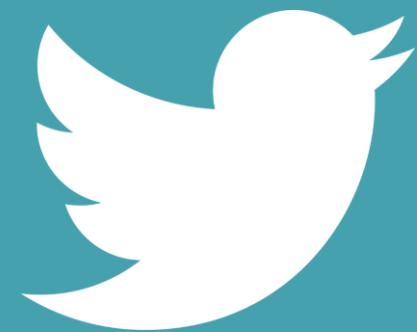


How we changed our world

Dr. Carola Lilienthal | cl@wps.de | [@cairolali](https://twitter.com/cairolali)

CAROLA

LILIENTHAL



@caiolali





Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG



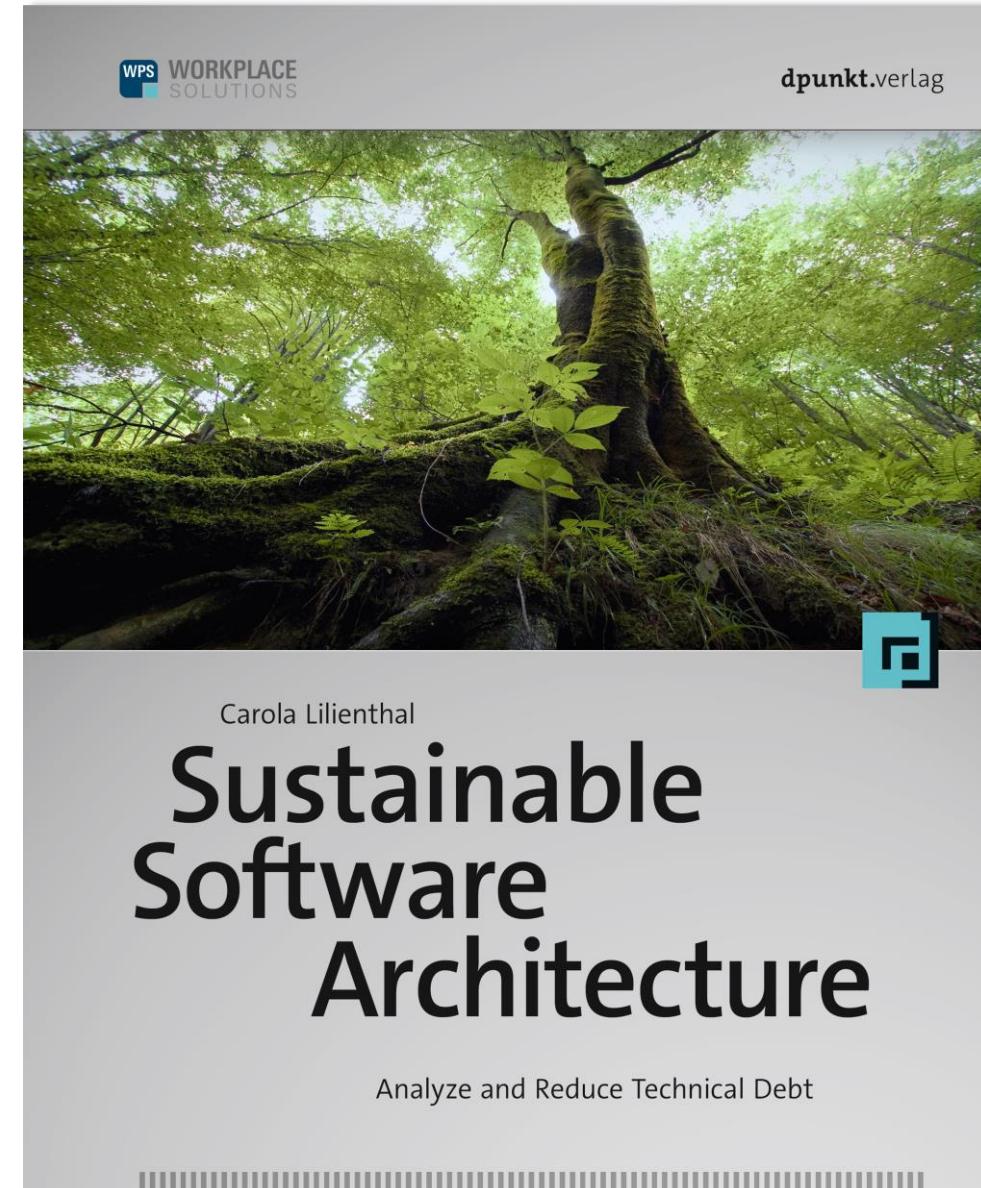








www.llsa.de



Analyze and Reduce Technical Debt

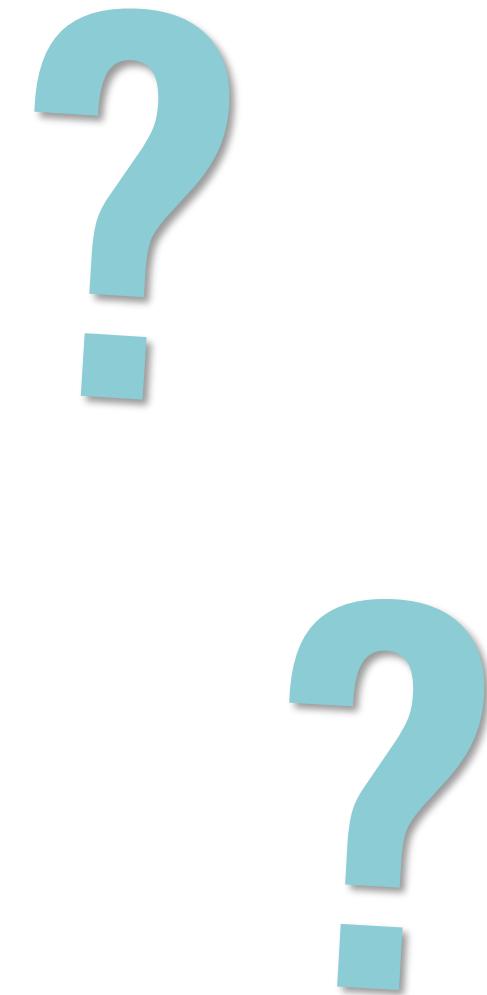
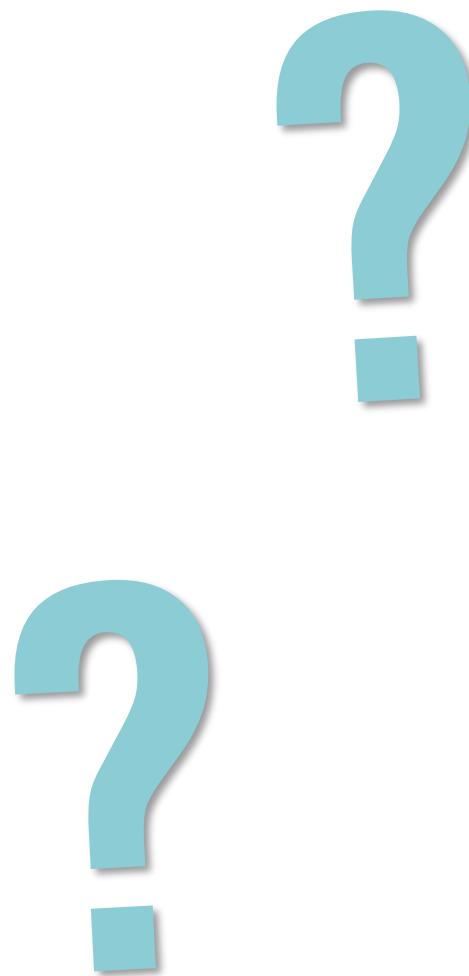
 [@cairolali](https://twitter.com/cairolali)

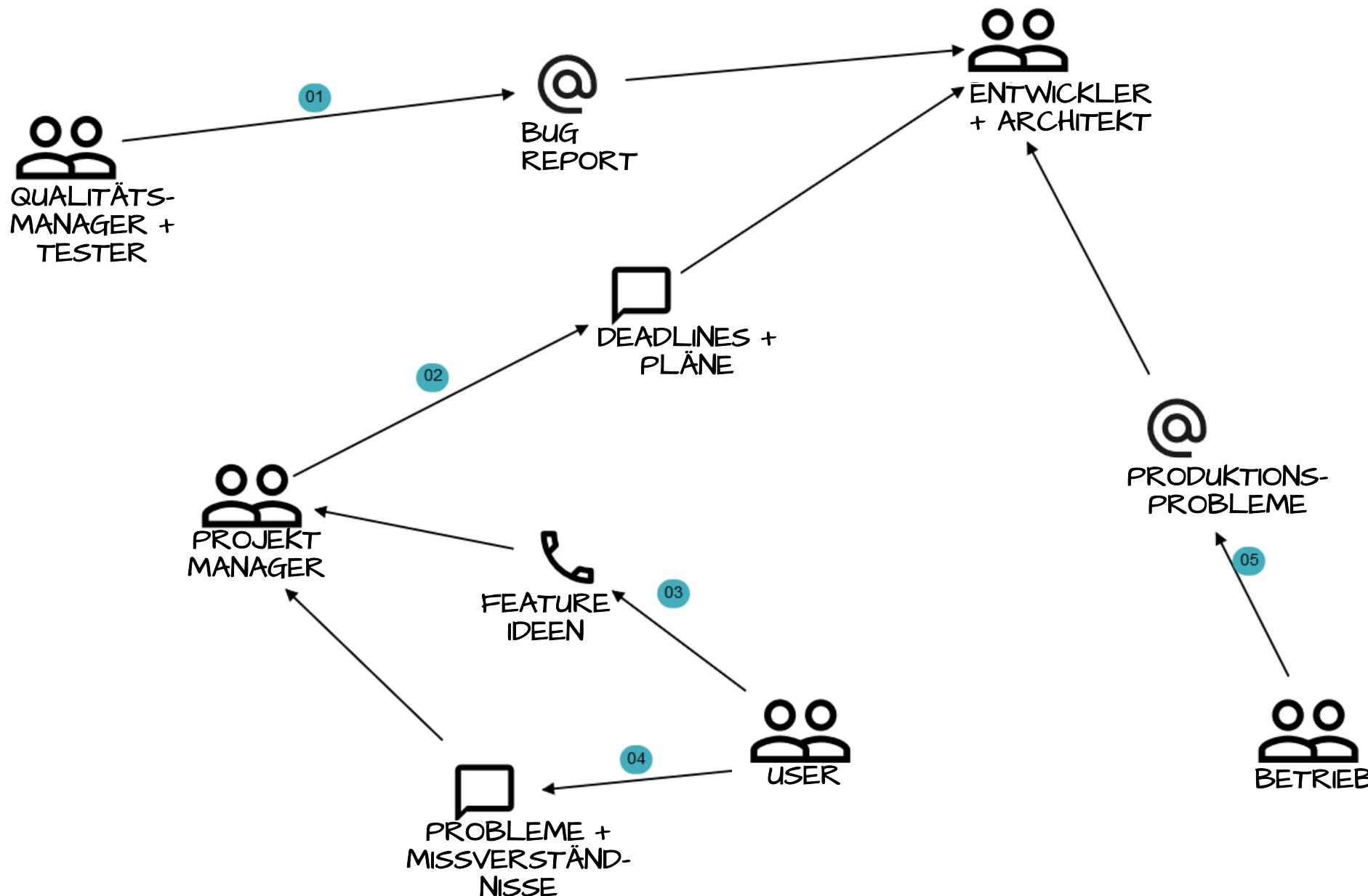


WORKPLACE
SOLUTIONS



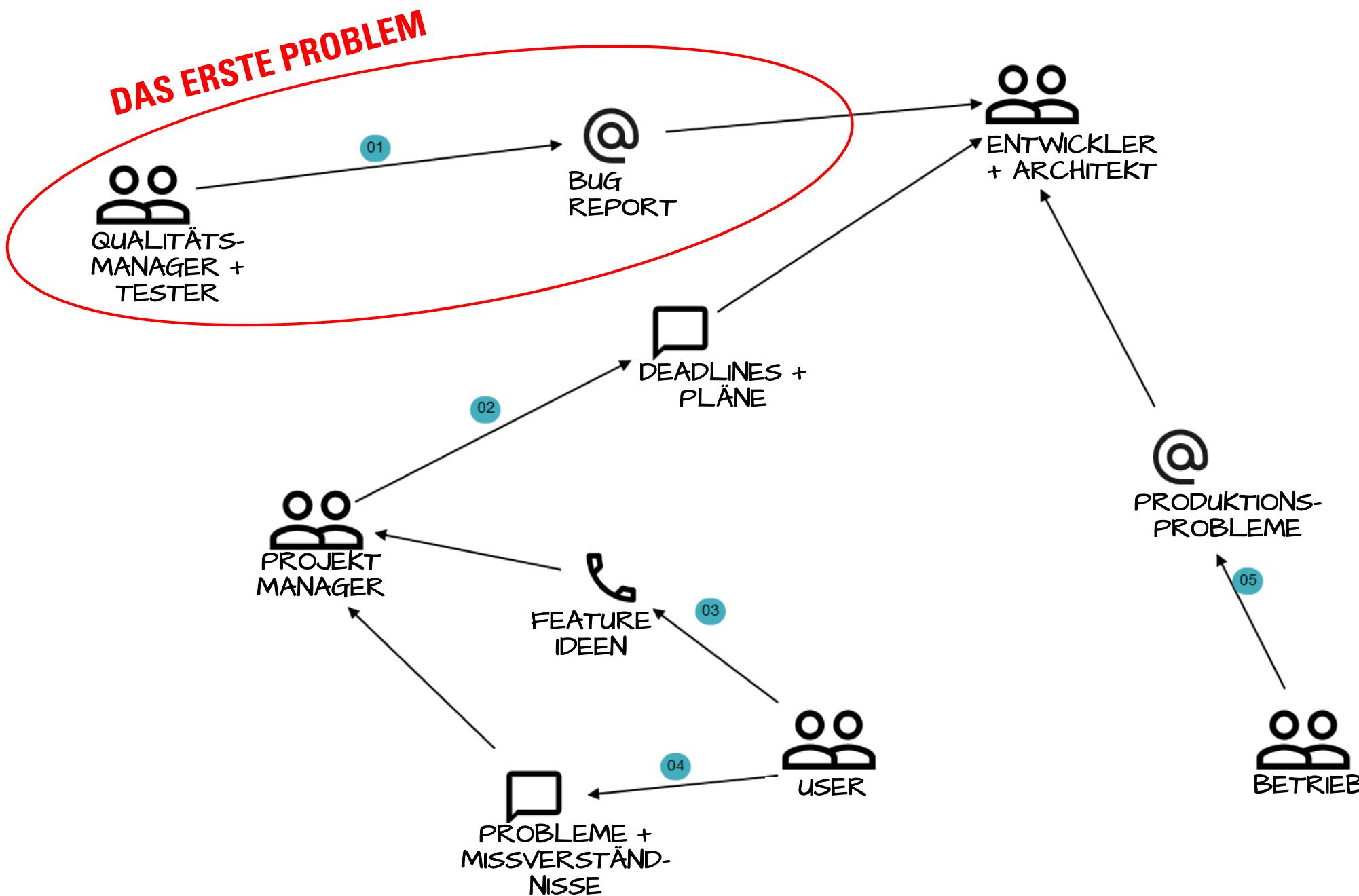








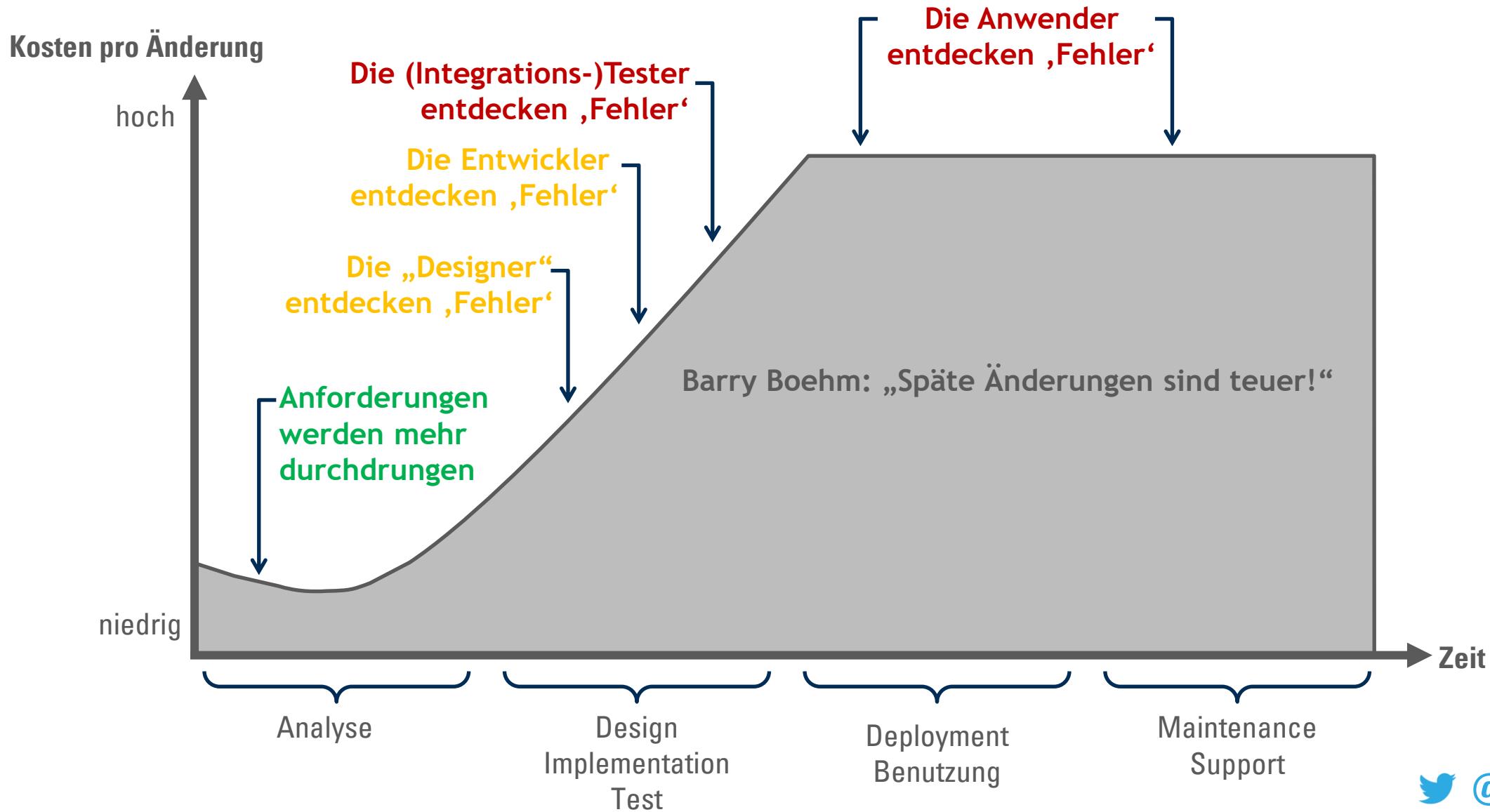
Solution
Problem

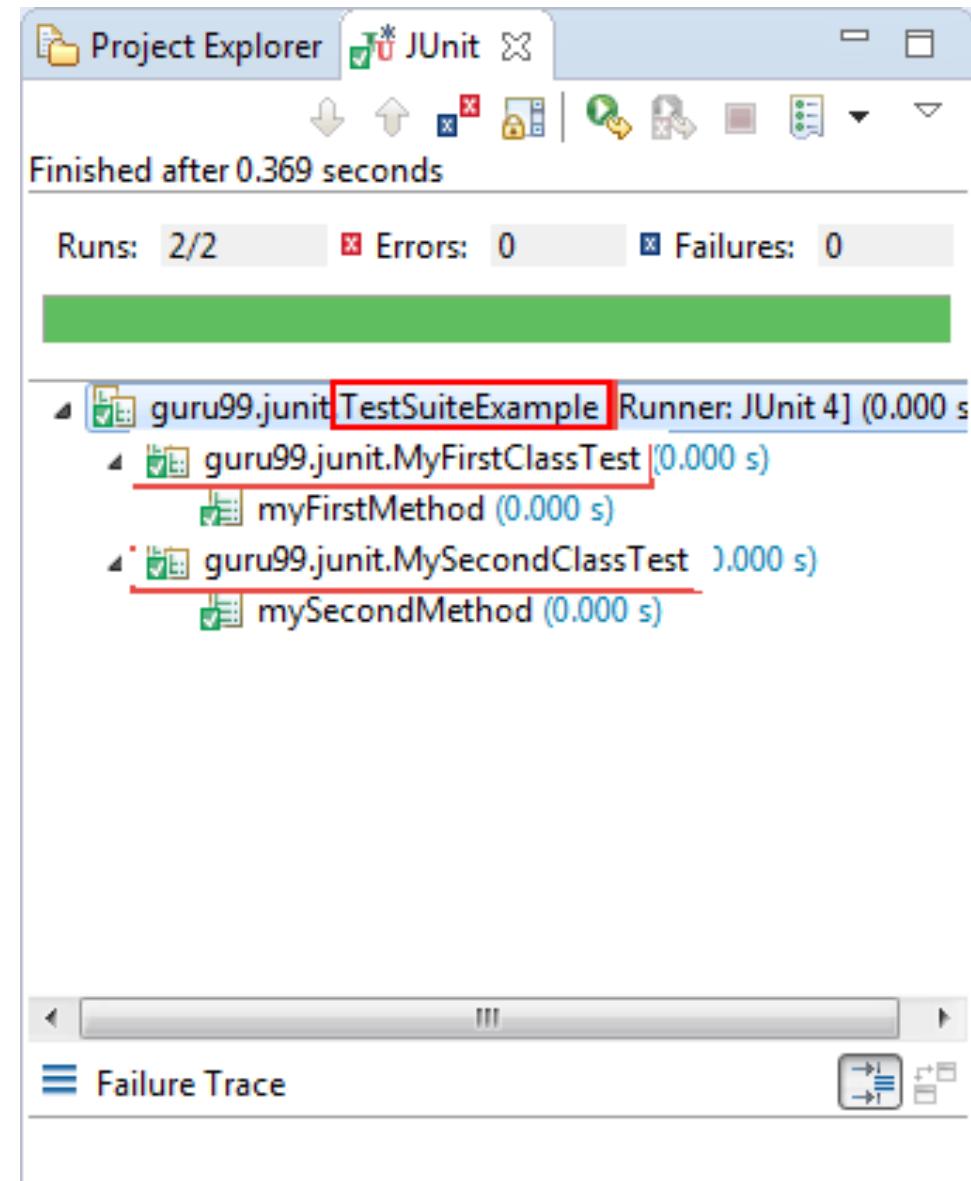
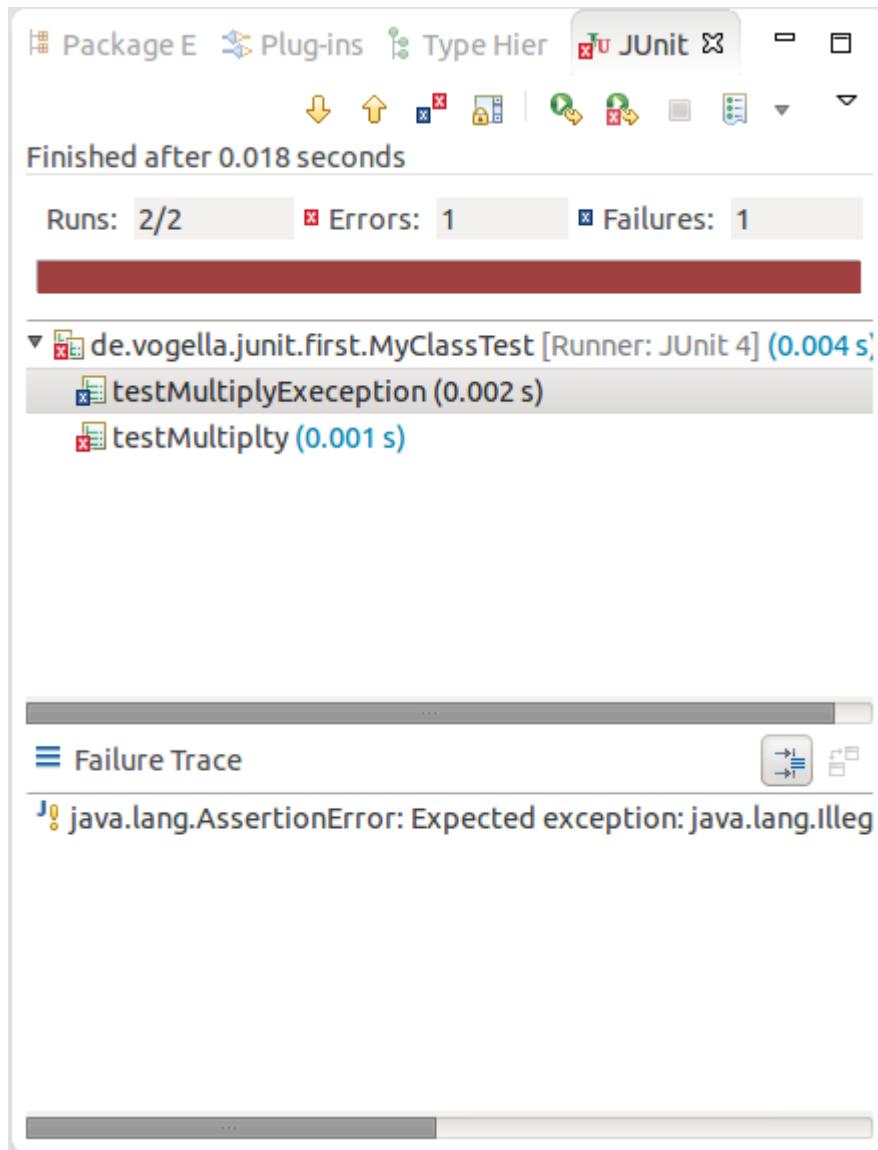


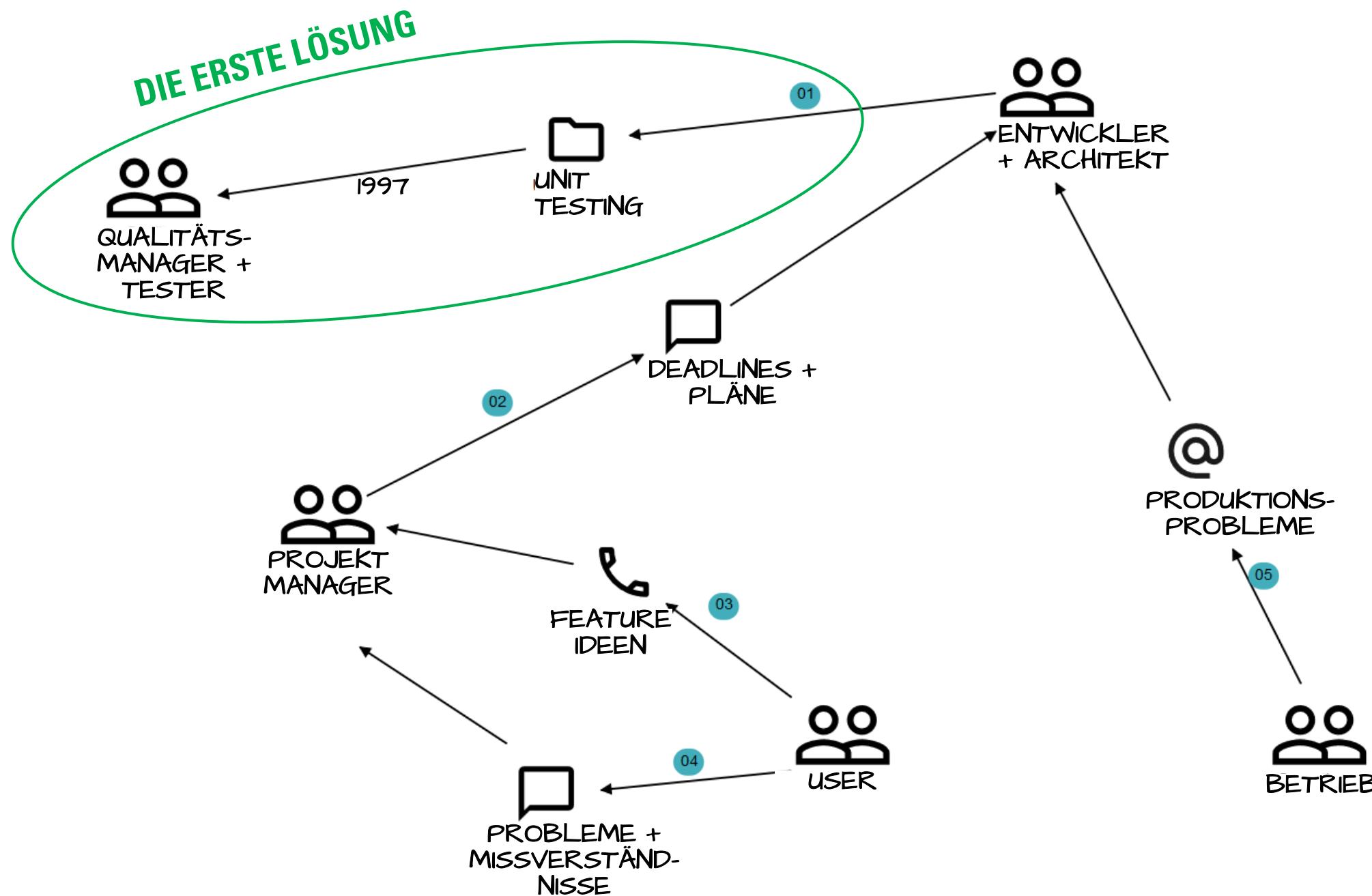


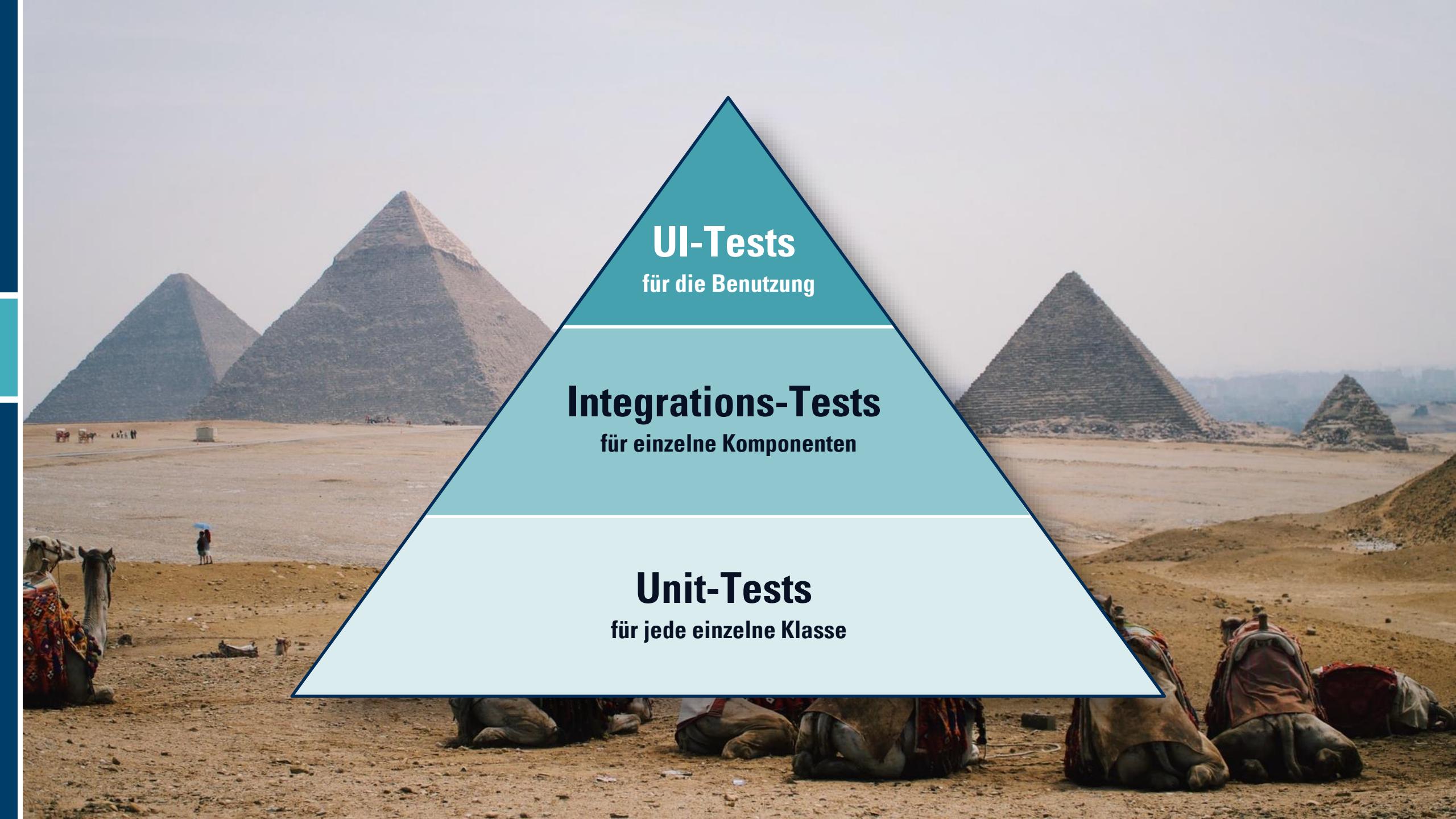
**Being a software tester
is like being a detective**

DIE KOSTEN KURVE





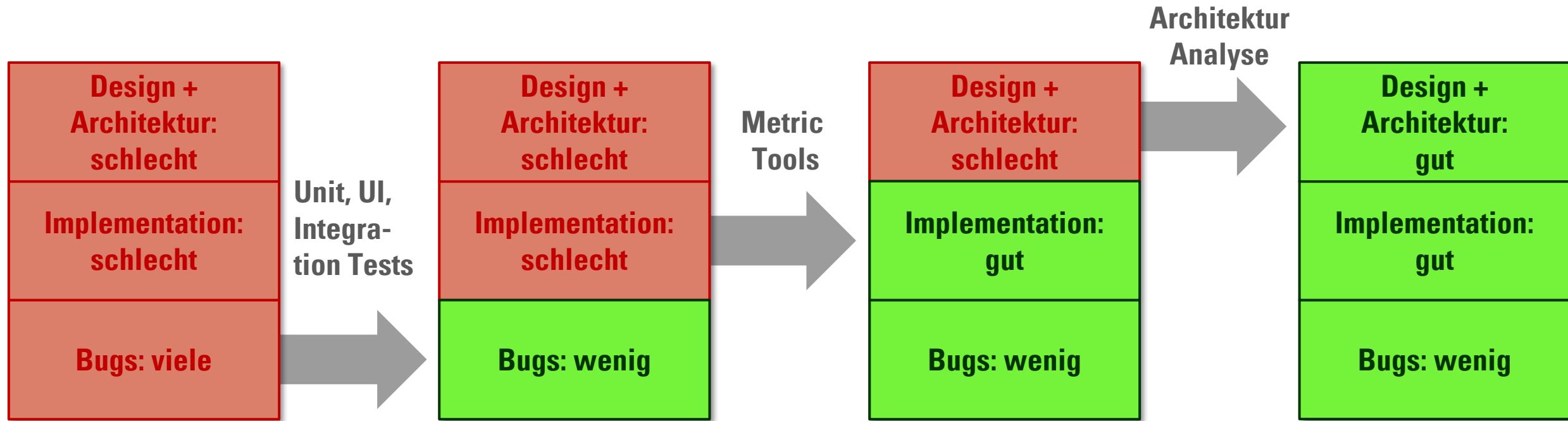




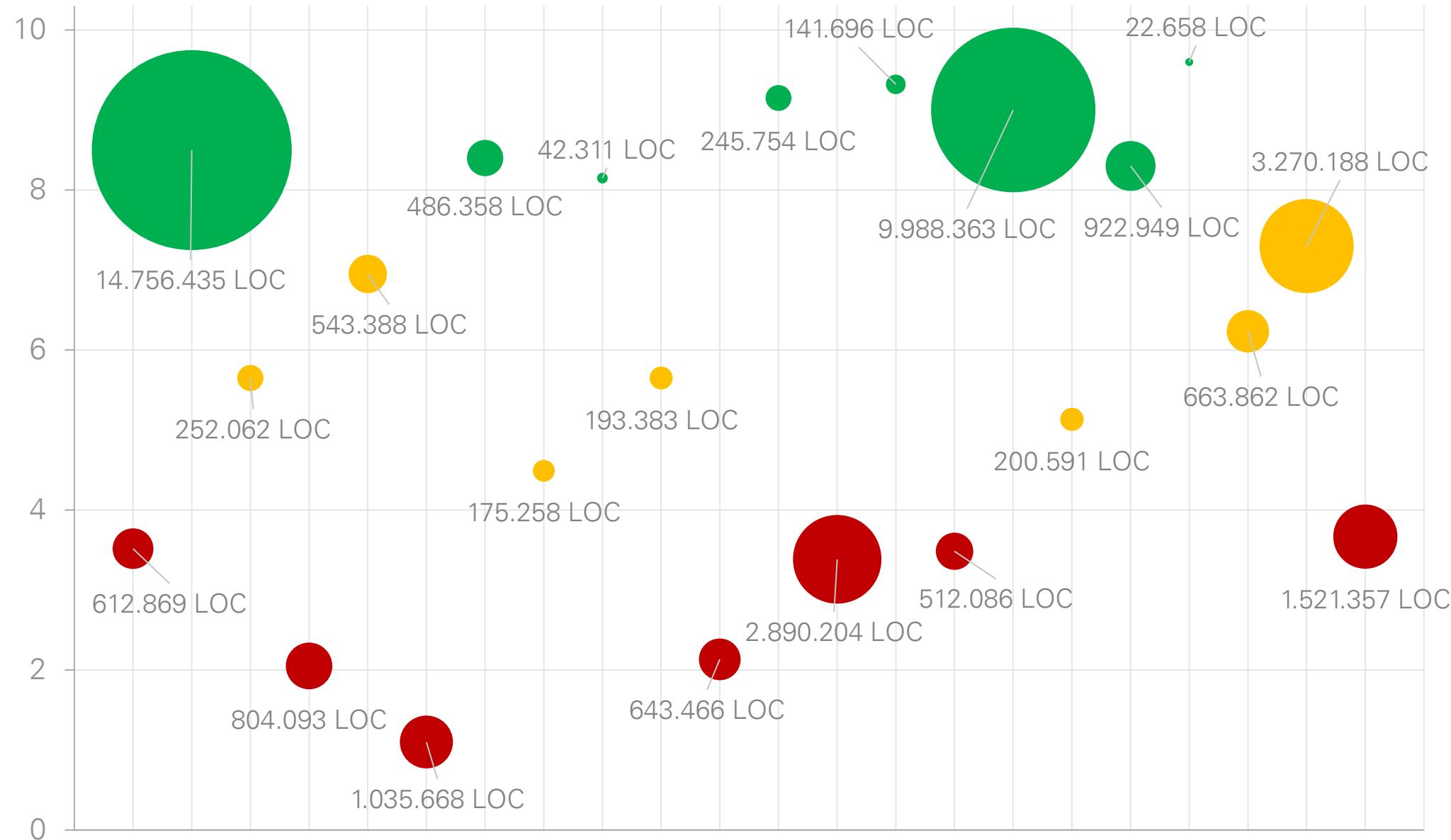
UI-Tests
für die Benutzung

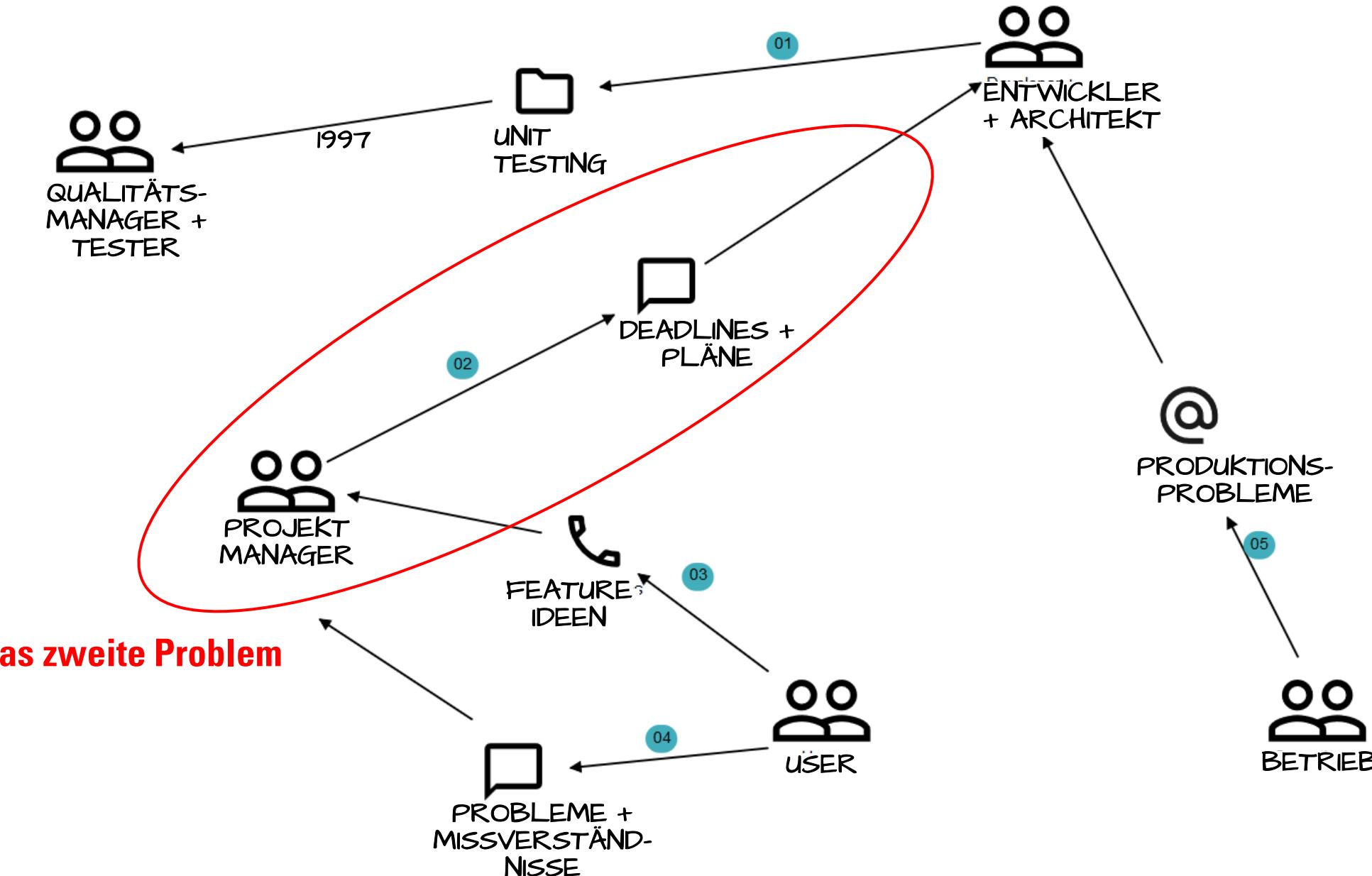
Integrations-Tests
für einzelne Komponenten

Unit-Tests
für jede einzelne Klasse

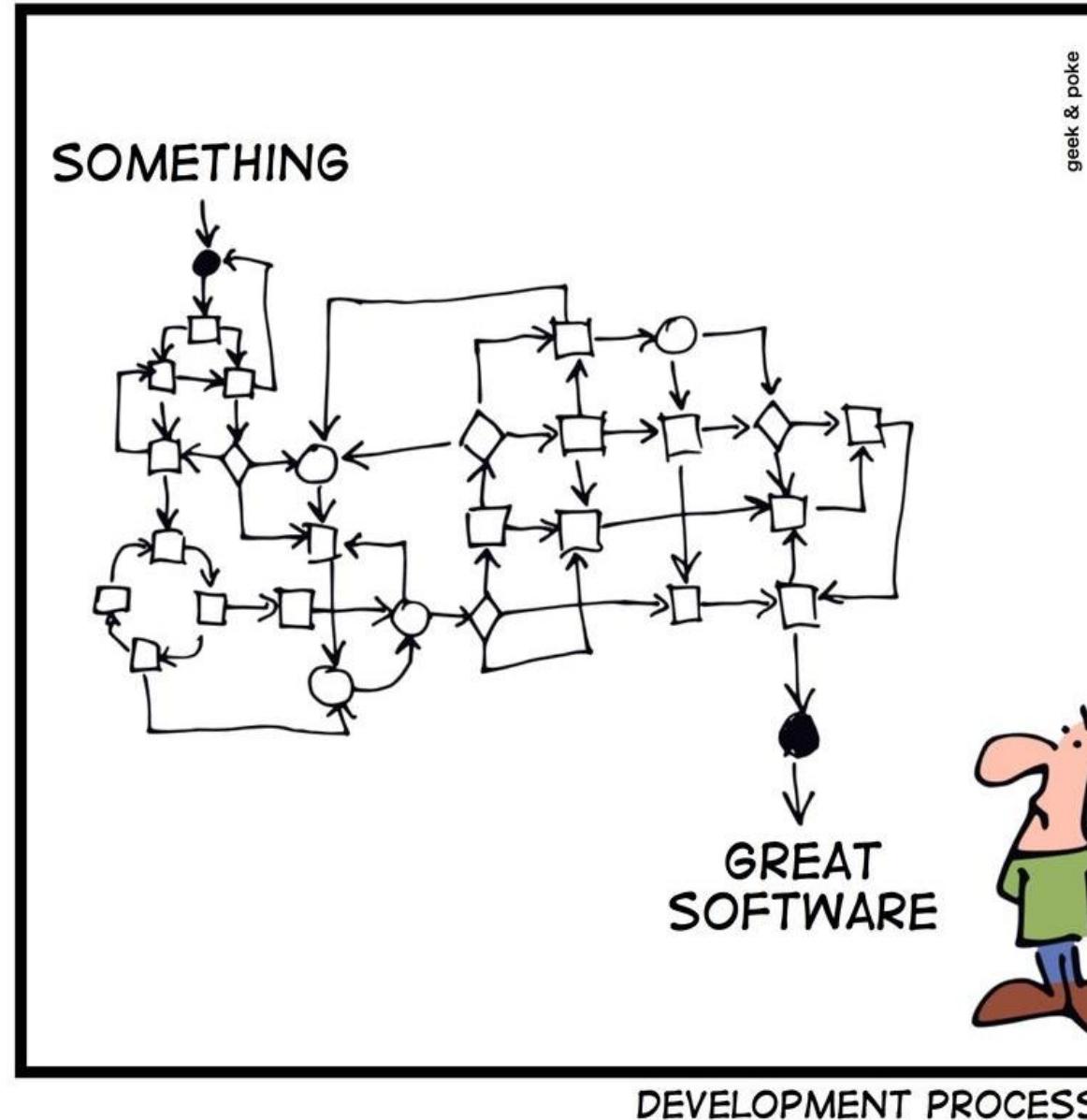


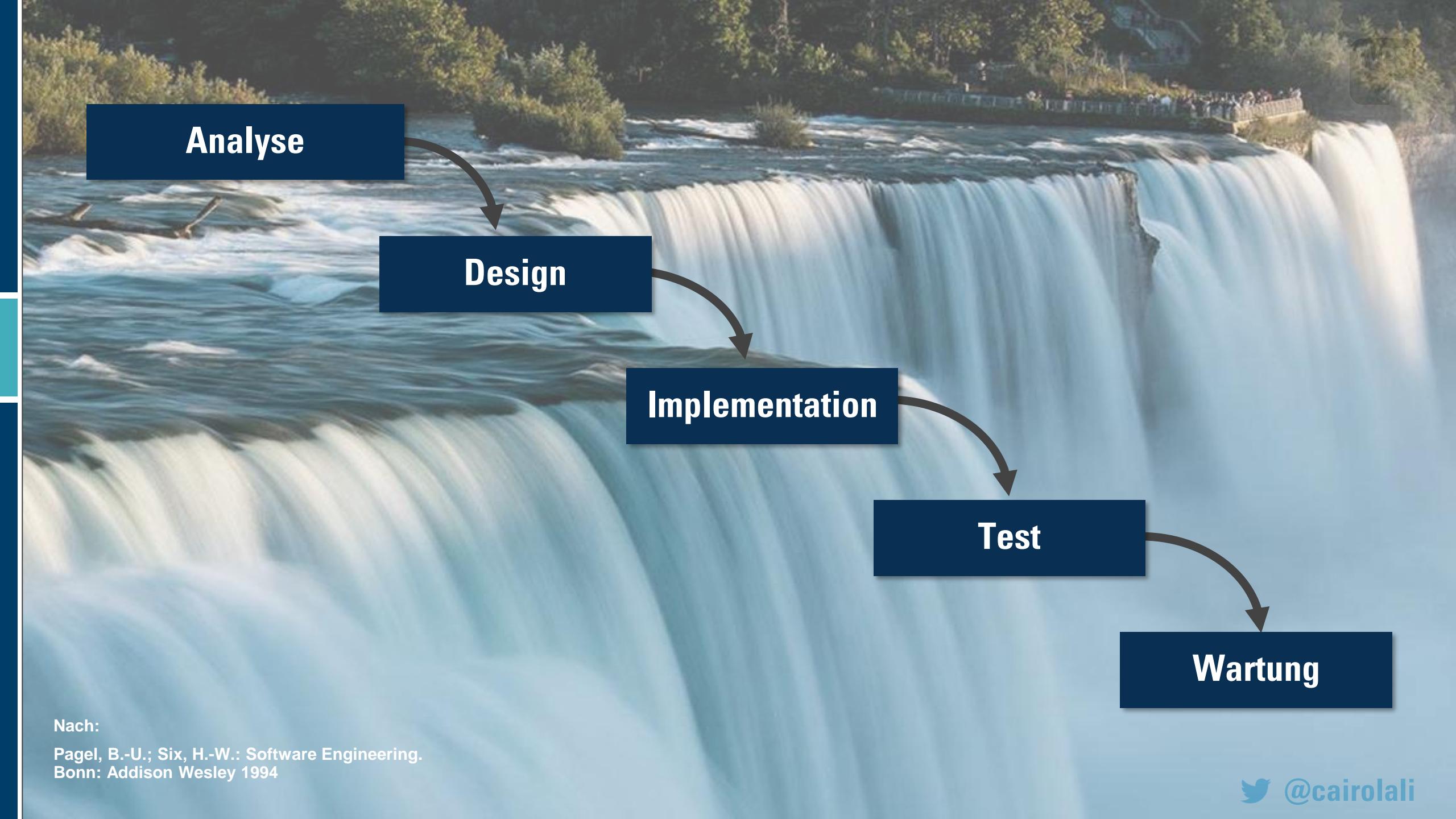
MODULARITY MATURITY INDEX (MMI)





SIMPLY EXPLAINED



A photograph of Niagara Falls, showing the Horseshoe Falls and the American Falls. The water is a vibrant blue-green color, and the falls are in sharp focus. The background shows the lush green trees of the Niagara escarpment and a few buildings on the far shore.

Analyse

Design

Implementation

Test

Wartung

Nach:

Pagel, B.-U.; Six, H.-W.: Software Engineering.
Bonn: Addison Wesley 1994

THE AGILE MANIFESTO

Individuals and interactions

over

Processes and tools

Working software

over

Comprehensive documentation

Customer collaboration

over

Contract negotiation

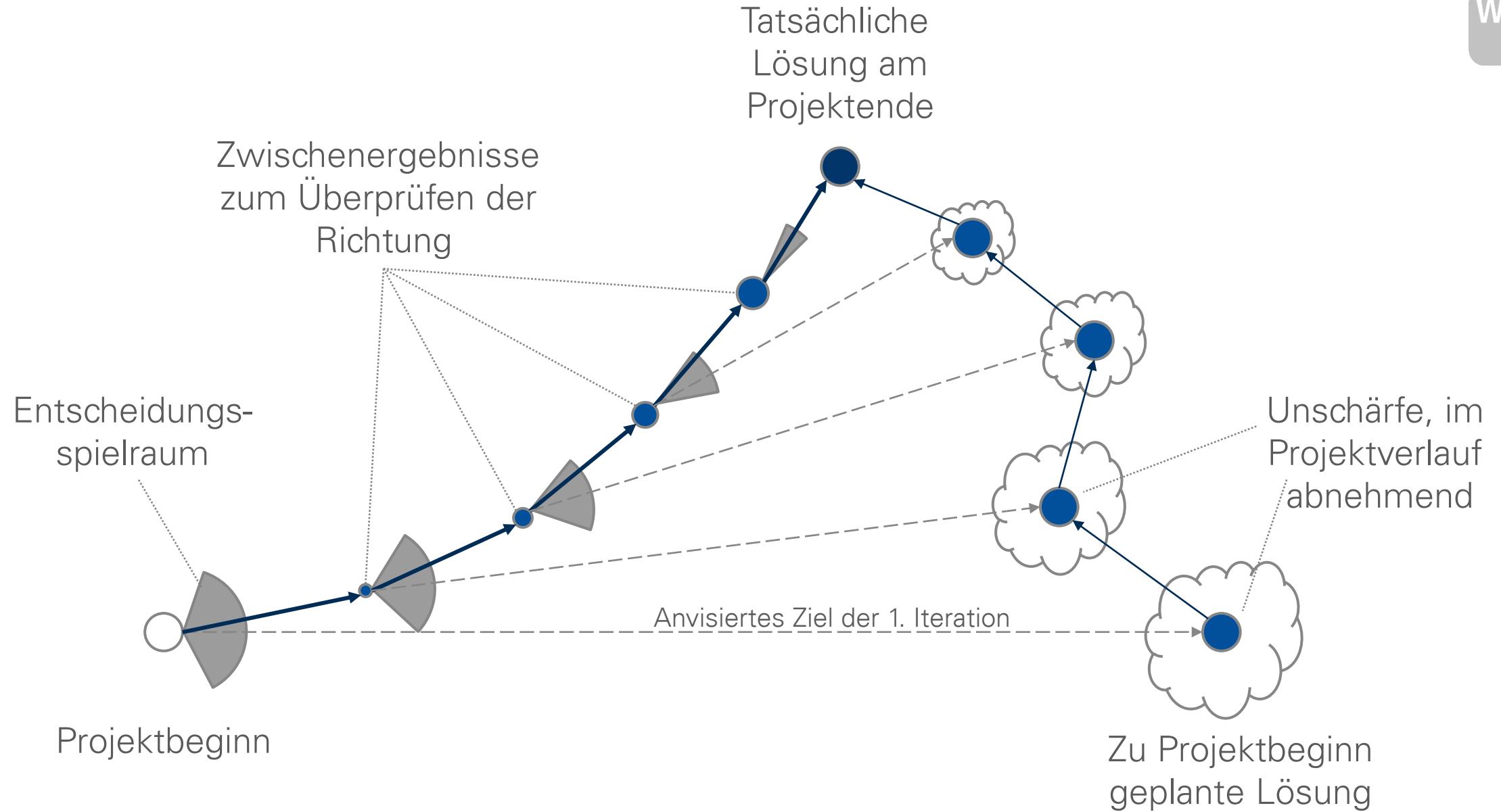
Responding to change

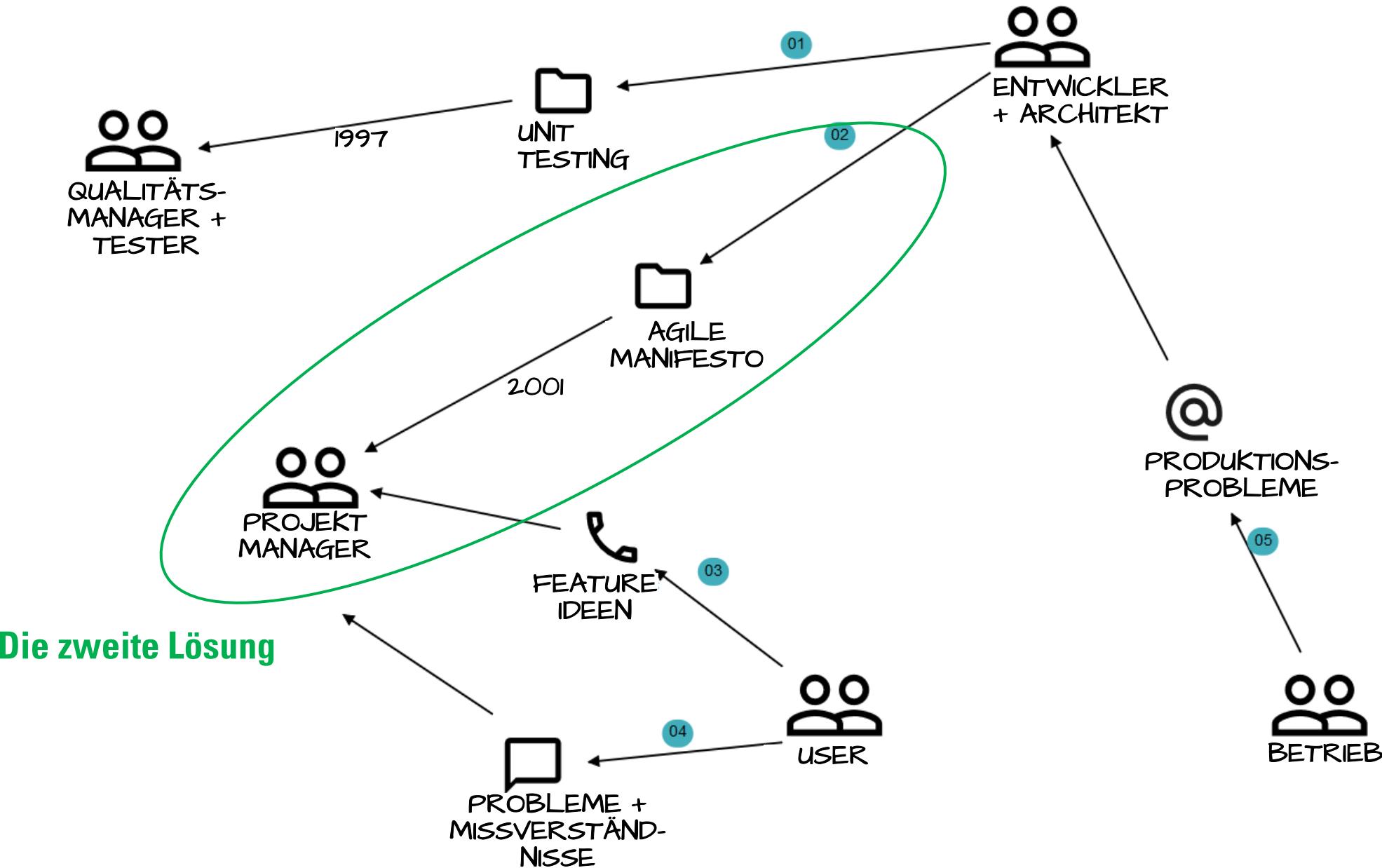
over

Following a plan

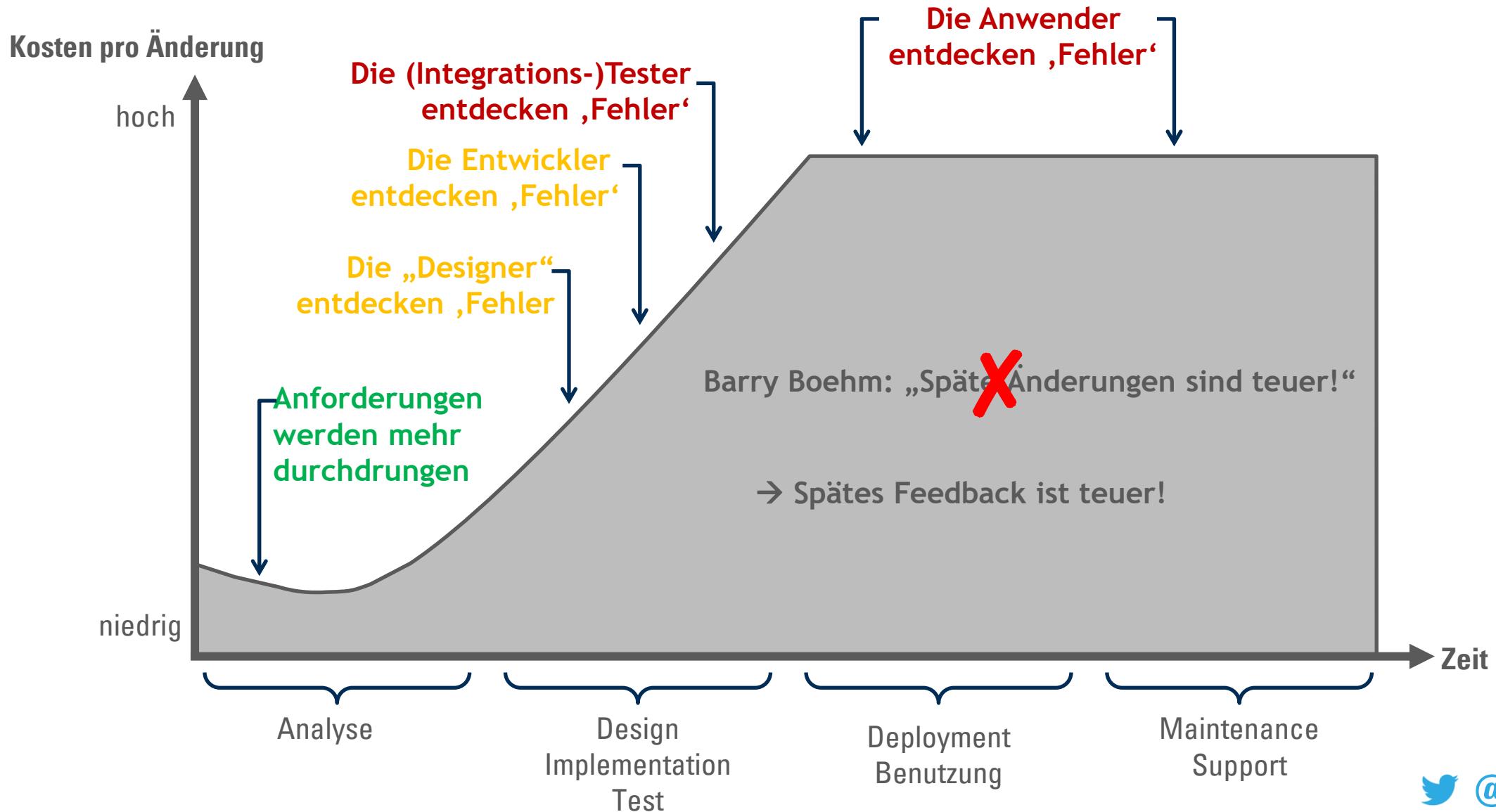
While there is value in the items on the right, we value the items on the left more.



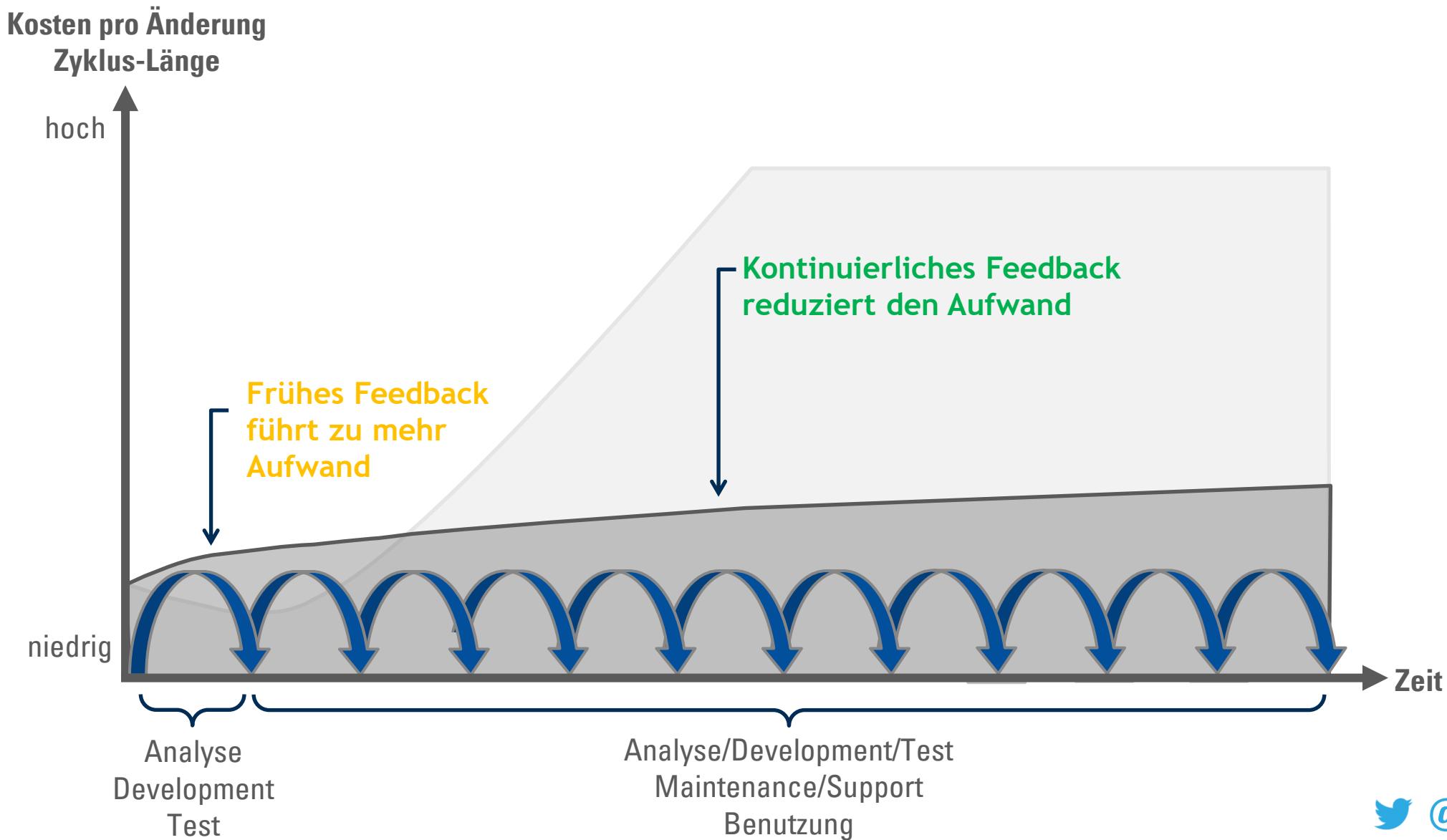


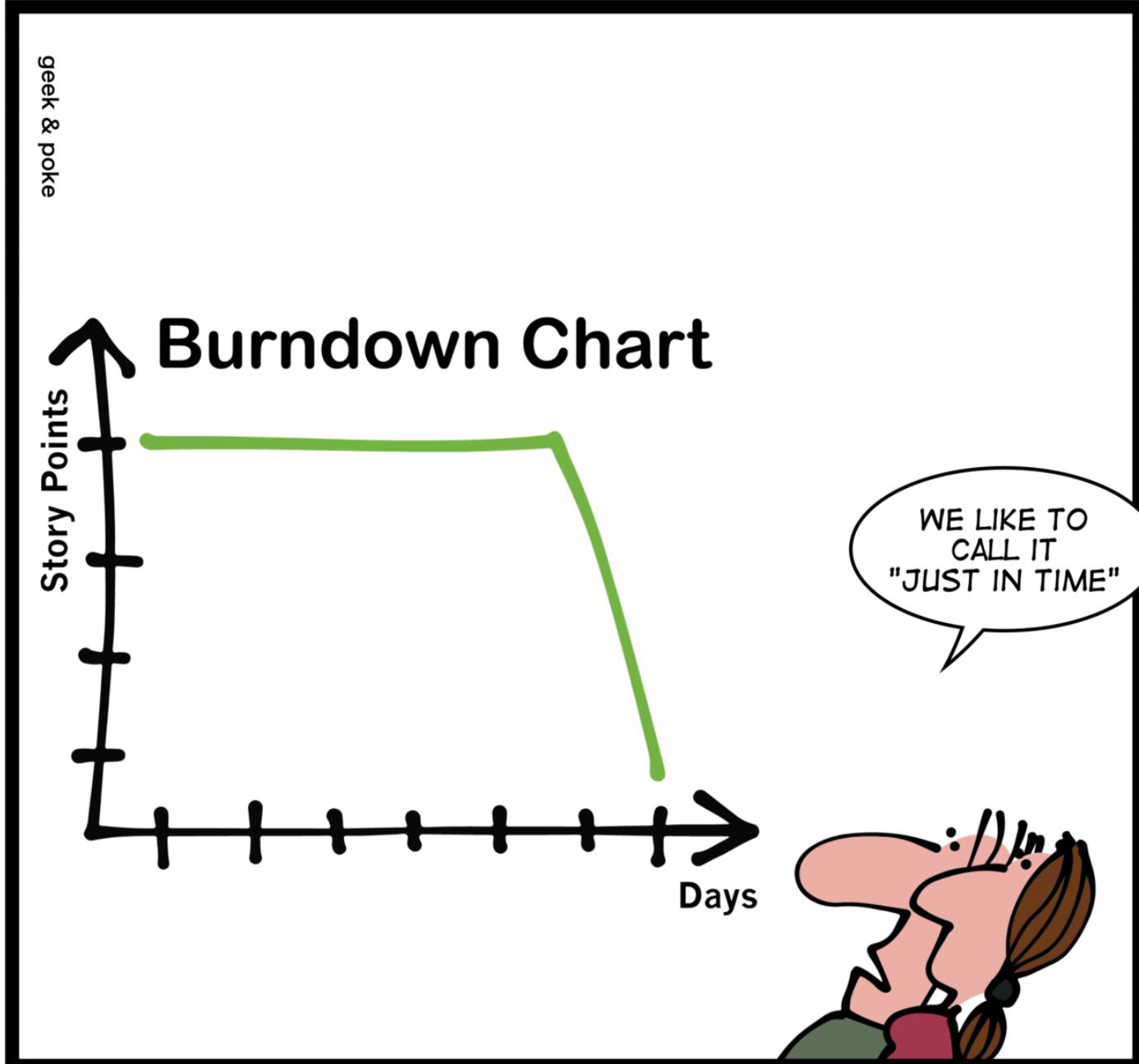


DIE KOSTEN KURVE



KOSTEN KURVE BEI AGILER ENTWICKLUNG





WANN MAN ZWISCHENERGEBNISSE NUR PRÄSENTIERT



1. Release



4. Iteration



3. Iteration



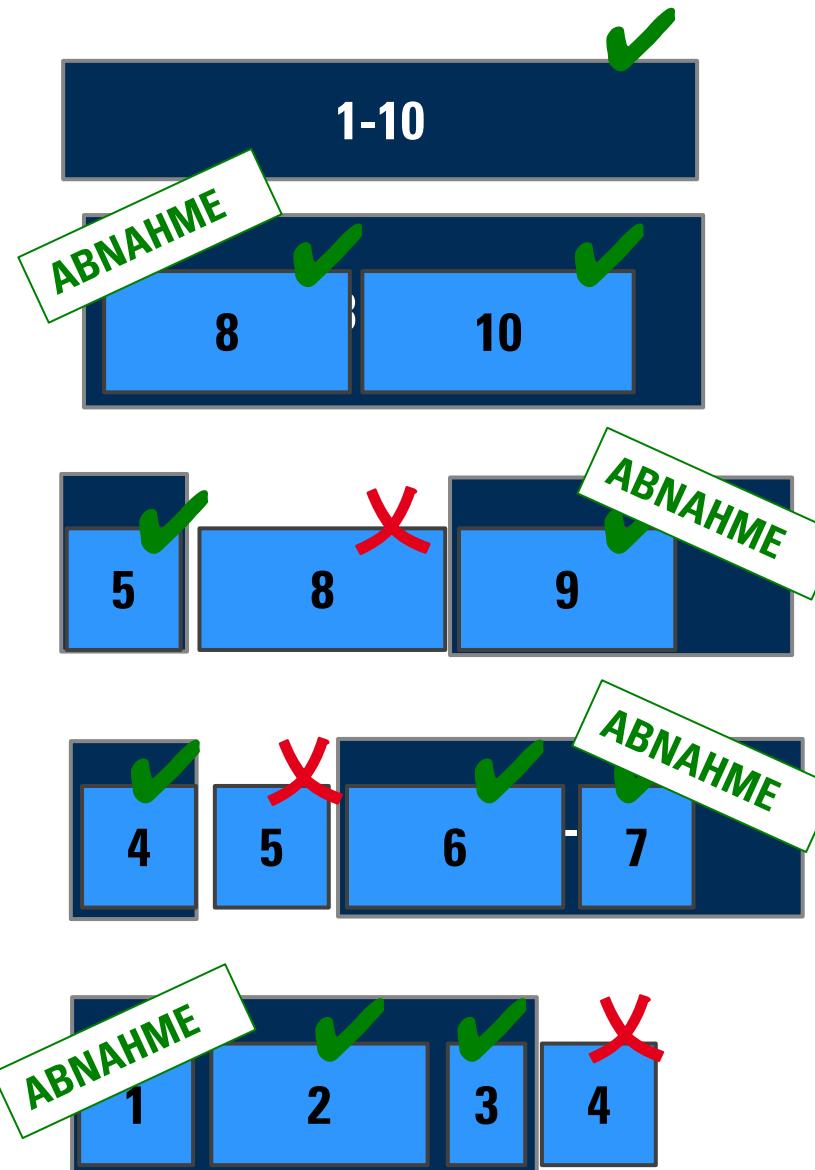
2. Iteration



1. Iteration



WENN MAN ZWISCHENERGEBNISSE ABNEHMEN LÄSST



1. Release

4. Iteration

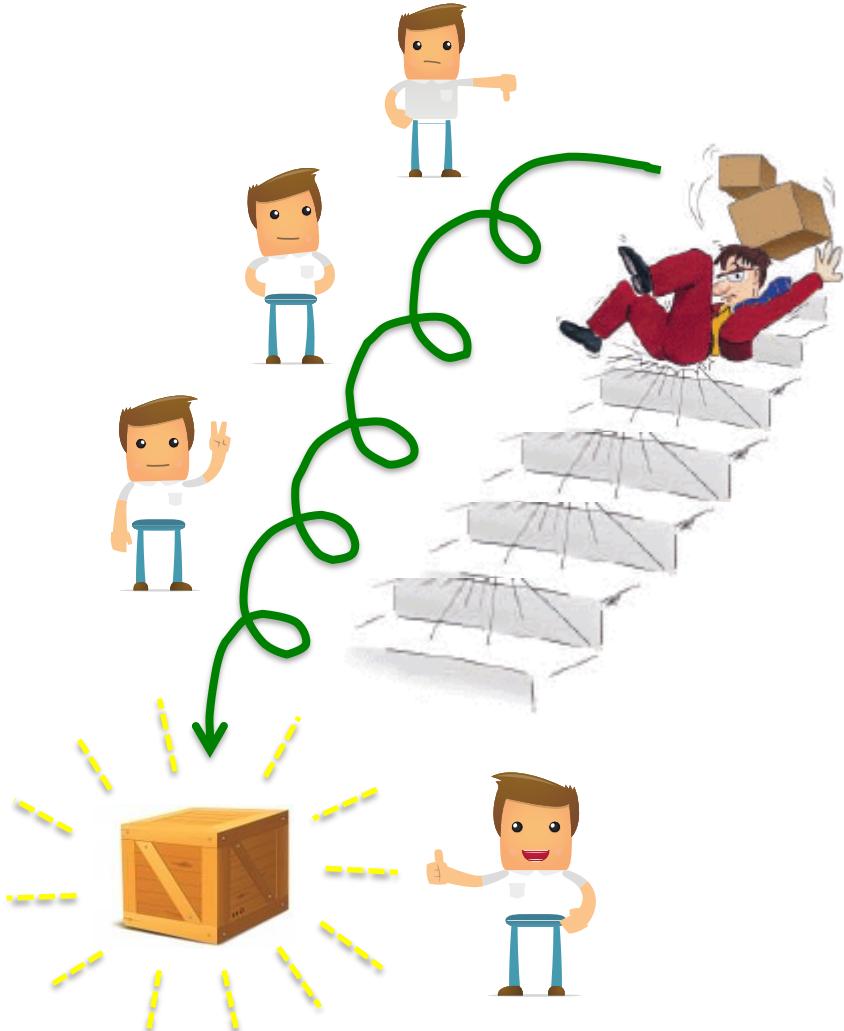
3. Iteration

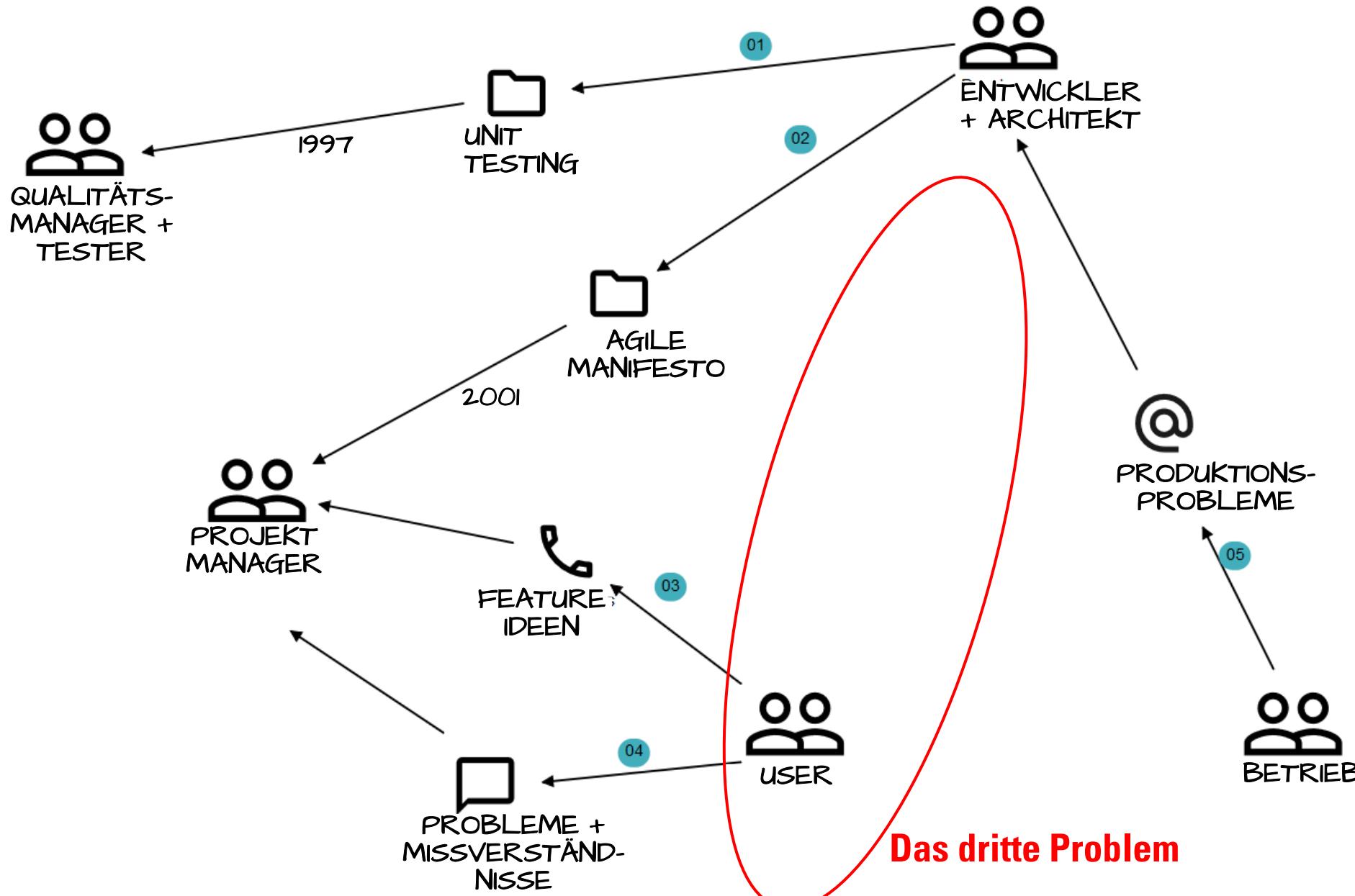
2. Iteration

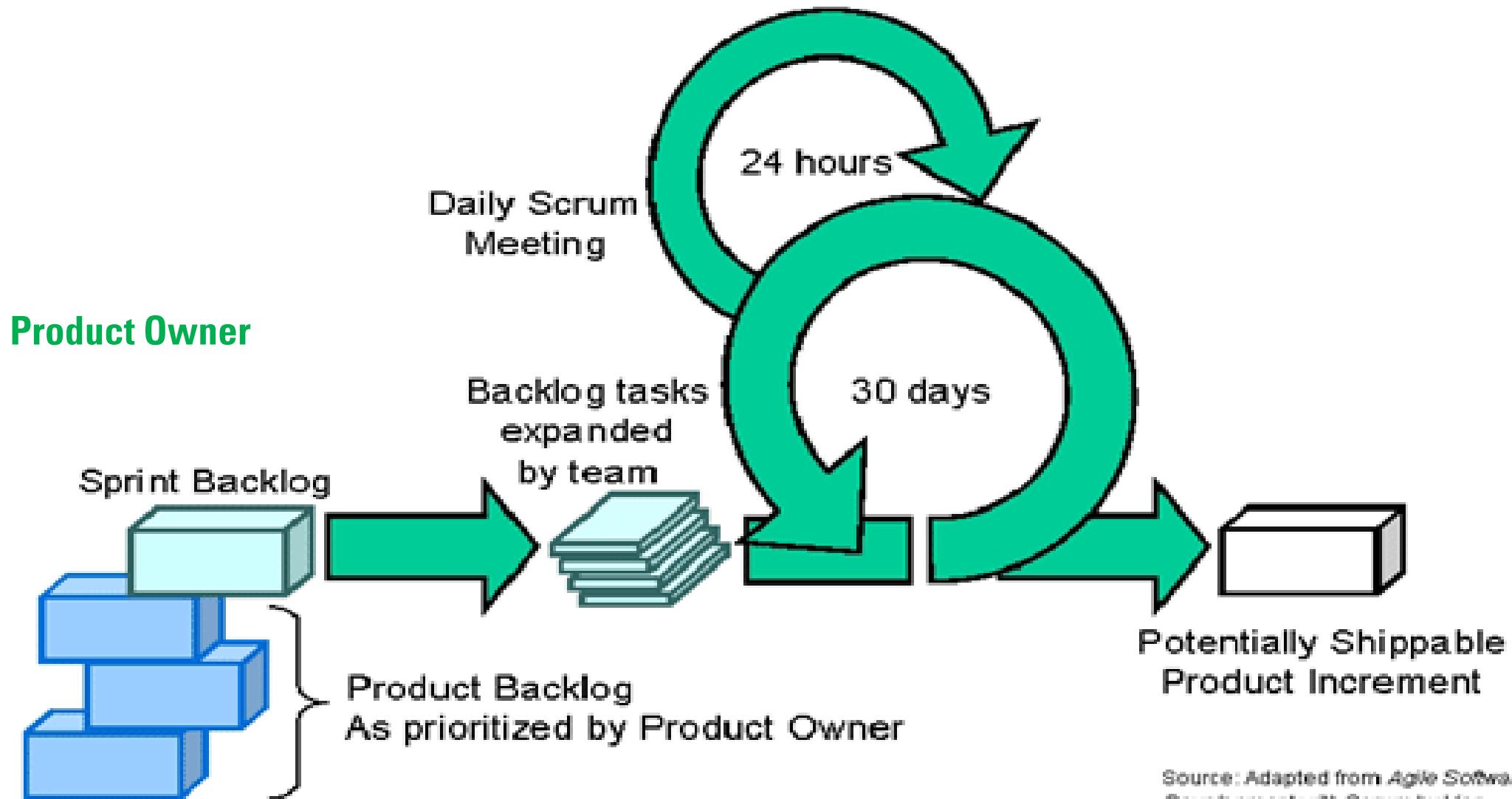
1. Iteration

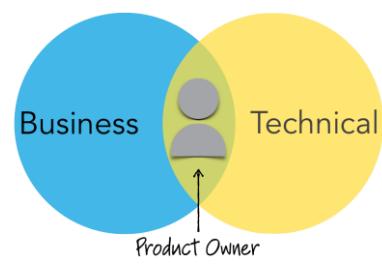
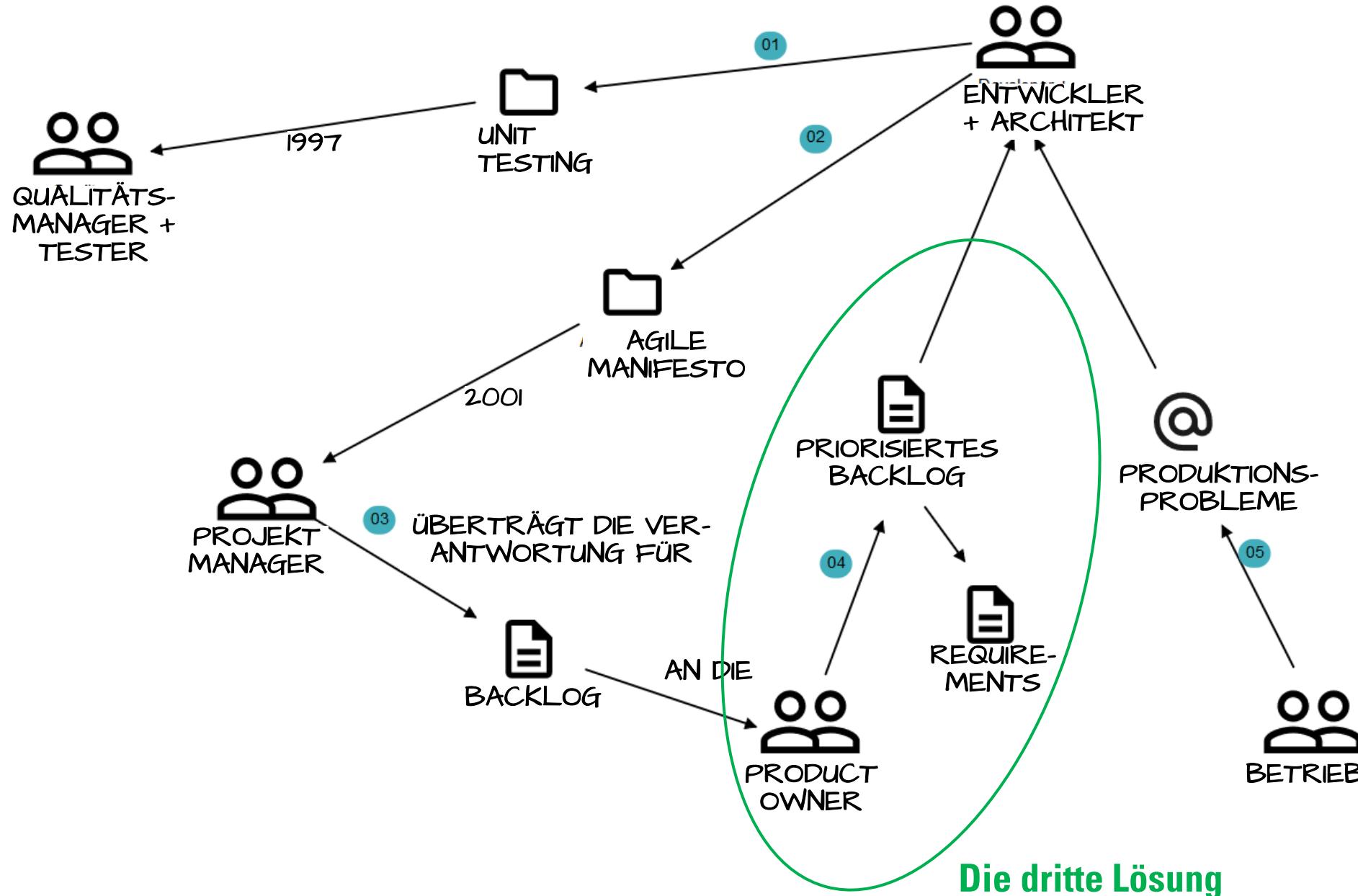
ES TUT IMMER WEH! DIE FRAGE IST NUR WANN

WPS

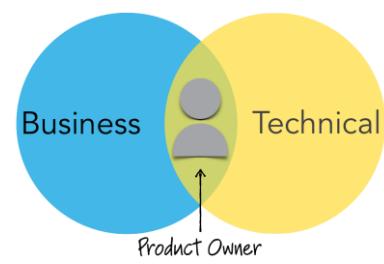
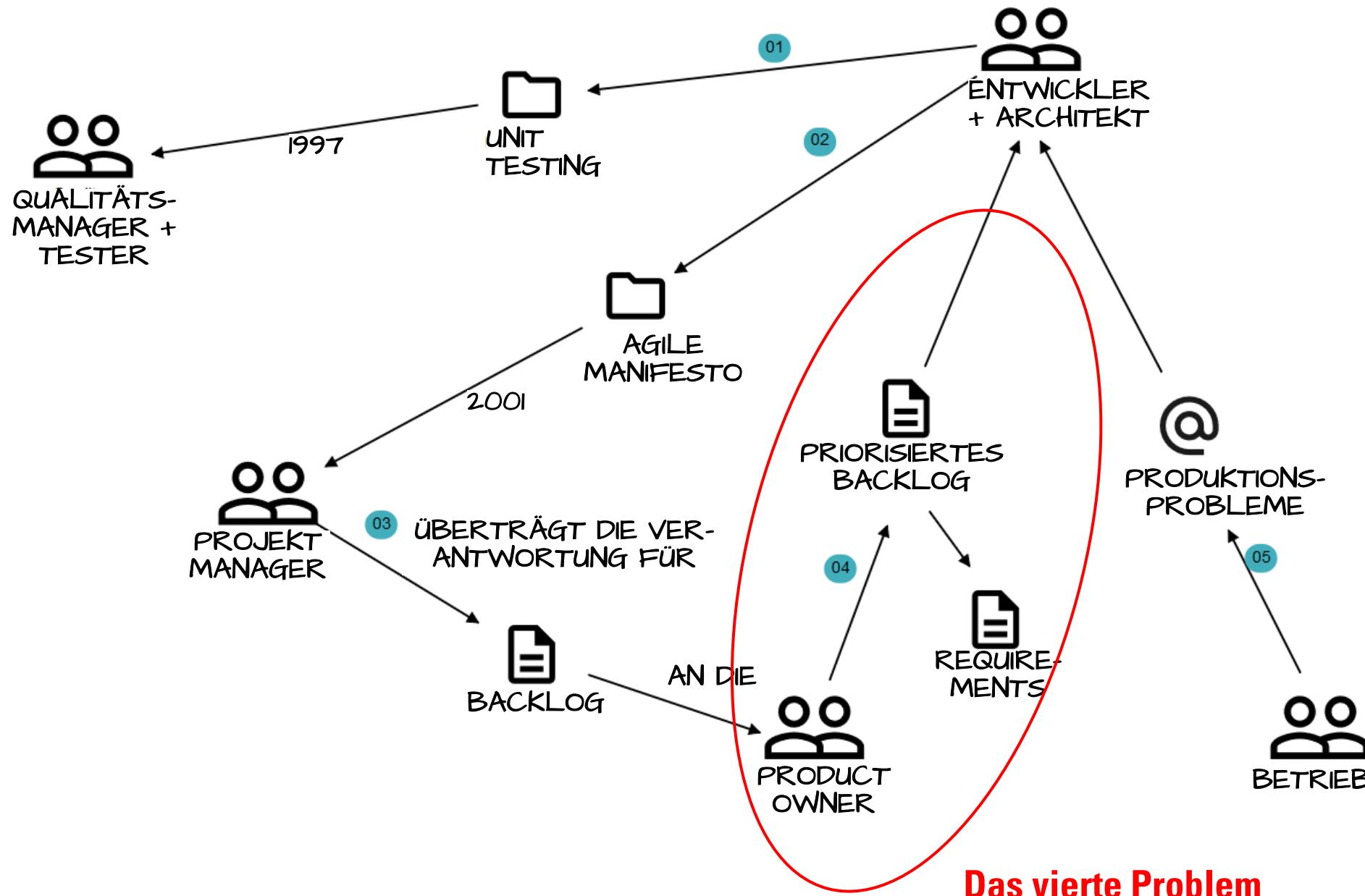










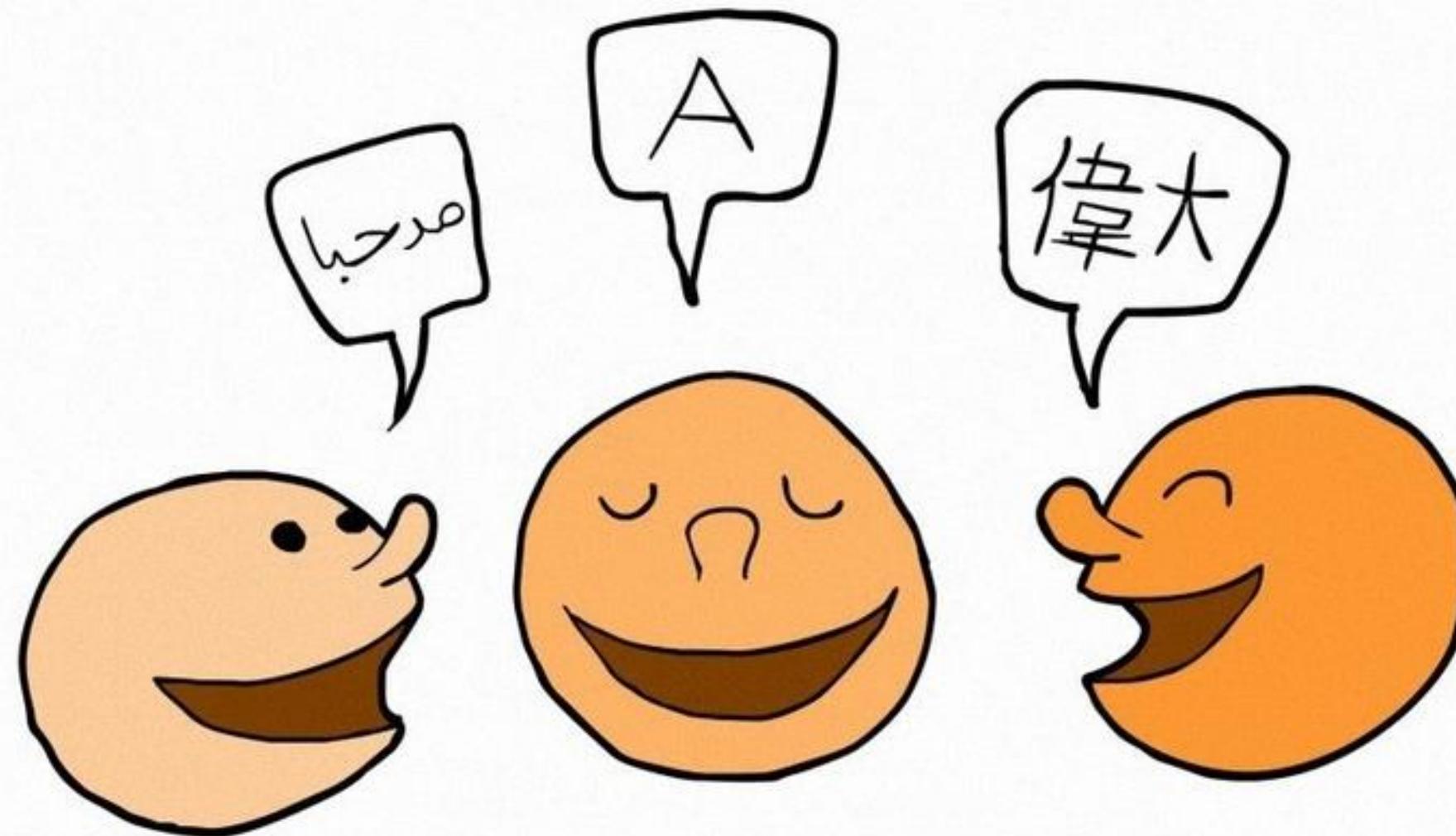


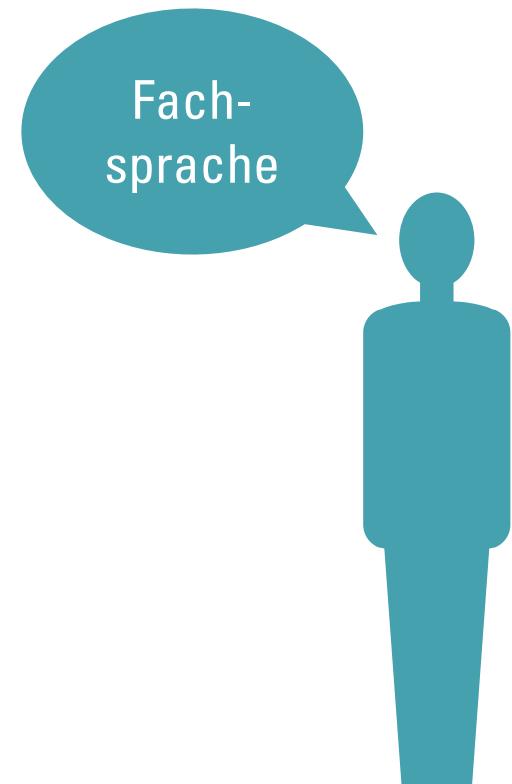
Der Source code enthält nur das
Verständnis der Entwickler*innen
nicht die in **backlog items**
beschriebenen Anforderungen.

Domain-Driven

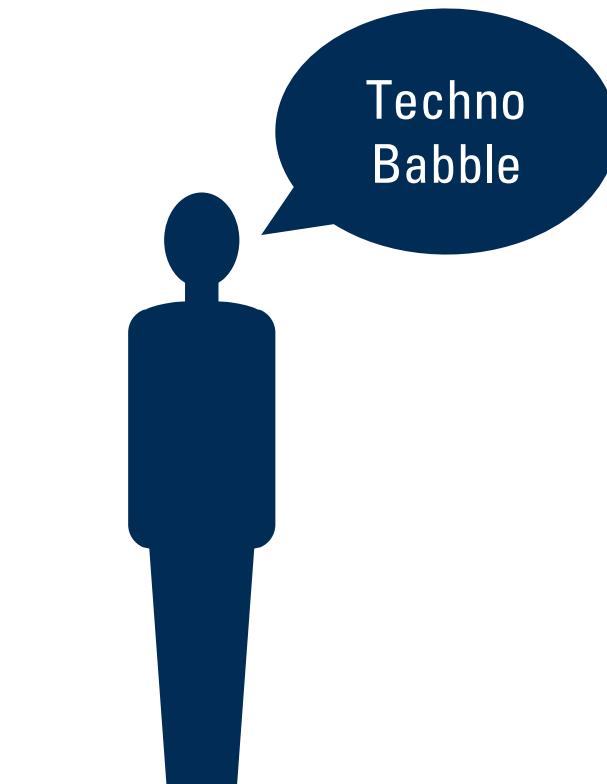
DESIGN





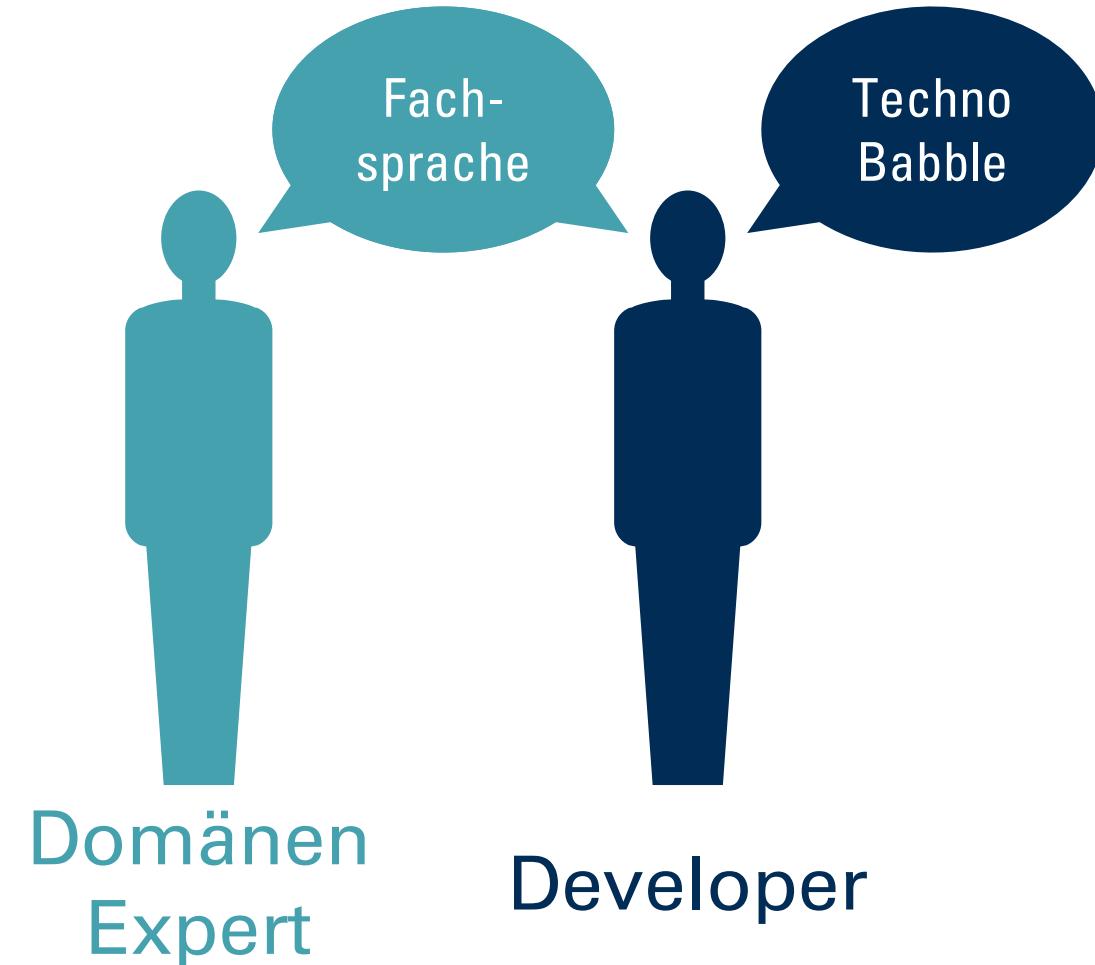


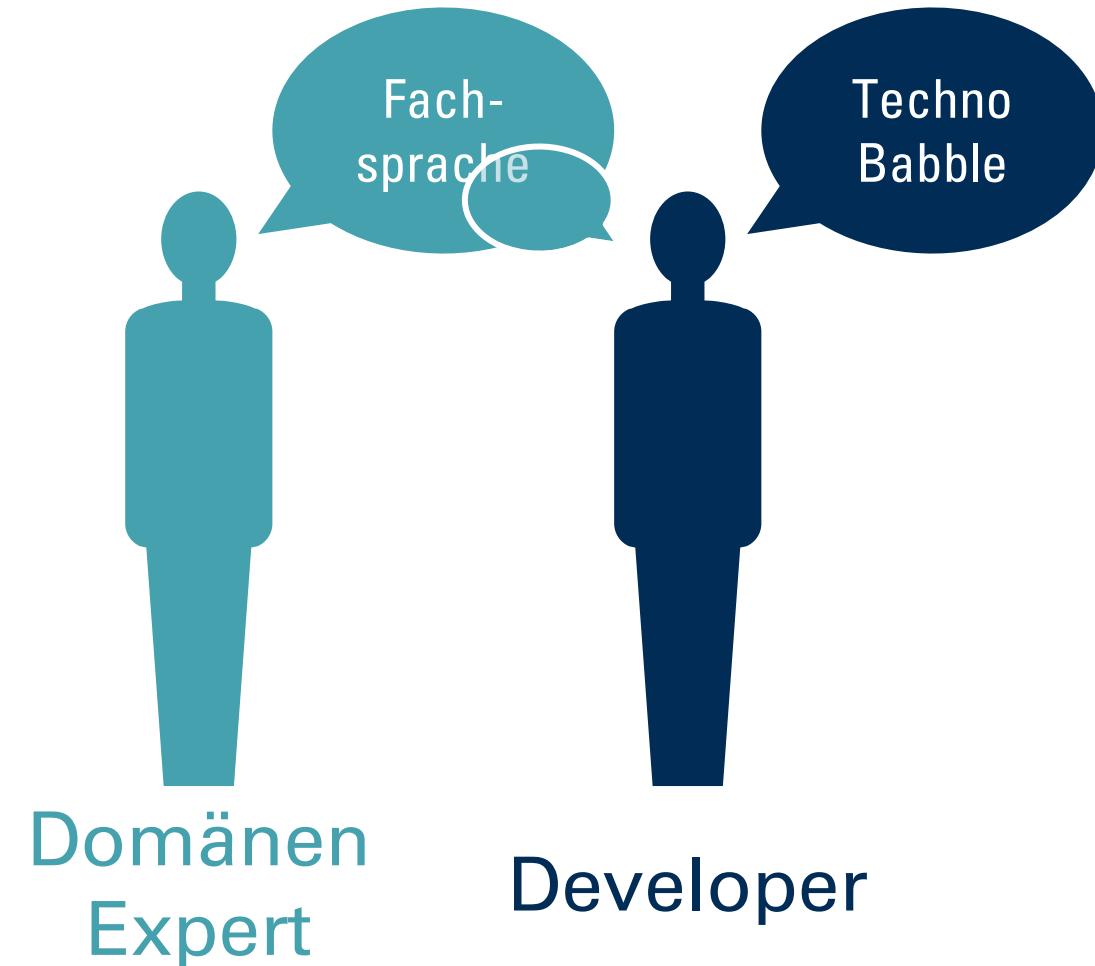
?

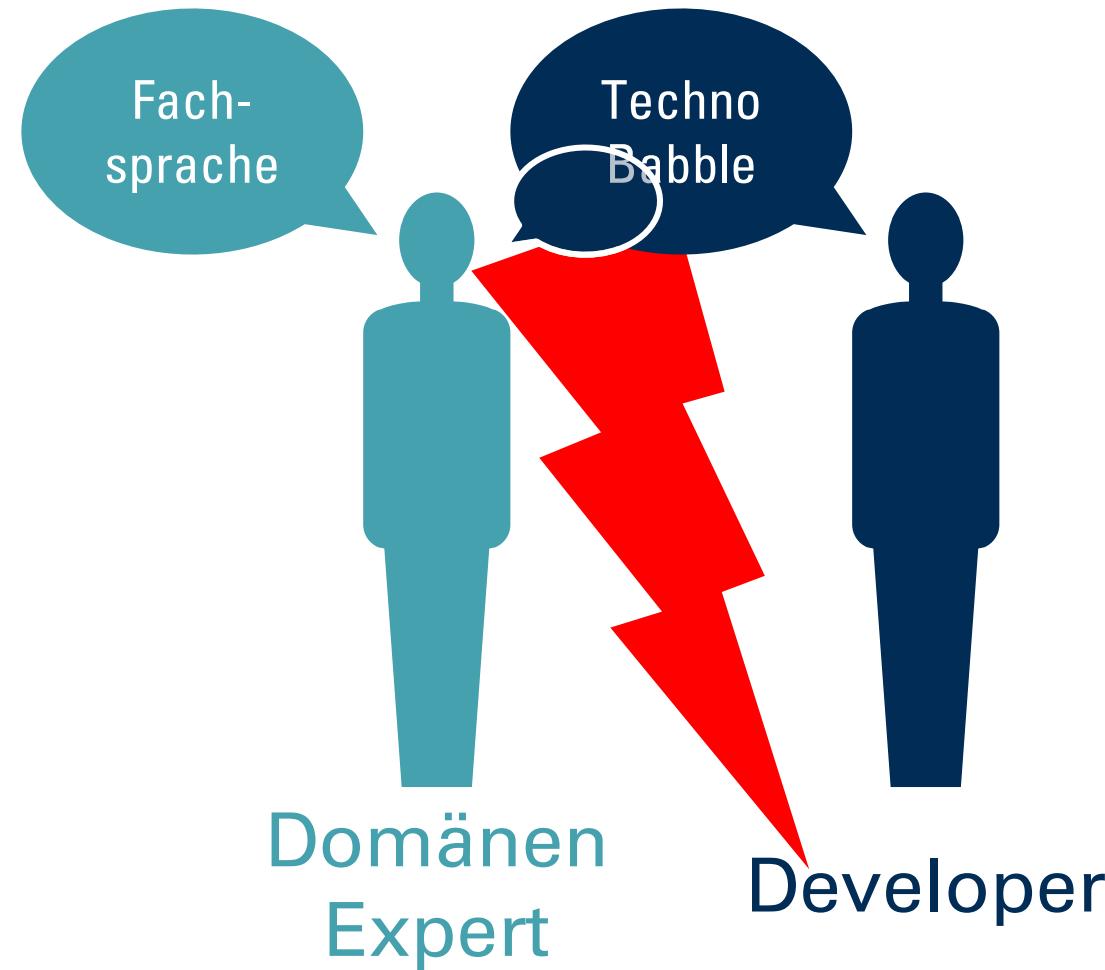


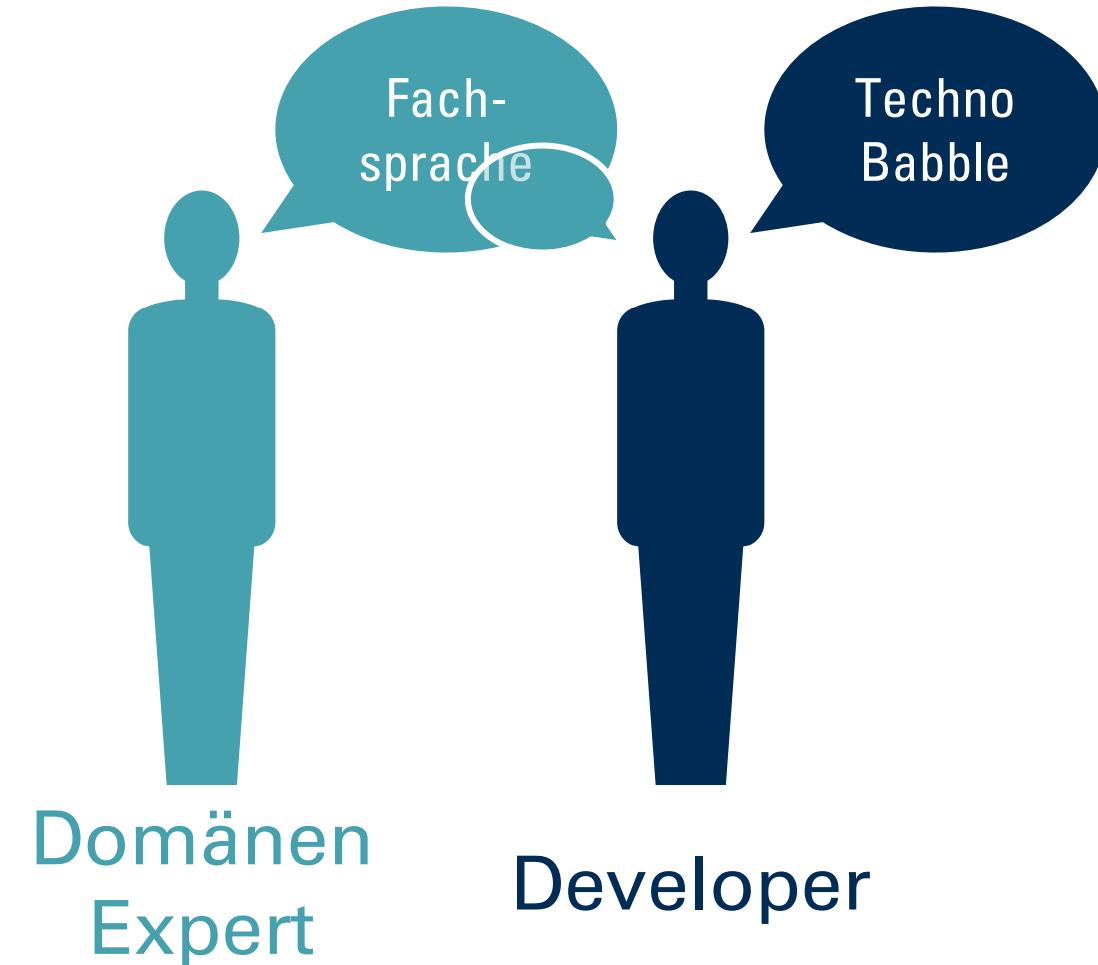
Domänen
Expert

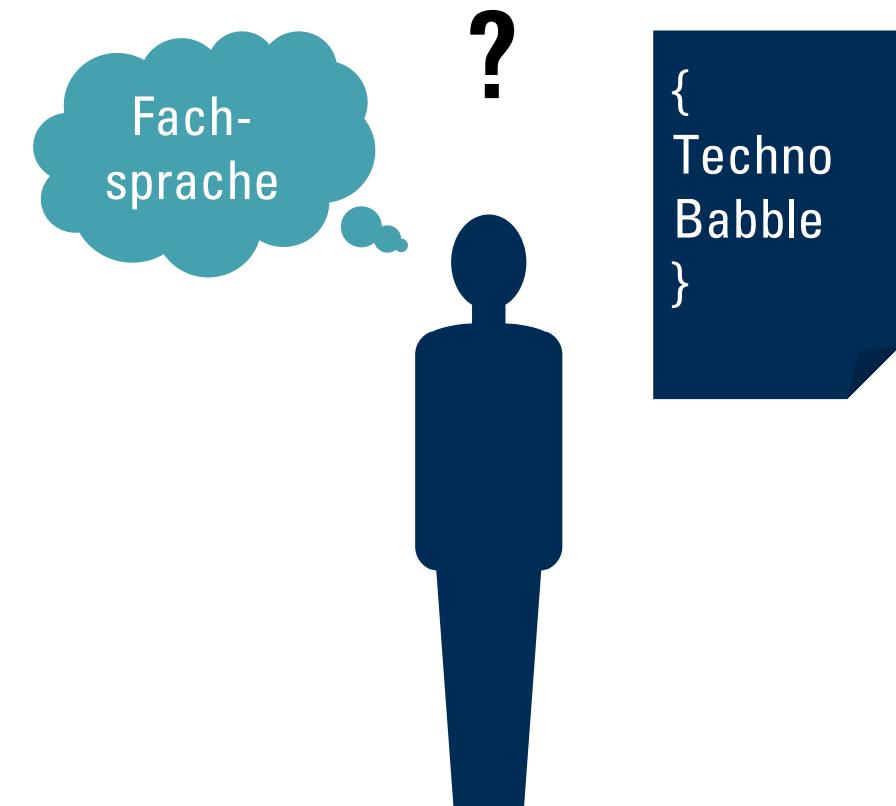
Developer



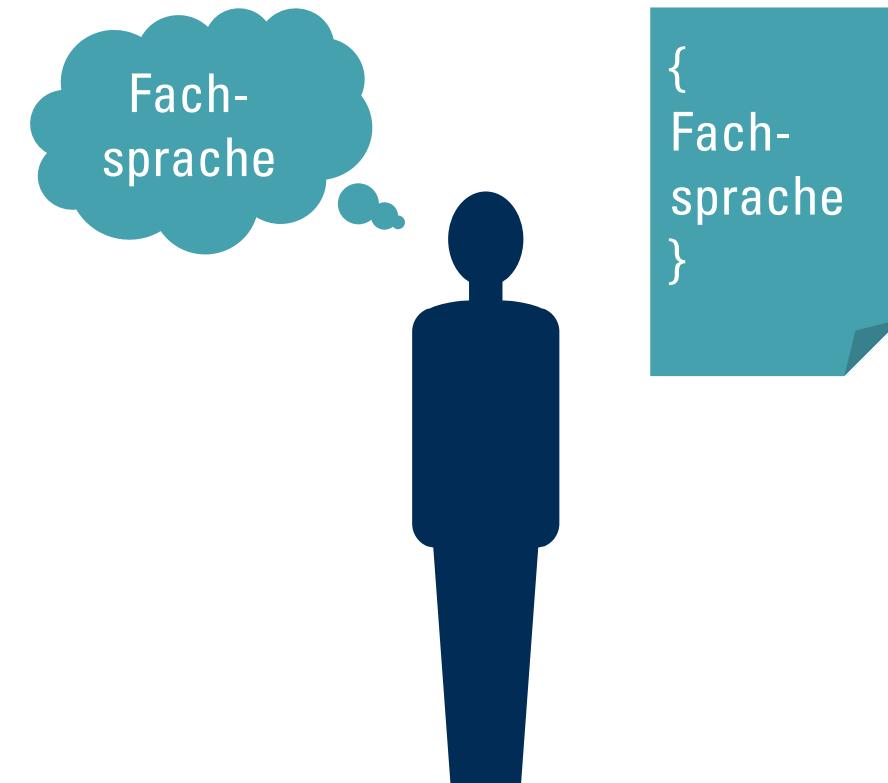








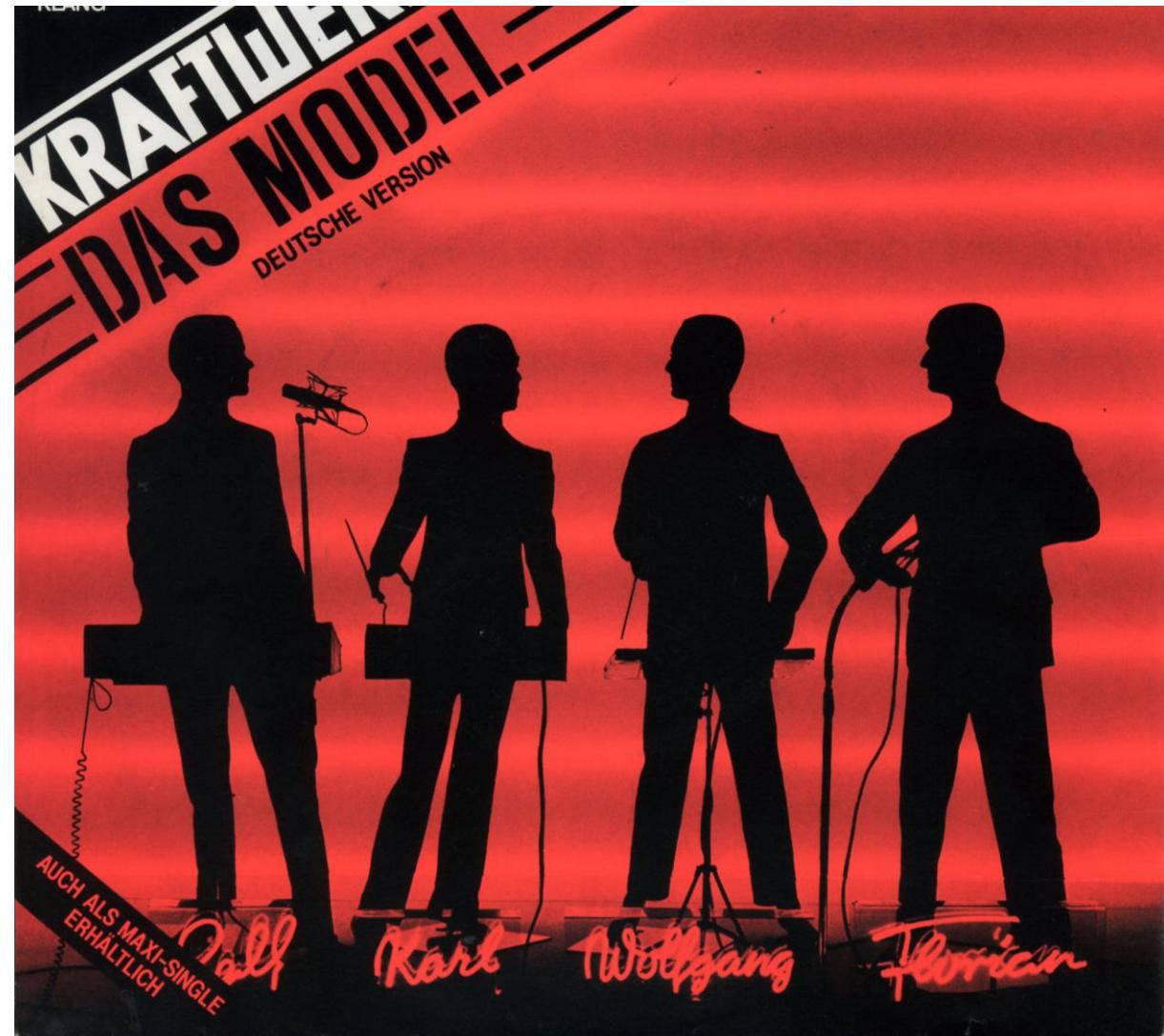
Developer



Developer

- Das Modell muss **aus unserem Kopf raus**
 - Wir müssen unser **Wissen teilen**:
 - Graphisch
 - Schriftlich
 - im Gespräch
- Es ist wichtig eine Sprache zu haben, um das Modell auszudrücken
- In DDD heißt diese Sprache:

Ubiquitous Language



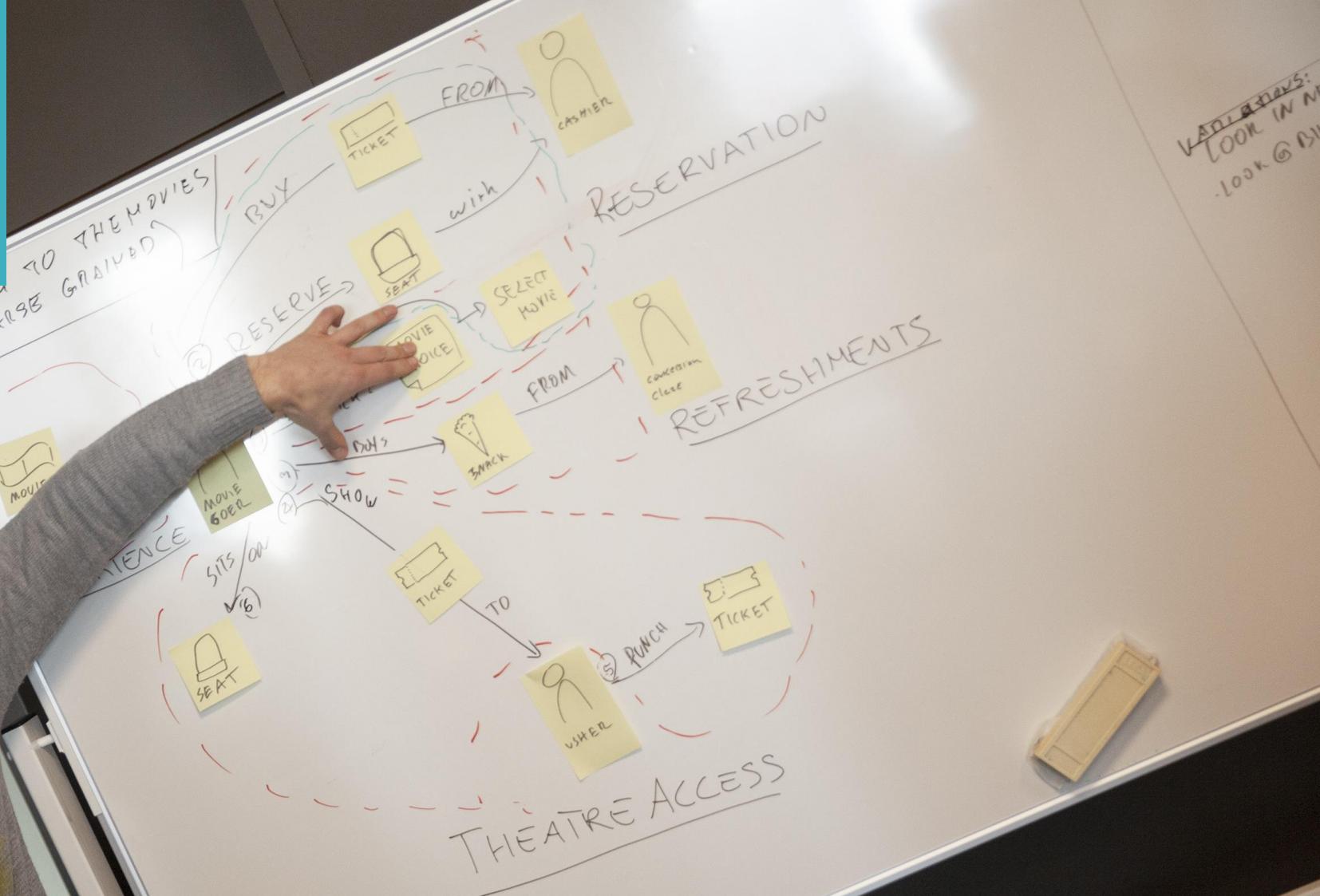
EVENT STORMING

Alberto Brandolini

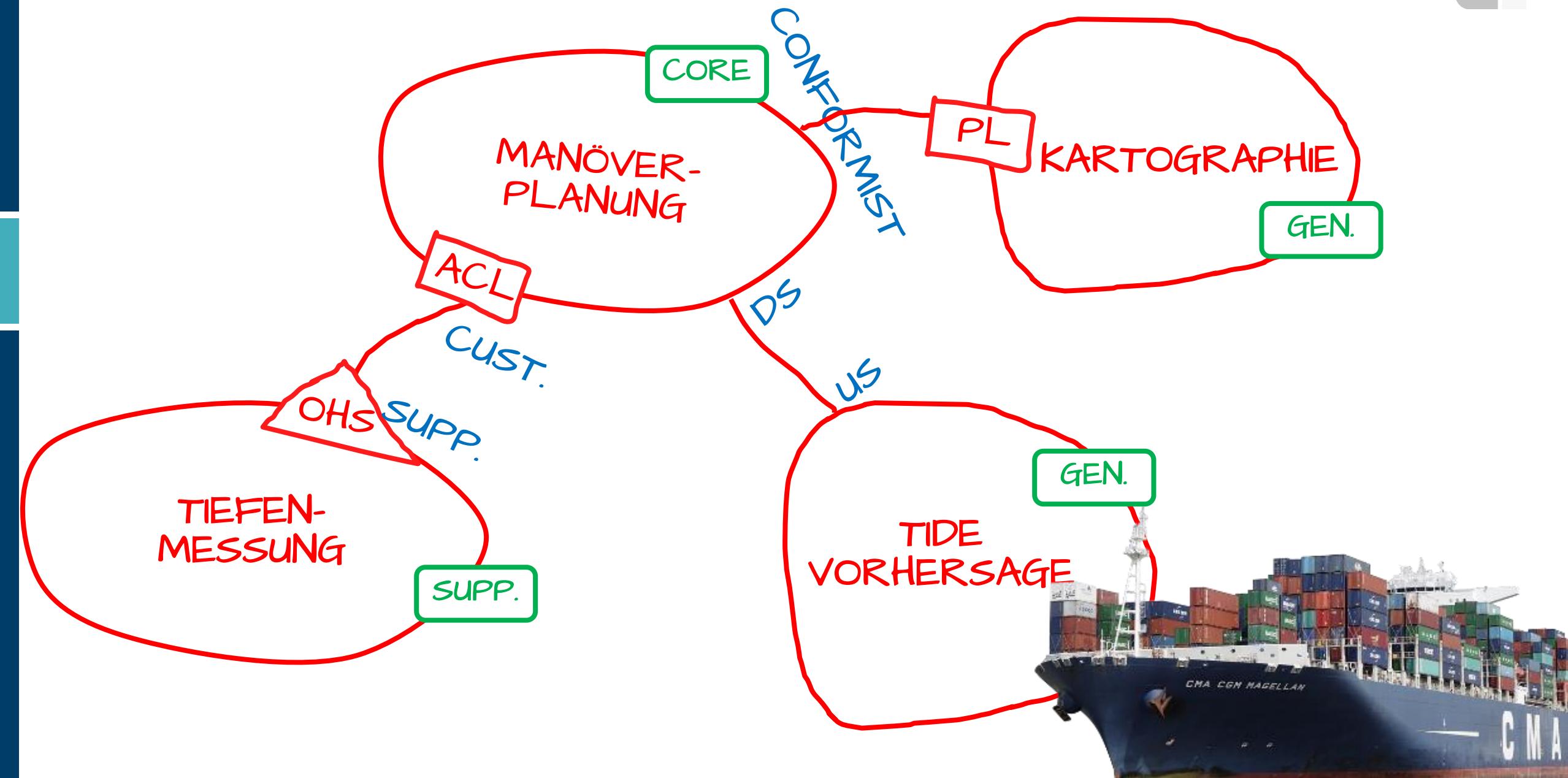


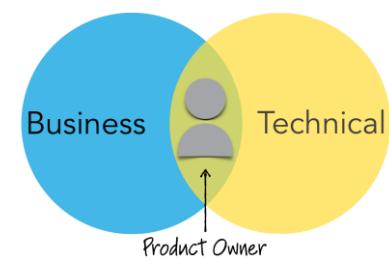
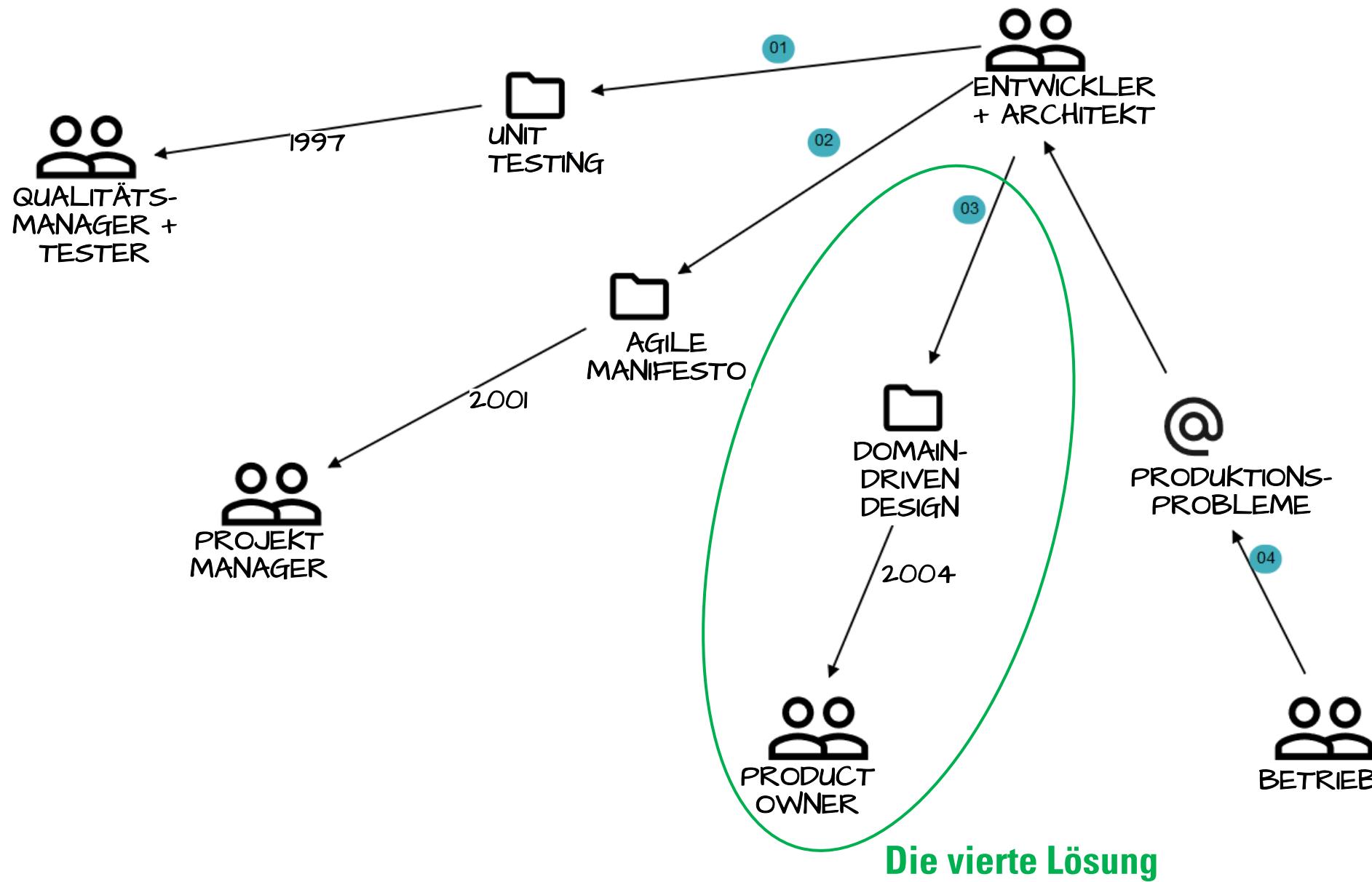


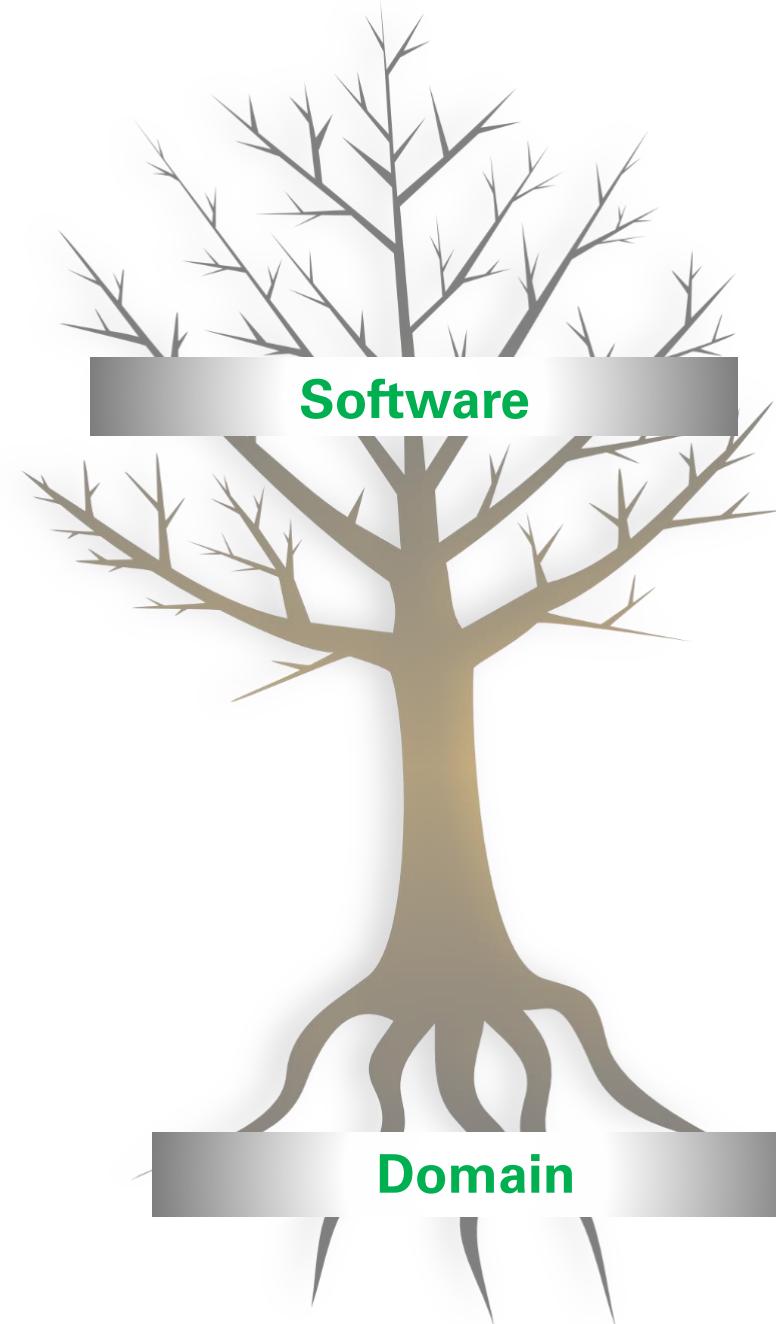
DOMAIN Storytelling

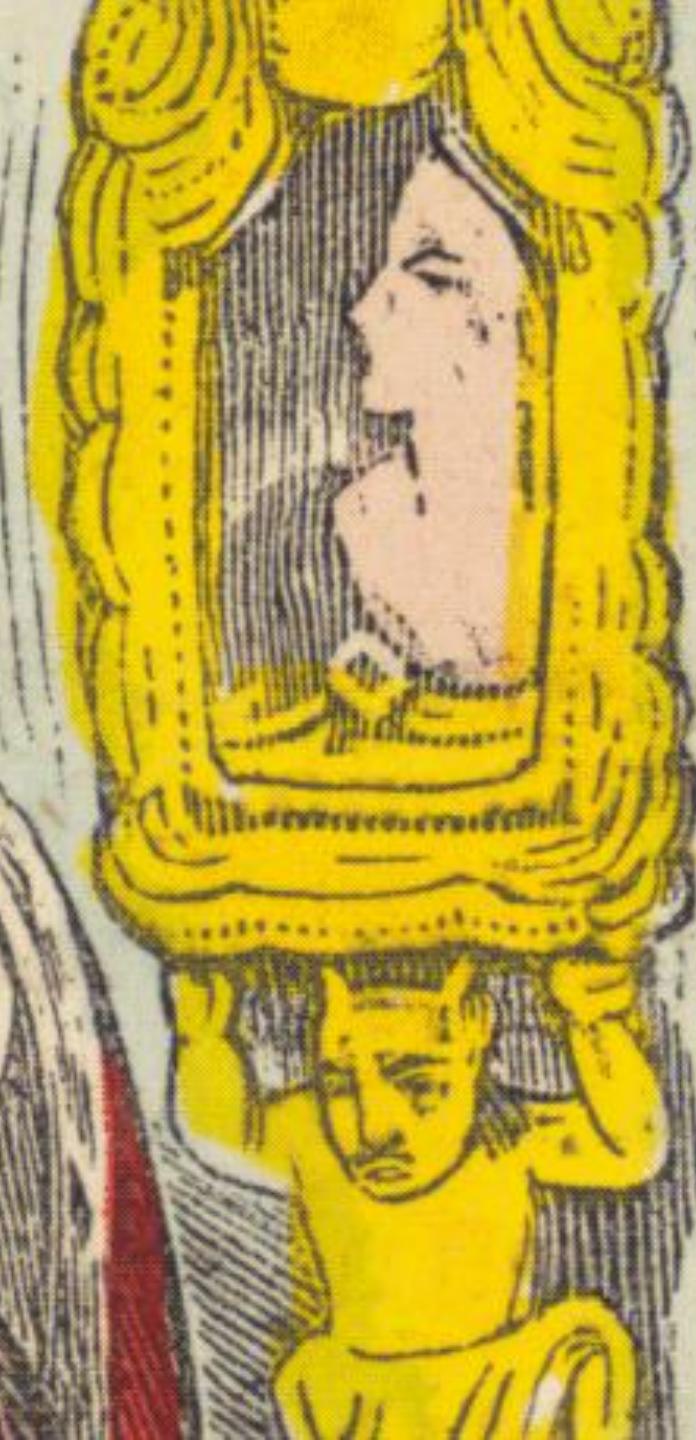


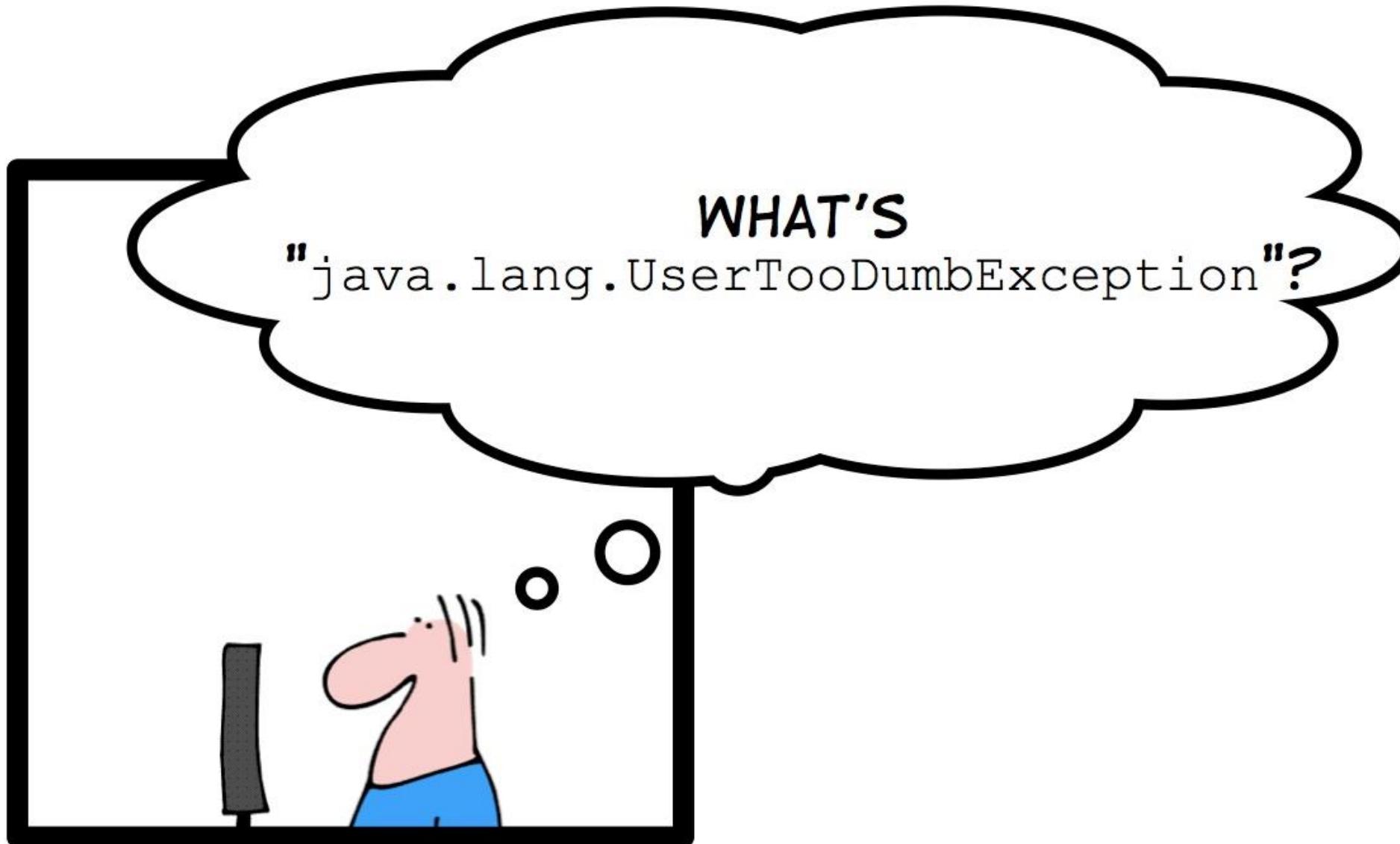
CONTEXT-MAPPING



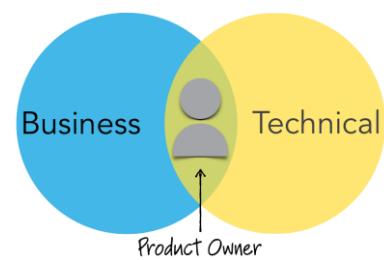
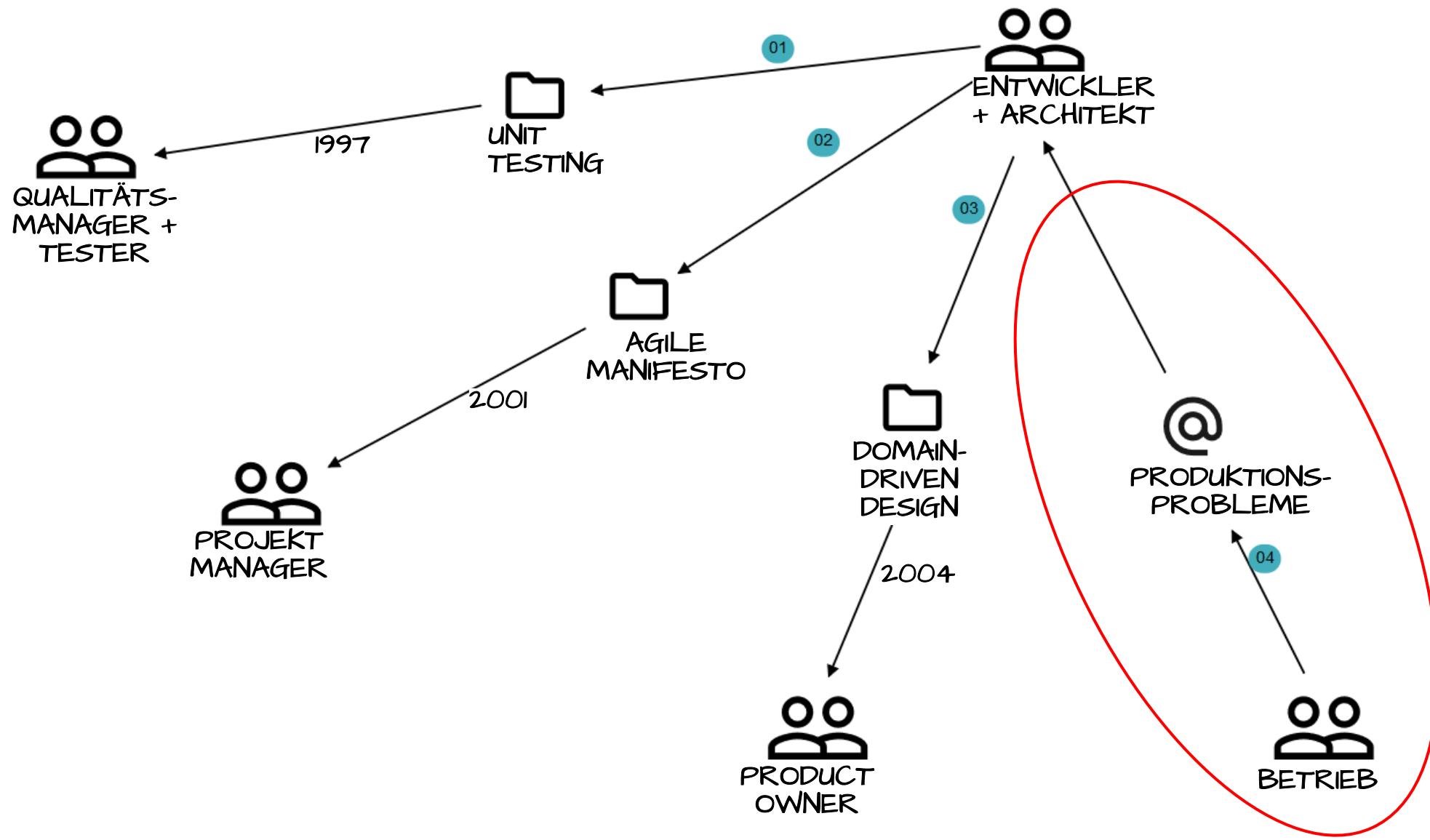


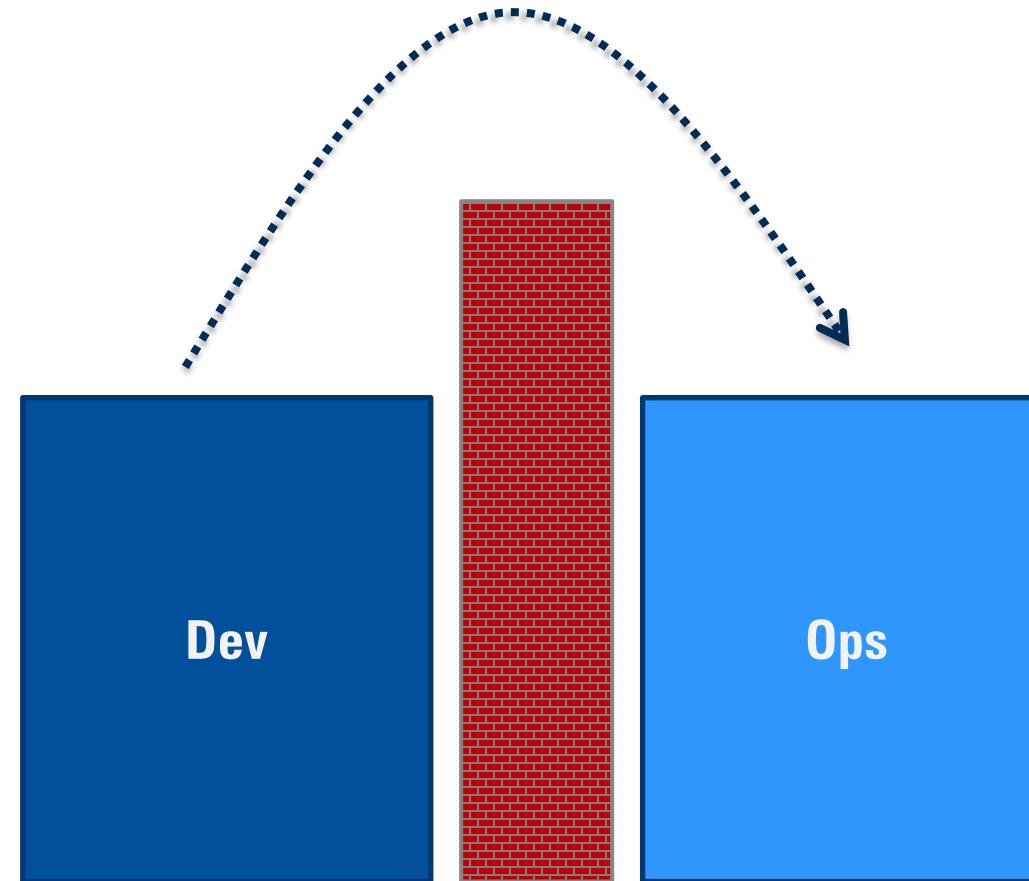


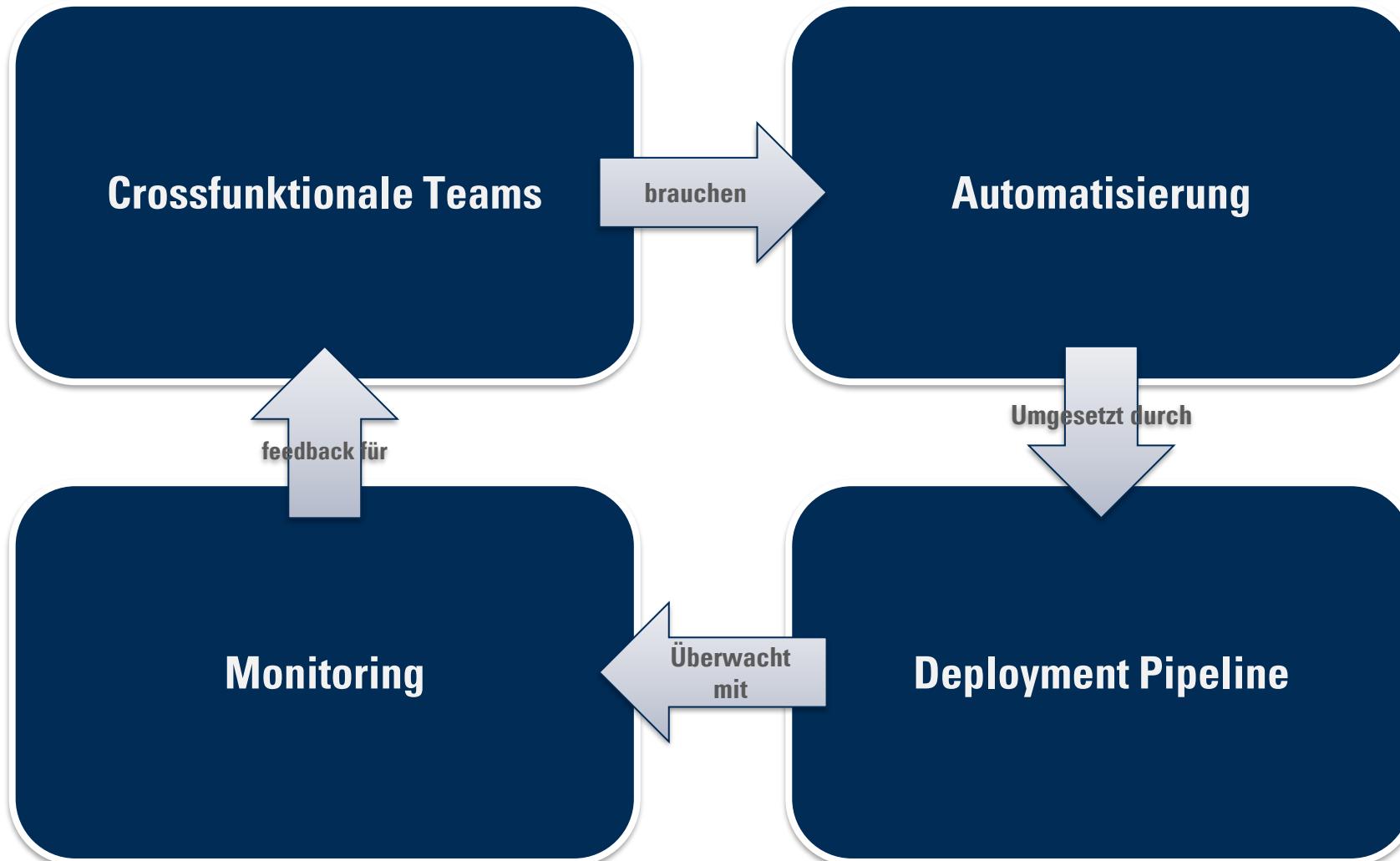


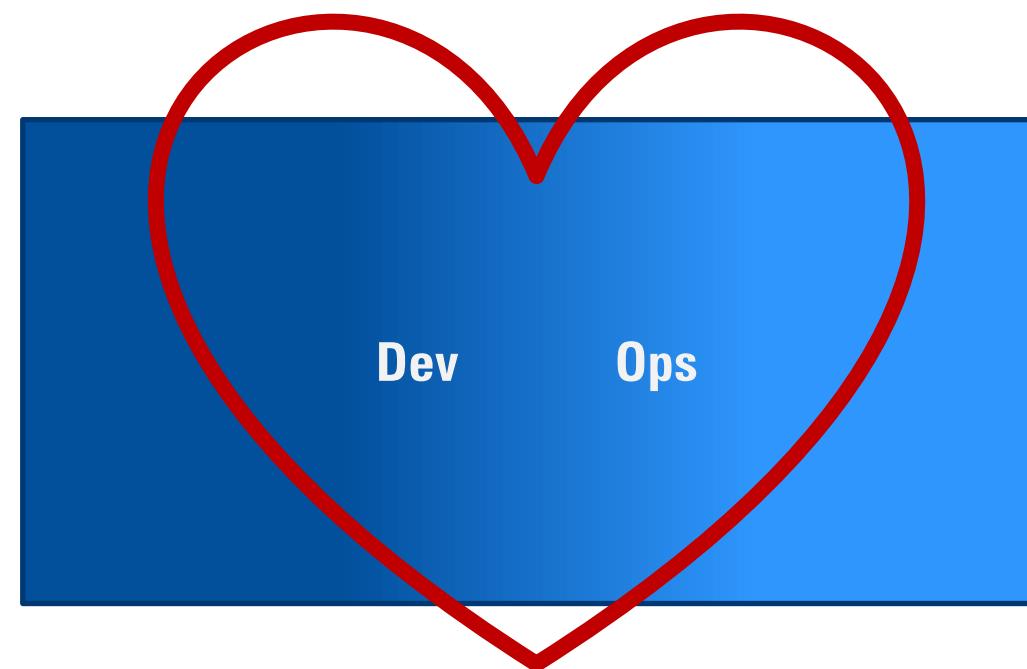


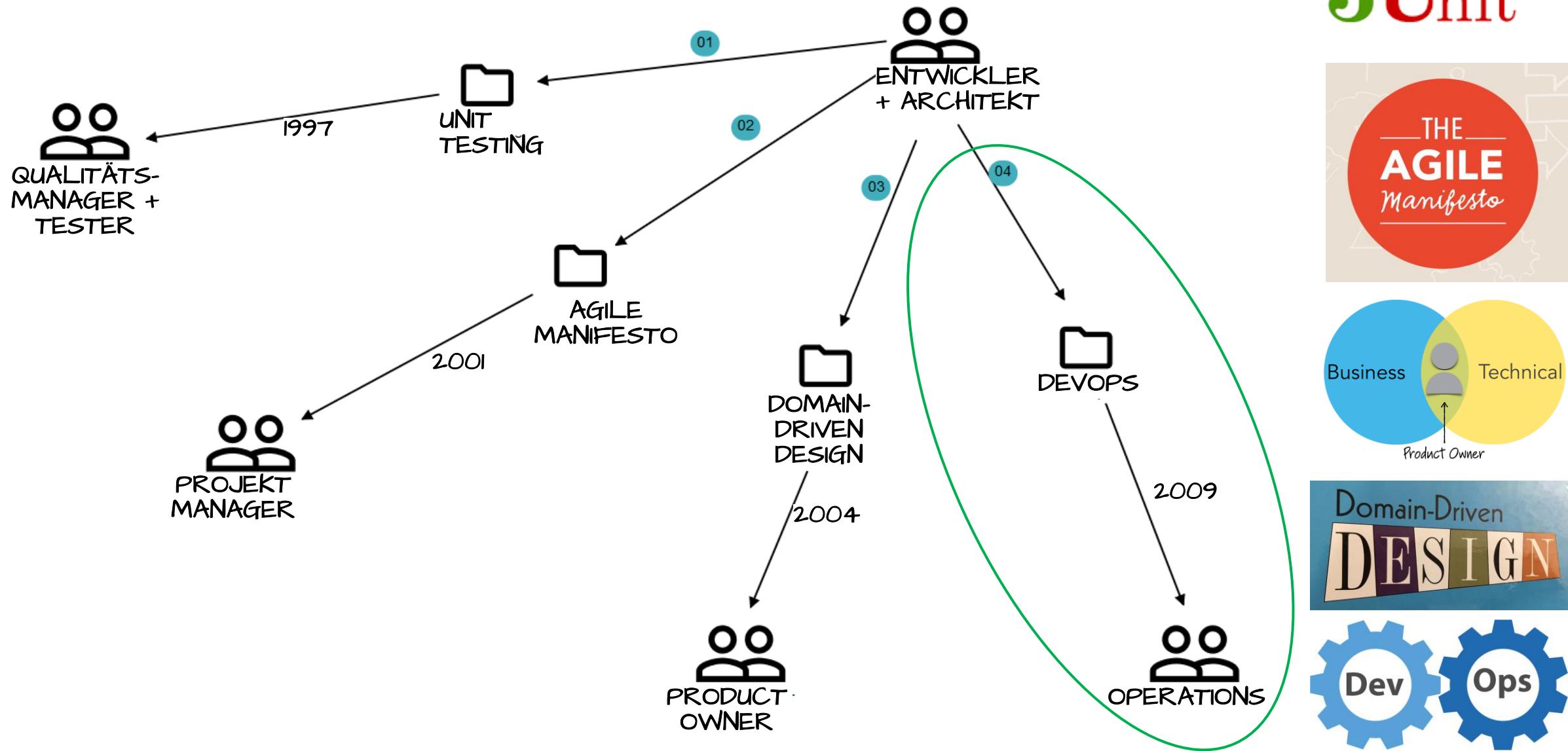
CODER'S REVENGE



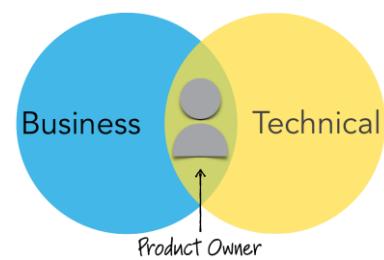








Die fünfte Lösung





GEGENWART

ZUKUNFT

VERGANGENHEIT

von innen
betrachtet



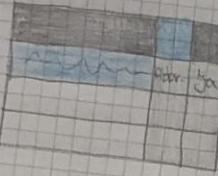
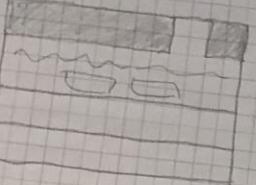
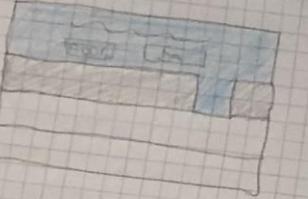
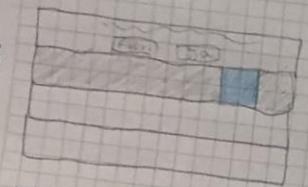
von außen
betrachtet



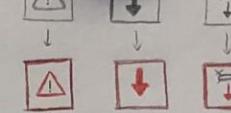


Thema

Name



Emergency	
D1	>
M1	>



	⚠
D1	>
M1	>

	⚠
D1	>
M1	>

Drohne D1 hat ein Defekt!
Soll Drohne D1 notlanden?

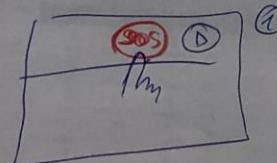
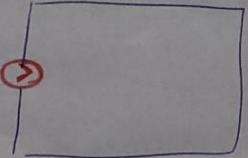
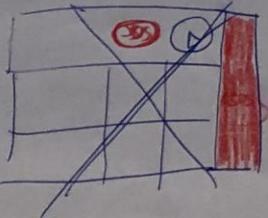
	⚠
D1	>
M1	>

	⚠
D1	✓
M1	>

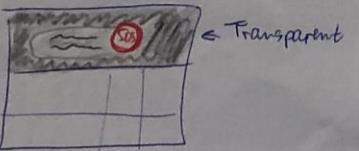
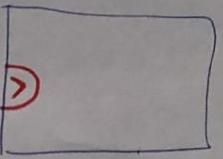
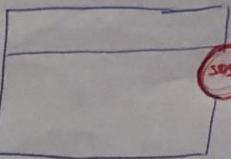
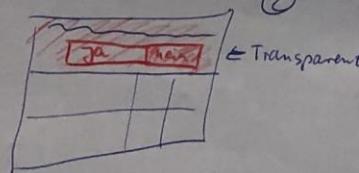
Roter Defekt

Arduipilot

← SC

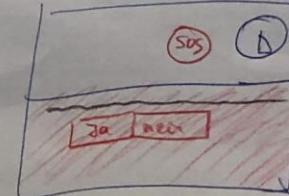
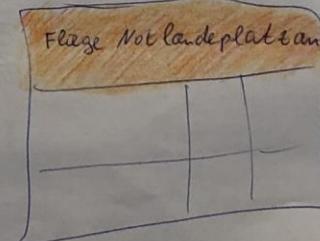


②

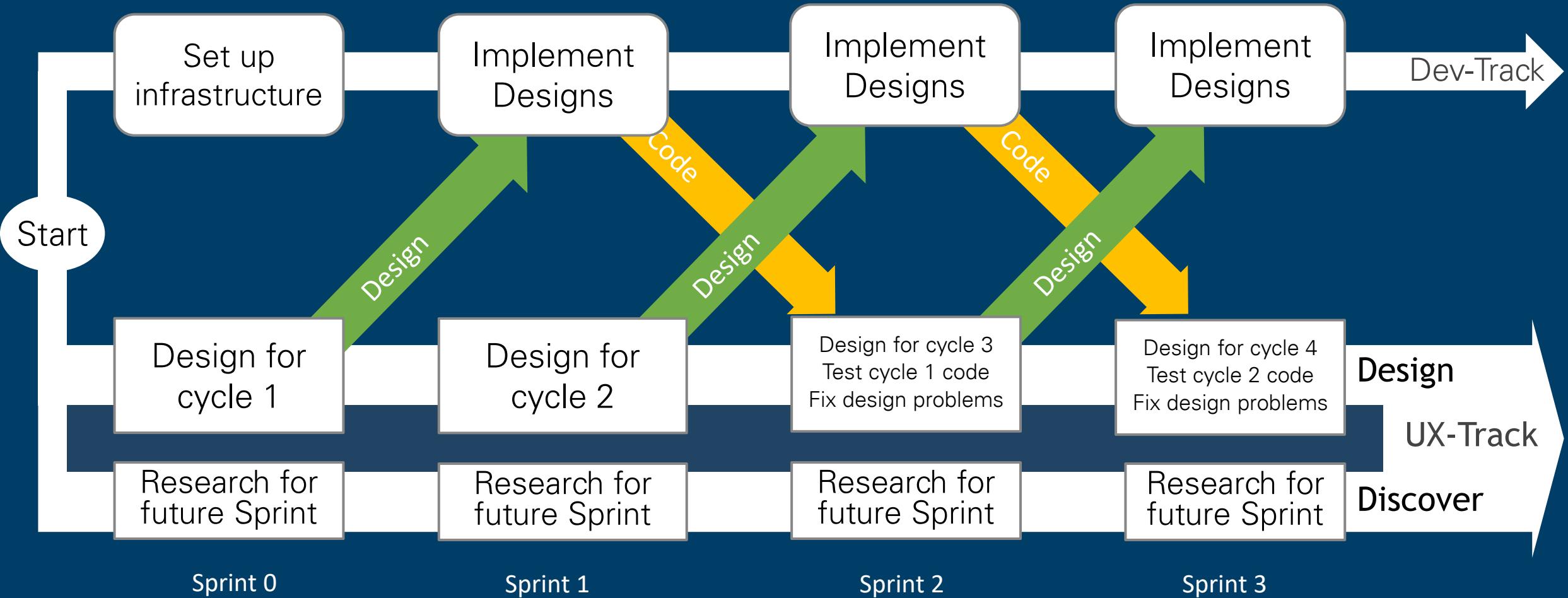


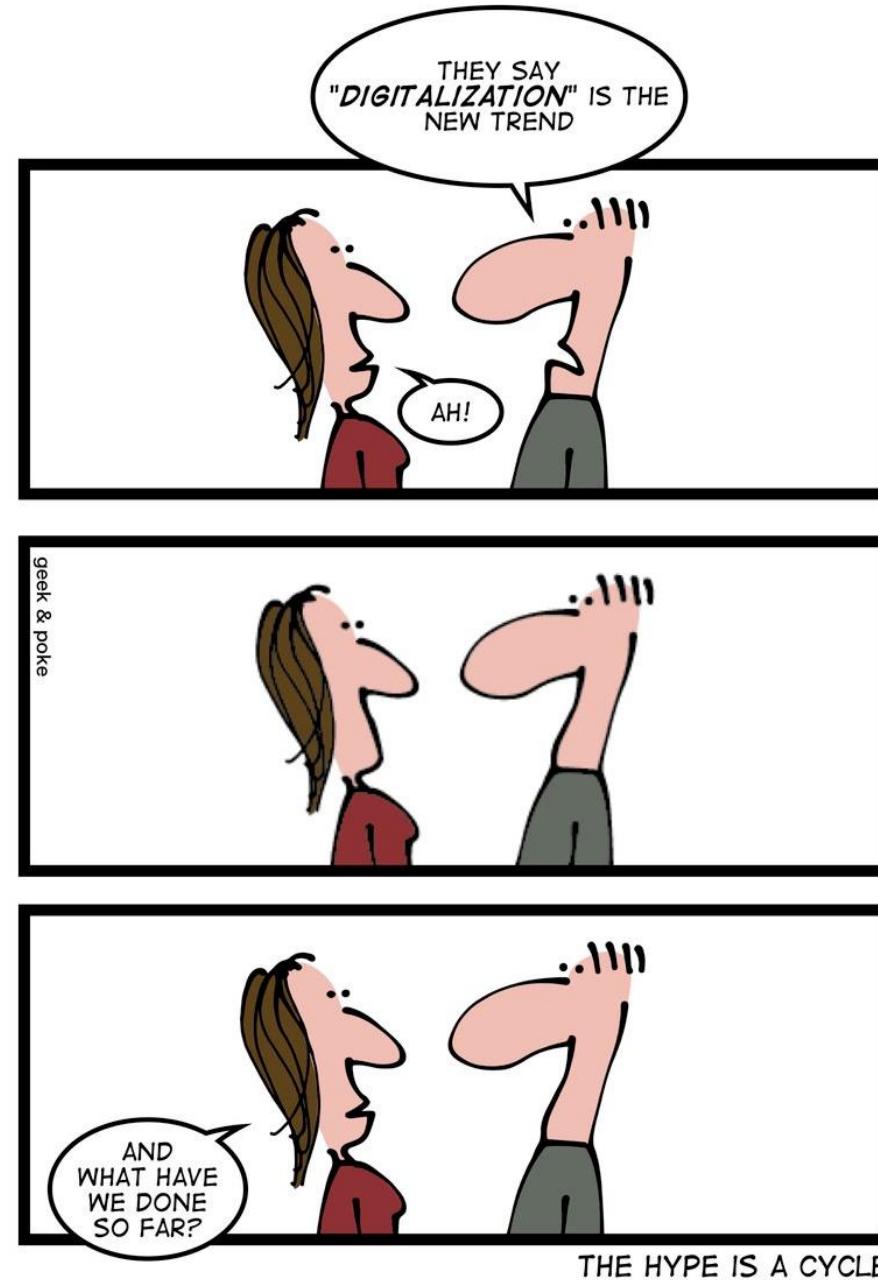
Möllanden ~
Ja / Nein

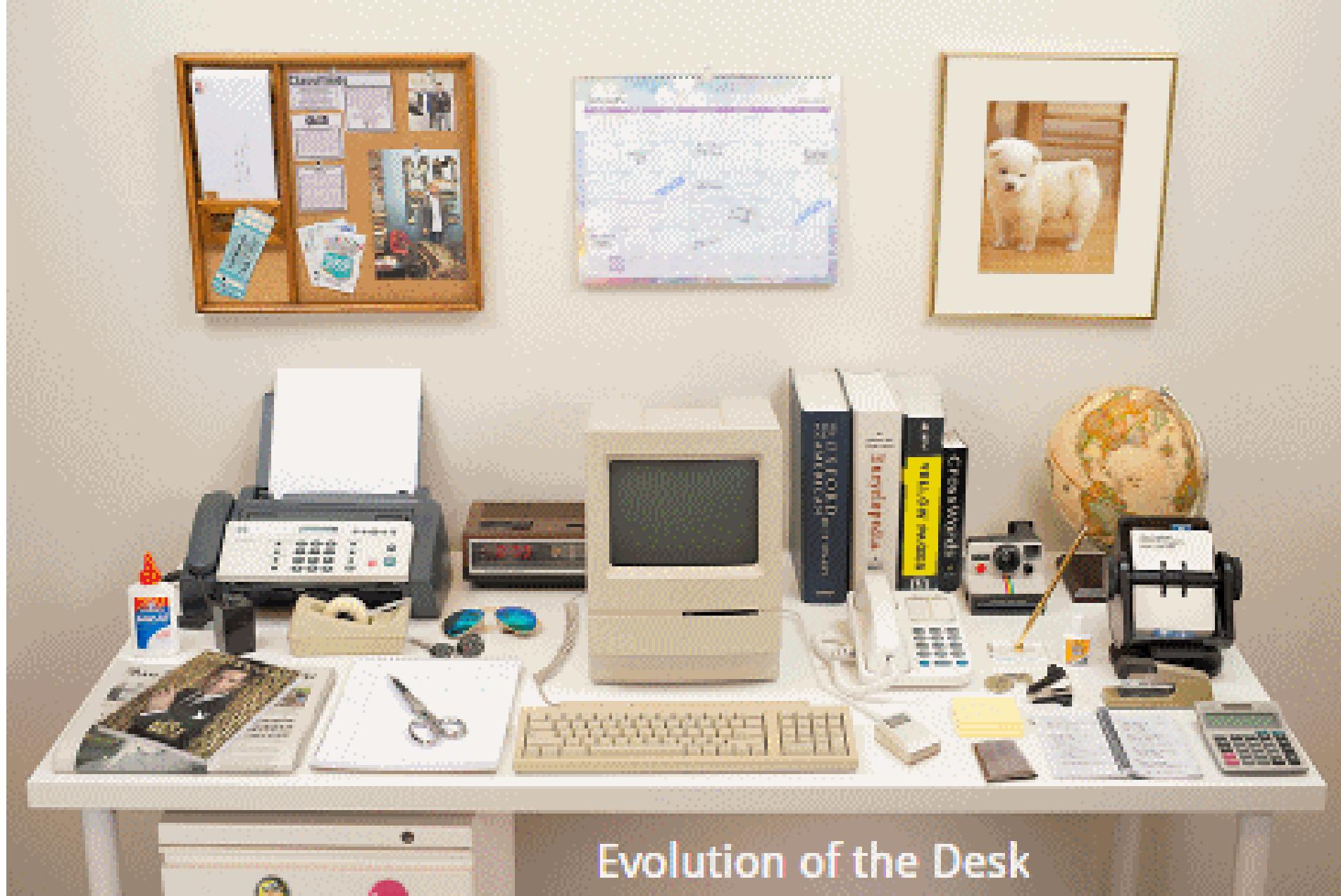
Not Emergency pressed



DUAL TRACK SCRUM







Evolution of the Desk

1980

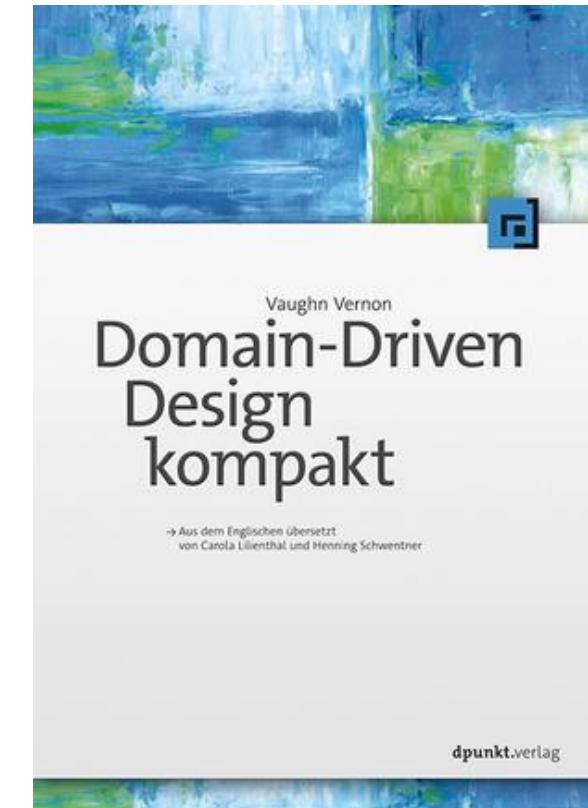
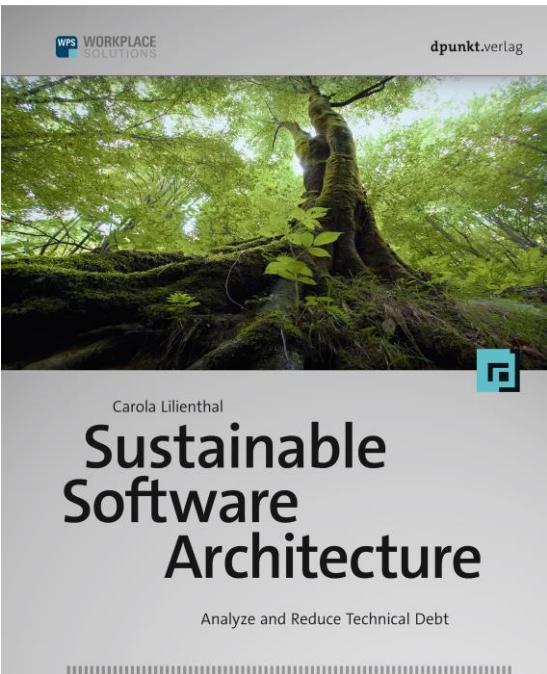
@cairolali



2014

@caiolali

VIELEN DANK FÜR EURE AUFMERKSAMKEIT!



www.sustainable-software-architecture.com

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cl@wps.de
www.llsa.de

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