

# Competence Development Program; Vision on Architecting and Education

by *Gerrit Muller* University of South-Eastern Norway-NISE

e-mail: `gaudisite@gmail.com`

`www.gaudisite.nl`

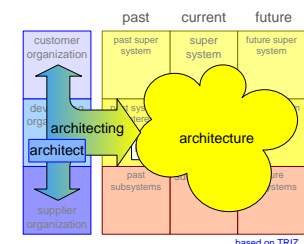
## Abstract

The TNO vision on competence development of architects is described. Architect, Architecture, and Architecting are placed in perspective. A didactic model of the layers attitude, ability, skills, and knowledge is the framework for the vision on education.

### 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.

January 27, 2026  
status: planned  
version: 0



TNO-ESI evolved the competence development program for architects over many years.

Joris van den Aker is program manager and driver behind the program

# Our Primary Interest

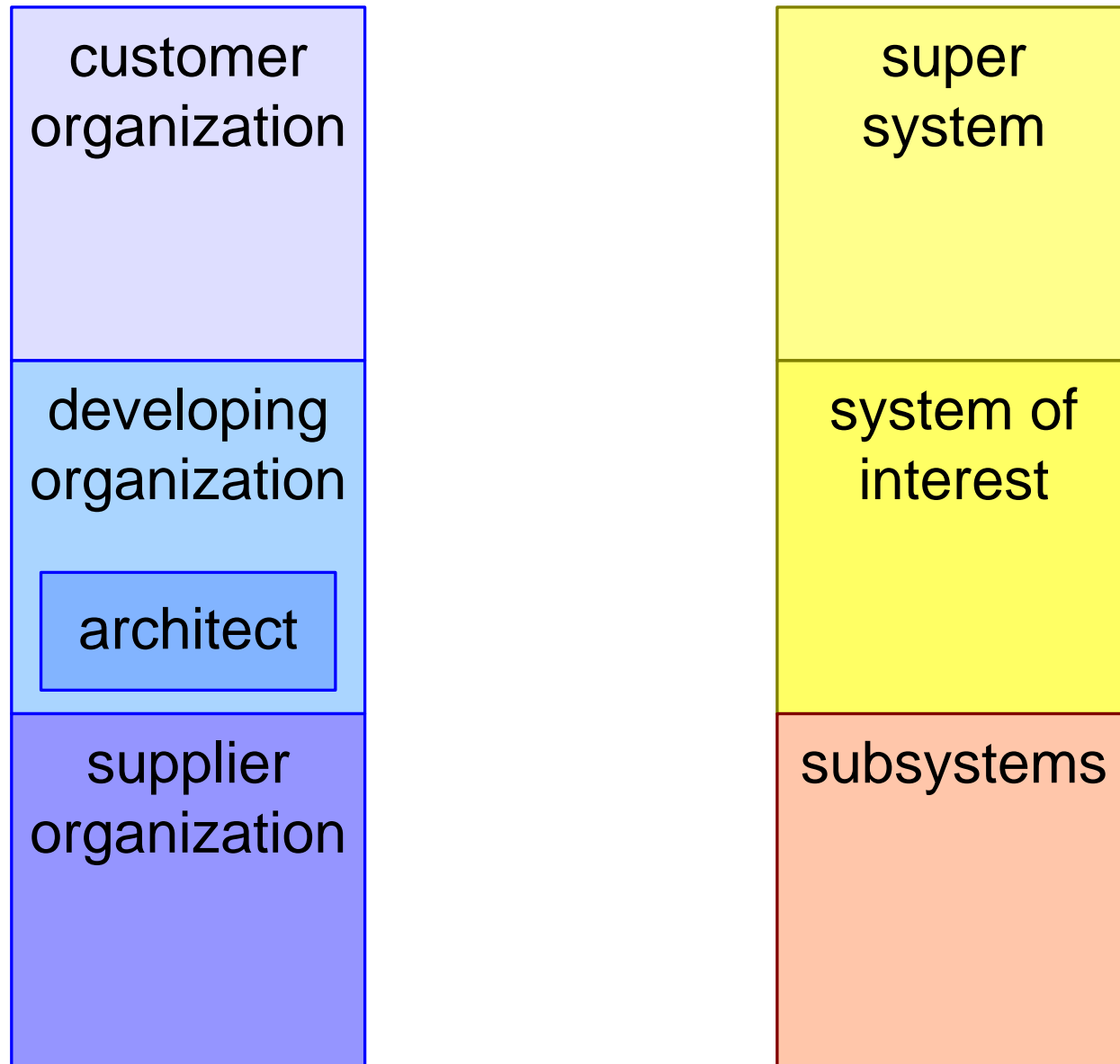
---

developing  
organization

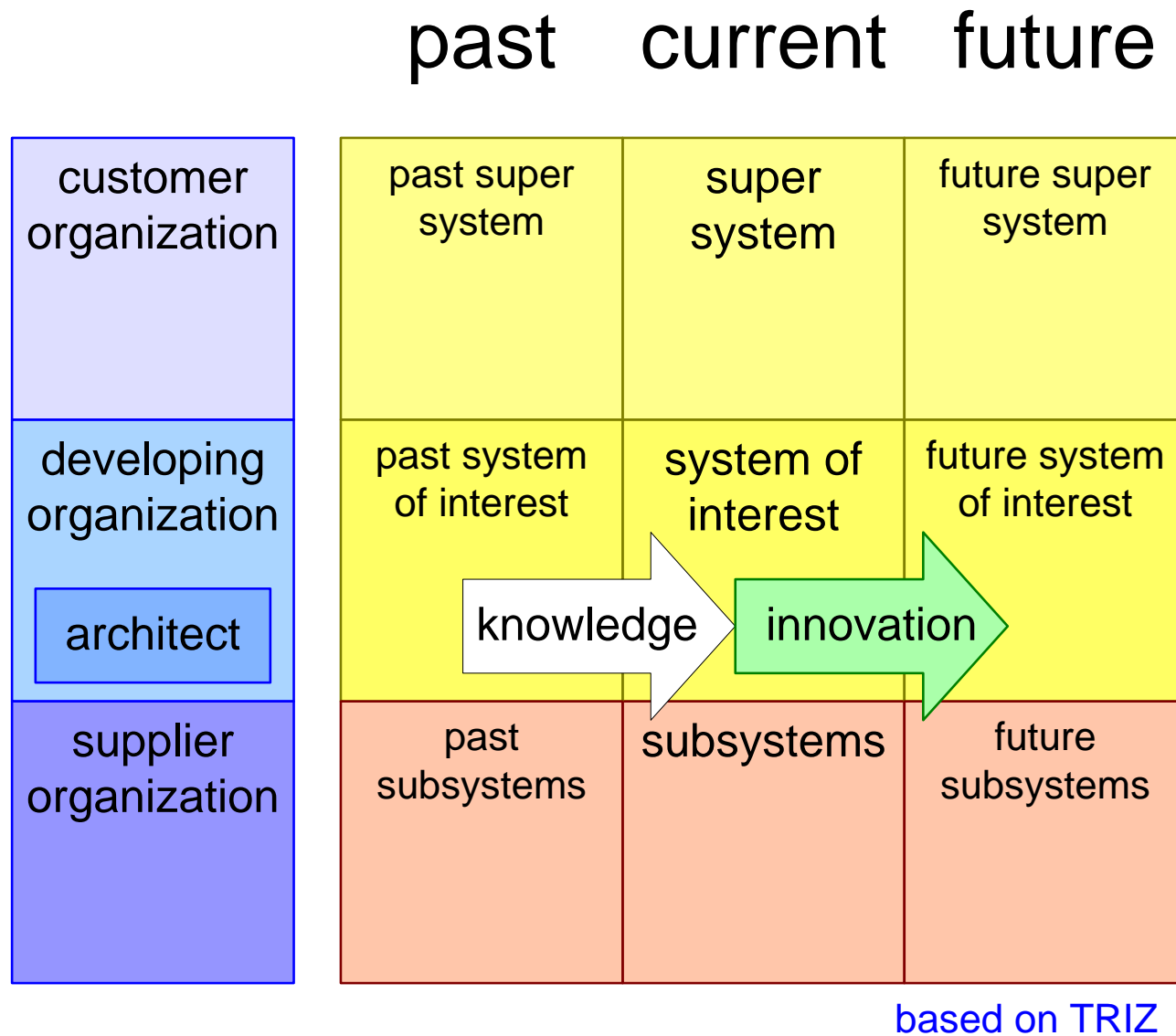
architect

system of  
interest

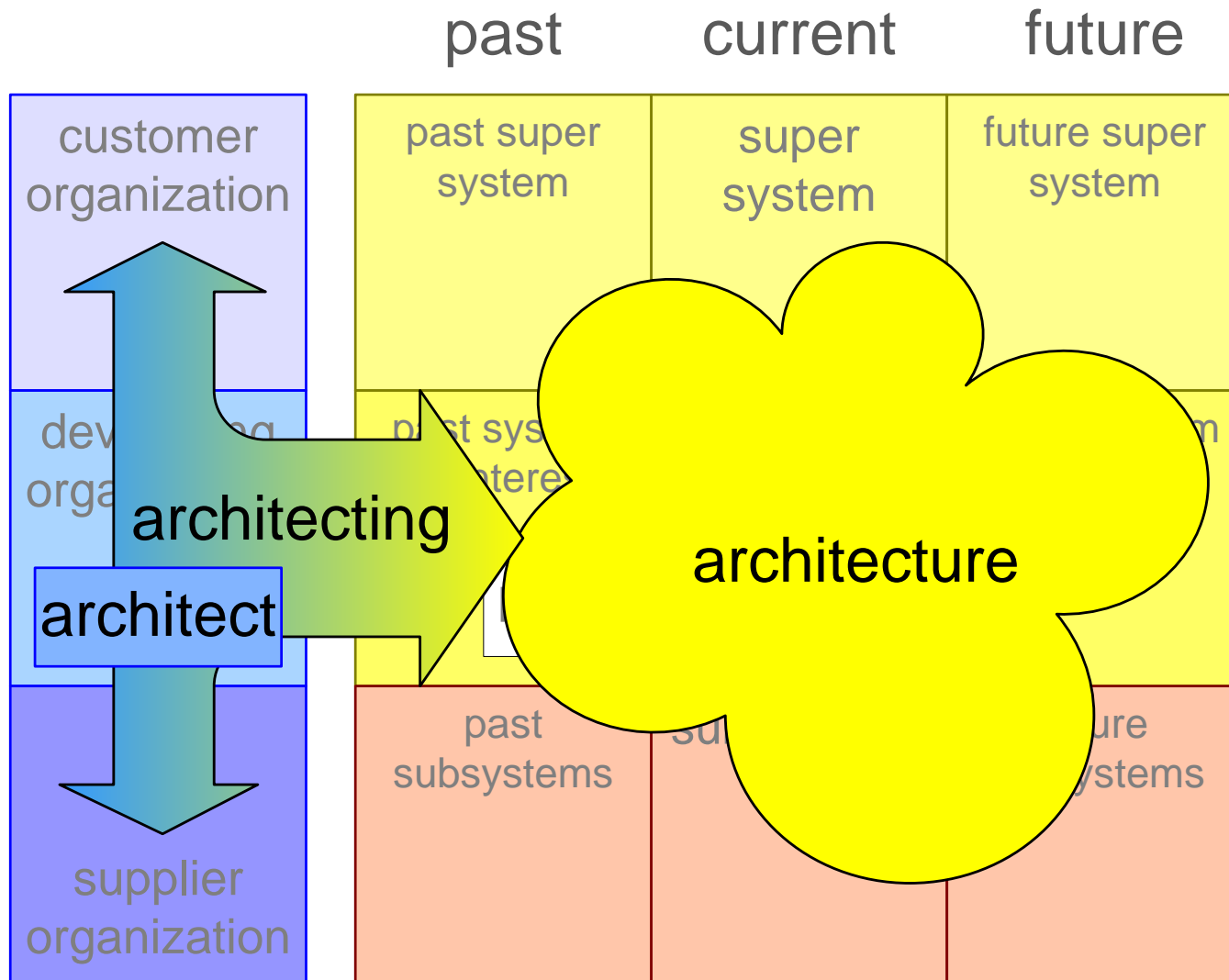
# Context, Zoom-out and Zoom-in



# Adding the Time Dimension



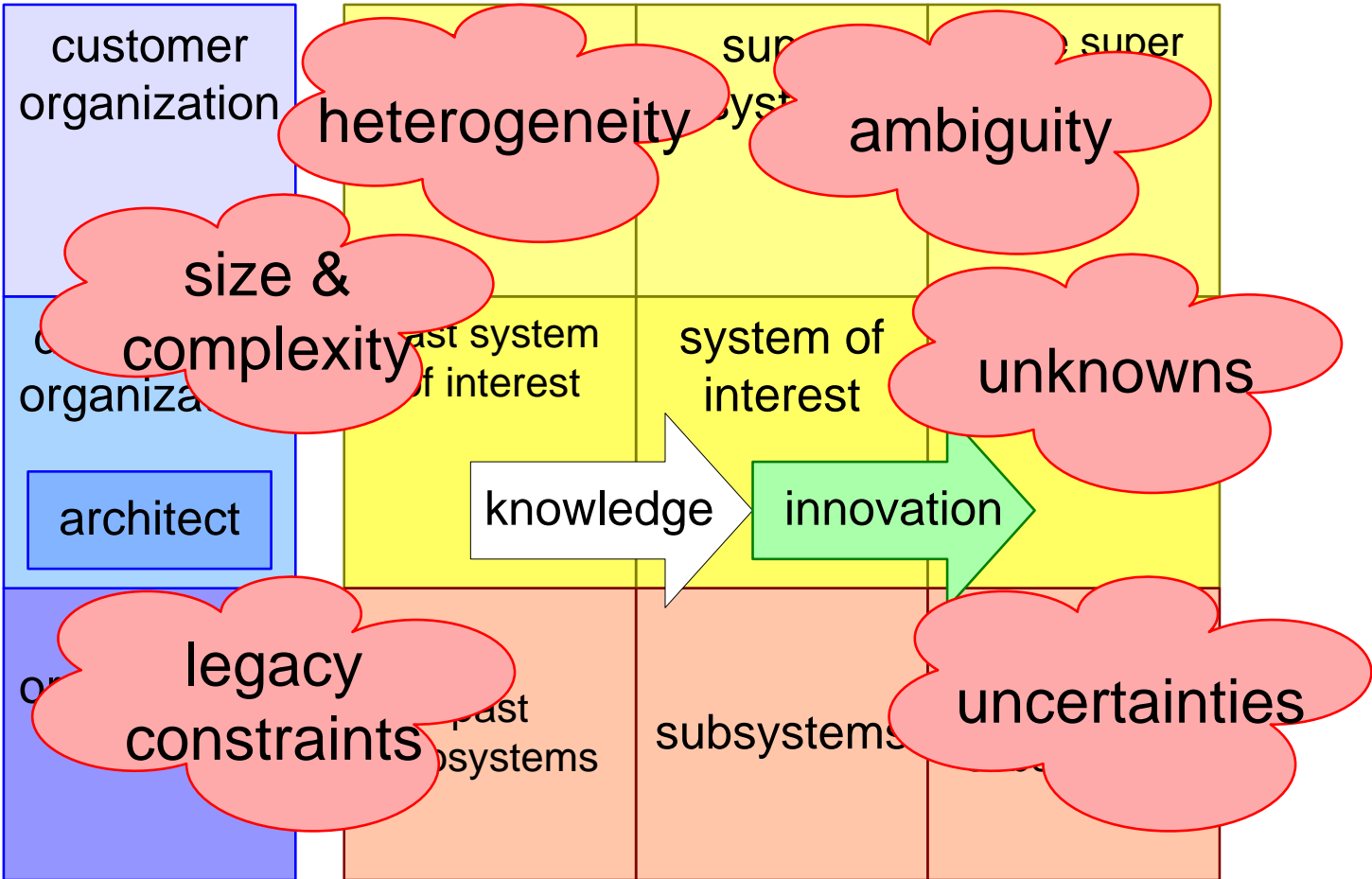
# Architect, Architecture, Architecting



based on TRIZ

# Challenges

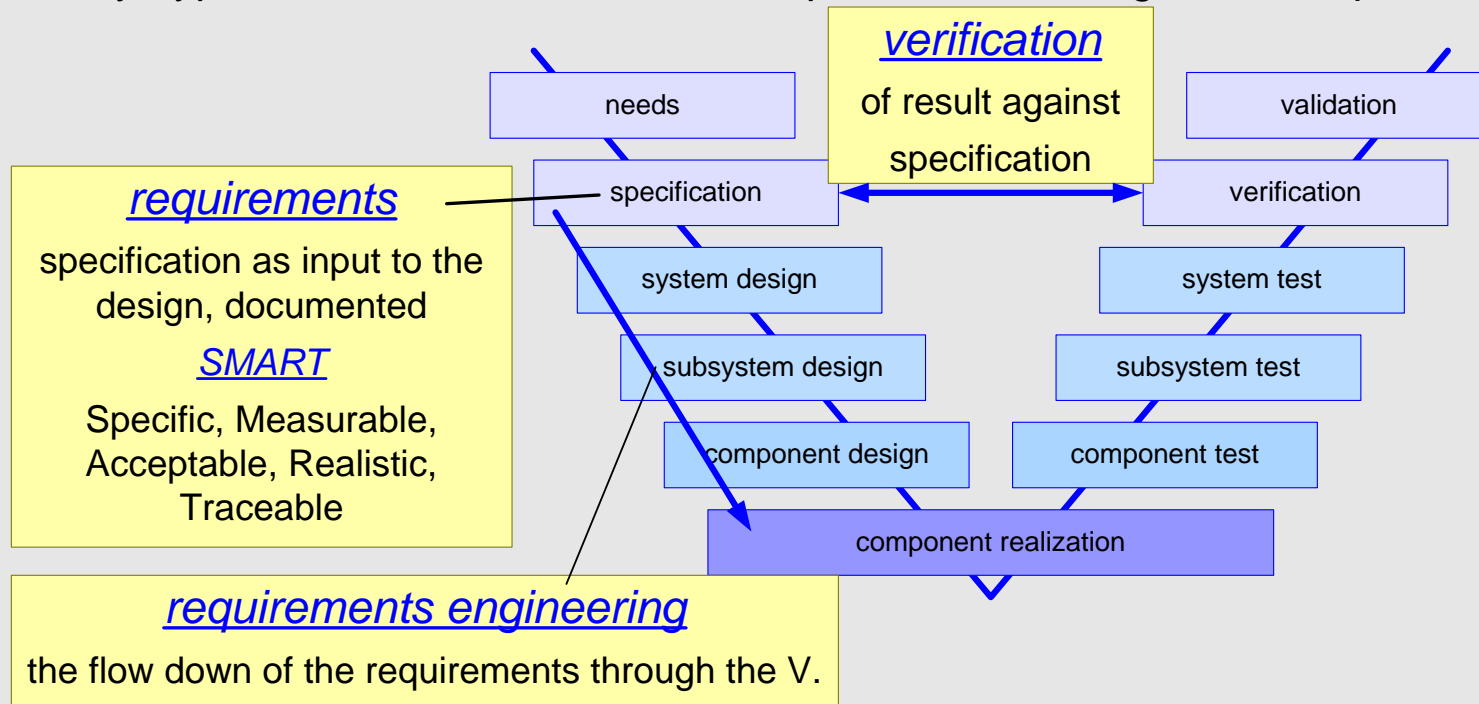
past    current    future



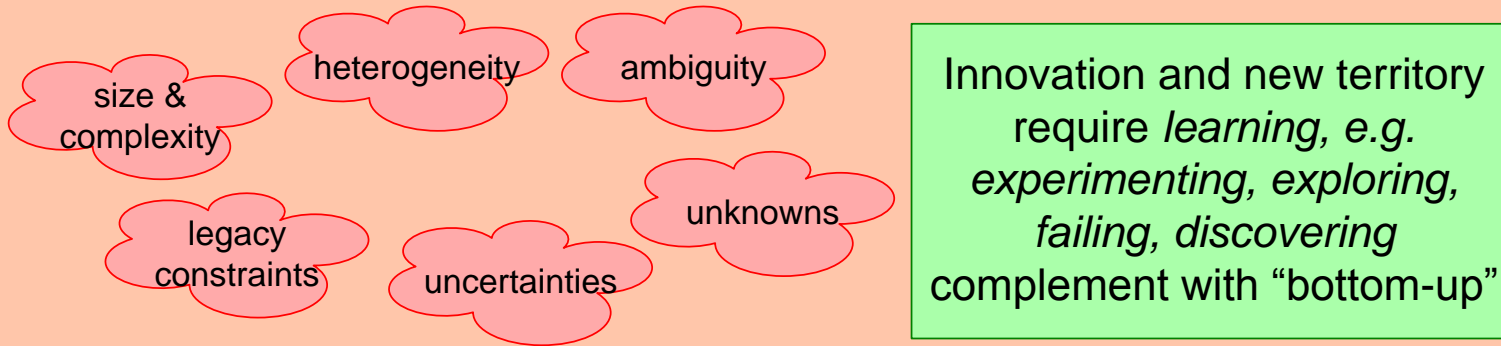
based on TRIZ

# From Theory to Practice

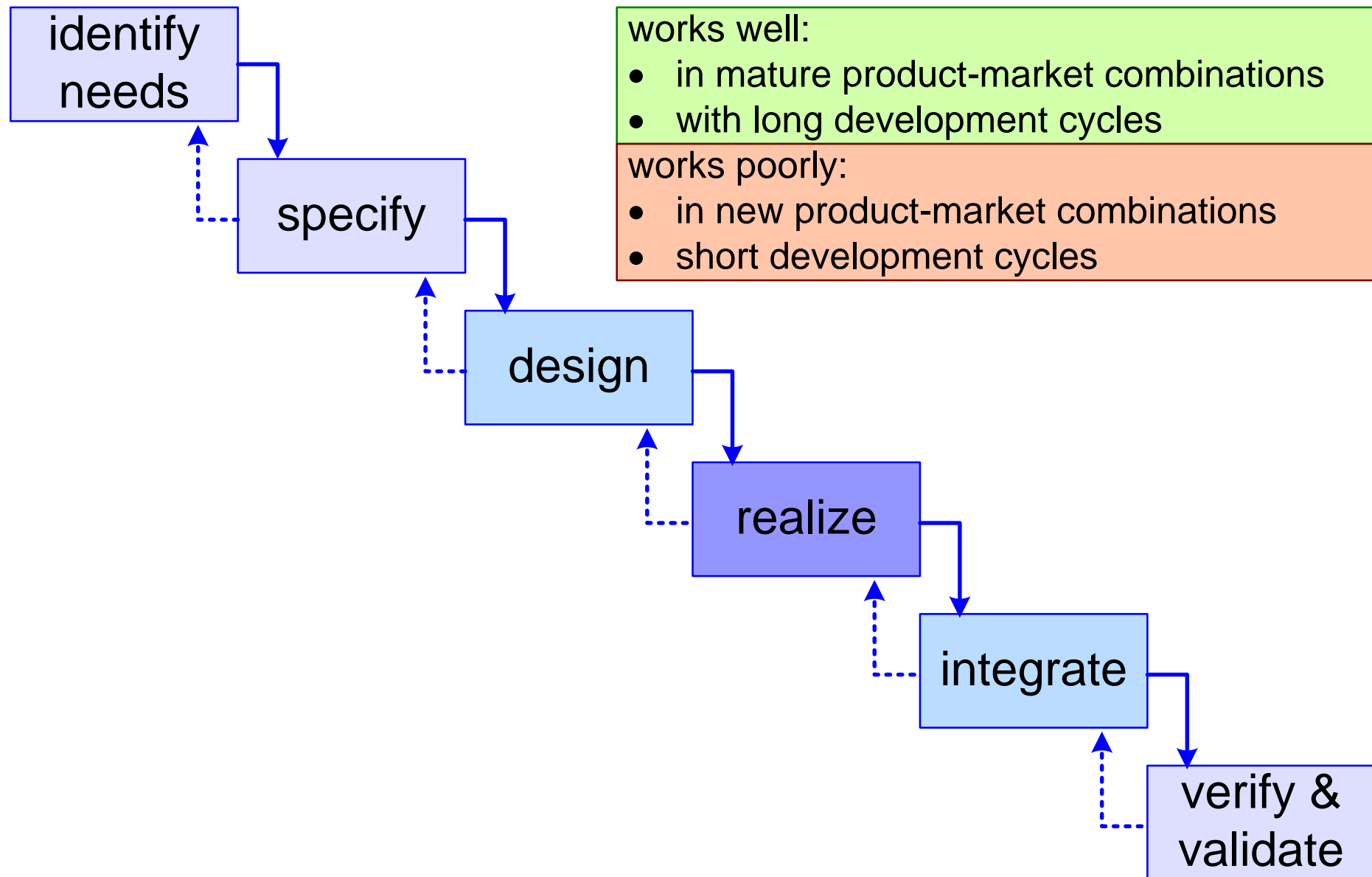
Theory: typical SE workflow: V-model, requirements management, “top-down”



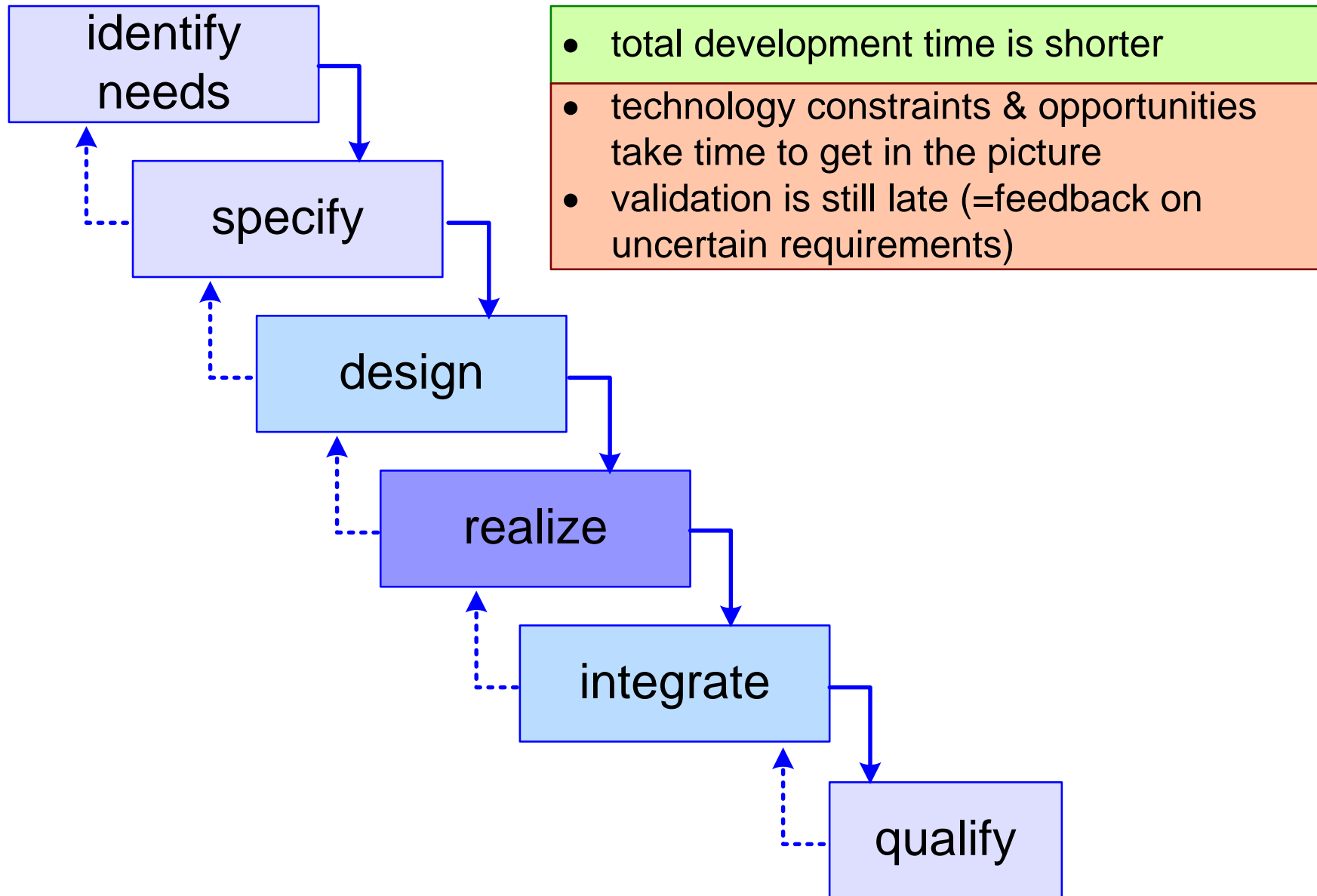
Practice: Finite knowledge and wisdom causes late disruptions



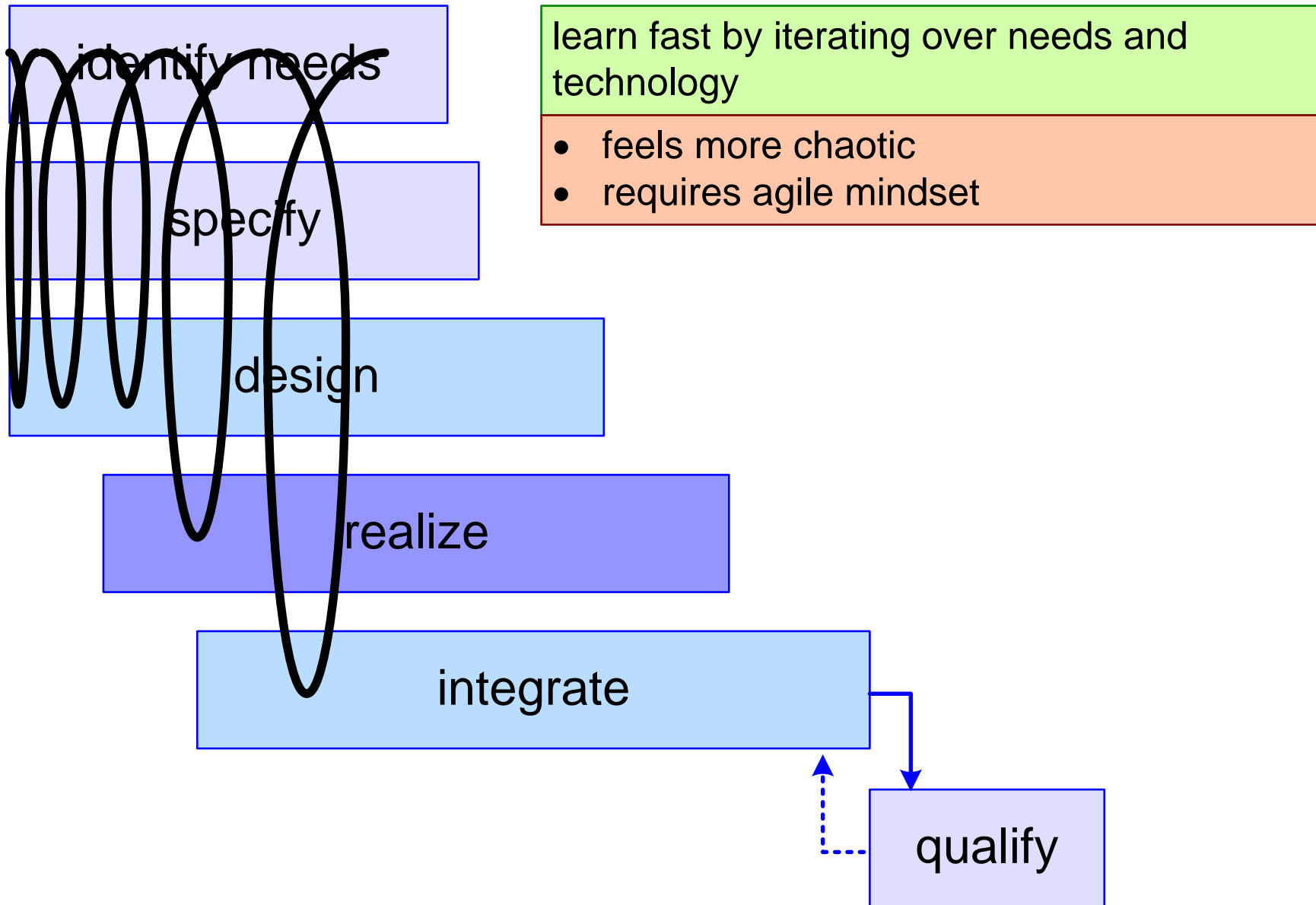
# Waterfall model



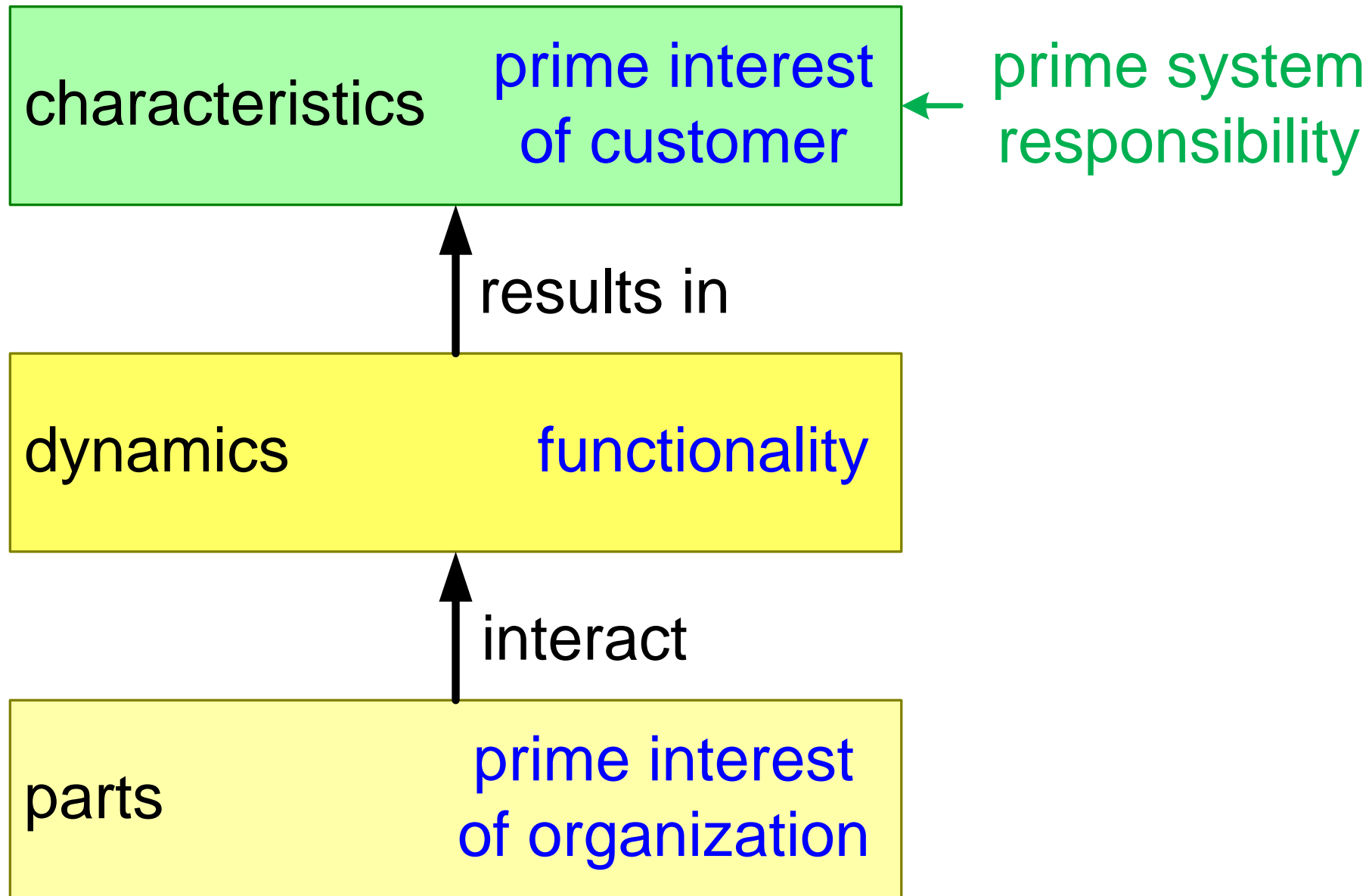
# Concurrent Engineering



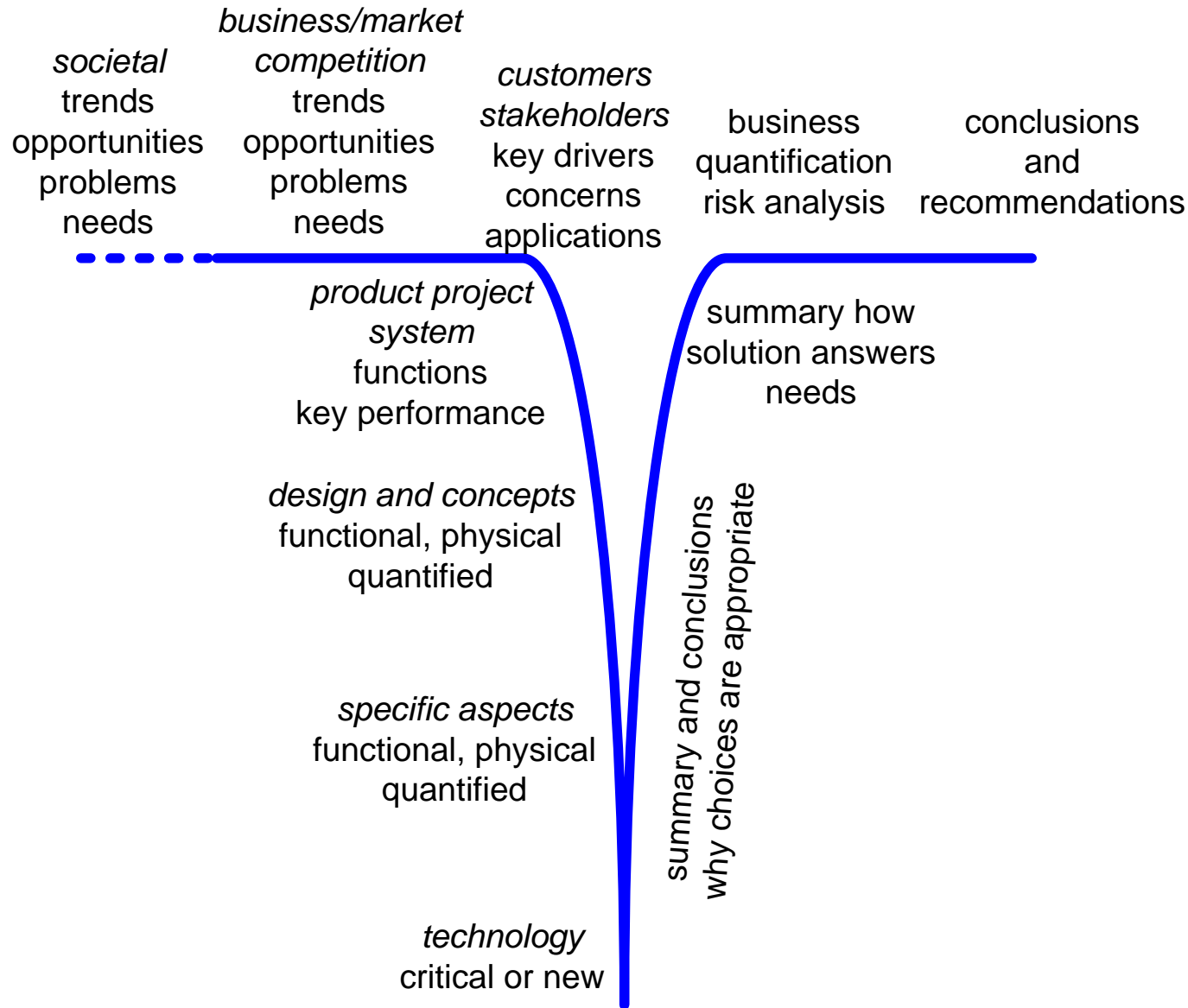
# Iterative Approach



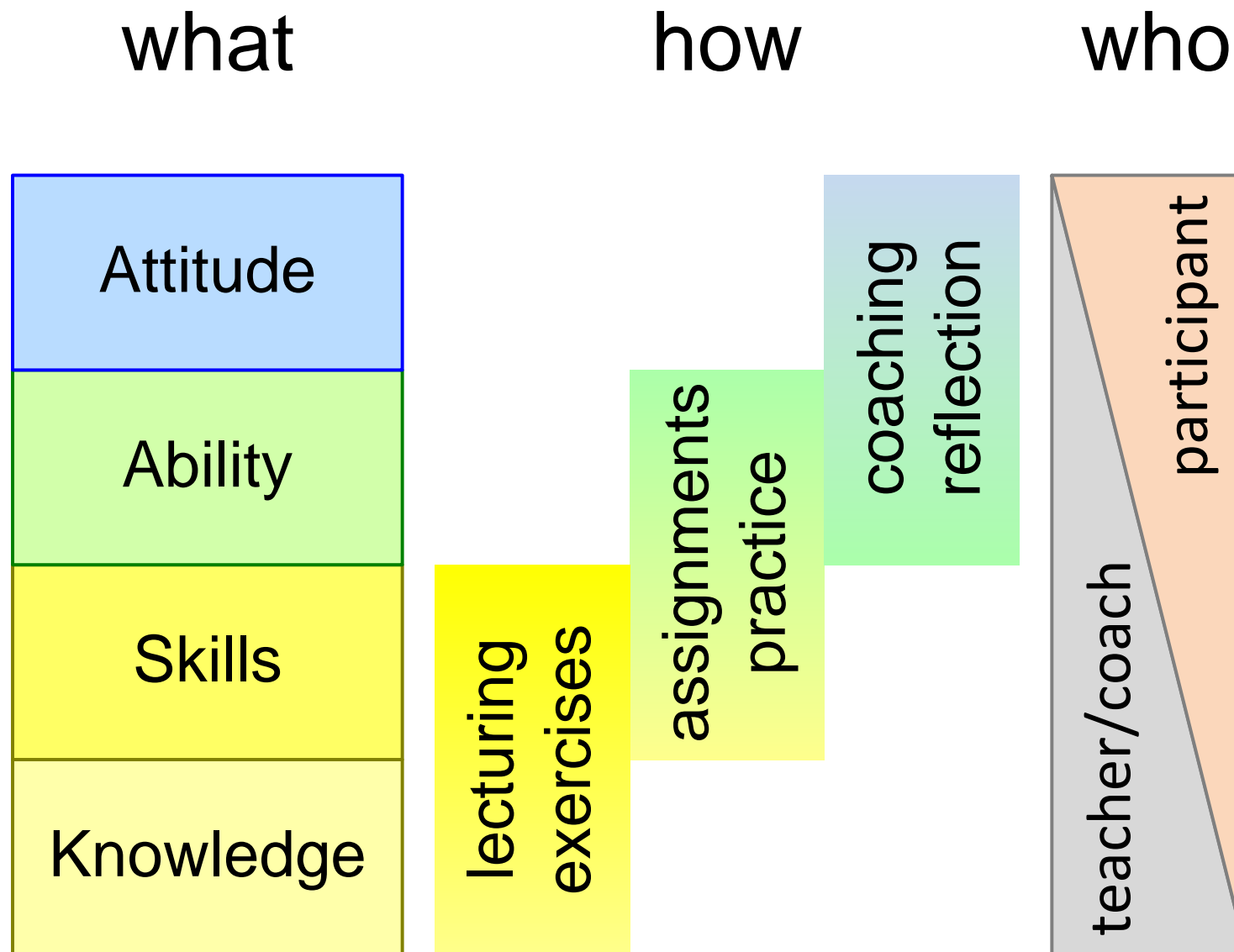
# Architect and Typical Expectation from Organization



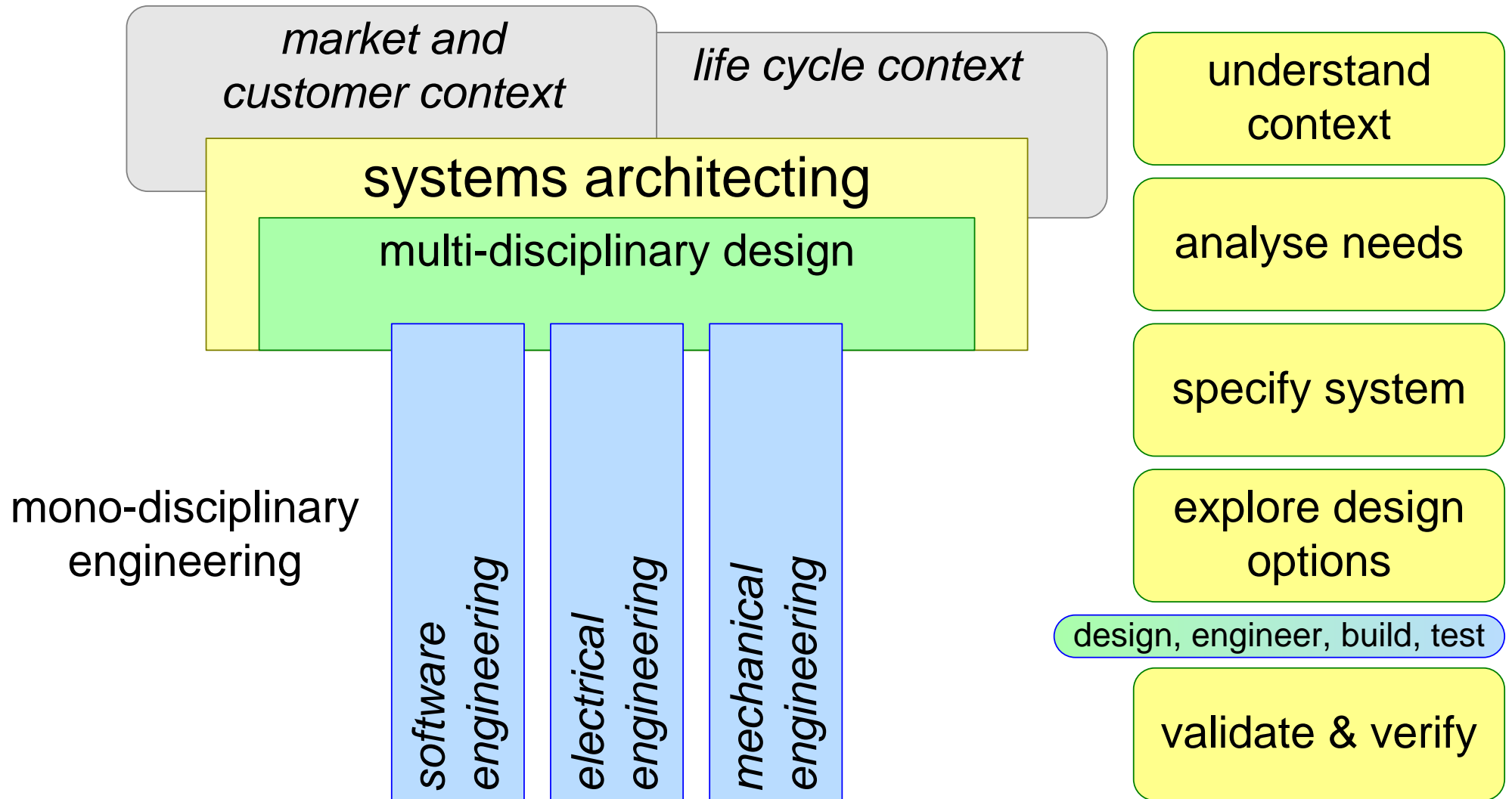
# Final Delivery: T-shape Presentation to Top Management



# Competence Development: working at multiple levels

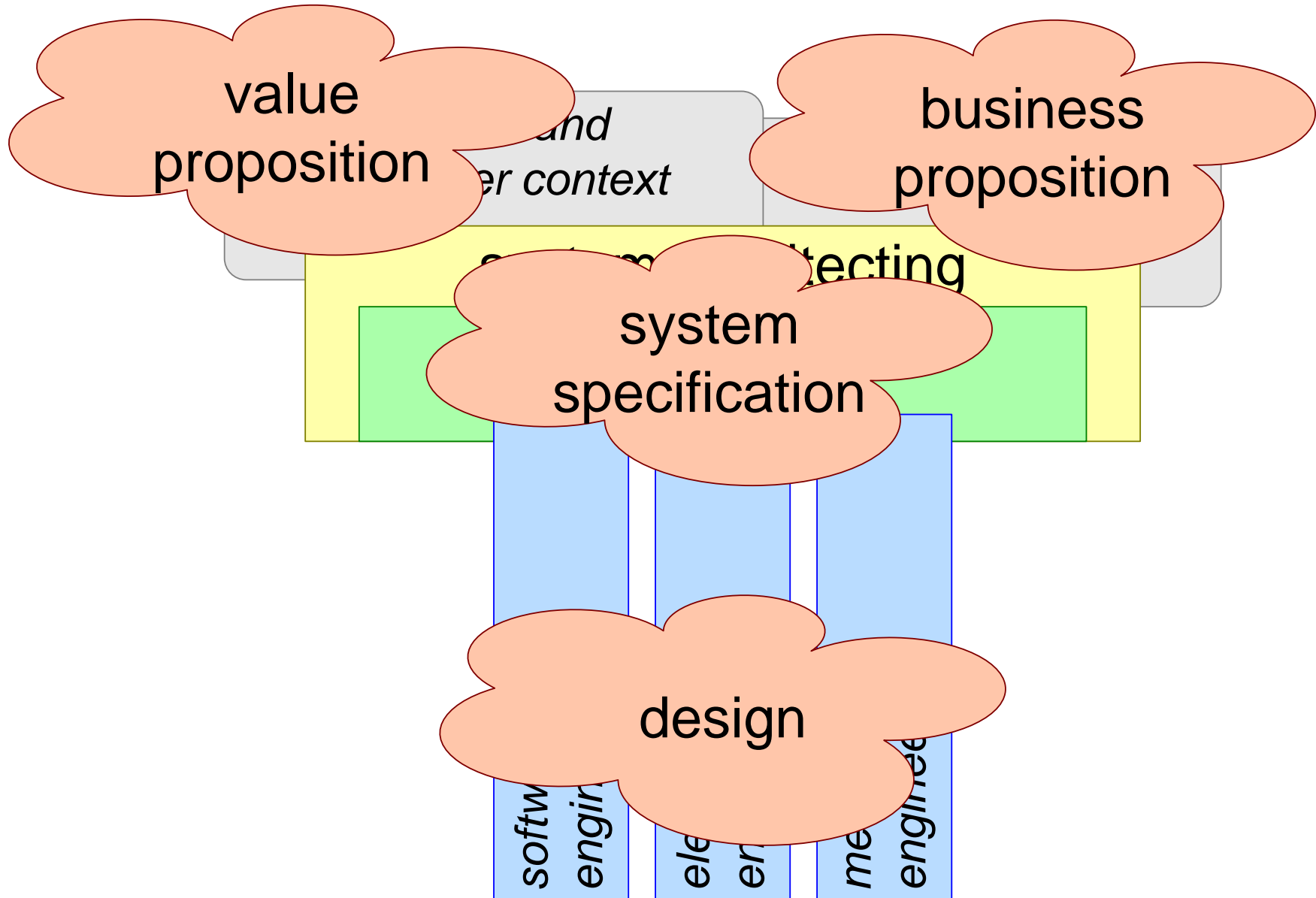


# Architecting: Fit-For-Purpose



# Delivery at the end of this module

---



# Alternate Knowledge/Skills and Attitude

