

SPARX GLOBAL

ENTERPRISE ARCHITECT 15

How to Succeed *with your* Modelling Approach

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SPARX SYSTEMS

How to succeed with your Modelling Approach using Enterprise Architect

About the benefit of a model based specification and how you find a suitable Modelling Approach

Part 1

Horst Kargl



SPARX SYSTEMS CENTRAL EUROPE

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Who is Sparx Systems

- Sparx Systems Central Europ is a sister Company of Sparx Systems HQ
- We provide Licenses, Training, Consultings about EA.
- Provide adaptions of EA (realized with our Partner LieberLieber)



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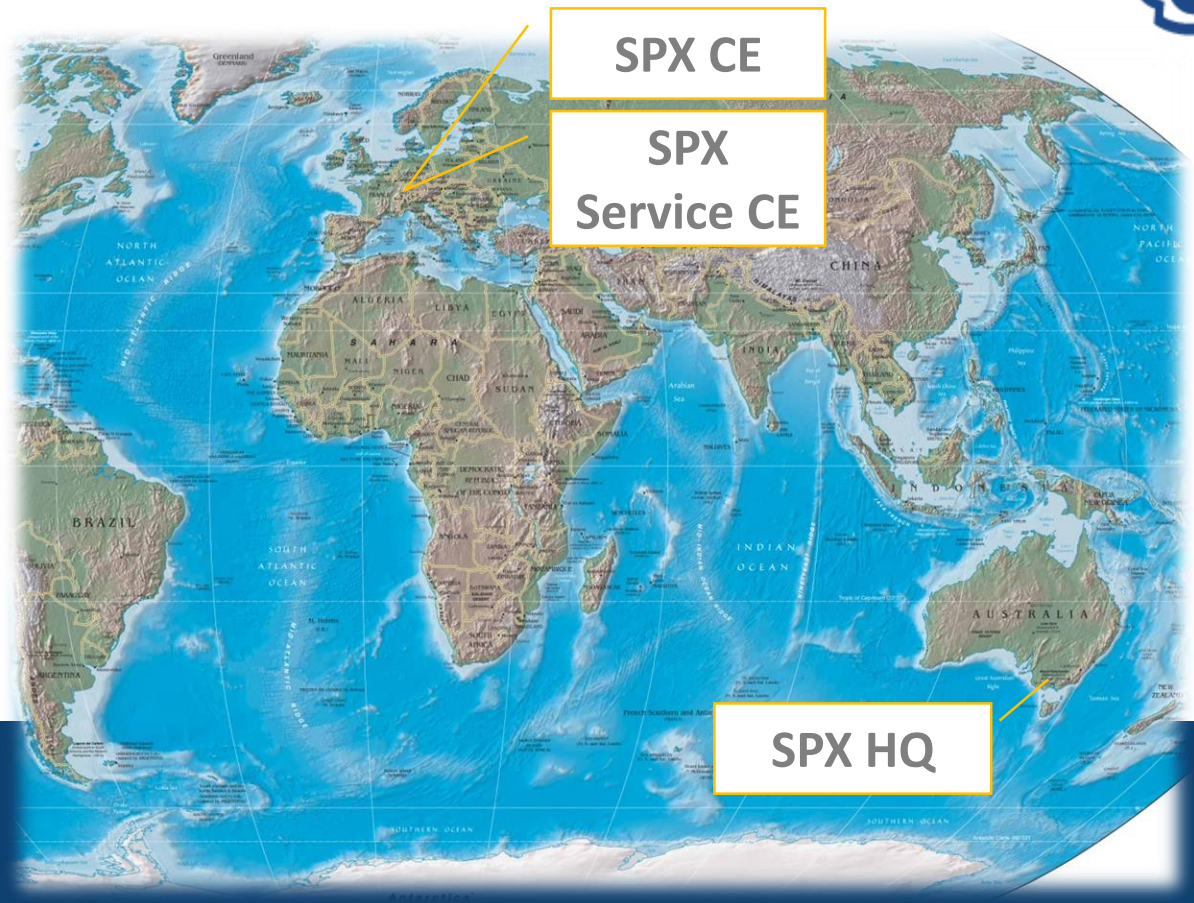
Who is **Sparx Systems** - Who is **Sparx Services**

- **Sparx Systems Central Europe** is a sister Company of Sparx Systems HQ.
  - Licenses, Training
- **Sparx Services Central Europe**
  - Consulting



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Write Specifications

	Text-based	Model-based
Language	German/ English / etc.	UML, SysML, BPMN, ...
Tool	Visio, ...	Visualization of Structured Data & Modelling Platform to automatically process the Data

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Text-based

Model-based

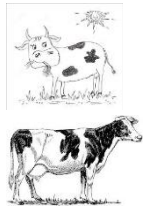
Visio

German /
English/ etc.

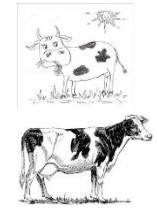
The tools used must be mastered.

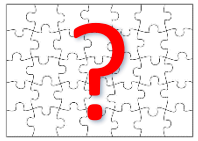
We need to speak the language at a certain level

The structure of the document must be well considered, as well as the structure in a model.



The details and the degree of abstraction of the contents must be worked out and possibly described as examples.





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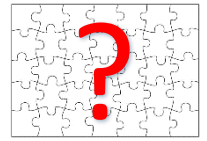

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Text-based

Model-based

Visio

Deutsch /
Englisch / etc.

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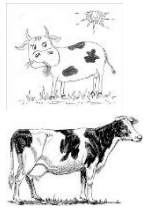

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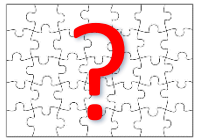

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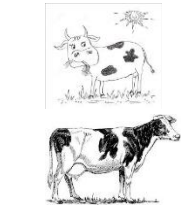

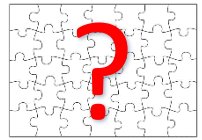

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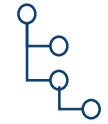

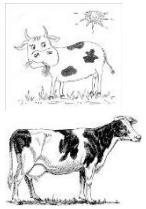

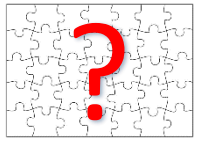

The tools used must be mastered.

We need to speak the language at a certain level

T … considered, as well as the structure in a …el.

…f the contents must be worked out and …d as examples.

… itself is identical in both variants.

This effort pays off with the first possible automation in EA.

If the Text-based approach use UML/SysML/… the effort is the same in both approaches.

Do not forget to address the other topics in the Model-based approach, which lead to our **Modelling Approach**!







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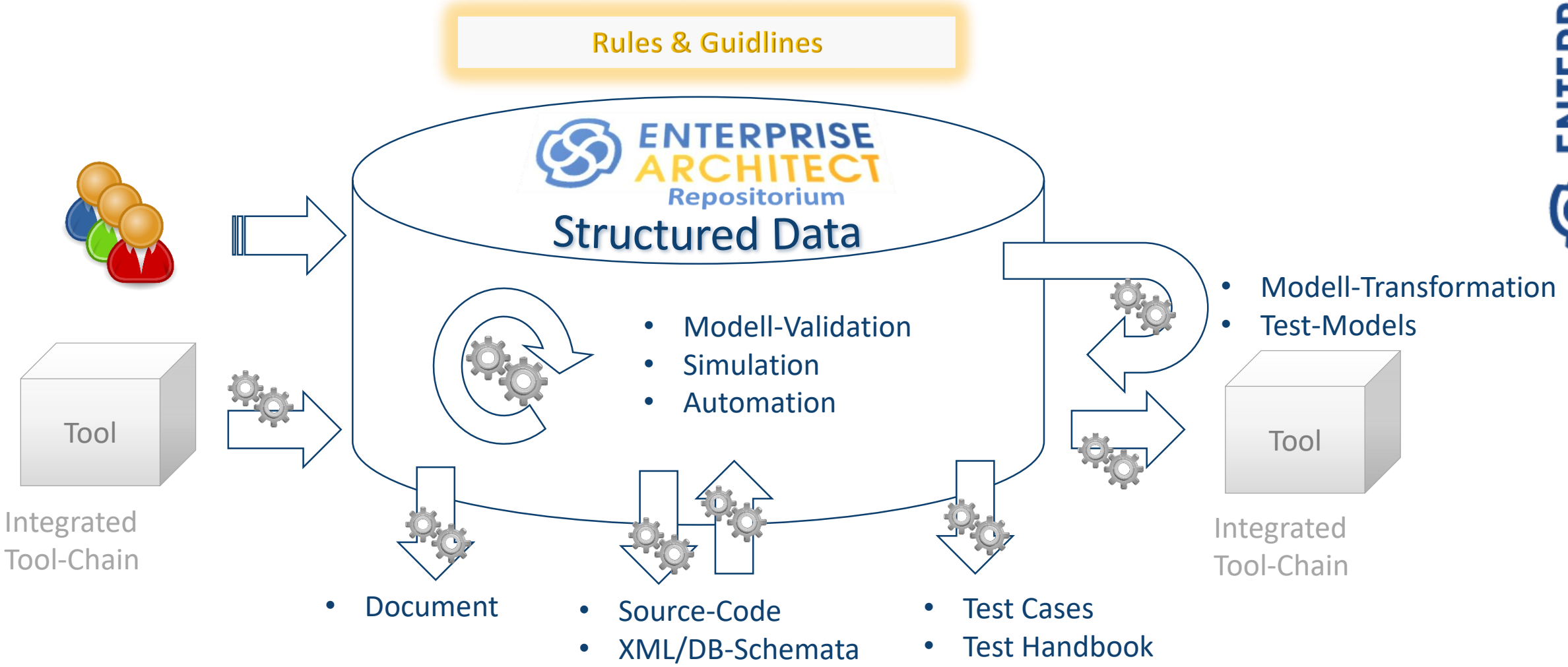
We have to deal with the same topics in both approaches!

What is the advantage of models?



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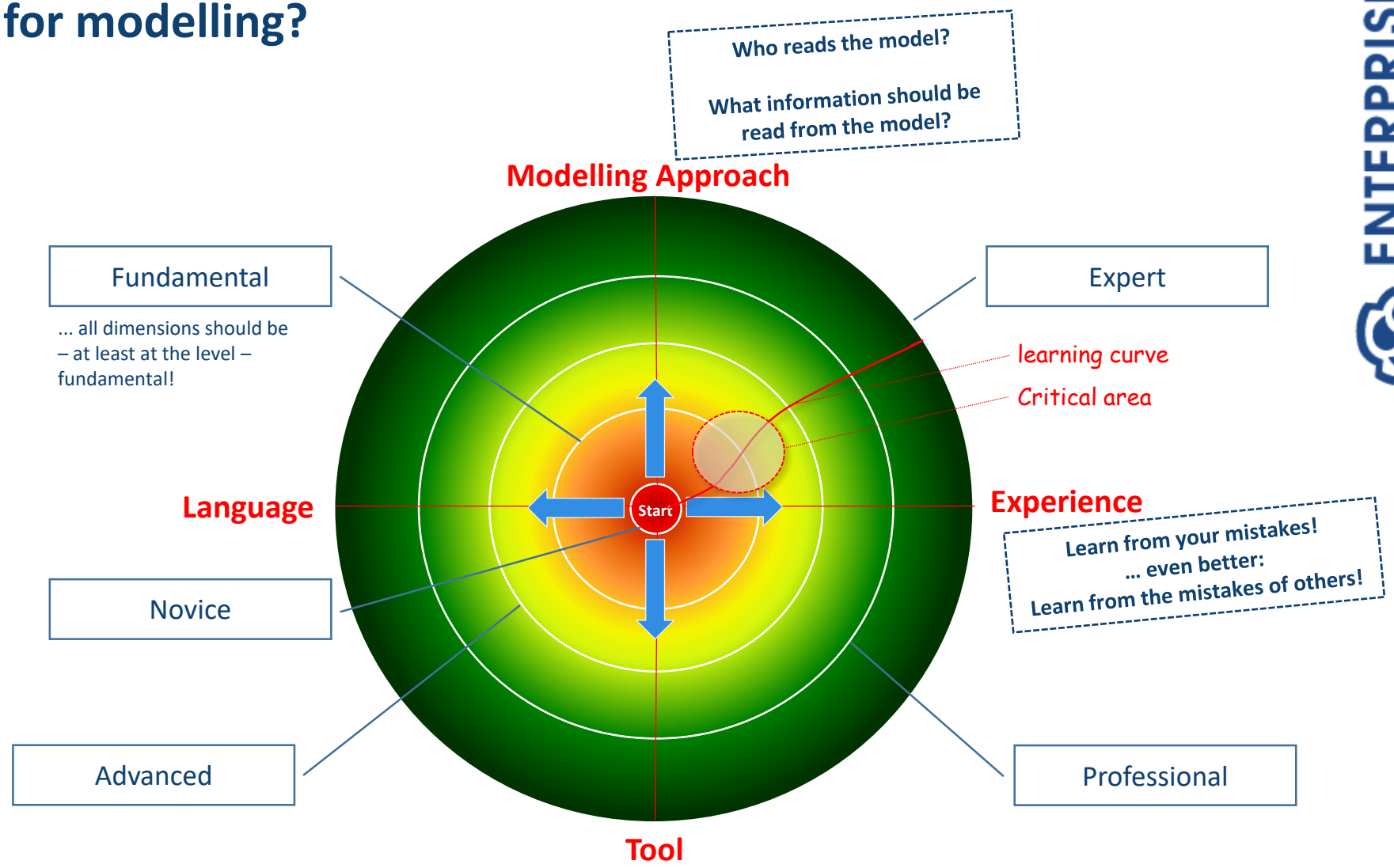
If everything is done "right“, you will benefit from many automations!

What skills do we need for modelling?

"A fool with a tool is just a fool"

"A genius without a tool is not productive"

"A genius without a plan is lost"



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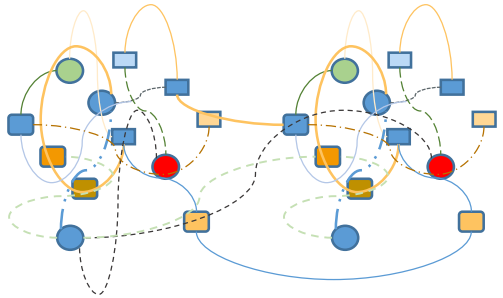
What the Modelling Approach consists of?

Models are structured data with a graphical representation!
What is the structure of this?



To prevent models like this, we **need a modelling approach**!

Who reads the model?

What information should be read from the model?

Modelling Approach

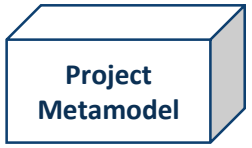
Method

Process

*** Which Artifact should be created**

*** When**

*** Who's responsible for that step**



What language elements should be used? *

What connectors should be used? *

What element should be connected with which connector? *

Define additional Stereotypes and Tags if required *

Approach specific subset of the **language & required extensions for the Domain (DSL)**

How to model structure (Packages) should look like? *

Which elements should be contained in which Package? *

Approach specific **model structure**

Define additional rules, constraints and guidelines *

Approach specific **Governance**

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How to find my Modelling Approach?

Who reads the model?

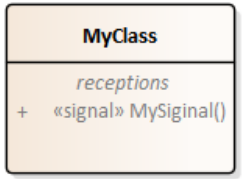
What information should be read from the model?

Formulate concrete questions:

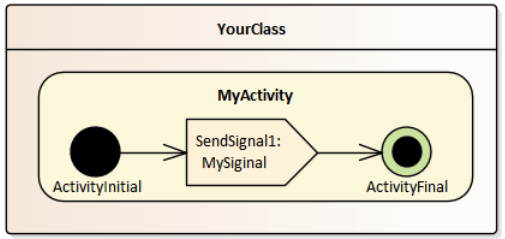
1. What Signals do we have?



2. Who receives signal "*MySignal*" ?

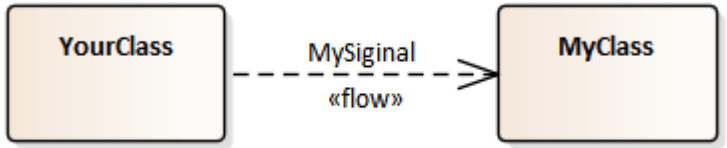


3. Who sends signal "*MySignal*" ?

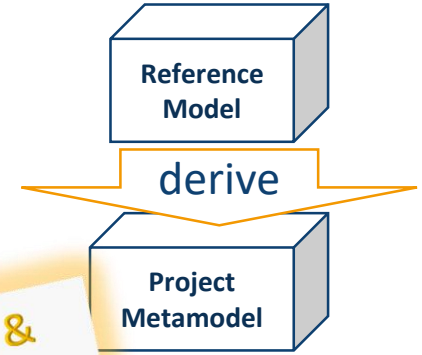


4. … further questions

The easier model for the 2. & 3. questions.



Create a reference model:



Rules & Guidlines

You will prevent:

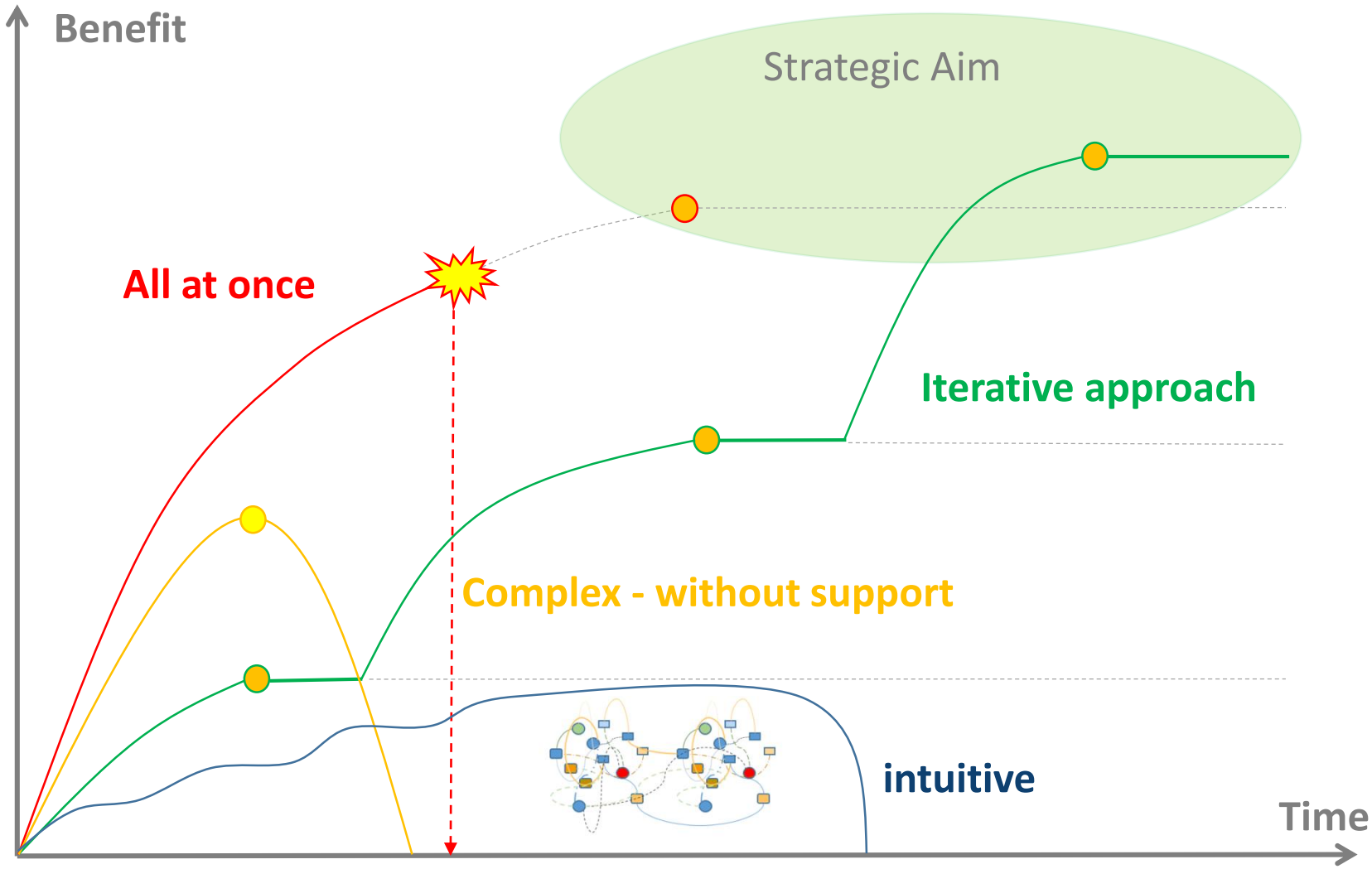
- Modelling too much
- Modelling too complex

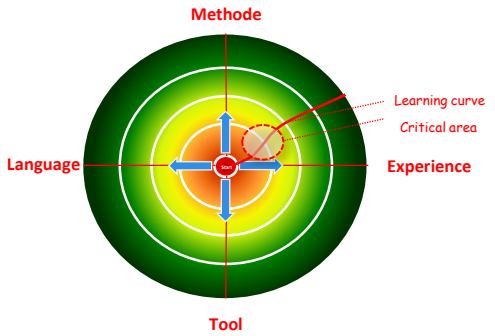
You can assure:

- Any Model has a purpose
- You have found the easiest representation

The more questions we have, the easier it is to find the required language elements!

How can we fail in our Modelling Approach?





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Process to elaborate the Modelling Approach?



Sparx Systems/Service - Central Europe

We teach you the basics	Expert Workshop	Basic Knowledge
We consult you and provide Examples.	Collect the required Question	Required Information, the model should answer
We consult you and provide best practice.	Create a Reference Model	Reference Model
We consult you and help you deriving the Project Metamodel and required Automations	Stress Test the Model	Project Metamodel, EA Configuration, Automations
Prepare the required training material	Training Preparation	Customized Training Material
Do the training based on the customized Modelling Approach	Training	Skilled Employees

Your customized **Modelling Approach**



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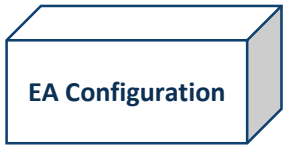
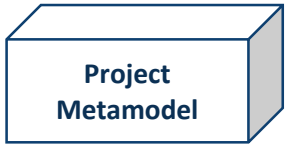
Summary

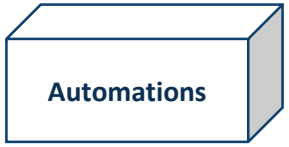
Powerful **Modelling Platform** with many possibilities and a lot of freedom.



- To reduce the complexity of the EA user interface.
- To get customized templates for
  - Document generation, Code generation, etc.
- To define custom searches.
- Etc.



- Constraint Metamodel
  - to get custom toolboxes and quicklinker.
  - to get basic modelling rules and constraints.
- Contains the model structure and rules where to nest the model elements.
- Etc.



- to get assistants, which help to answer complex questions.
- to get assistants, which help to follow the modelling Project Metamodel.
- to add additional validation rules, which checks if the model follows the Project Metamodel.
- Etc.

… remember!



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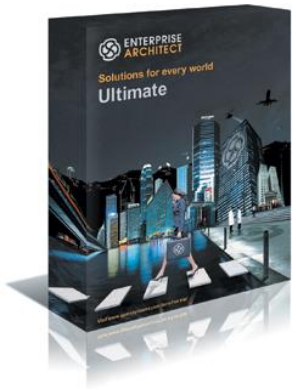
Who reads the model?

What information should be read from the model?



derive

Your **Modelling Approach** in



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