
  - To show logical connections between elements
Views on Business Processes

• We use different models to show different aspects of a Business Process:
  – **View Scope**: Process Map, Structure View
  – **View Flow**: What is the order of activities? BPMN Models
  – **View Process Execution**:
    - **Workflow Control**: BPMN Models
    - **System Support for Business Tasks**: Use-Case-Models
  – **View Responsibilities**: RACI-Charts
  – **View Communication**: Choreography and Communication Model
  – **View Guidance**: Business Rules and Business Logic
Business Process Modeling

- We follow a top-down approach.

- **Structural View**

- **Management View**
  - General understanding of the process.
  - Mid-Level Management.

- **Execution View**

- **Scope**
  - Structure the End-to-End Process
  - Top-Level Management

- **Management View**
  - General understanding of the process
  - Mid-Level Management

- **Workers View**
  - Detail level description of the process for the operator
Business Process Modeling

- We follow a top-down approach.

- Structural View
- Management View
- Execution View

- No BPMN
- Limited use of BPMN elements from Analytical Conformance Level
- Use of BPMN Analytical Conformance Level
The only slide you need ...

- Start with the content in mind.

- Business Architecture defines the context for your models.

- Manage Complexity using a Business Architecture.

- A well defined method and process is needed.
Thank You!

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