

Consolidating Architecture Overviews

by *Gerrit Muller* University of Southeast Norway-NISE

e-mail: gaudisite@gmail.com

www.gaudisite.nl

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

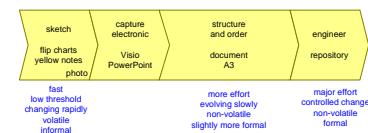
This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

June 5, 2018

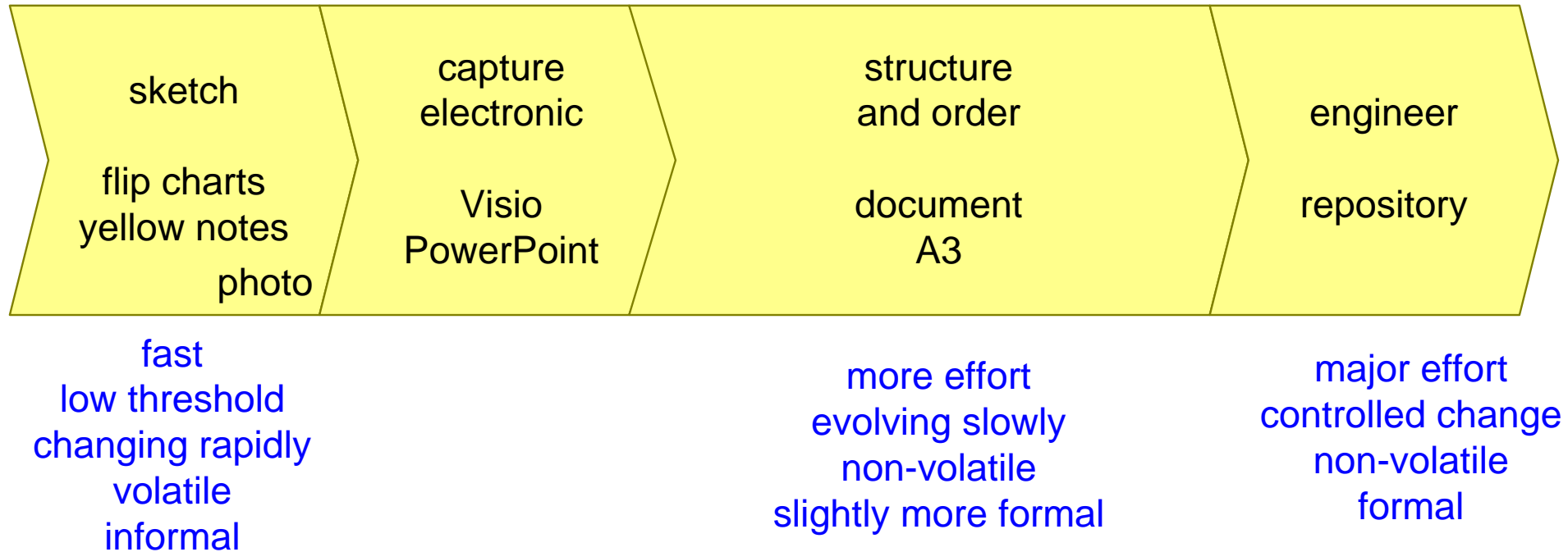
status: preliminary

draft

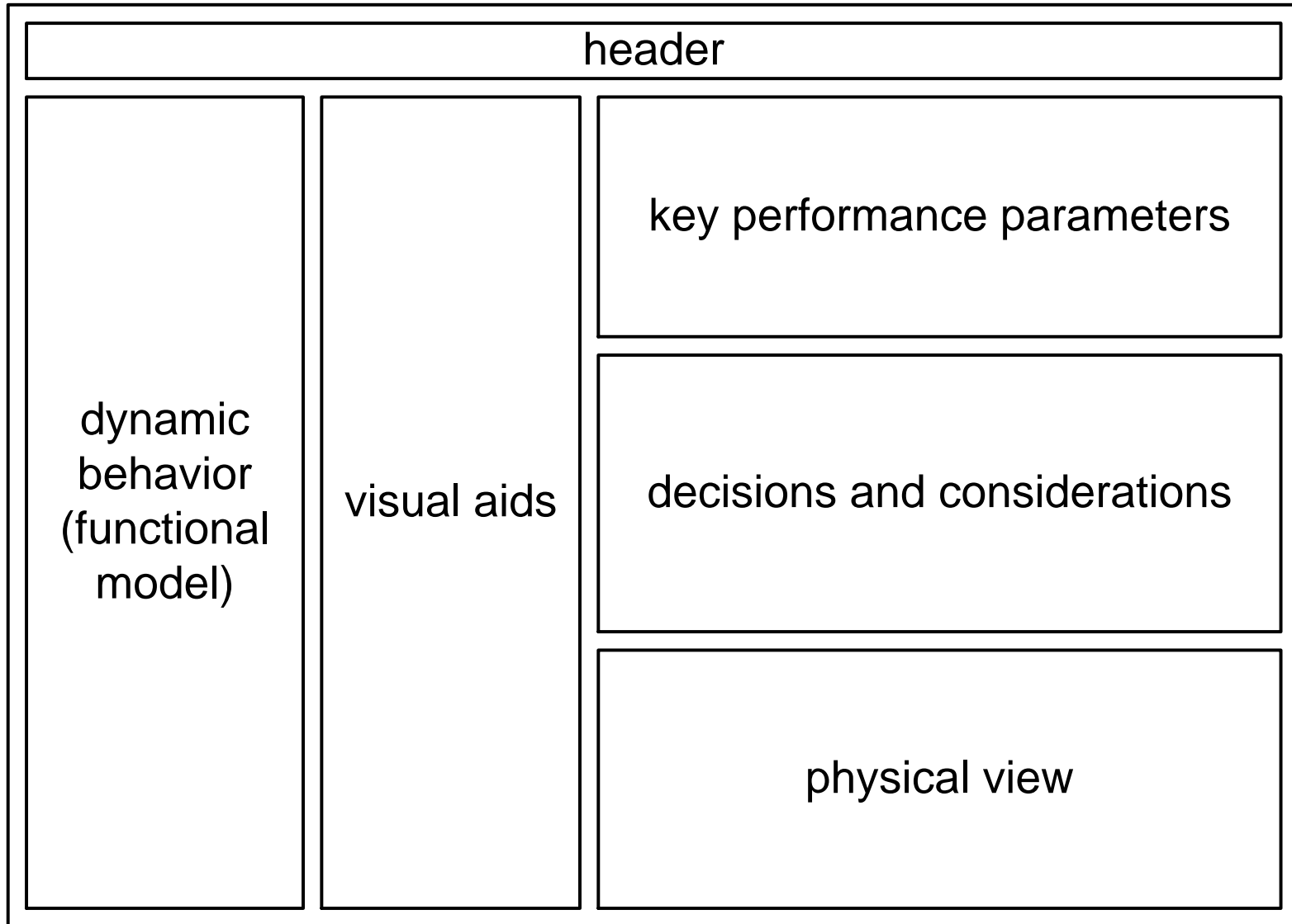
version: 0.2



Maturing an Architecture Description



Architecture Overview A3



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

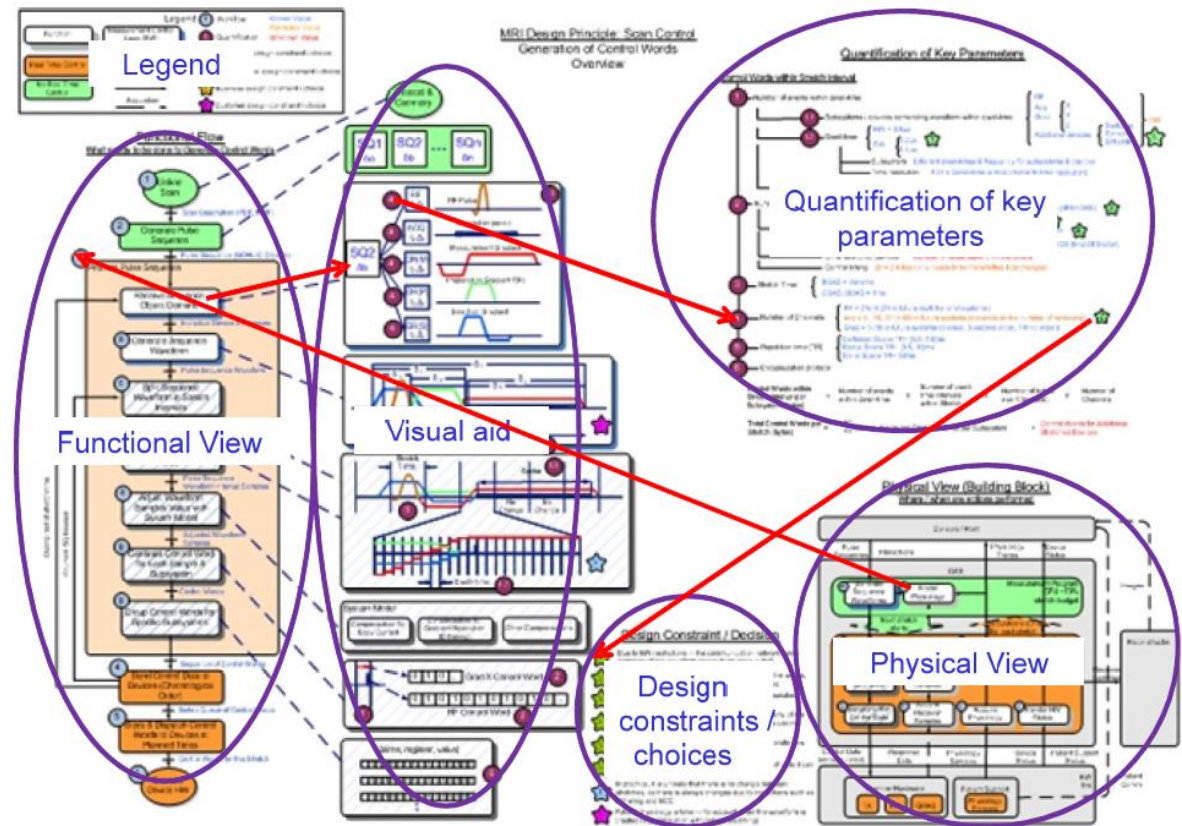
A3s to Capture Architecture Overviews

multiple related views

quantifications

one topic per A3

capture "hot" topics



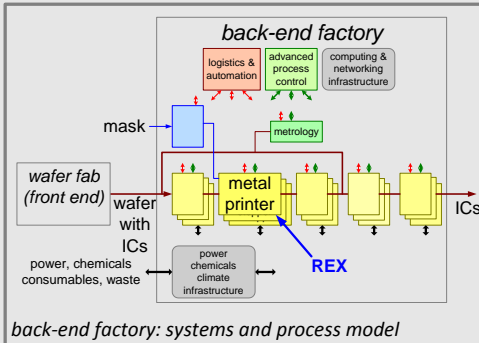
source: PhD thesis Daniel Borches <http://doc.utwente.nl/75284/>

digestable
(size limitation)

practical
close to stakeholder experience

Example of A3 Architecture Overview

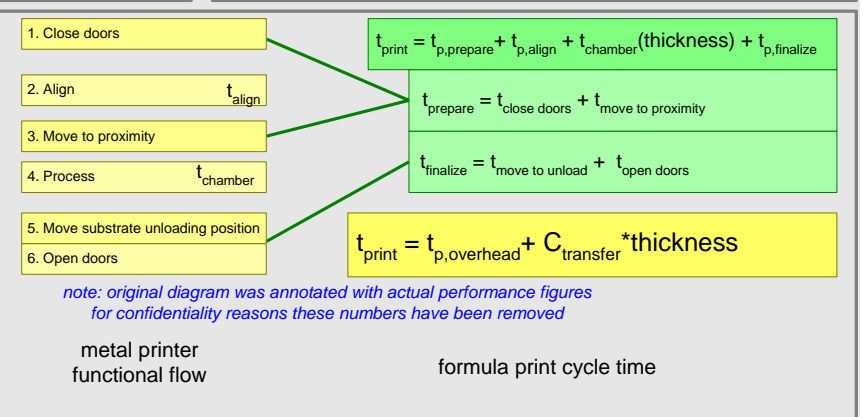
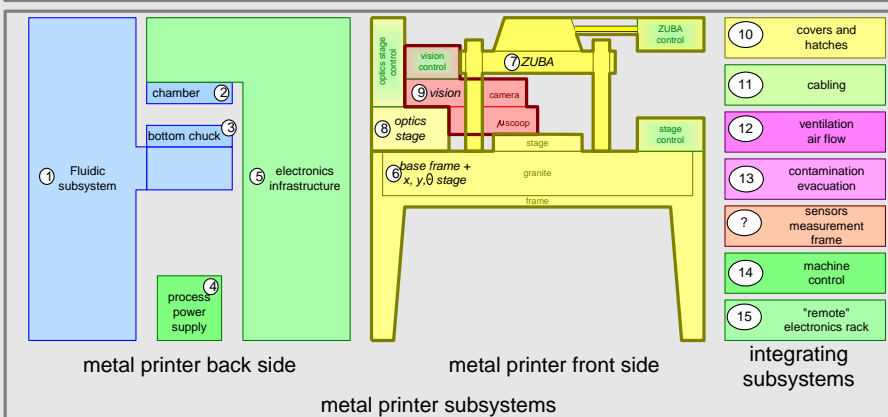
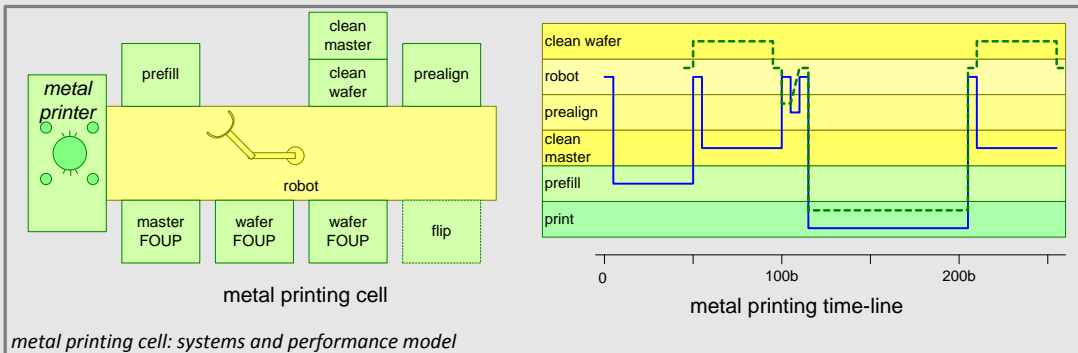
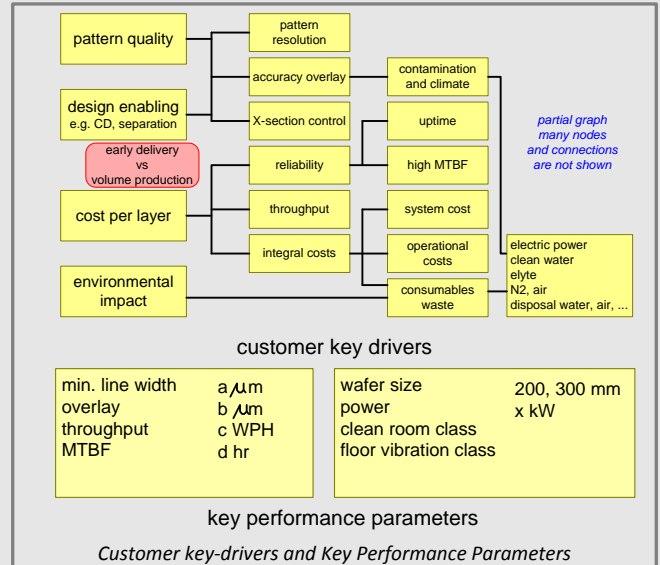
A3 architecture overview of the Metal Printer (all numbers have been removed for competitive sensitivity)



process steps	throughput in minutes	per wafer
1. inspection		
2. seed sputter		1
3. metal print		t
4. seed etch		1
dual layer only		
5. coat/develop dielectrics		3..4
6. exposure or CMP for polymer vias		1..2
7. E-test		

author	Gerrit Muller	scope	system and supersystem
version	0.1	status	preliminary draft
date last update	August 3, 2010		

Document meta-information

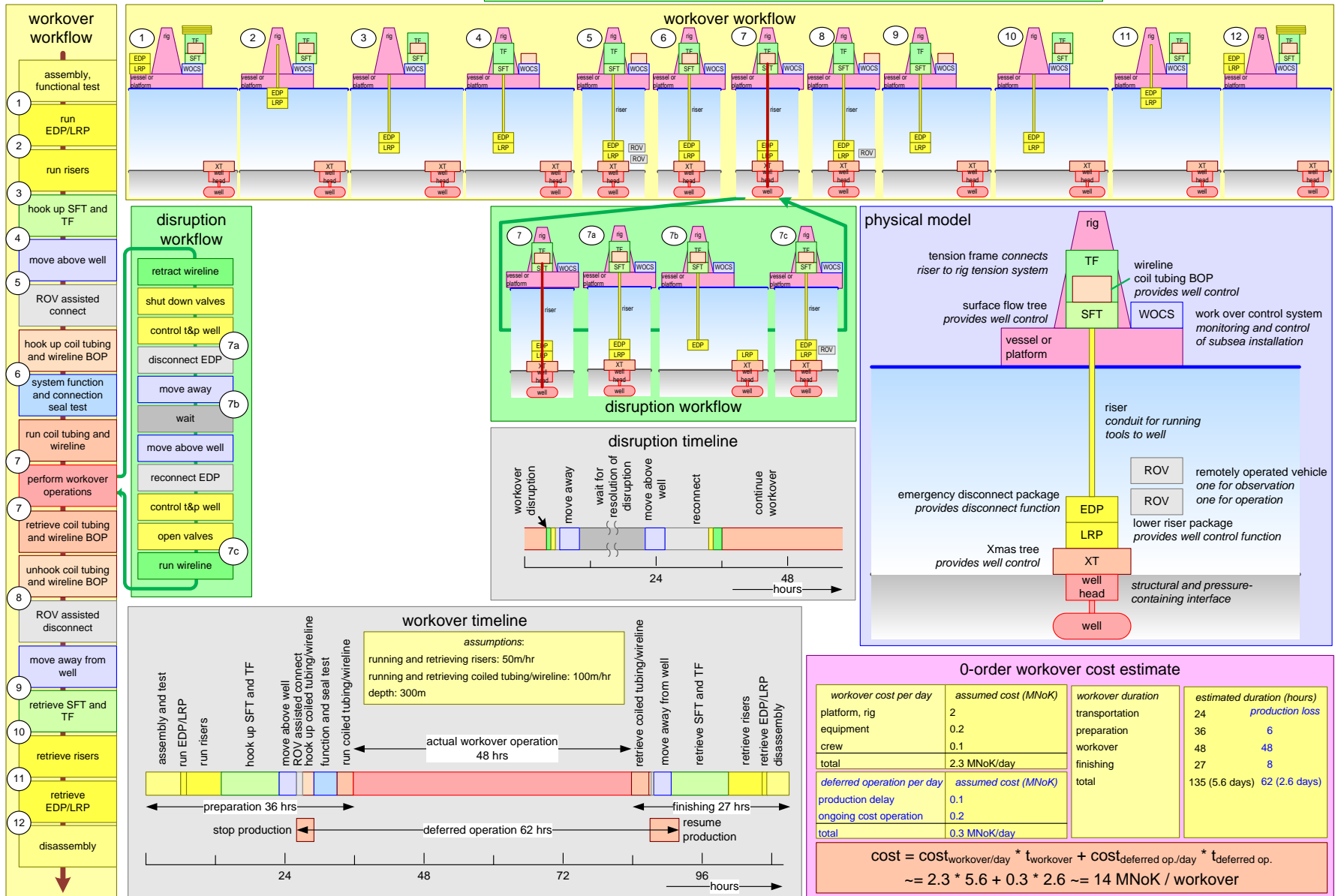


Example of SubSea A3 Architecture Overview

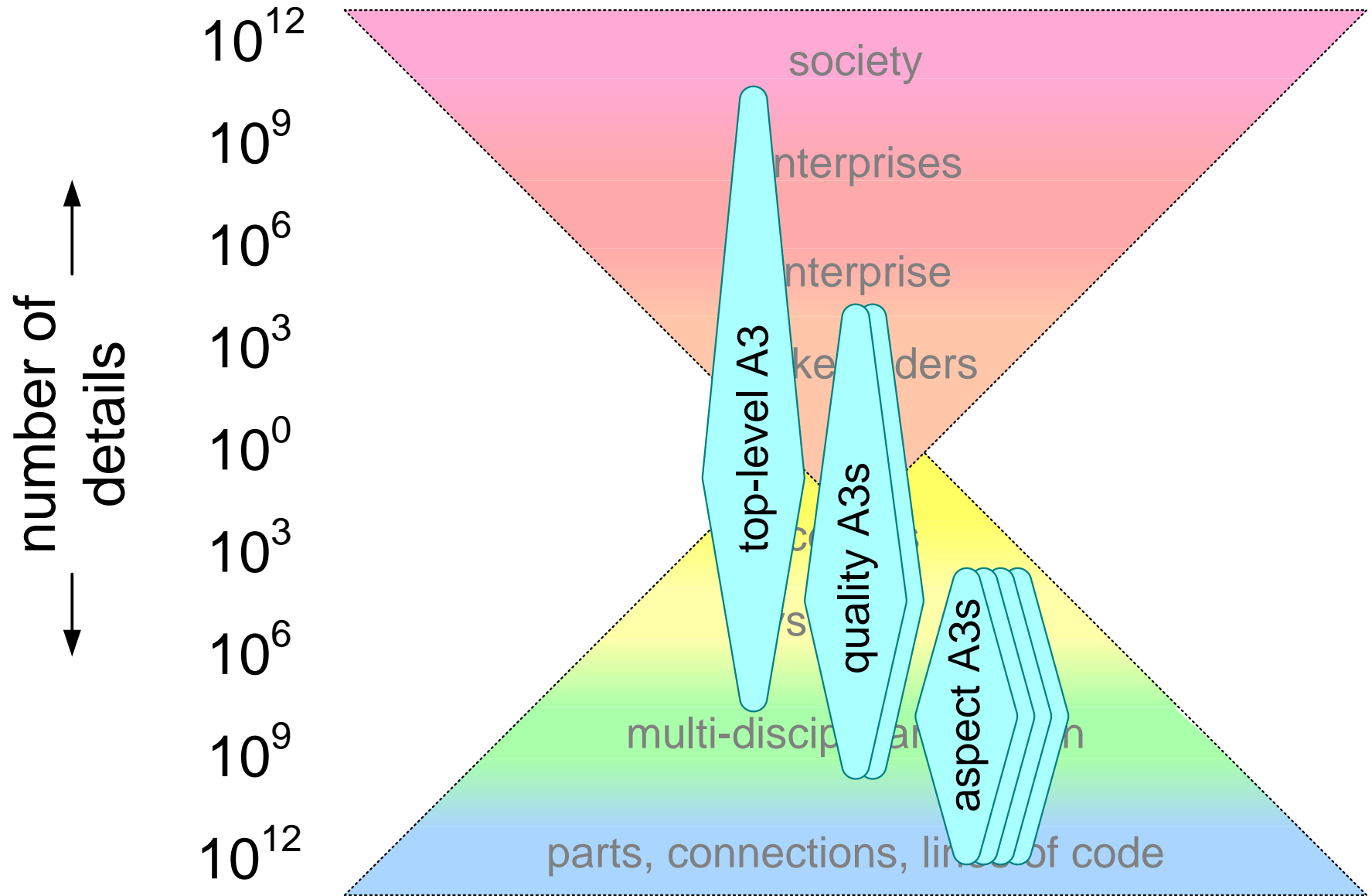
Workover operation; architecture overview

This A3 based on the work of SEMA participants: Martin Moberg^a, Tormod Strand^a, Vazgen Karlsen¹, and Damien Wee¹, and the master project paper by Dag Jostein Klever¹. ^aAker Solutions, ¹FMC Technologies

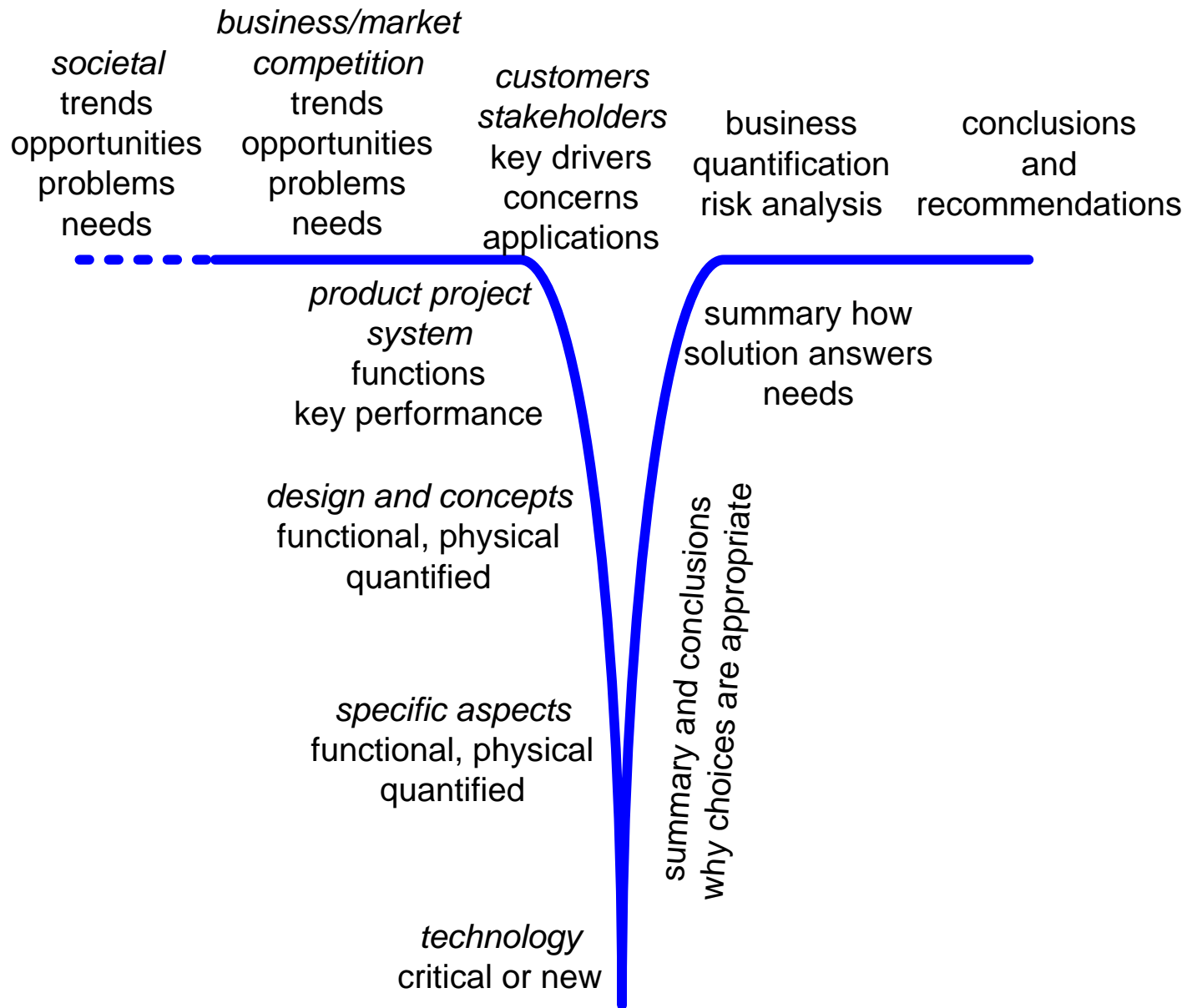
version 2.2 Gerrit Muller



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>