

Scenario How To

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Abstract

Good designers keep multiple alternatives open in parallel. This improves the specification and design quality. Scenarios can be used to cope with these alternatives and as a means for communication with stakeholders.

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October 11, 2020
status: planned
version: 0

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TBD

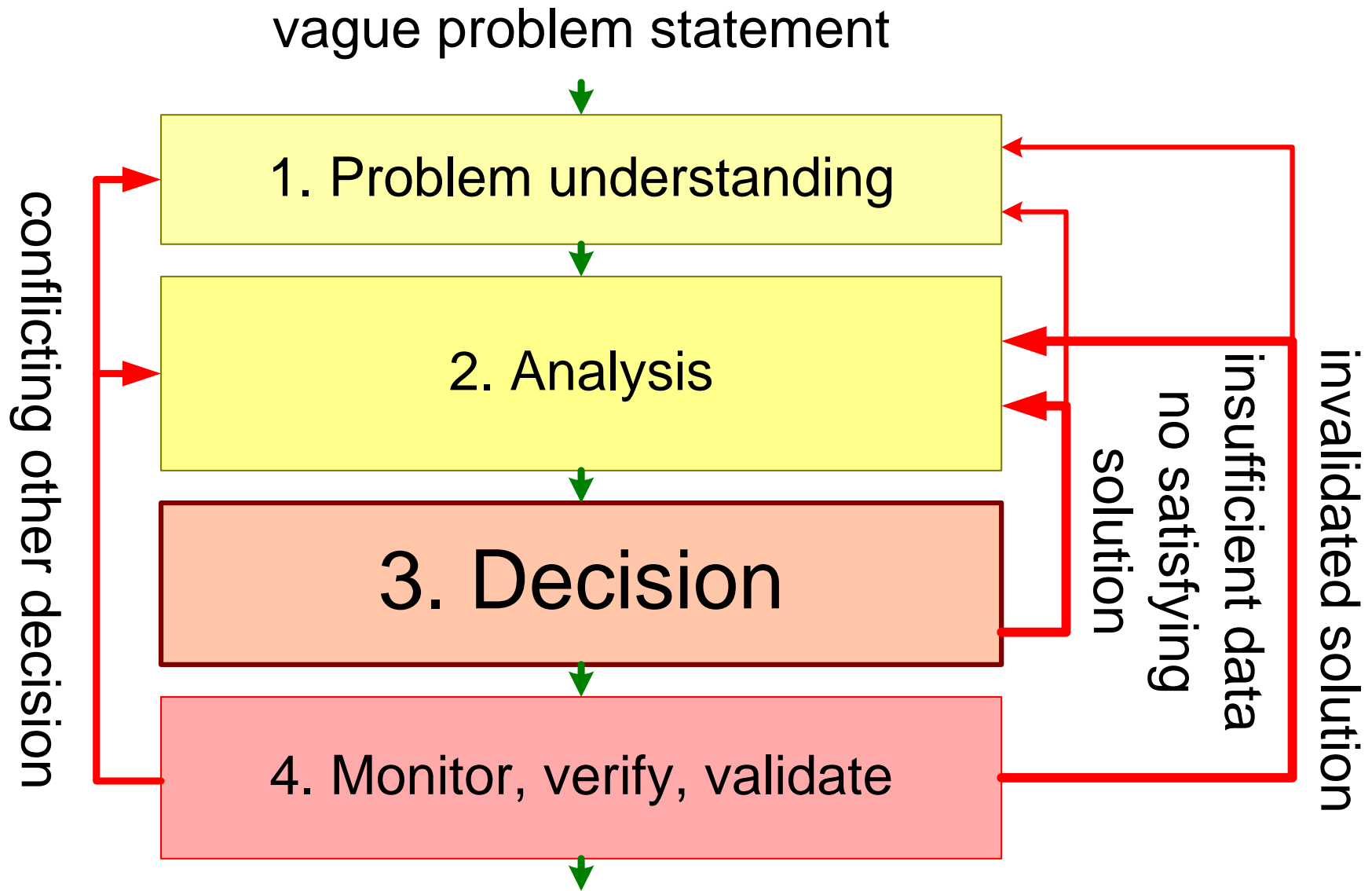
content of this presentation

Decision making

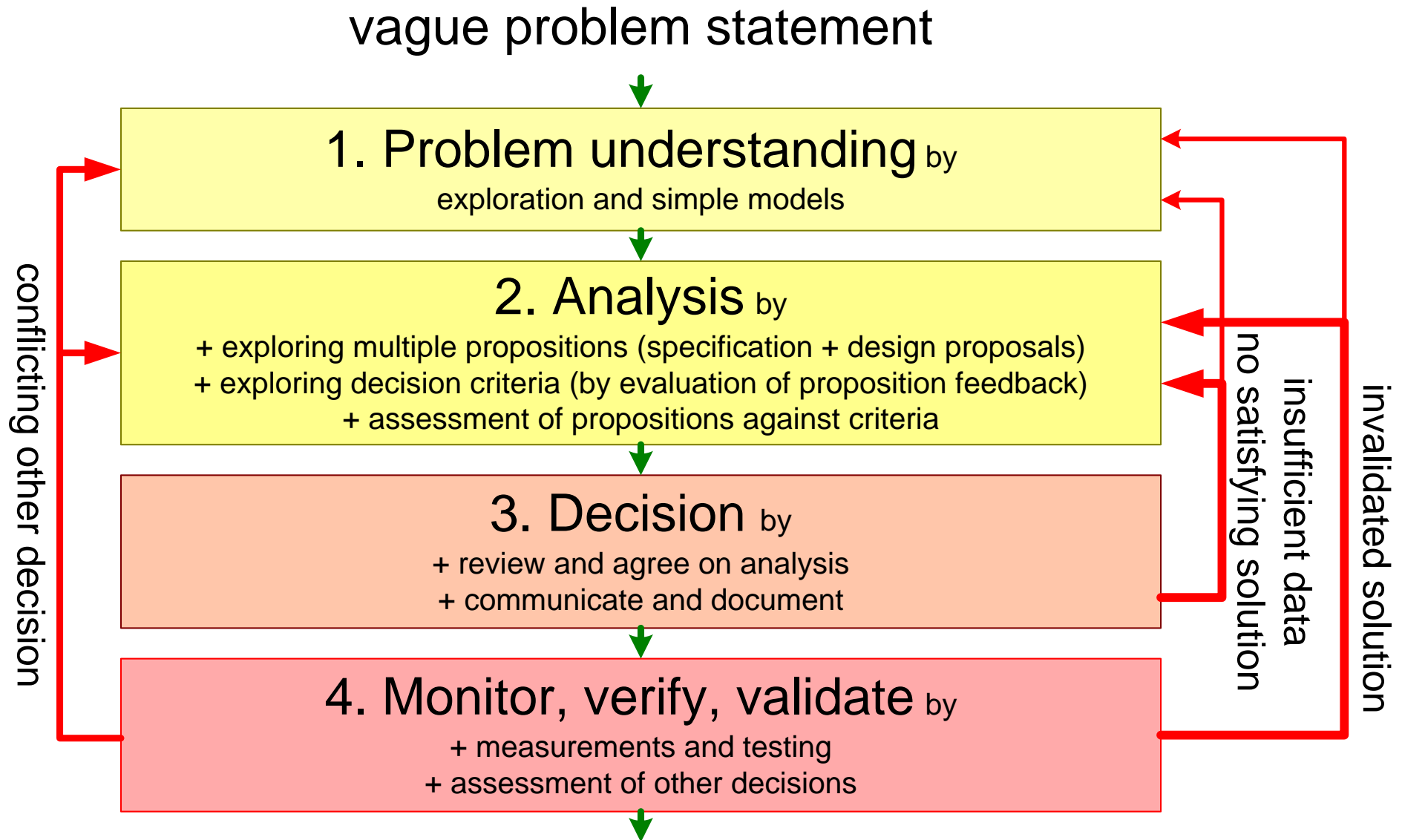
Multiple propositions

Scenarios

Decision Making Process



Flow from problem to solution



Example of Multiple Propositions

throughput	20 p/m	high-performance sensor	350 ns
cost	5 k\$	high-speed moves	9 m/s
safety		additional pipelining	

low cost and performance 1

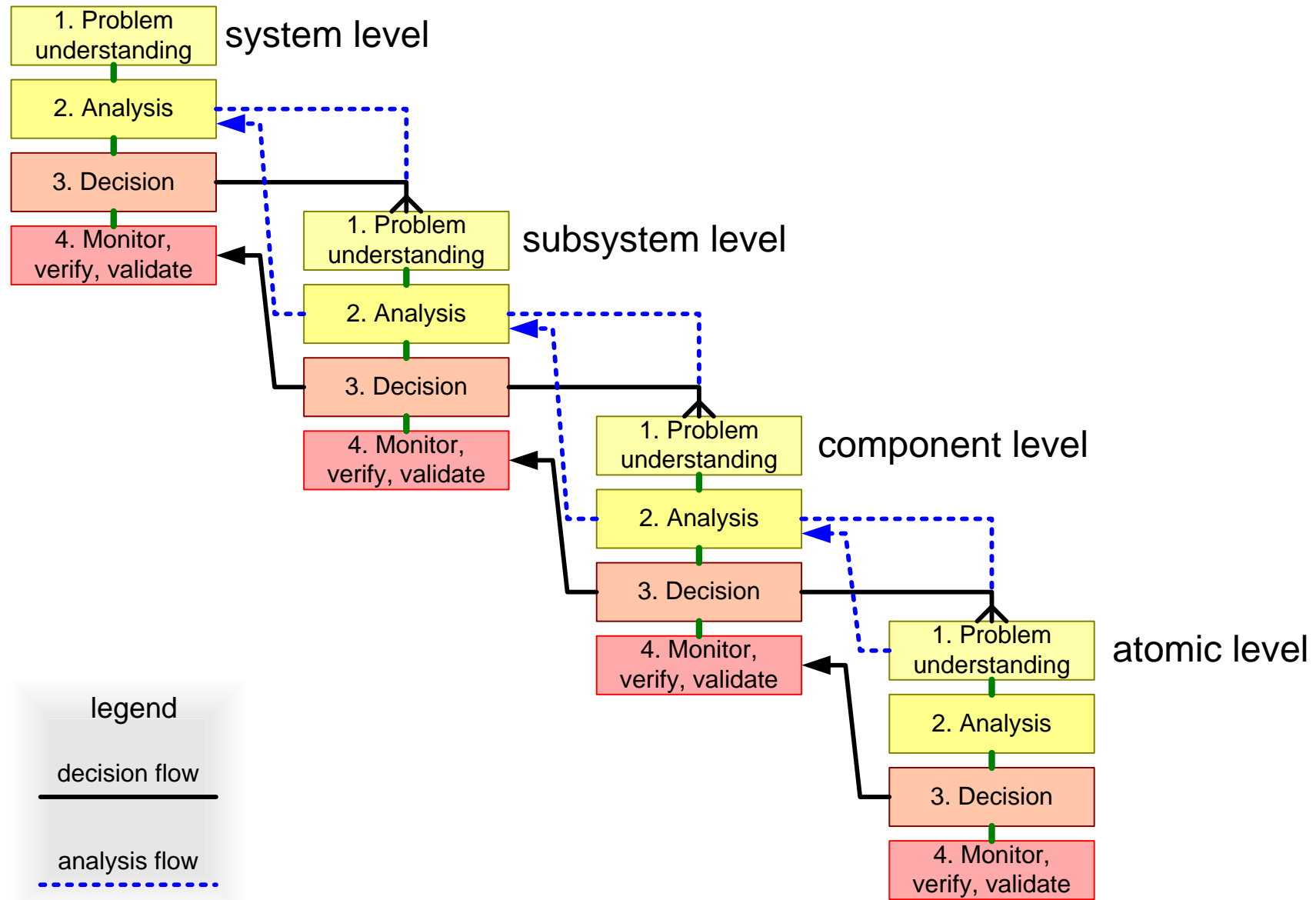
throughput	20 p/m	high-performance sensor	300 ns
cost	5 k\$	high-speed moves	10 m/s
safety			

low cost and performance 2

throughput	25 p/m	highperformance sensor	200 ns
cost	7 k\$	high-speed moves	12 m/s
safety		additional collision detector	

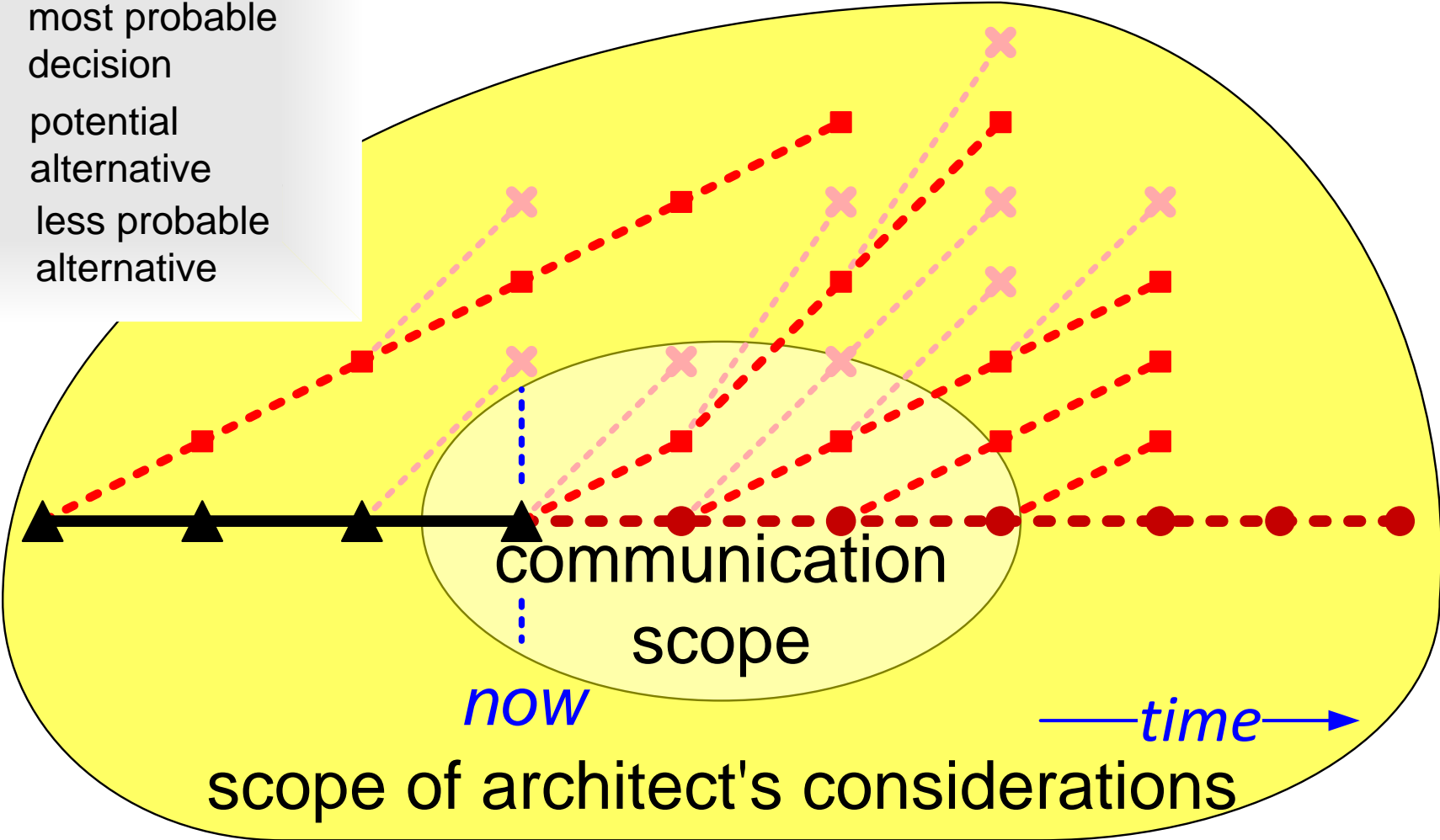
high cost and performance

Recursive and concurrent application of flow



Graph of Decisions and Alternatives

- legend*
- ▲ past decision
 - most probable decision
 - potential alternative
 - ✕ less probable alternative



Different Types of Decisions

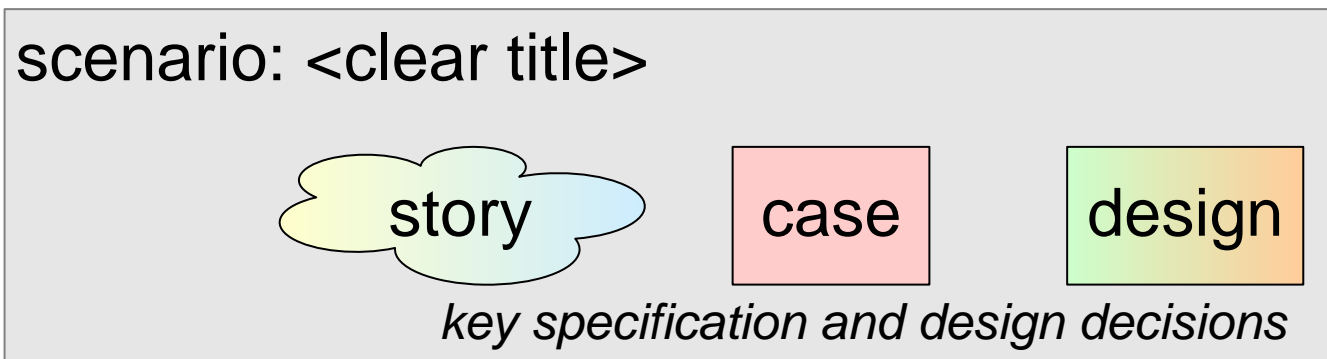
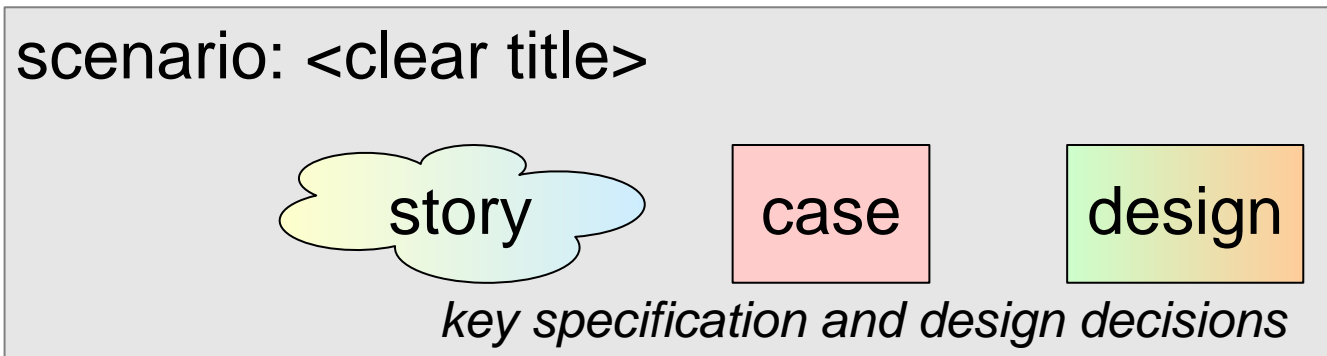
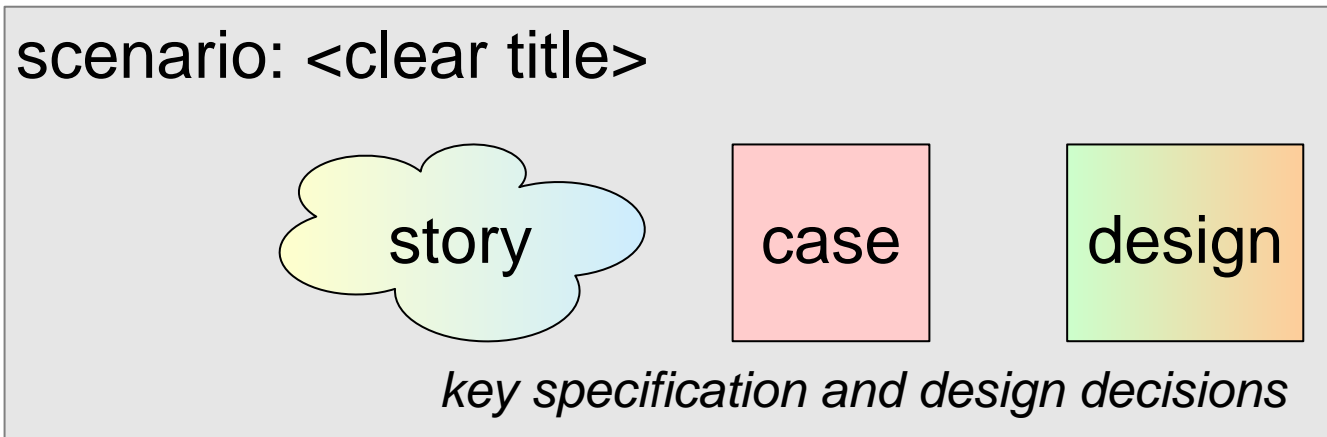


basic
principles

requirements

architecture rules
implementation choices
f.i. technology

Elements of a Scenario



Summary of Scenarios

Exploration and analysis require multiple propositions.

Architects continuously work with multiple alternatives.

Scenarios have a clear title, story, use case and design.

Scenarios are differentiated by key specifications and design decisions.