How to adopt an integrated model based approach for Business and IT

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About me

I’m a speaker, consultant, advisor, coach, writer, teacher, CBPP, TOGAF Level2 Certified, …

Engineer
Why do we model?

„If you can’t describe it, you can’t build it“.  

John A. Zachman

Understand – Trace – Maintain
## Standards for Enterprise Models

<table>
<thead>
<tr>
<th>Business Scope</th>
<th>BPDM</th>
<th>BPMM</th>
<th>BM</th>
<th>VDM</th>
<th>SBVR</th>
<th>DMN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Concepts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Logic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Component Assemblies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How many notations do we need?

• “Every type of model, ..., has strengths and weaknesses. As a result each model type is appropriate for certain uses. Effective modelers have a large number of model types in their intellectual toolkit and thereby have a greater chance of using the right technique for the situation that they face.”

Scott Ambler on LinkedIn
How notations are often adopted

Learn – Apply – Learn more

The phenomenon of “unwanted learning”
The “hammer-and-nail effect”
What is a model good for?

System Model versus Business Model

The main purpose of most models is communication between *humans*. 
BPMN 2.0 for Business Analysts

"The OTHER Poster"

Content and Symbols Used

Participants and Roles / Pools and Lanes

Business Events

Activities / Sub-Process and Task

Describe Process Flow / Sequence Flow

Describe Process Scenarios / Gateways

Information and Objects / Data Objects

Communication within Business Processes / Message Flow

A Short Explanation

Participants and Roles - Pool and Lane
- A lane is a horizontal element in a BPMN diagram. It represents a role. A role is a person, group, or external system that is involved in a process.
- A pool is a vertical element in a BPMN diagram. It represents a participant. A participant is an agent that can start, carry out, and complete activities.

Business Events
- Events represent changes in the environment that trigger business processes. They can be of three types: start event, intermediate event, and end event.
- Start events trigger the commencement of a process. Intermediate events can be used to represent things like approval or rejection. End events mark the completion of a process.

Business Activities - Sub-Process and Task
- Sub-processes are used for more granular level of representation. They are used to represent a set of activities that are performed as a single entity.
- Tasks are the smallest unit of BPMN where a human or system is involved in the process.

Flow of Activities - Sequence Flow
- The sequence flow shows the logical order of activities within a process.
- The sequence flow can be connected with other types of process flows.

Process Scenarios - Gateways
- Gateways are used to direct the flow of processes.

Information and Objects - DataObjects
- Data objects carry the values that are exchanged within the process.

Communication within a Business Process - Message Flow
- Message flows represent the passage of information between participants or between a participant and a pool.
Architecture, Method, Process, Tools

- Tools: support Process, Method, Architecture
- Process: application of the method in projects
- Architecture: set of descriptive representations

Source: I. Jacobson, Object-Oriented Software Engineering
Architecture

“If you can't explain it simply, you don't understand it well enough.”

Albert Einstein

Avoid or Manage Complexity?

A model doesn‘t reduce complexity, it‘s just not showing the complexity.

Models – Viewpoints – Views
Method

„You don’t need a method if you have enough time.“

The method describes planned step-by-step procedures to create and implement the architecture.
Process

"Take what is good, compose it with something new, and don't throw away the baby with the bath water."

Ivar Jacobson

Process is the scaling up of the method so that it can be applied to projects. A process coordinates interacting activities and parties.
BTW: What is a model?

• **model** (*plural models*)
  1. A person who serves as a subject for artwork or fashion, usually in the medium of photography but also for painting or drawing.
  2. ...
  3. A simplified representation (usually mathematical) used to explain the workings of a real world system or event. *The computer weather model did not correctly predict the path of the hurricane.*
  4. ...
  5. The structural design of a complex system. *The team developed a sound business model.*
  6. A praiseworthy example to be copied, with or without modifications. *British parliamentary democracy was seen as a model for other countries to follow.*
  7. ...

BTW: What is a model?

A model is an abstract presentation of an subject of interest.

Model Elements: Primitives
Single Variable Models: Primitive Models
Connect Models: Complex Models
A Model is much more than a Picture.
Model ≠ Model Output
The Zachman Framework for EA

Source: Zachman International™
www.zachman.com
The Zachman Enterprise Framework™

Level of Detail

Change of Perspective
Model Views and Model Output
Define your architecture

• Specify Model Output

• Select Primitives
• Specify Single-Variable Models
• Specify Relations between Model Elements and Models

• Specify Viewpoints and Views
Build your method

• Adopt working techniques to create and implement the architecture.

• Think about needed Roles:
  – We need specialization.
Build your project team

- Tool Specialist
- Project Manager
- Business Analyst, Subject Matter Expert, System Designer, Requirements Engineer, ...

Source: I. Jacobson, Object-Oriented Software Engineering

Build your project team

- Tool Specialist
- Project Manager
- Method Team
- Business Analyst, Subject Matter Expert, System Designer, Requirements Engineer, ...

Source: I. Jacobson, Object-Oriented Software Engineering
The only slide you need ...

Standard Notations are great.

Content first: You need an architecture.

Be systematic: Define a method to create your architecture.

Apply it to the real world: Build your team!
Thank You!

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