

Architecture and Scrum
Scrum Gathering
April 16, 2008
Chicago

How do you create time for architecture?

- Iteration zero – pre planning
- Architectural statement – a whiteboard sketch is fine
- How will it be accomplished
- What architectural elements will be introduced or changed?
- An architectural element: in SOA, a new service or change to existing service. Some companies look at them as any non-functional requirement.
 - Each company will have to define this.

Do you have full-time architects?

- Some say no – teams are staffed with senior engineers.
 - Pre-planning (iteration zero).
- Some do – Company A (Company name withheld)
 - Architect is part of technical ladder – each team has 1 or 2 reporting in their organization with one chief architect. This company has 700 engineers.
 - 1 or 2 architects per about 10 teams.
 - They do not work as a Scrum team. The architects split time between the functional teams.
 - Their architects work up front (iteration zero) before the rest of the team joins the project (this is for a new project).
 - Architecture is defined as core platform (messaging, data access, web-based services, API, etc).
 - Feature teams are empowered to change architecture.
 - Only 20% of architects actually code.
 - They draw diagrams and theory.
 - Domain architect (knows business) vs technical architect.
- Company B
 - In iteration zero, they create an architectural diagram/vision – a systems architecture report – a formal word document that describes data structures, interaction between components, etc.
- Company C
 - Formed an architecture review board (not part of Scrum).
 - A solution architect must present to this review board 2-3 Sprints ahead.
- Company D
 - Full-time architecture team – working together as a Scrum team.
 - Architects have to
 - 1) Project success

- 2) Evangelist for technology – make sure their architecture is being used and extended, etc.
- They have a roadmap – not a full-blow architectural plan. They evolved their architecture slowly.
- Also have concept of iteration zero to plan.

Architecture role

- Chief architects or enterprise architects don't necessarily code but should have the capability.
- Software architects (sometimes report to Chief Architect) must know how to code – in fact they should in some cases implement the architecture.

Challenge with Agile and Architecture is how to you evolve it over time. In other words, how do we stop building complex architecture that isn't ever used.

Debate about best way to implement architecture - some believe that the architects should code this either as a full-time team or as a visiting member of one of the feature teams. Others believe that the architects should simply paint the vision and the senior engineers should implement it.

Assumptions that are at odds:

- 1) Architecture can be drawn and directly implemented with little thinking required vs evolutionary design.
- 2) A senior engineer is capable of making architectural type changes vs a full-time more senior architect.

What are good ways to get visibility so teams can make mistakes and get course corrections?

- Have your chief architect in the middle of the action – i.e. a cubicle in the middle of the programming floor. Very accessible to engineers.