Agile Architecture

Software Architecture 2020-2021

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What is agile architecture?

"Set of values, practices and collaborations that support the active, evolutionary design and architecure of a system."

"How an enterprise, system or software architect apply architectural practice in agile software development."

Has variable scope: single aplications, family of applications...

Some characteristics



Evolves over time



Avoids delays associated with waterfall processes



Ensures that the system always runs



Balances emergent design and intentionallity

"Agile methods are the car's steering wheel, not the gas pedal."



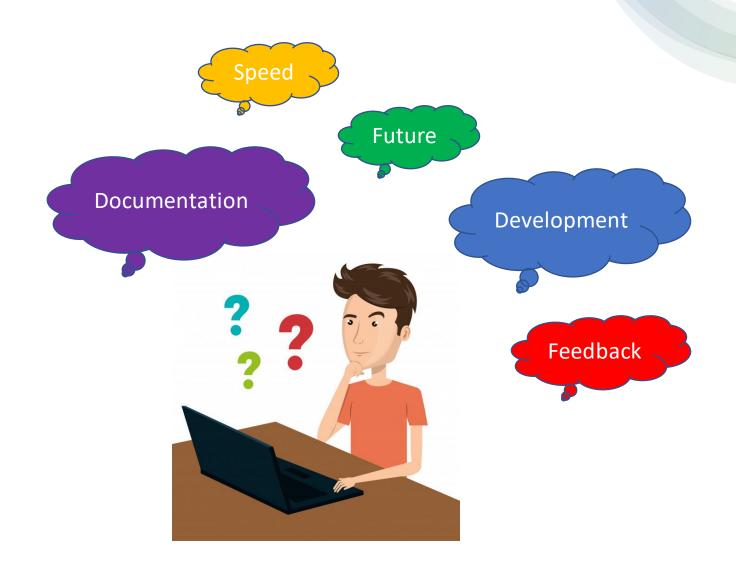
Roles

- Team members
- Product Owner: Gives direction, Steers the Wheel to maximize value
- Stakeholders: users, customers, governance
- Team lead / Scrum master when applicable
- "Supporting cast" -> Technical experts, Domain experts, Independent testers.

A flatter structure

- Reduce bureaucracy
- Aim for self-organizing teams (11th principle of Agile)
- "Steering" decision come from inside the team, and not from entities far removed from the developing process.

How to be a good agile architect?

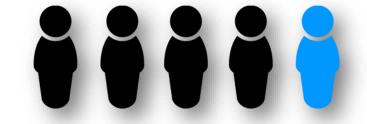


Agile teams

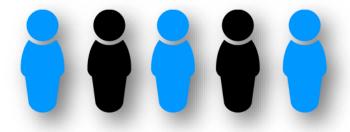
Team organization



Architect outside the team



Architect inside the team



Several architects

Agile teams

• Architecture-driven approach

• High cohesion

Low coupling

Work approaches

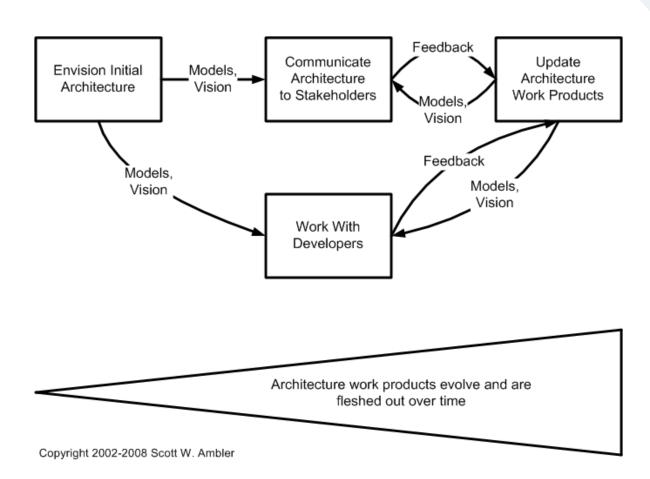
Feature-driven approach

A more incremental approach

Low cohesion

High coupling

Agile architecture process



Questions?

