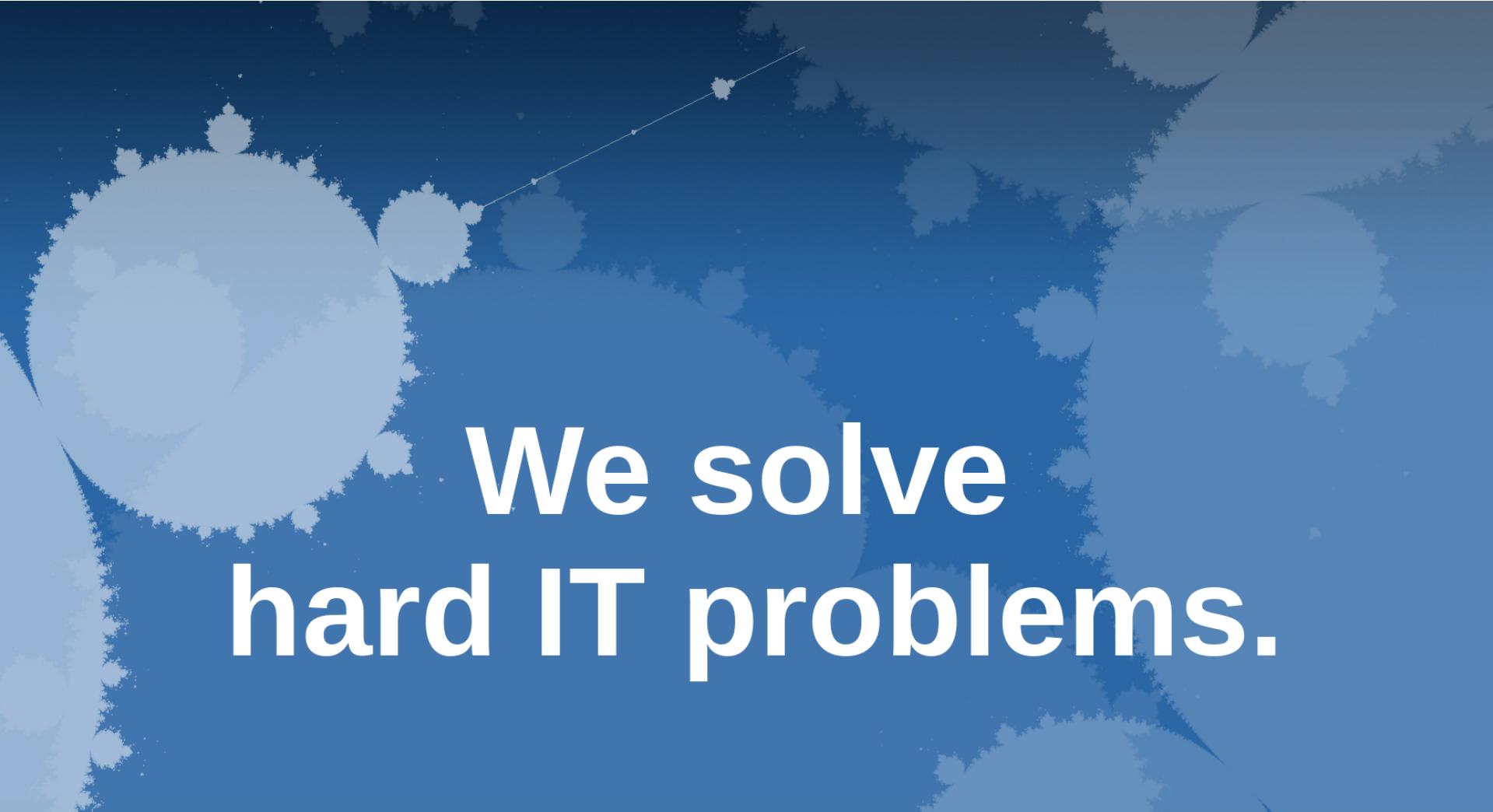


Taming Agile Architecture



Michael Haeuslmann @ **TNG** TECHNOLOGY
CONSULTING



We solve
hard IT problems.

Facts and Figures



Foundation in 2001



Located in Unterföhring
near Munich



99% University Degree Holder
60% with a PhD



2 Internal Training Days per Month



Approx. 275 Employees



41% with a Degree in
Physics

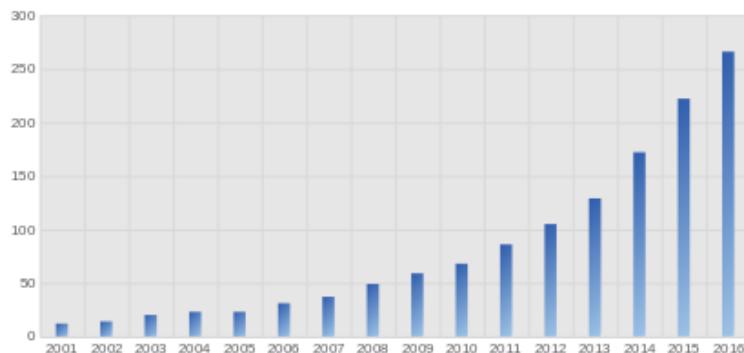


Fluctuation < 6%



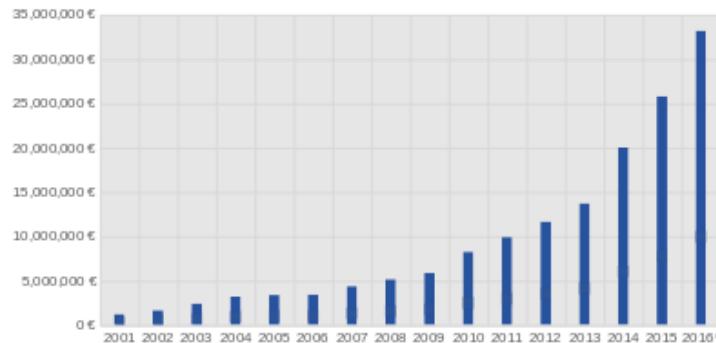
1-4 External Conferences per Year

Number of Employees



Note: The number of employees is stated as of the end of December.

Sales Growth



TNG Technology Consulting

Atlassian Partner

Java

PHP Projects

Scrum Coaching

Confluence

BigTechday

BigData

Hibernate

NoSQL

TestDrivenDevelopment

JIRA

DesignPatterns

Sonar

CleanCode

Solr

Interaction

ExtJs

IntelliJIDEA

Python

ScrumTraining

MapReduce

Mediation

Nagios

WebServices

Taskboard

ProductOwner

DesignThinking

ContinuousIntegration

log4j

Velocity

Lucene

FindBugs

node.js

EnterpriseWiki

CloudComputing

Greenhopper

JPA

NexusPerl

DevOps

Kanban

InnovationGames

Monitoring

Spring

Eclipse

MySQL

Groovy

Mockito

Grails

OracleRuby

Artifactory

PlanningPoker

Transaction

CodeReview

PostgreSQL

ScrumMaster

TechDay

Clustering

LoadBalancing

Datawarehouse

Talks

ContinuousDelivery

Iteration

MediationZone

ArchitectureReview

BusinessIntelligence

OFBiz

JavaScript

Retreat

Jenkins

ScalaTraining

SQL

Maven

ProductOwner

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Kanban

InnovationGames

Monitoring

Spring

Eclipse

MySQL

A photograph showing a group of approximately ten people in a workshop or office environment. They are standing around a large, round, light-colored wooden table. Some individuals are leaning in, looking down at the table, while others stand back, engaged in conversation. The room has warm lighting and appears to be a creative or professional workspace.

*"Individuals and interactions over
processes and tools..."*

- Agile Manifesto

Let's be agile, lets interact!

Agenda

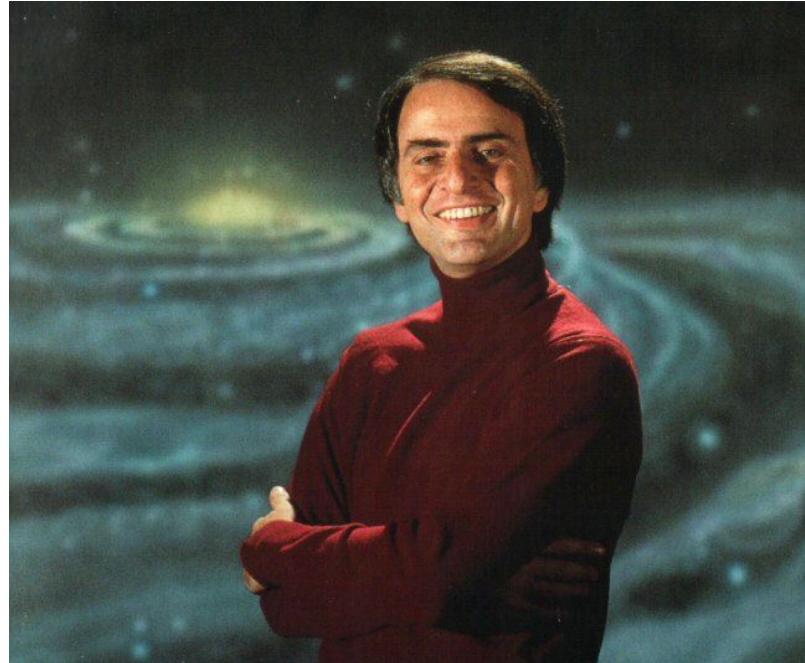
- Agile/Architecture Myths
- Practicing Agile Architecture

Why do we even talk about this?

*“The word 'agile' has been subverted to
the point where it is effectively
meaningless, and what passes for an
agile community seems to be largely an
arena for consultants and vendors to
hawk services and products.”*

- *Dave Thomas*

The Fine Art of Baloney Detection

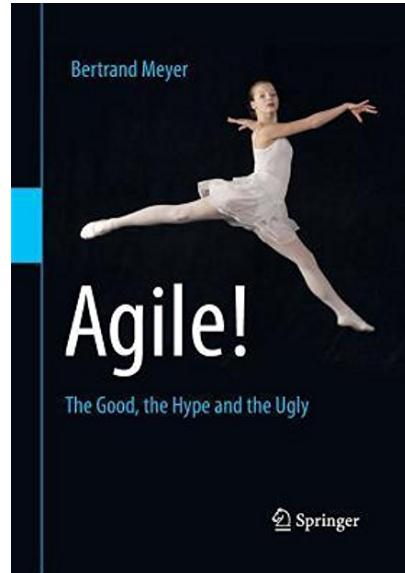


"The Demon-Haunted World: Science as a Candle in the Dark" - Carl Sagan

- there must be independent confirmation of "facts"
- arguments from authorities carry little weight
- try not to get overly attached to a hypothesis, just because it's yours
- ...

Agile!

The Good, the Hype and the Ugly



Bertrand Meyer

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

**That is, while there is value in the items on
the right, we value the items on the left more.**

Myth #1

Agile means no documentation









Myth #2

Agile means no architecture



Myth #3

Good coding practices lead to good architecture

Myth #4

Agile means everything is easy to change

(even architecture)



Myth #5

Scrum === Agile

Myth #6

We're agile because ...

- ... we're using Jira
- ... we're doing Standups
- ... we use microservices
- ... we're using DDD

SAY A GLASS



ONE MORE

TIME

Agile Architecture



Architecture

"Software architecture refers to the high level structures of a software system, the discipline of creating such structures, and the documentation of these structures."

- Wikipedia

Architecture

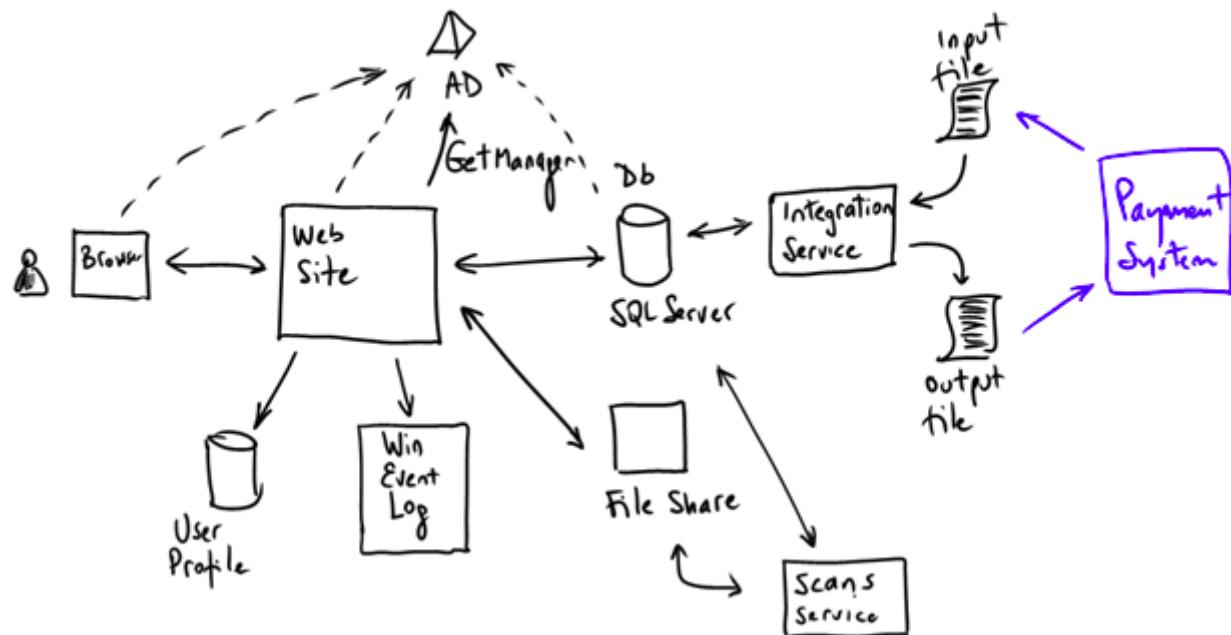
"[Architecture] is the stuff that's hard to change"

- Martin Fowler

Design Decisions

- Big Ball of Mud (Foote & Yoder): design your architecture so that things which change often are closer together
- as little as possible, as much as needed
- Monolith first!
- think big, act small

Whiteboard Architecture





Class-Responsibility-Collaboration Cards (CRC)

Class
Responsibility Collaboration

Microservices



Daniel Bryant

@danielbryantuk



Follow

"Beware of the distributed monolith connected via a database"

[@lornajane #CraftConf](#) meetup

6:06 PM - 26 Apr 2017



249

316

Continuous Integration

- fail fast
- learn rapidly

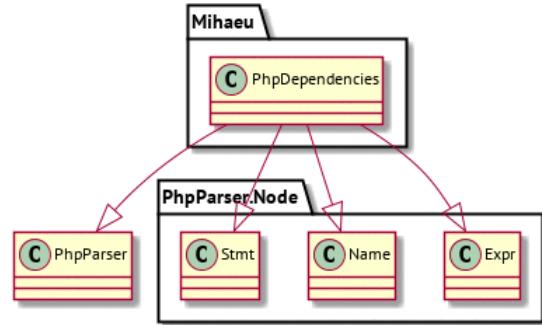
Living Architecture

Bring your Architecture and
Documentation back to life

Validate your Architecture

with

de*PHP*end



- validate design decisions
- generate up to date documentation
- assist in the design process or with refactoring

Summary

- Use your baloney detection kit
- be wary of agile "processes"
- let's all be architects
- fail fast and learn rapidly
- live architecture
- validate your architecture decisions
- revive your documentation

Questions?

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<https://github.com/mihaeu>

Feedback?

Sources

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