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- CEO Scrum, Inc. and Senior Advisor, OpenView Venture Partners
 - Agile coach for OpenView Venture Partners portfolio companies
 - CTO/VP Engineering for 9 software companies
 - Created first Scrum at Easel Corp. in 1993. Rolled out Scrum in next 5 companies
 - Achieved hyperproductive state in all companies. Signatory of Agile Manifesto and founder of Agile Alliance
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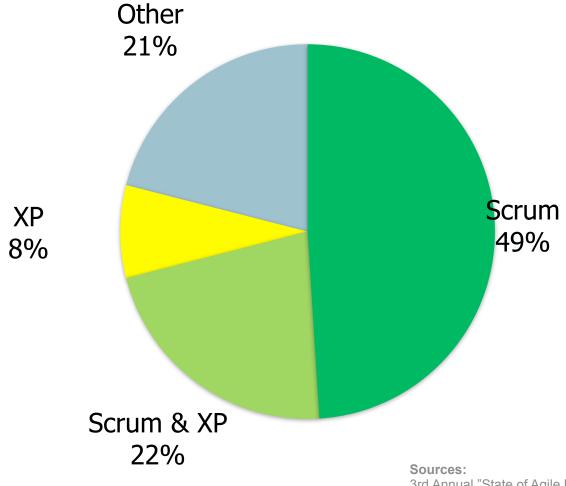


Agile 2009 Papers

- **Take No Prisoners: How a Venture Capital Group Does**Scrum
 - Jeff Sutherland and Igor Altman
- Scrum in Church
 - Rev. Arline Conan Sutherland and Jeff Sutherland
- Scrum and CMMI: Going from Good to Great
 - Carsten Jakobsen and Jeff Sutherland
- Shock Therapy: Bootstrapping a Hyperproductive Scrum
 - Jeff Sutherland, Scott Downey, and Bjorn Granvik
- Fully Distributed Scrum: A Report on Linear Scalability of a Team in San Francisco and India
 - Jeff Sutherland, Guido Schoonheim

Topic: The big picture Queue theory Chaos theory **Principles** Research Agile Lean Game theory Philosophy History More theory... Scrun **Practices Implementation** Google Yahoo Microsoft Source: Henrik Kniberg CSM v9.6 © Jeff Sutherland 1993-2009

Which processes do agile companies use?

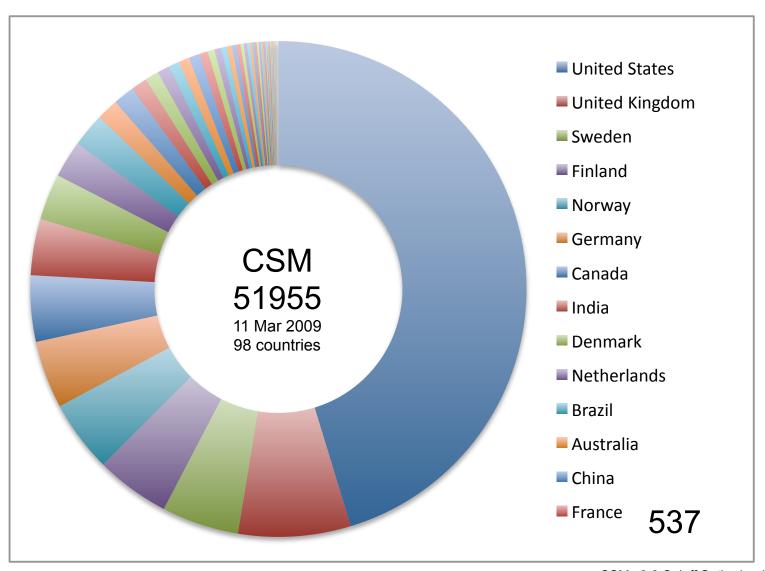


3rd Annual "State of Agile Development" Survey June-July 2008

- 3061 respondents
- 80 countries

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Certified ScrumMasters



Scrum Gathering 2009 Orlando



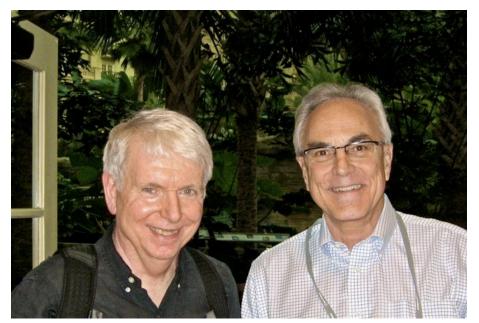


- Keynote speakers
 - Scrum Research at Carnegie Mellon: Dr. Mark Paulk (developed CMMI at SEI)
 - View from PMI: Gregory Balestrero, President &
 CEO, Project Management Institute CSM v9.6 © Jeff Sutherland 1993-2009

New ScrumTrainers



- Dr. Jim Coplien founder of the patterns movement
- Alistair Cockburn Crystal process
- Ron Jeffries founder of XP
- and many others ...



What is the different between waterfall and Scrum?

Jeff Sutherland - Co-Creator of Scrum

Greg Balestrero - CEO Project Management Institute (PMI)

- PMI is over 40 years old with over 500000 members
- Scrum Alliance is less than 5 years old with over 55000 members
- Almost half of people at Scrum Gathering were PMI Certified.
- Leadership message was to go forth and collaborate and see how we can best work together to improve the profession of value creation worldwide!

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Architecture of the Organization

- Hierarchy needs a plan to command and control
 - Slow, costly, high failure rates, low value
- Scrum needs a team to self-organize
 - Fast, inexpensive, high success, high value
- Conway's law say the architecture of the code will reflect the architecture of the organization
 - Organization must change to get better code
- Change is hard!
 - 50% of Scrum teams do not have working code at the end of a Sprint
 - 90% of Scrum teams have problems with the Nokia test

Jim Coplien and I discussed taking the Red Pill or Blue Pill



- Blue pill means 10-100% improvement with minimal organizational change.
- Red pill means 500-1500% improvement with full involvement of management in removing impediments and building a new organization.

"You take the blue pill, the story ends, you wake up in your bed, and believe whatever you want to believe. You take the red pill, you stay in Wonderland, and I show you just how deep the rabbit hole goes." *Morpheus*

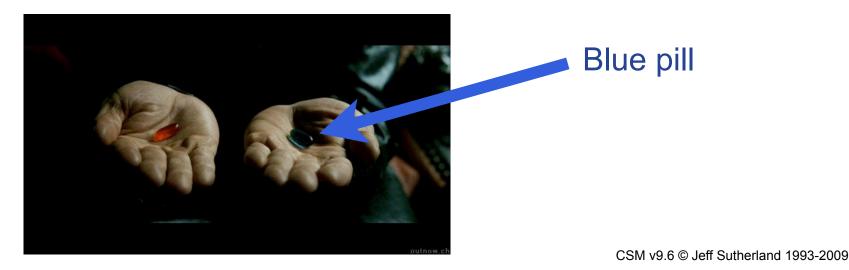


Redpills appear to have either seen "glitches" within the Matrix, or question their lives within the Matrix, refusing to dismiss strange events. These are the people most likely to recognize the Matrix as an illusion.

According to Morpheus, leaving the Matrix can be traumatic, particularly to those who have lived in it too long. As a rule, crews only offer the red pill to those younger than 18. After that, the risk of denial and psychotic episodes from the reality of separation is much higher. The exception to this rule is Neo, whose age is around 30 when he is released by Morpheus.

Believe what you want to believe

- Developers can choose any task they want in the Sprint backlog
- Architecture will just emerge
- We don't need any documentation
- We don't know our velocity and it's OK
- We are doing Scrum, but ...



Taking Architecture into the Agile World

- Architecture is the essence of structure
 - Structure obfuscates form!

Jeff Sutherland, Scrum Training Institute

- Agile architecture: one that supports change, end-user interaction, discovery, and ease of comprehension (of functionality)

Source: MVC to DCI: The Other Shoe Drops
Taking Architecture into the Agile World - Scrum Gathering, Orlando, 16 Mar 2009
James O. Coplien, Scrum Training Institute
Gertrud&Cope, Mørdrup, Denmark

What is the value of architecture?

- Architecture supports "what happens there"
- Habitable code by the people who develop it and the people who use it
- Architecture is what makes code feel familiar
- A good architecture reduces waste and inconsistency — muda and mura
 - Less rework
 - System consistency

Architecture and 00

- OO is a paradigm a way of talking about form
- **OO's foundations: to capture the end** user's mental models in the code
- **OO** captures

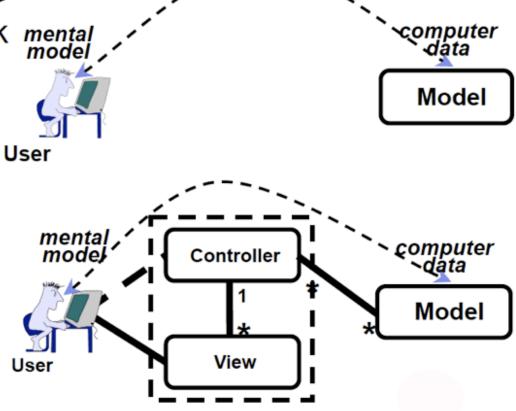
 - The classes that serve as sets of such objects
- Customer collaboration and embracing change

MVC: The Embodiment of the OO Vision

User model ->
 into the code ->
 presented back mental model
 to the user

 The goal of views is direct manipulation

The goal of the controller is to coordinate multiple views



From an Agile perspective, architecture:

- Allows me to connect with the user mental model
 - Users & interactions instead of processes and tools
- Can employ shared customer vocabulary
 - Customer collaboration, not contracts
- Can reason about form of task sequencing
 - More likely to deliver working software
- Exposes the changing part for ready update
 - Embracing change

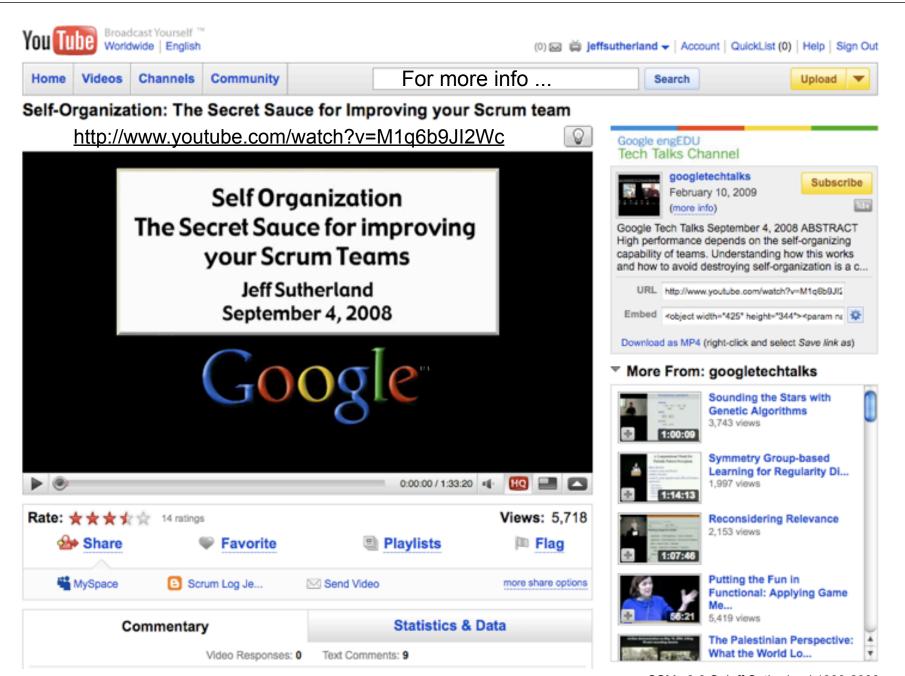
From the Red Pill view:

- Customer collaboration is embedding the mind of the user in the software
- Transparency is when the user feels like software is an extension of mind
- Empowerment is when the user experiences the exhilaration of being able to do what s/he only dreamed of doing

[The red pill] is a symbol. Of your desire to return to reality. Inside your dream [your blue pill life], you'll fall asleep! Dr. Edgemar to Qaid in The Matrix

The impact ...

- **●** The first Scrum team built a component architecture that everyone understood
- In the daily meeting they argued about where to implement the next task in the architecture
- The team would only allow a team member to take the next task if it would produce the most rapid appearance of a testable feature.
- Instead of implementing it in their code the developer often implemented it in someone's else code with someone else's help
- **■** In one sprint, velocity increased 400%
- And kept on increasing ...



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At the end of the day it is all about architecture!



Rugby players demonstrate emergent architecture

