TECHNISCHE UNIVERSITÄT CHEMNITZ

Do Microservices Prevent High Qualitative Code?

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Microservice (MS) Definitions

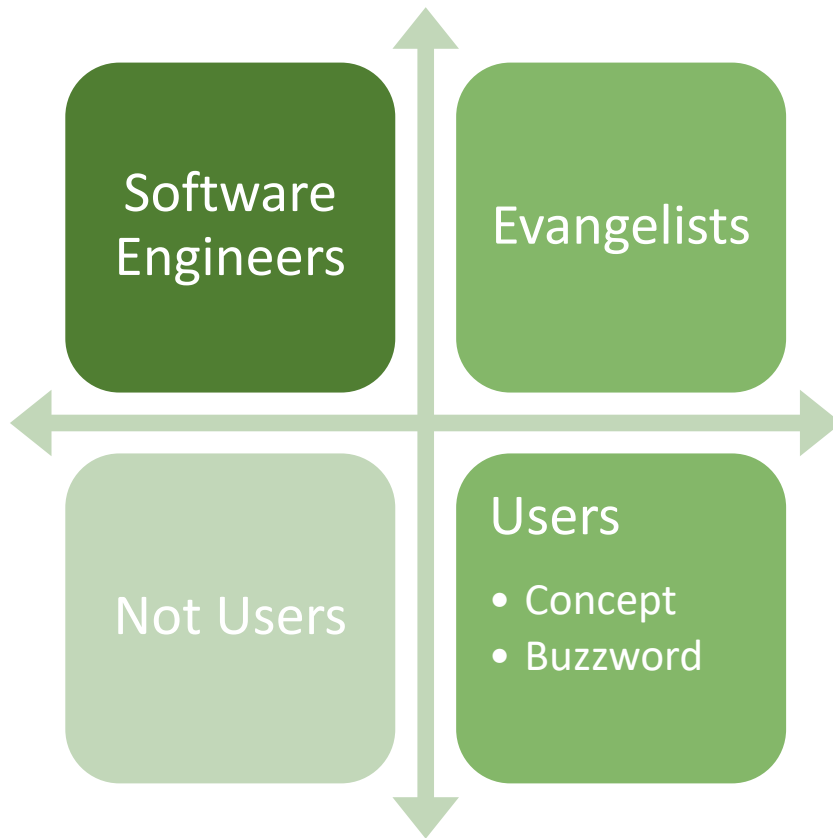| An architectural style	An IDE, or framework, or library, or deployment system	A DevOps strategy (process model)

A current buzzword	A philosophy / religion

Open Questions

Software Engineers

Evangelists

Not Users

Users
- Concept
- Buzzword

- Should we use MS?
  - It depends

- Do MS decrease the software quality directly?
  - Maybe

- Do MS decrease the software quality in principle?
  - Yes, but …

High Quality Code

Microservices

Observations

- Clean Code
- Architectures
- Fault prevention
- Code reuse

- Design for failures
- Services can be rewritten any time

- General carelessness
- Poorly managed code fragments

Statement I:

The (mis)interpretation of microservices reduces code quality

- Even for non microservice systems
- Microservices are an excuse

➢Can be solved by teaching?

Code Reuse

Microservices

Observations

- Own libraries / data structures
- Helper classes
- Coding guidelines
- No code duplicates

- Services are independent

- Not invented here syndrome
- Copy and Paste reuse

Statement II:

Code reuse is an inherent problem for microservices

➢Open challenge

Abstraction

Microservices

Observations

- Aspects
- Object Orientation
- Models

- Services are independent

- Abstraction strategies are not used

Statement III:

Abstraction is an inherent problem for microservices

➢Evangelists and non evangelists have opposite opinions

Semantic of Microservice

Stop using microservices
Nobody understands the concept
Reuse strategies for microservices
Abstraction and microservices
How to write good code
Fighting evangelists
…