

Project Systems Engineering Introduction; Phasing, Process, Organization

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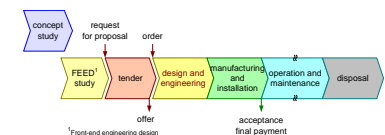
Abstract

The fundamental concepts and approach to project oriented Systems Engineering are explained. We look at project phasing, phase transition, processes, and organization.

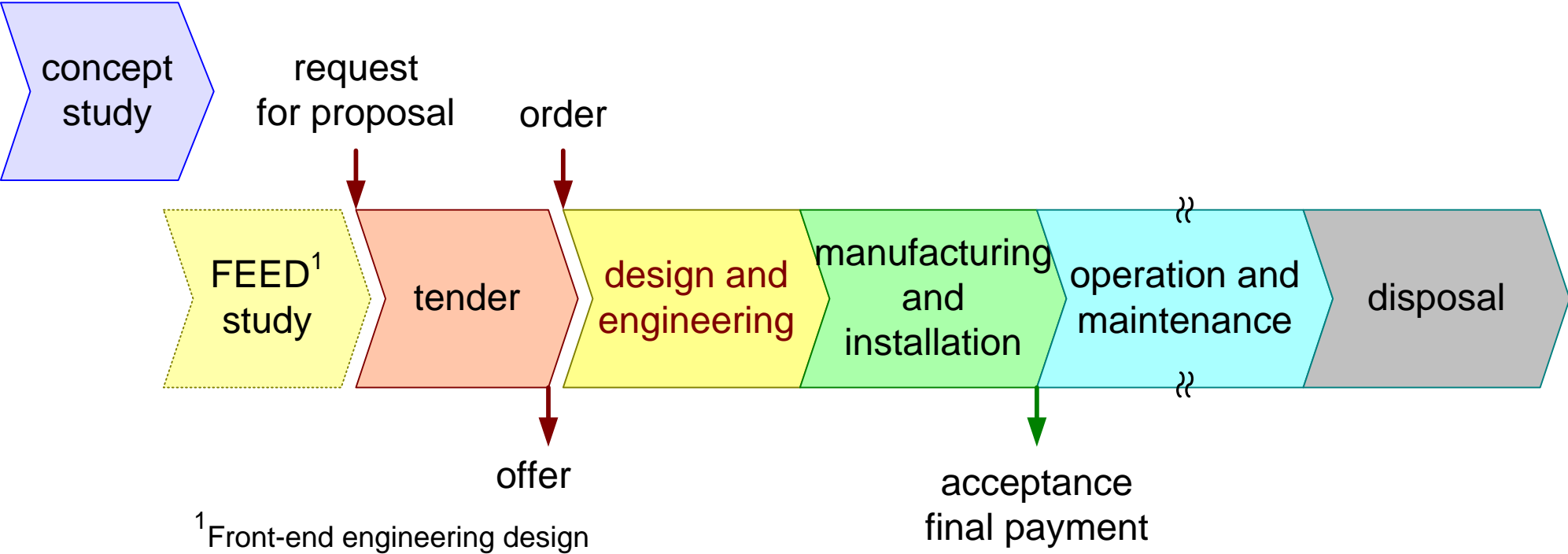
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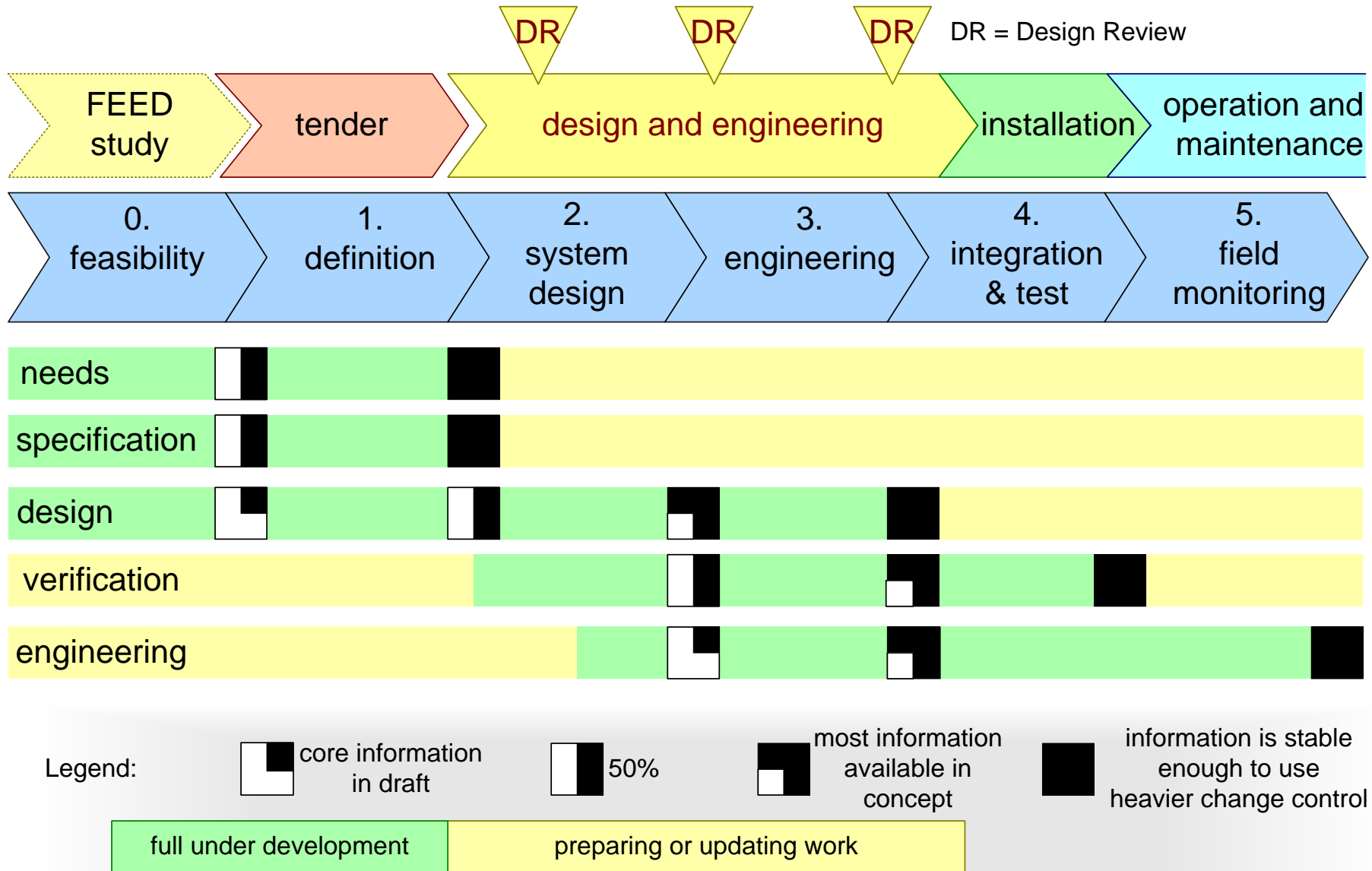
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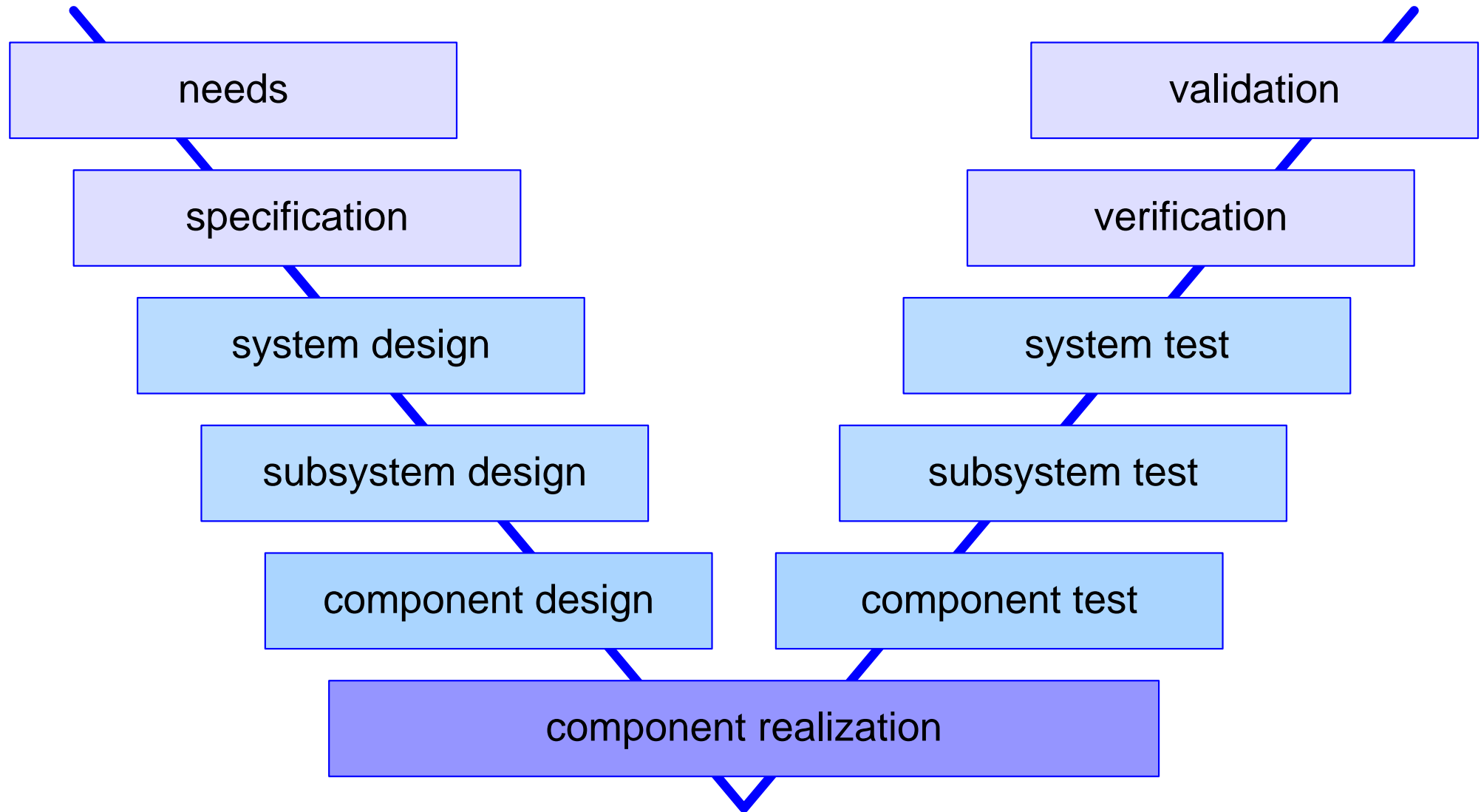
Project Life Cycle



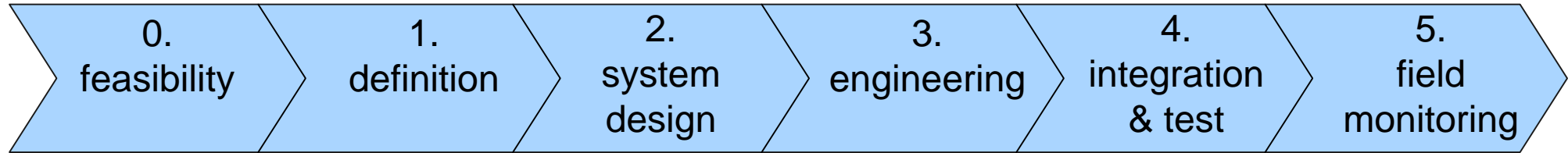
Phased Project Approach



V-Model



All Business Functions Participate



sales

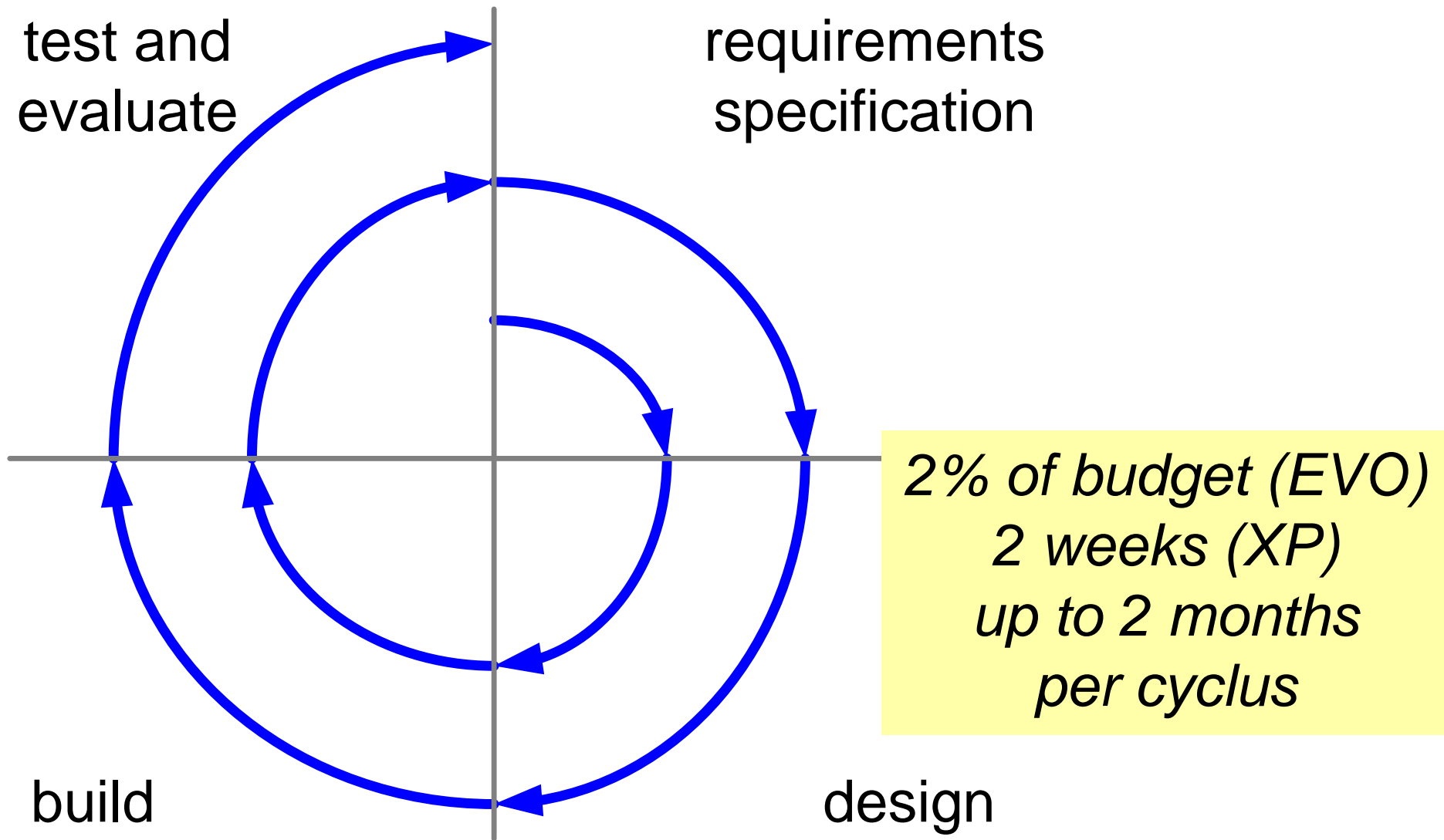
logistics

production

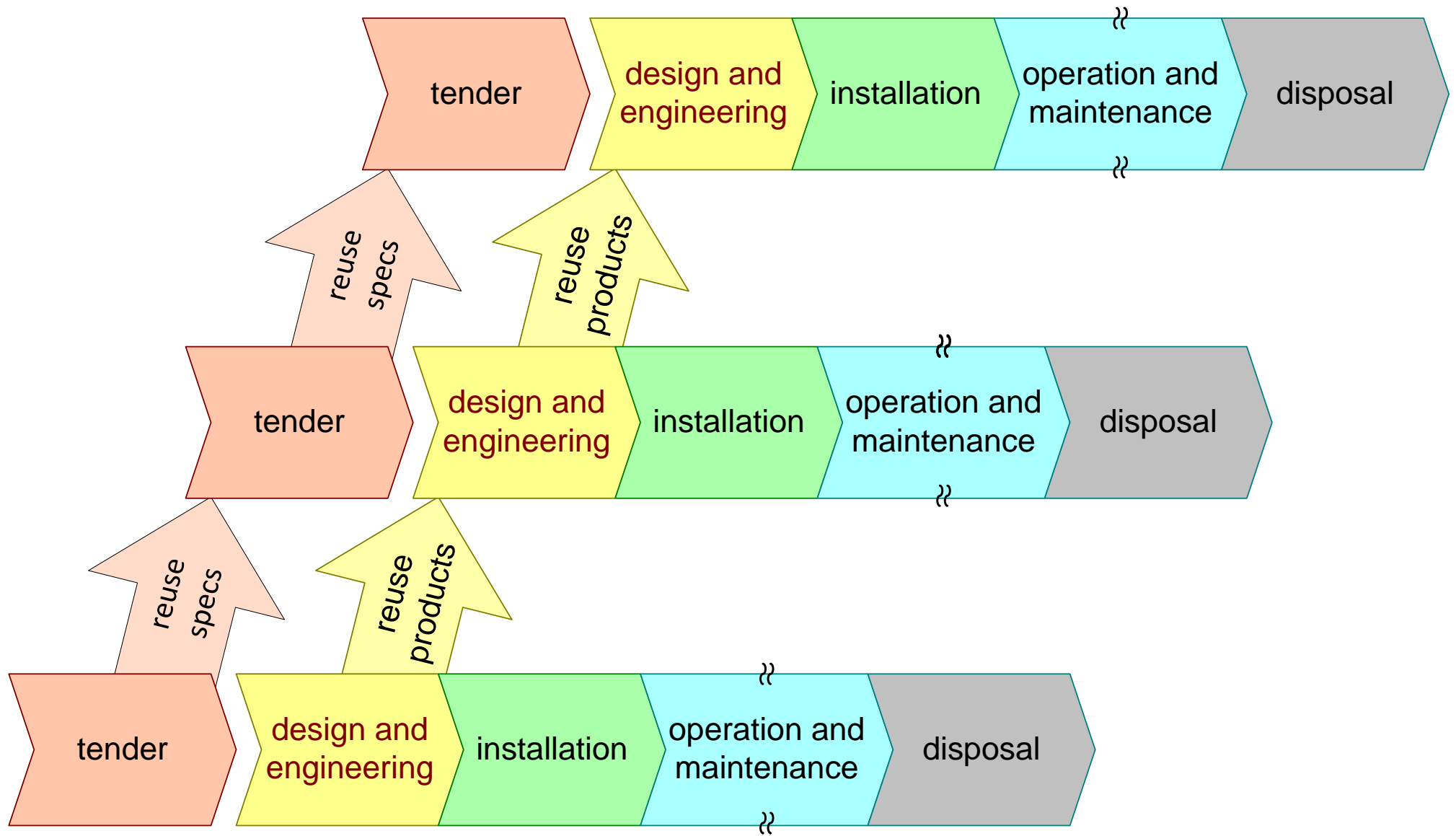
service

development & engineering: marketing, project management, design

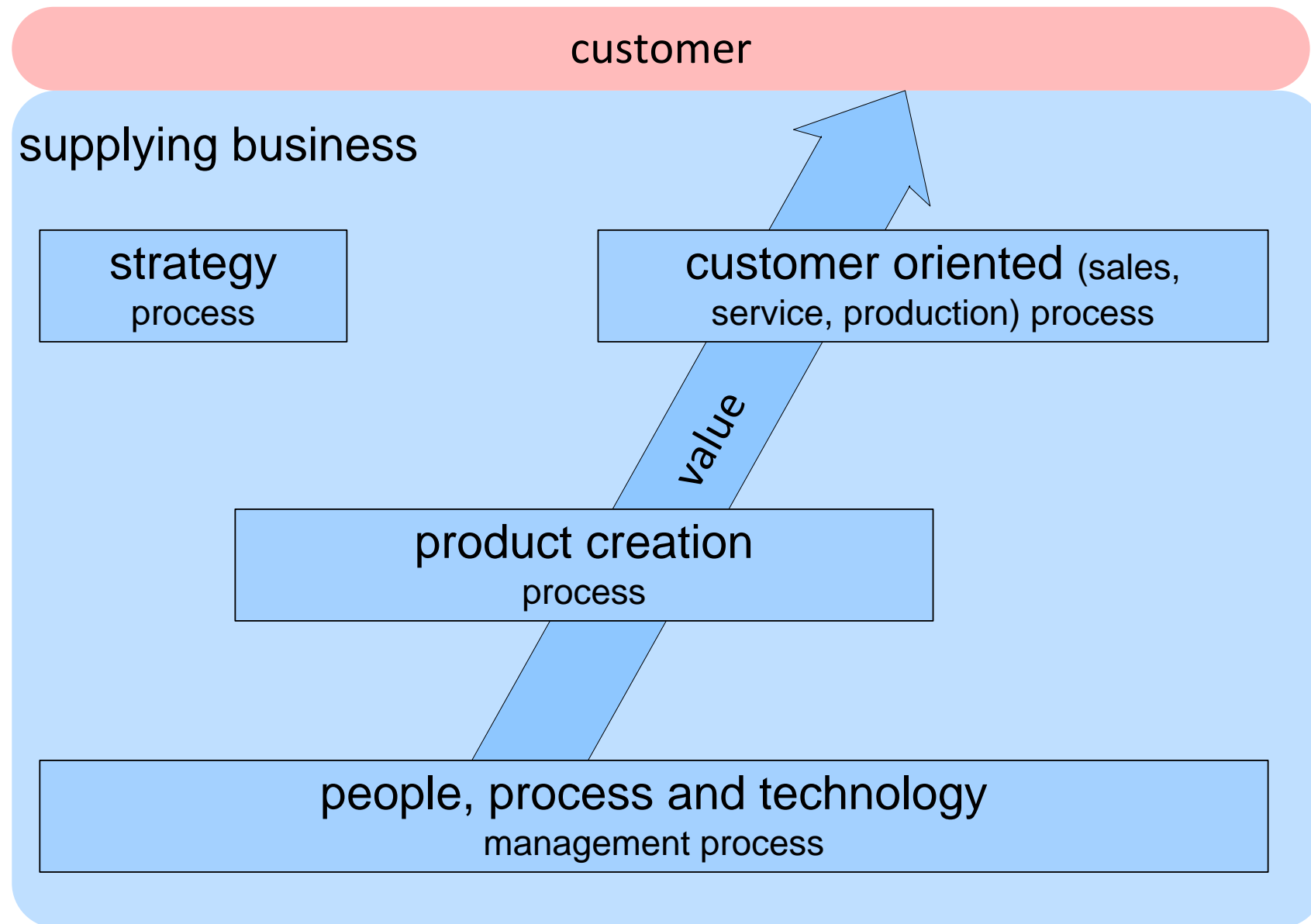
Evolutionary PCP model



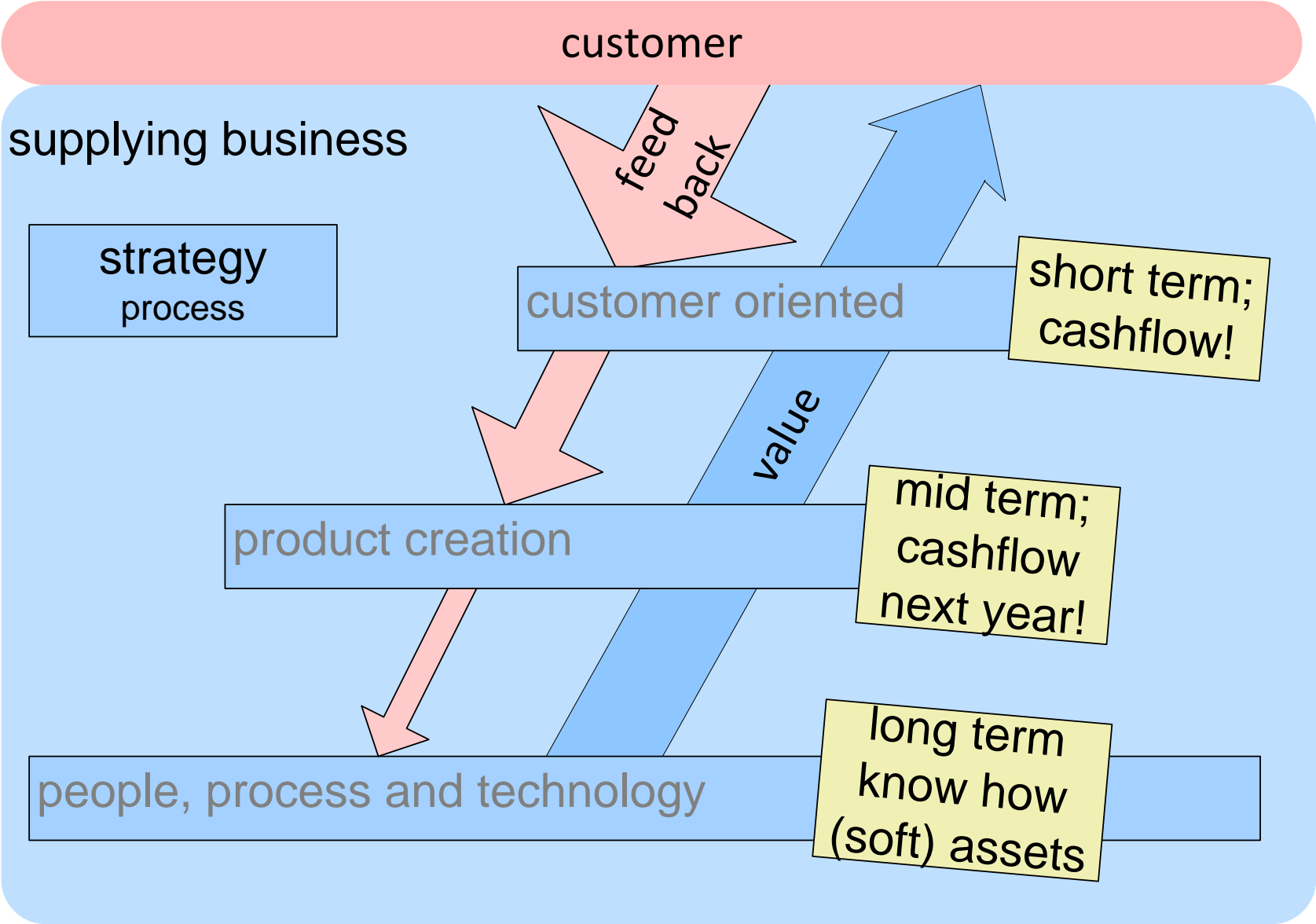
Reuse and Products



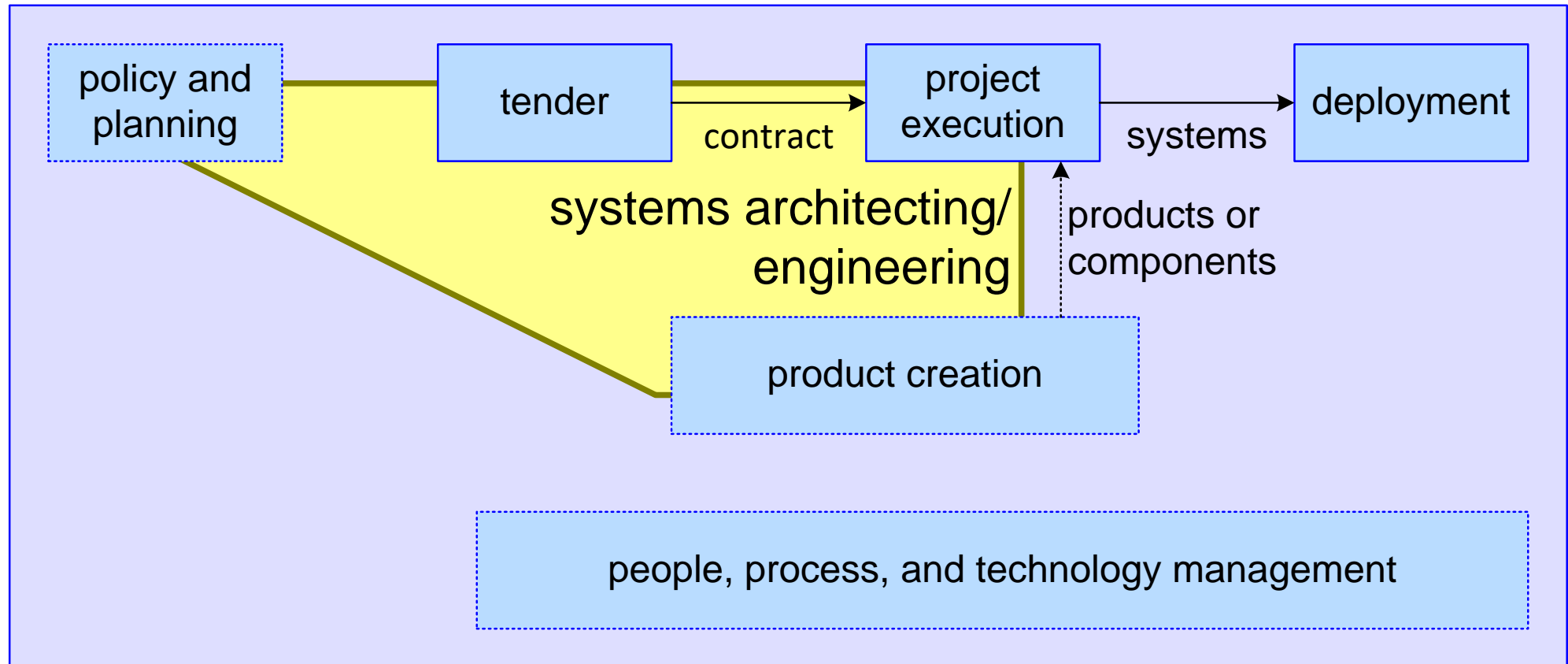
Simplified Process View



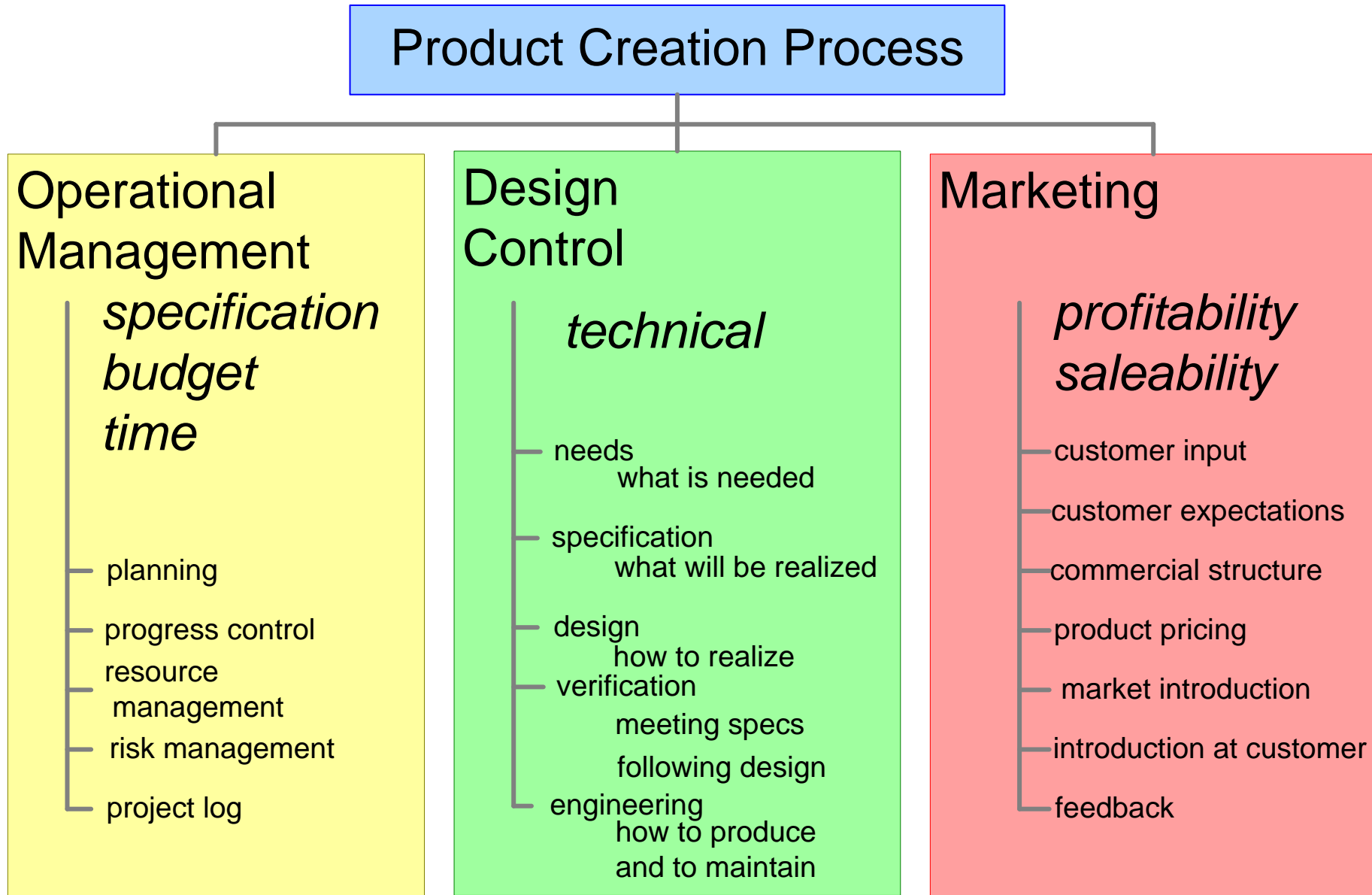
Simplified Process; Money and Feedback



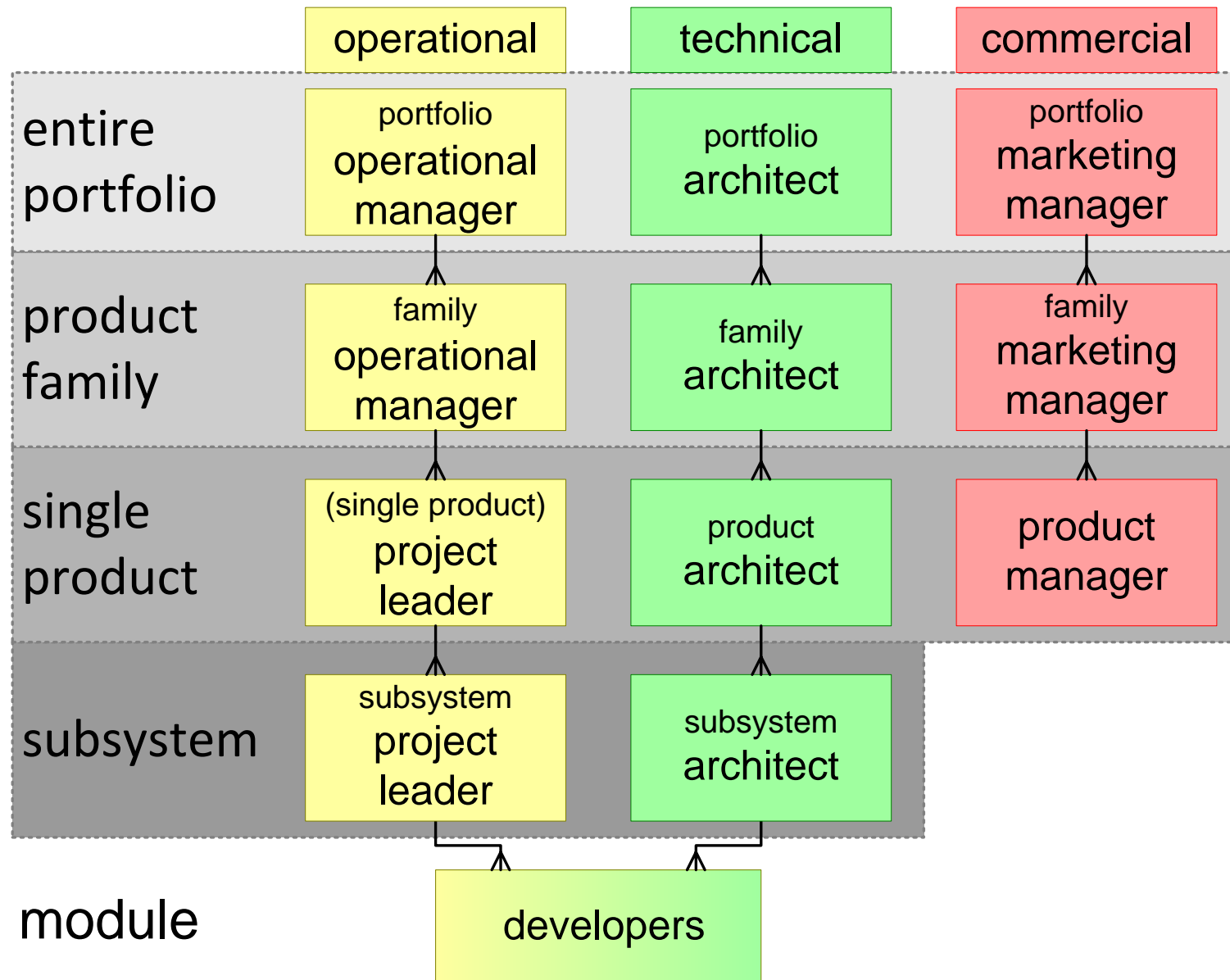
Simplified process diagram for project business



Decomposition of the Product Creation Process

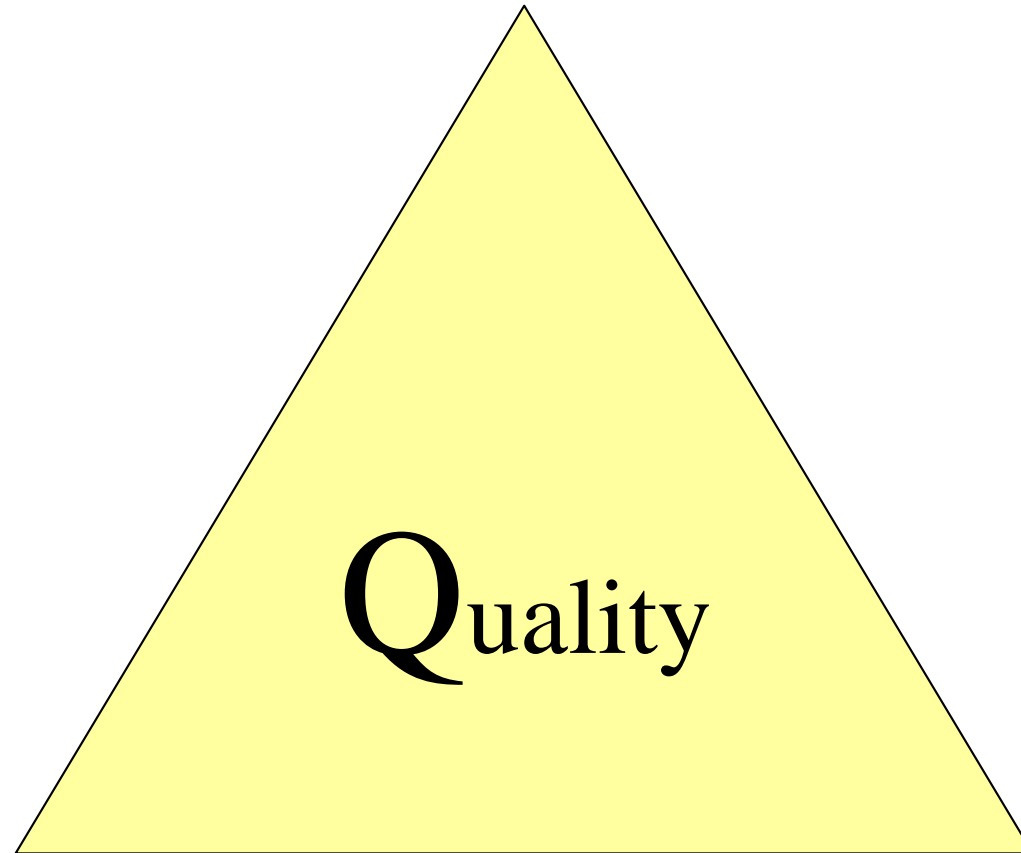


Operational Organization of the PCP



Prime Responsibilities of the Operational Leader

Specification



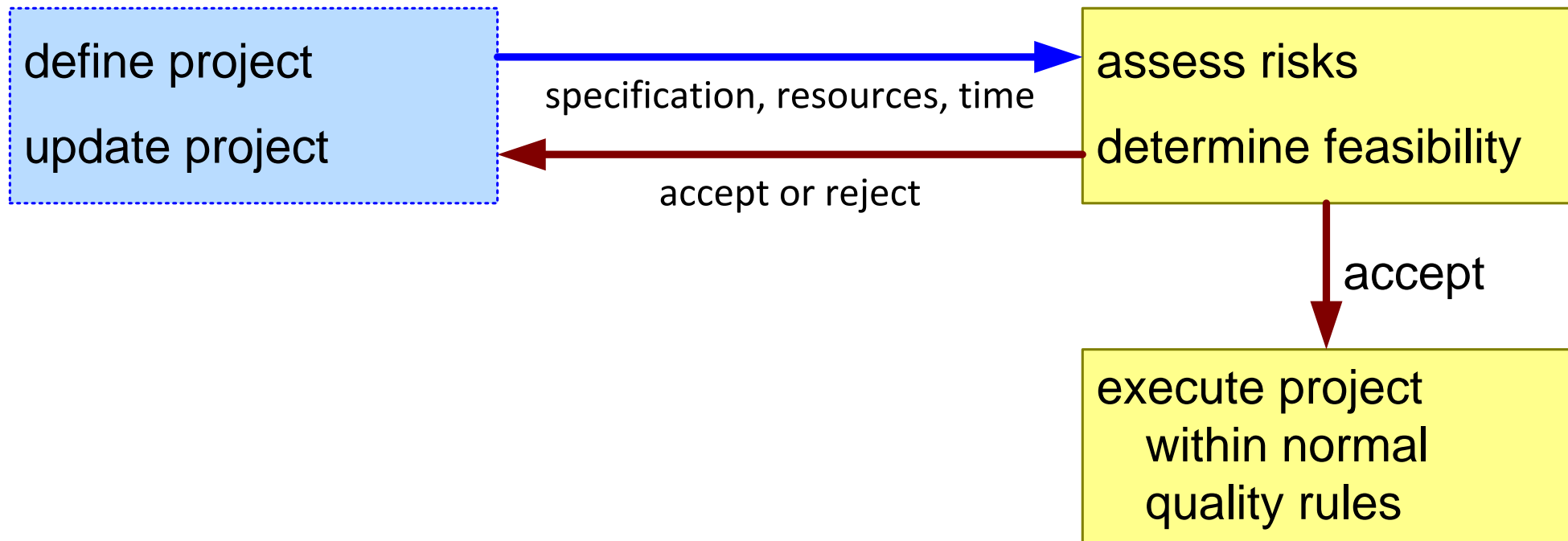
Resources

Time

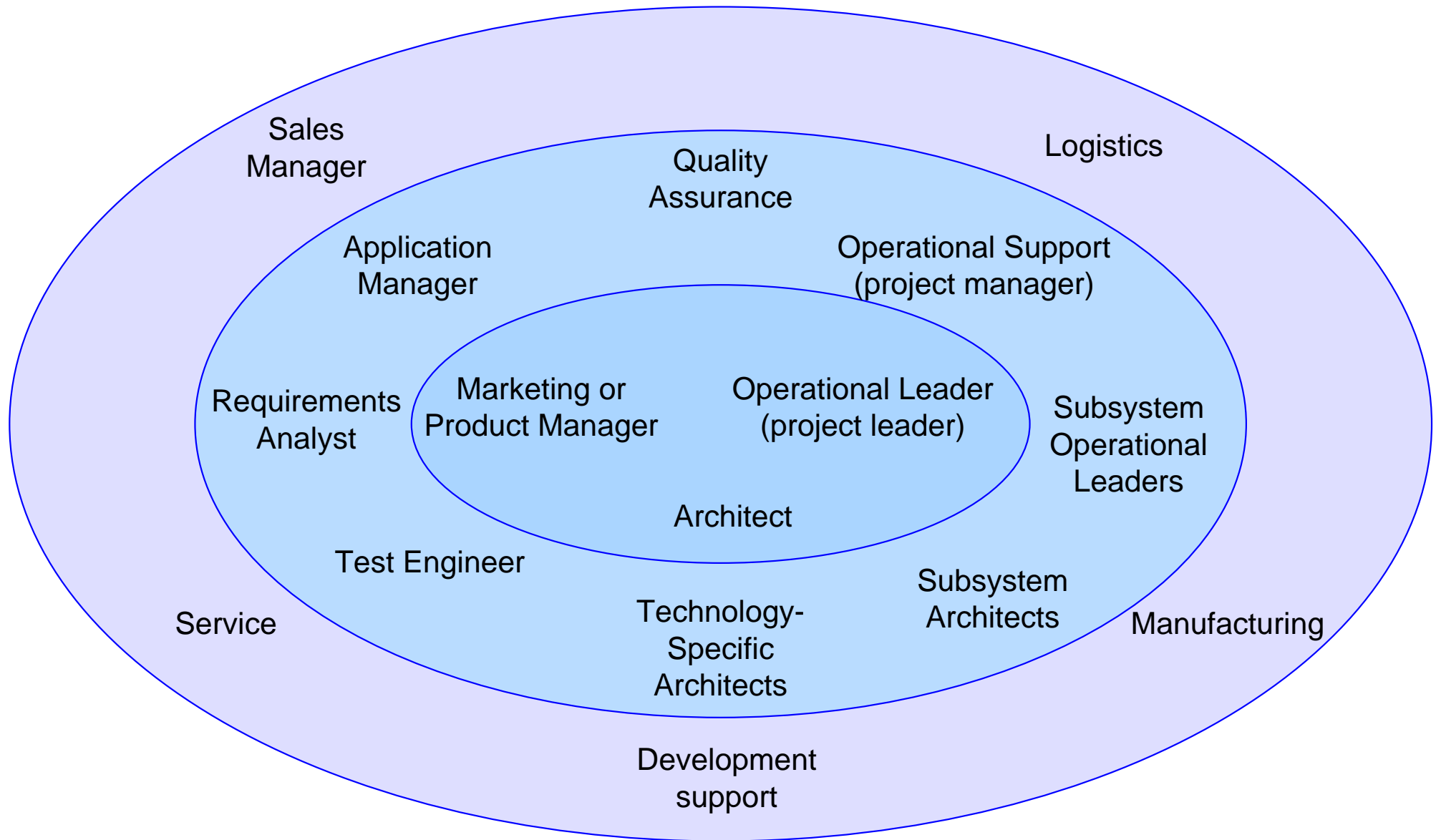
The Rules of the Operational Game

business management

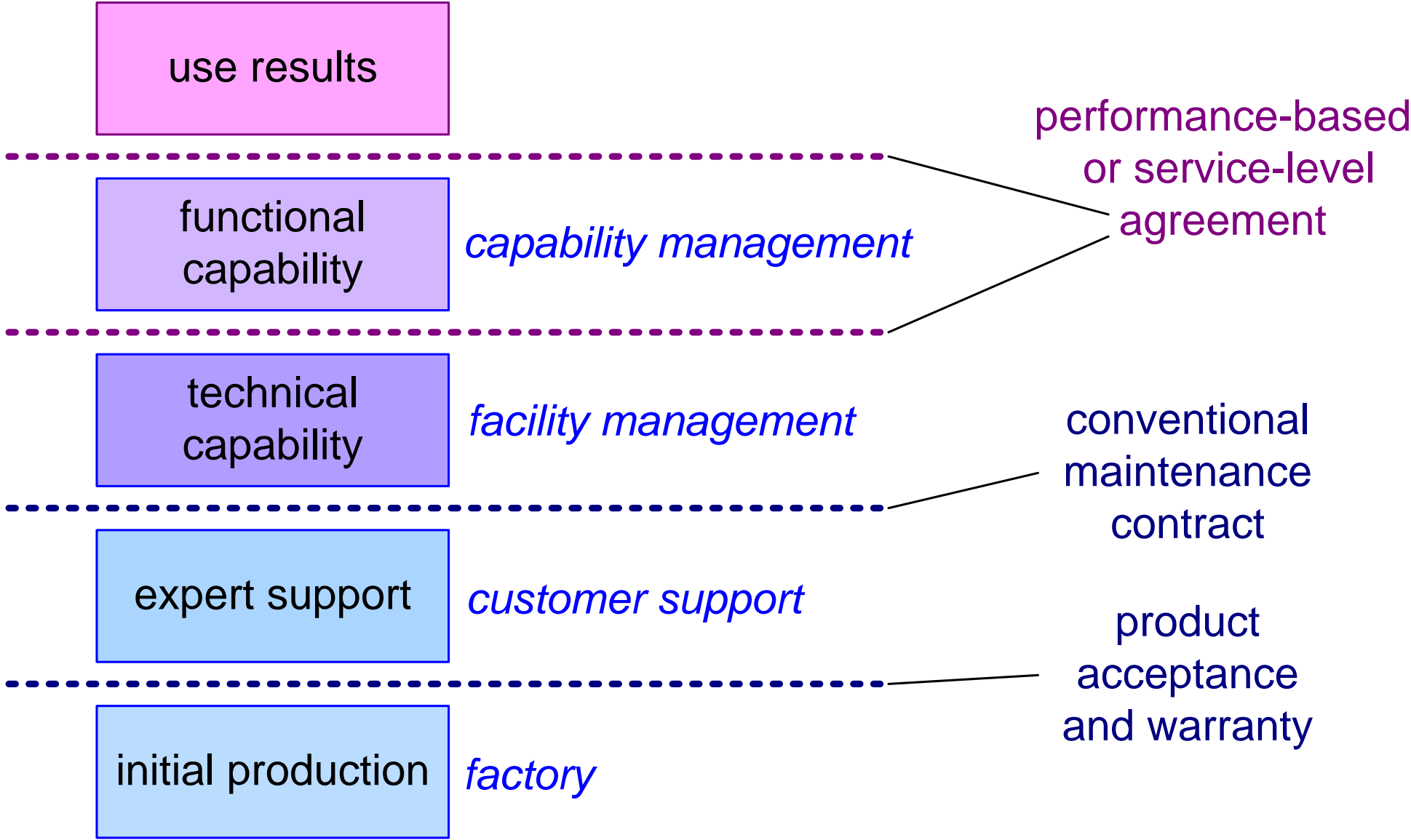
project leader



Operational Teams



What Service Level to Deliver?



Systems Engineering Management Plan (SEMP)

How the project will perform the systems engineering process:

- main events and activities
- roles and responsibilities
- work products
- procedures and standards

Bridge between project management and engineering (NASA 2016)