

Module 39, Wrap-up

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Abstract

This module provides various means to consolidate architectures.

Distribution

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status: preliminary

draft

version: 1.1



Consolidating Architecture Overviews

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Abstract

This presentation provides guidelines and means to capture architecture overviews. Main challenge is to maintain the overview across multiple views. Architecture Overview A3s One support multi-view. Another challenge is to make an overview accessible for a wide range of stakeholders. The architecture description should therefor be visualized such that it fits the mental model of the audience.

Distribution

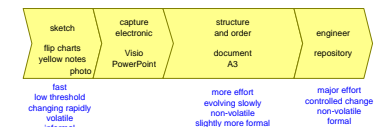
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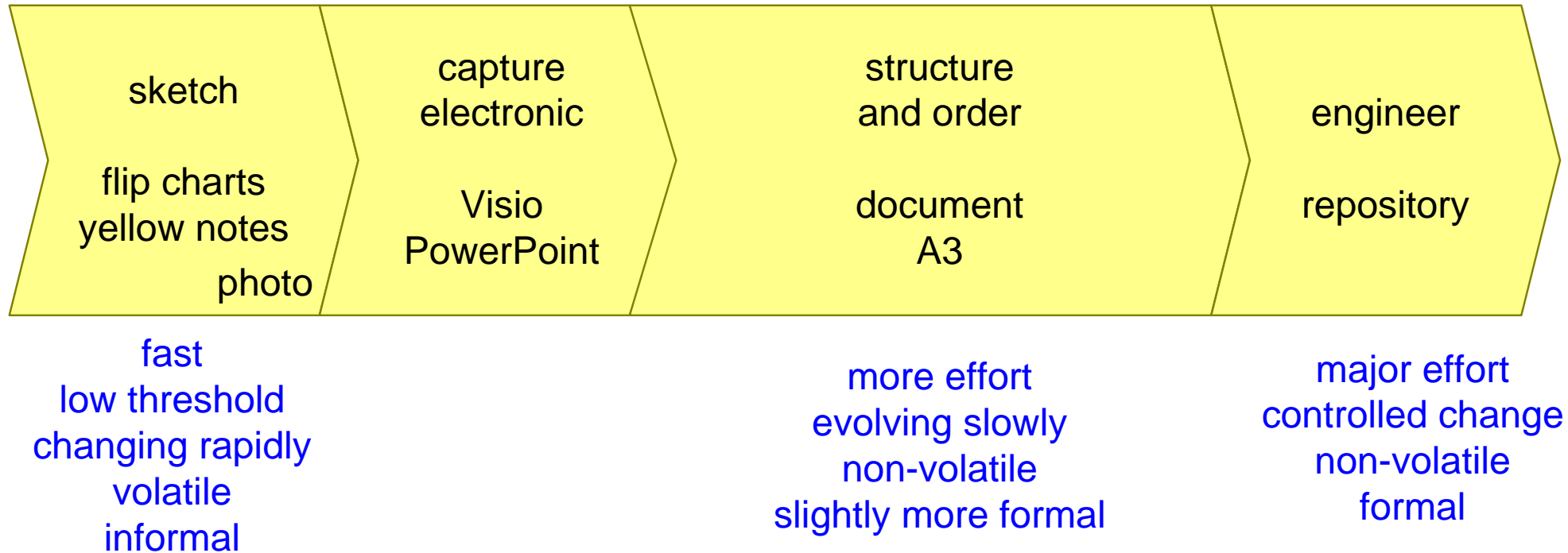
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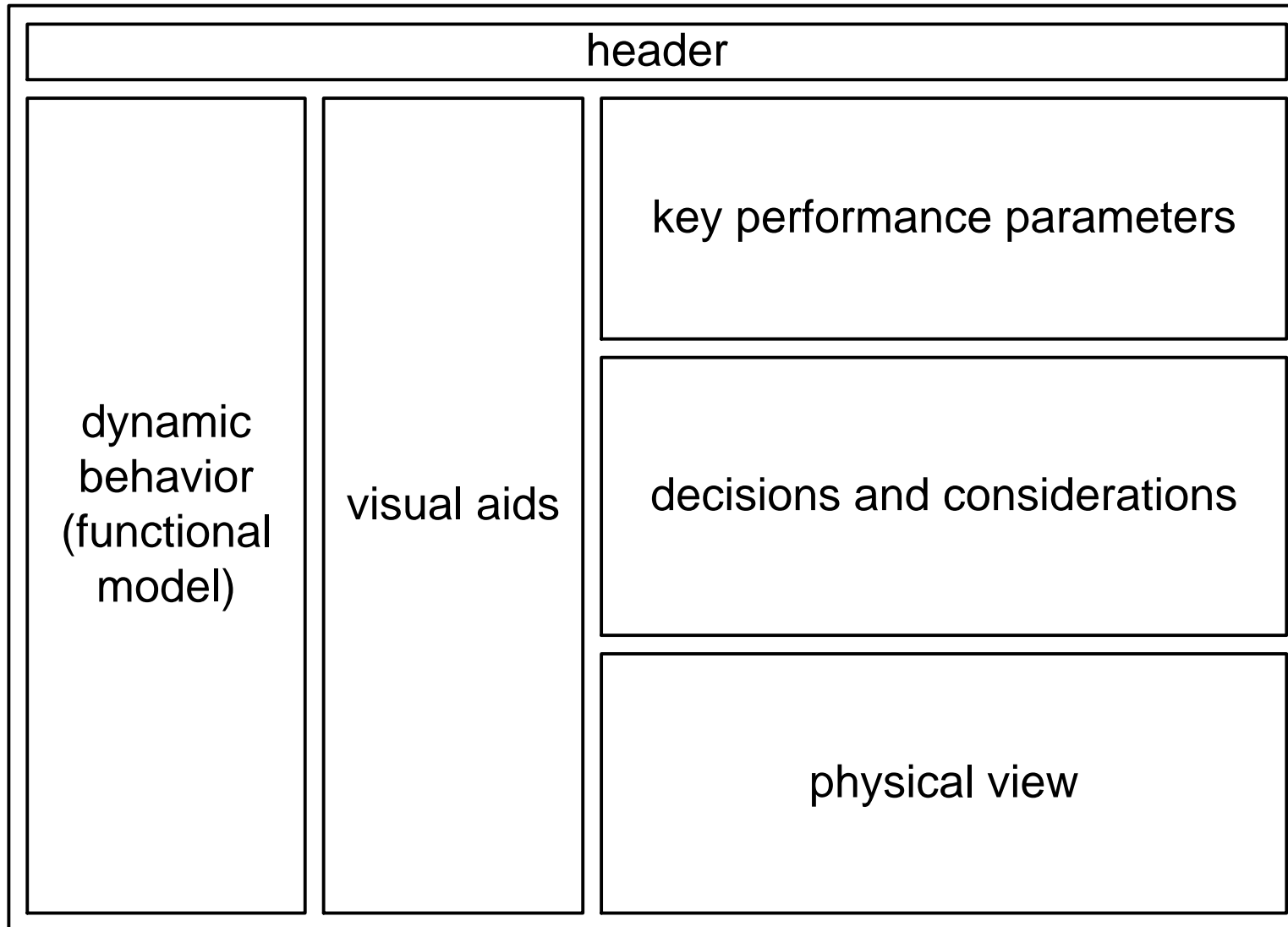
version: 0.2



Maturing an Architecture Description



Architecture Overview A3



simplified from <http://www.gaudisite.nl/BorchesCookbookA3architectureOverview.pdf>

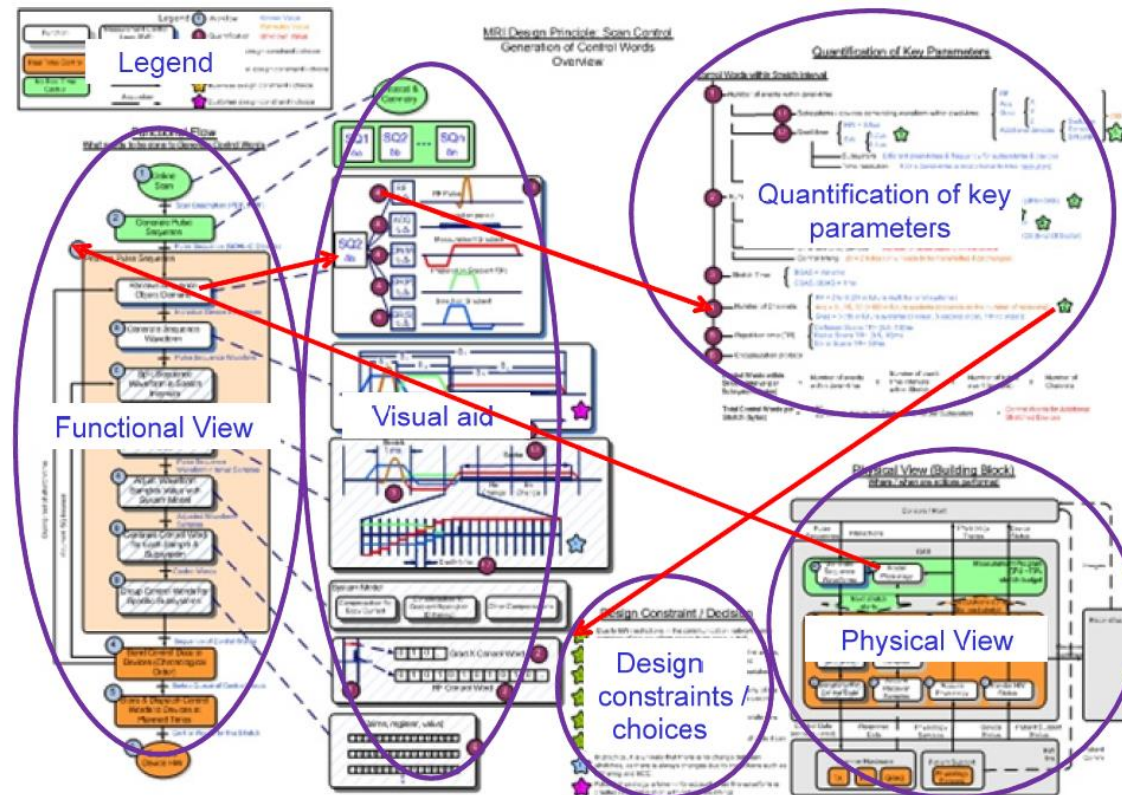
A3s to Capture Architecture Overviews

multiple related views

quantifications

one topic per A3

capture "hot" topics



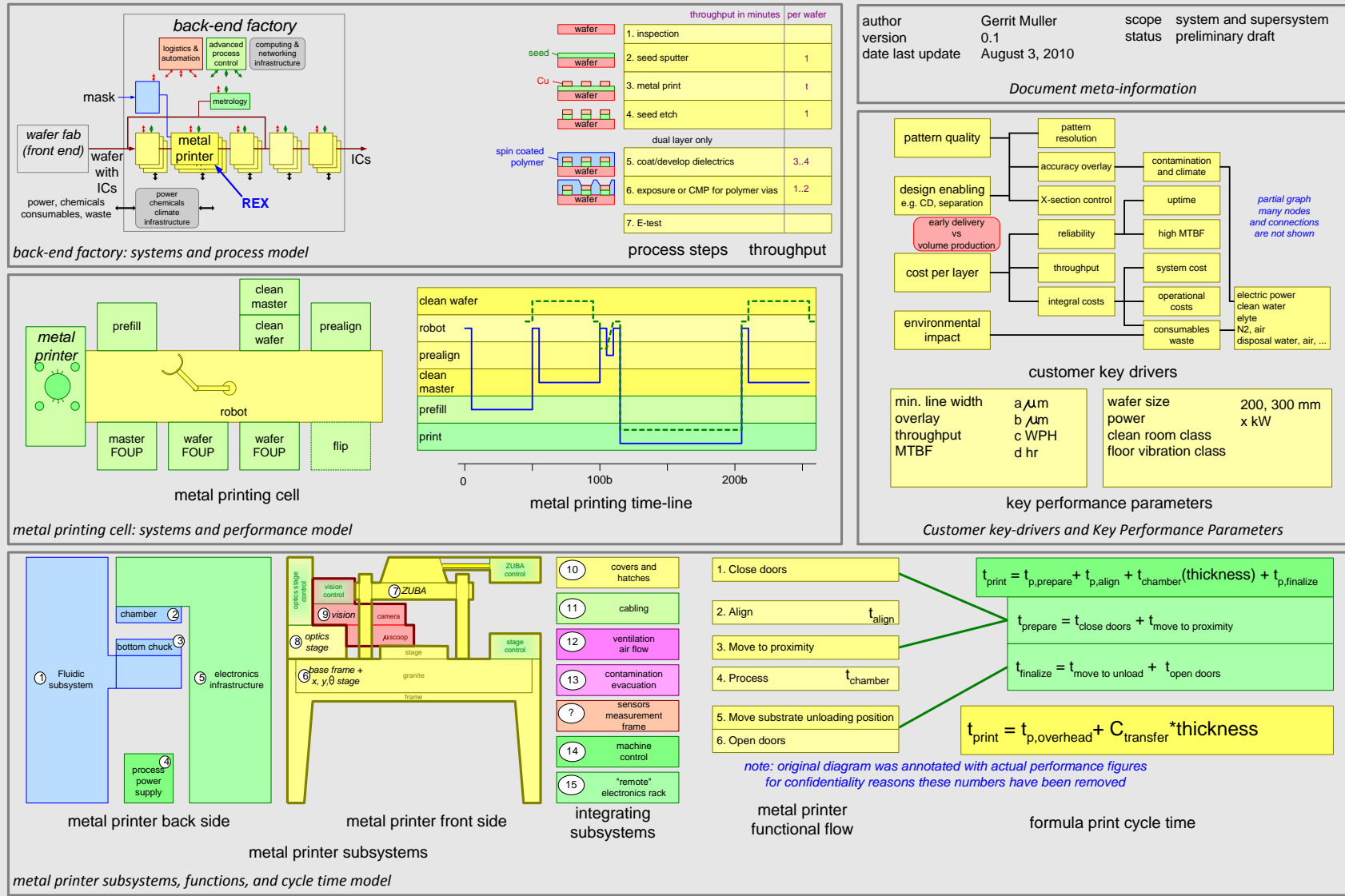
source: PhD thesis Daniel Borches <http://doc.utwente.nl/75284/>

digestable
(size limitation)

practical
close to stakeholder experience

Example of A3 Architecture Overview

A3 architecture overview of the Metal Printer (all numbers have been removed for competitive sensitivity)

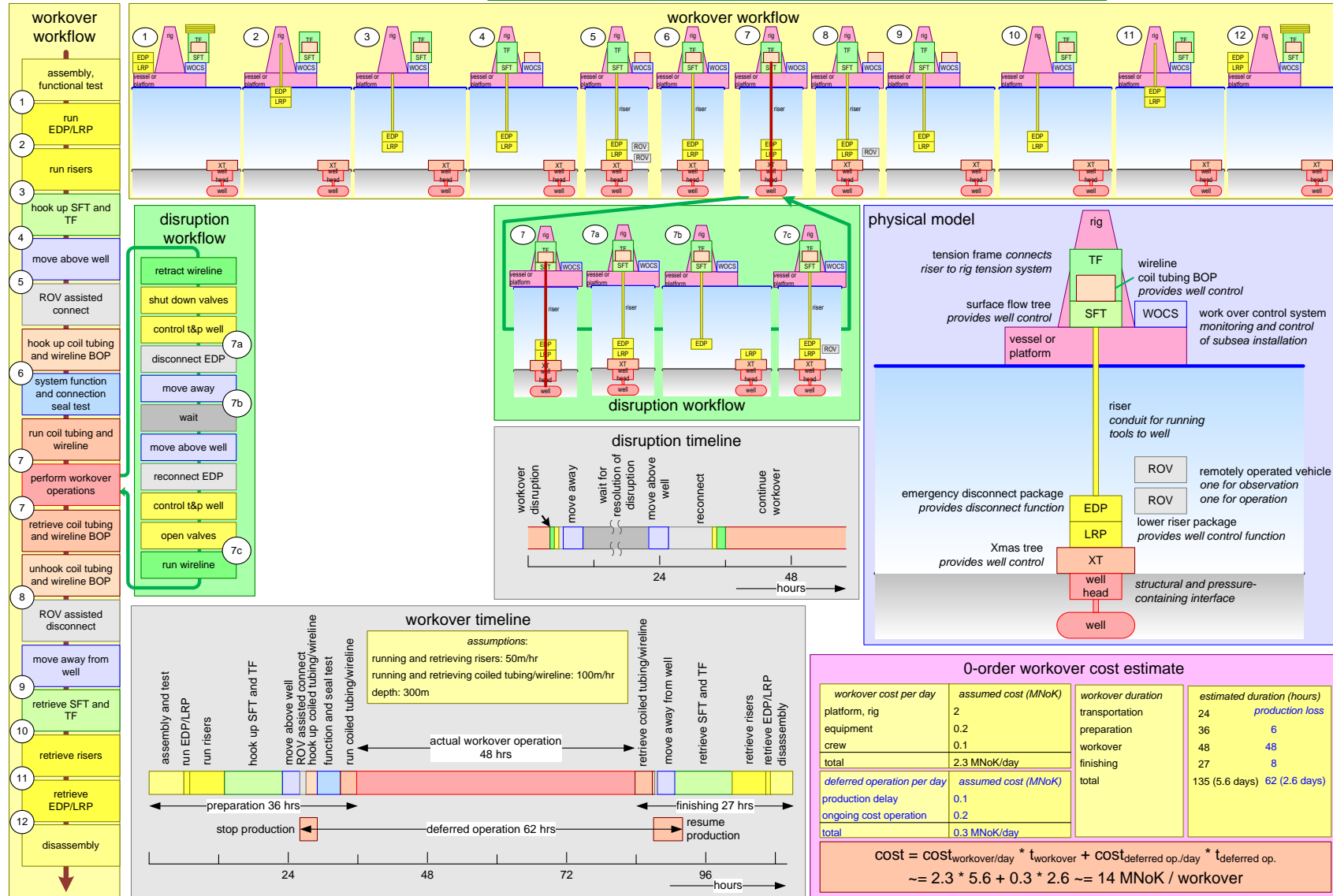


Example of SubSea A3 Architecture Overview

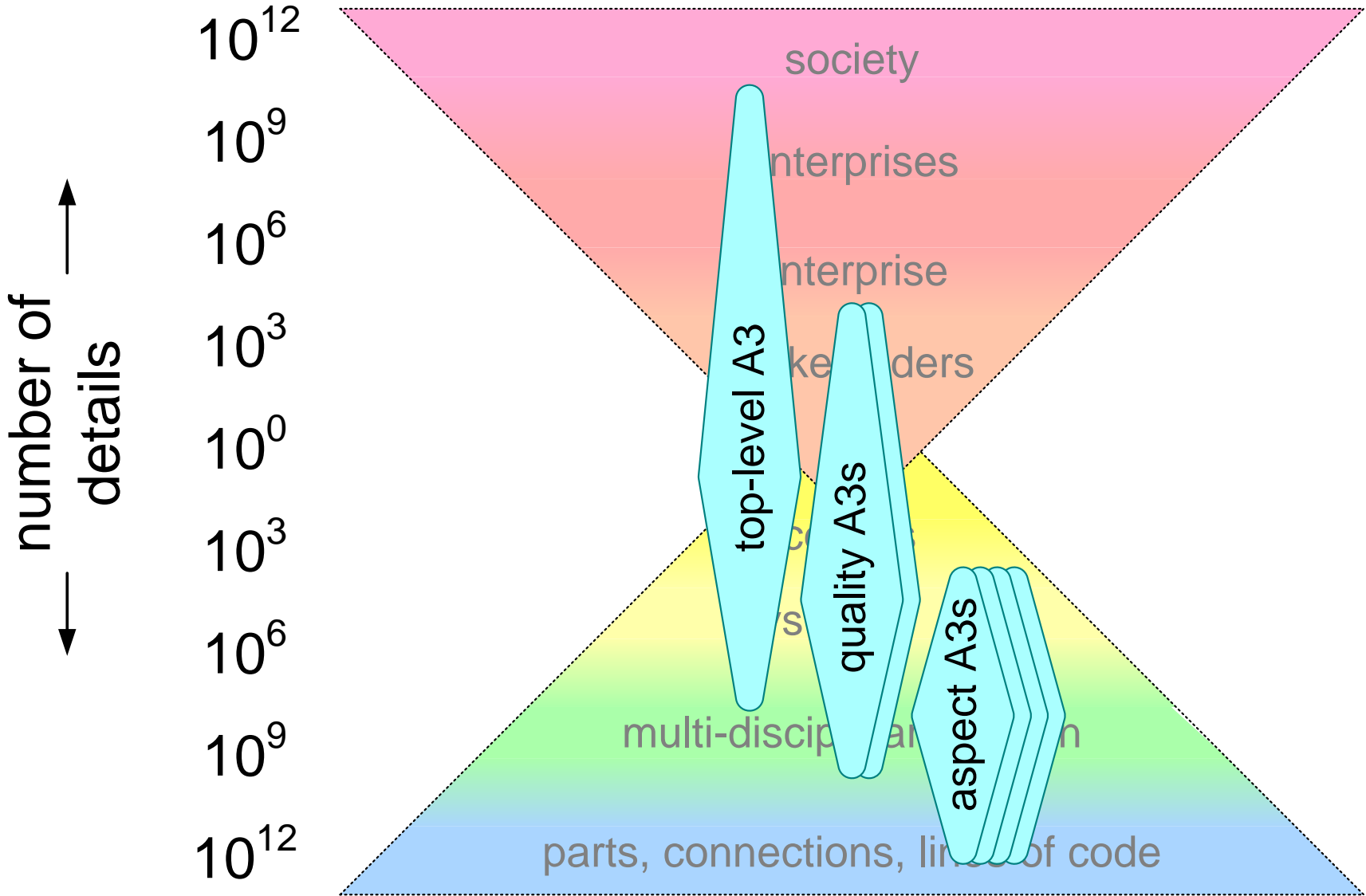
Workover operation; architecture overview

This A3 based on the work of SEMA participants: Martin Moberg^a, Tormod Strand^b, Vazgen Karlsen^c, and Damien Wee^d, and the master project paper by Dag Jostein Klever^e. ^aAker Solutions, ^fMC Technologies

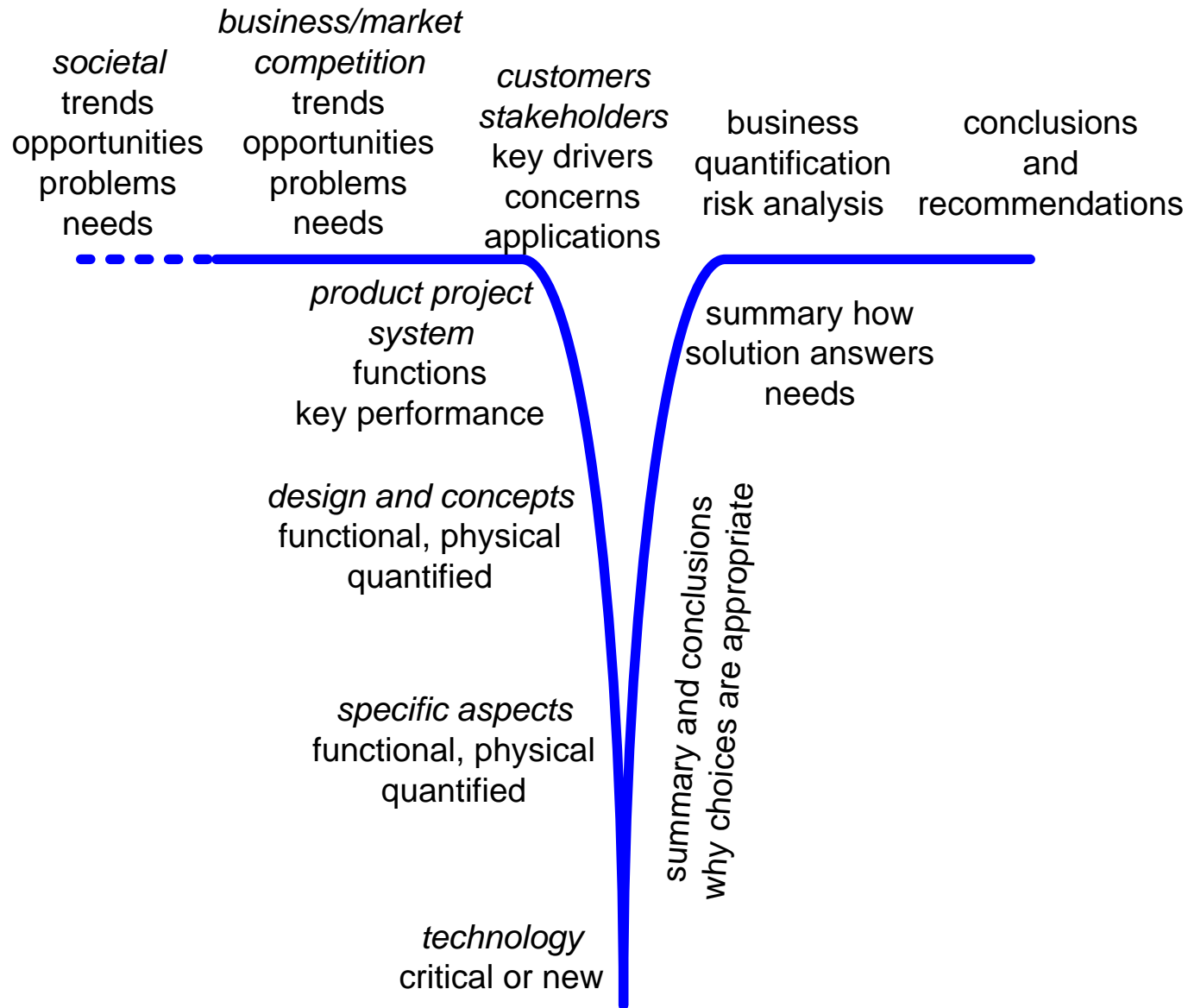
version 2.2 Gerrit Muller



Multiple Levels of A3s



T-shape Presentation



1.1 One of several prerequisites for architecture creative synthesis is the definition of **5-7 specific key drivers** that are critical for success, along with the rationale behind the selection of these items

2.1. The essence of a system can be captured in about **10 models/views**

2.2. A **diversity** of architecture descriptions and models is needed: languages, schemata and the degree of formalism.

2.3. The level of **formality** increases as we move closer to the implementation level.

from <http://www.architectingforum.org/bestpractices.shtml>

Capture your work done during the course, e.g. **make photos** of the flip charts.

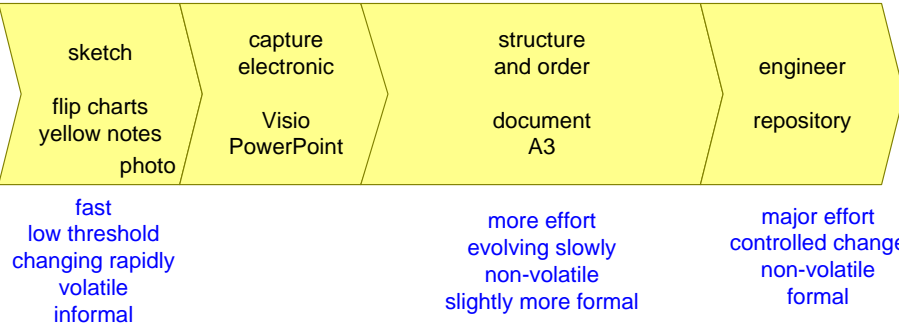
Make a list of **questions**, **assumptions**, biggest **uncertainties** and **unknowns**

Make a list of **lessons learned**

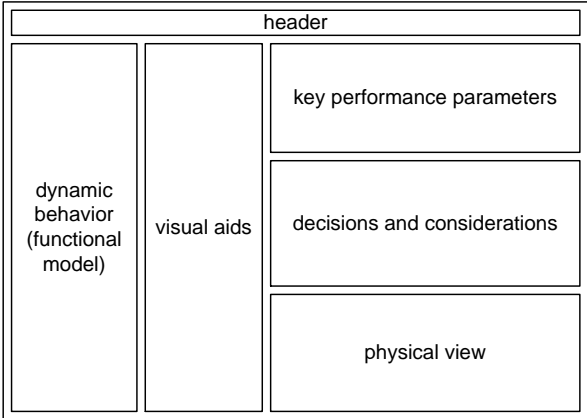
Make a plan for the **homework**

Consolidating Architectures

Maturing, from Light to Heavy

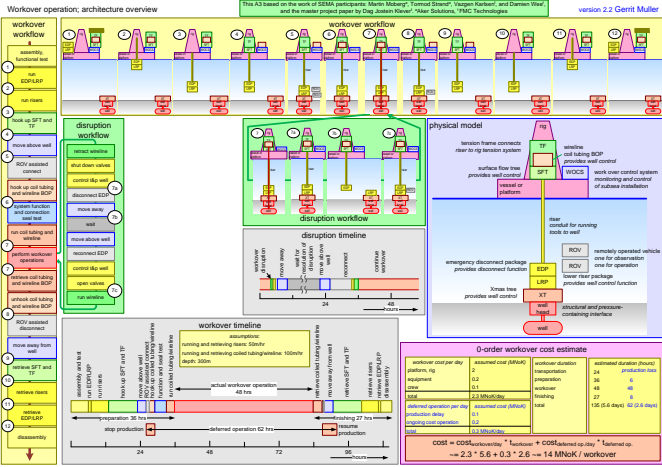


A3 Architecture Overview

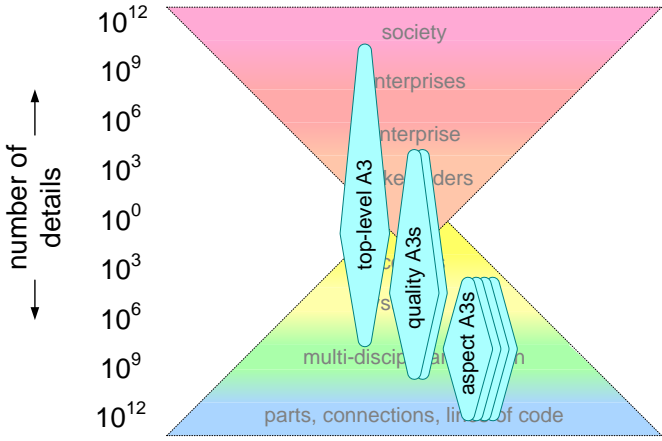


simplified from <http://www.gaudisite.nl/BorchesCookbookA3architectureOverview.pdf>

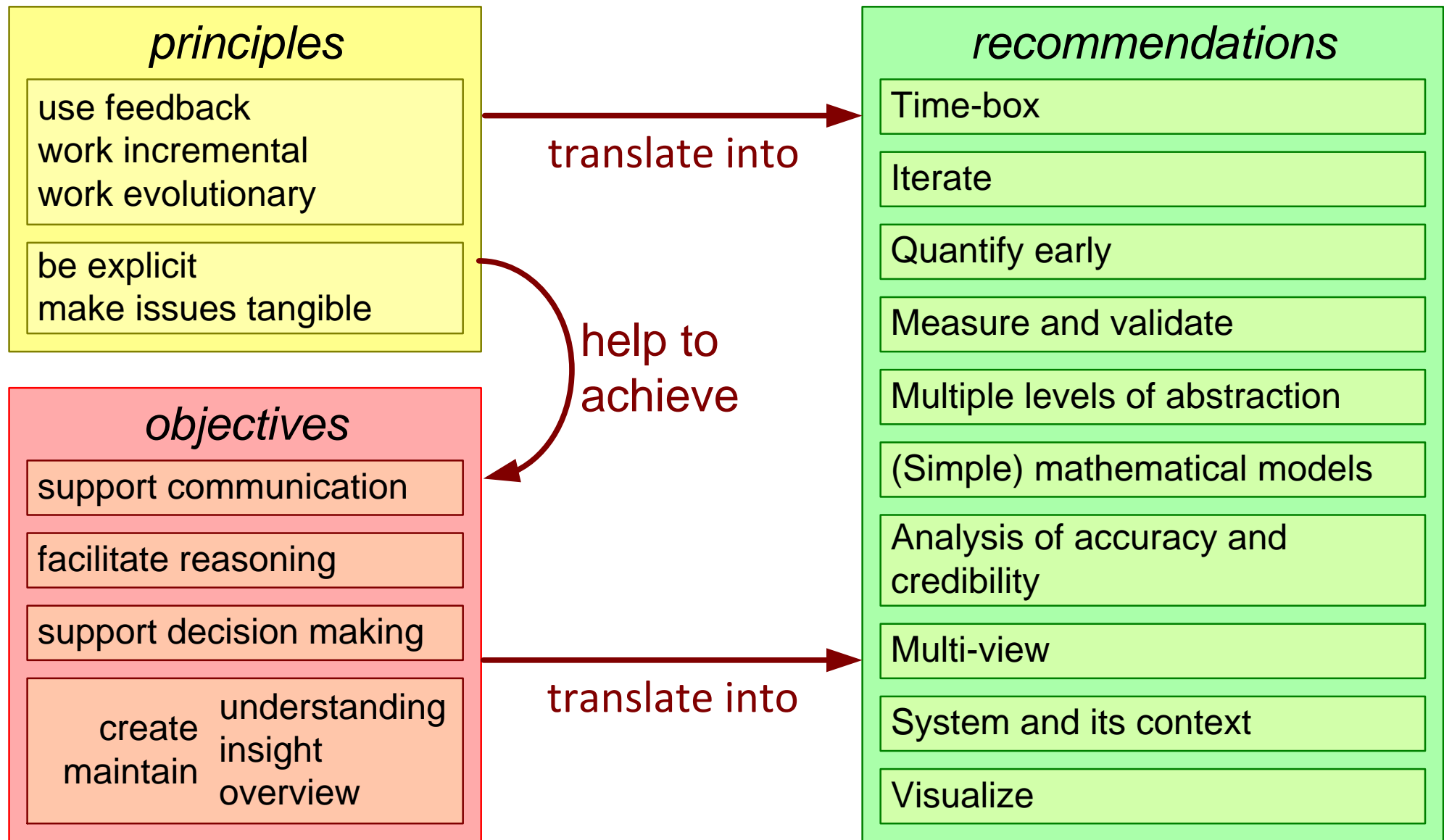
Subsea A3



Multiple Levels of A3s



Recommendations as Red Thread



SEMA Homework Assignment

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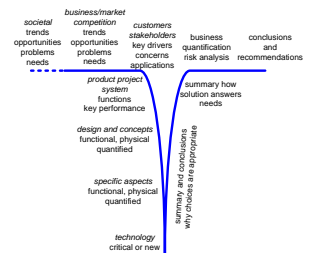
Abstract

This document described the homework assignment for the SEMA course. The homework is made and delivered incrementally, so that the teacher can provide feedback during the assignment.

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Group Assignment

Submit each step to the teacher, and process feedback in the next step

Step 1. weeks 1..3

- Consolidate work of course in 20 slide presentation as baseline.
- Search for answers to the main questions, biggest uncertainties and unknowns, validate main assumptions.
- Elaborate most relevant models.
- Discuss your work with other stakeholders to collect more facts and figures and for early validation

Step 2. weeks 4..6

- Transform the presentation into a T-shape presentation
- Identify gaps in the “T”
- Make simple models to eliminate the gaps

Step 3 weeks 7..9

- Identify required changes in models made so far, due to increased insight;
- Change one of the models accordingly.
- Evolve the T-shape presentation (max 20 slides); the target audience of this presentation is your management.
- Present to company management
- Identify next models to be made, measurements to be done, or fact finding to take place.
- Update the presentation with feedback from management and a list of future work.

Individual Assignment

Write an individual reflection report after finishing the group assignment, answering the following questions:

What are the main gaps in the current proposal and presentation? What 3 gaps will you address first, and why?

In retrospect, formulate a problem statement that triggered the outcoming presentation and underlying modeling effort.

What would you do differently if you would have to prepare this presentation again?

How and what are you going to apply elements of this course in practice?

Be specific and use examples.

preferred size 2 A4s, max 4 A4s.

Submission Instructions

Submission instructions

use for all deliverables the following conventions:

filename: SEMA <your name or team> <subject>.<version>.<extension>

e.g. SEMA WOSTeam presentation.2.doc

or SEMA John Student individual report.1.docx

email to: <gerrit . muller@usn . no>

subject: SEMA <subject>

and submit in WiseFlow before the deadline.

"standard" file types preferred, e.g. pdf, jpg, doc, ppt, vsd, docx, xls, xlsx, ppt, pptx