The Scaled Agile Framework

Foundations of the Scaled Agile Framework® (SAFe)

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Today’s Agenda

- SAFe Overview
- SAFe for Programs
- Running a Release Train
- Lean and Agile Teams
- Q & A
Ag·ile

**Adjective**: Able to move quickly and easily, well coordinated and adaptable.

**Synonyms**: active, nimble, quick, spry, alert, responsive

**Antonym**: lethargic, slow, clumsy, awkward
Pioneer Thought Leaders – First Wave

Focused on Product Development Teams
Second Wave of Agile Adoption

Focused on Business Agility
Organizations want to be Agile

“A startup is a human institution designed to deliver a new product or service under conditions of extreme uncertainty.

Its has nothing to do with the size of the company, sector of the economy or industry.”

- Eric Ries
Thought Leaders in Lean and Agile

Dean Leffingwell

Jeff Sutherland

“Uncle” Bob Martin

Don Reinertsen
Agile Process Movement

Enterprise Agility

Agile (Adaptive) Processes
Scrum, XP, Lean, Open UP, FDD, Crystal...

Iterative Processes
Spiral  RAD  RUP...

Predictive Process


SAFe Enterprises
Nordstrom, Visa, Telstra, Nokia, BMC Software, John Deere, TradeStation Technologies, Tripwire, Discount Tire, Nokia Siemens Networks, ValPak...
Agile Principles – The Agile Manifesto

“We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

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”

http://www.agilemanifesto.org
Agile Manifesto Principles

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

3. Working software is the primary measure of progress.

4. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

5. Business people and developers must work together daily throughout the project.

6. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

http://agilemanifesto.org/principles.html
Manifesto Principles (continued)

7. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.

10. Simplicity – the art of maximizing the amount of work not done – is essential.

11. The best architectures, requirements, and designs emerge from self-organizing teams.

12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.
The Scaled Agile Framework® (SAFe)… is a proven, publicly-facing framework… for applying Lean and Agile practices… at enterprise scale.
Roots of SAFe

- Lean Thinking
- Agile Development
- Product Development Flow

Field experience at enterprise scale
SAFe Delivers Business Results

Significant increase in employee engagement
- John Deere

Agile teams average 37-50% faster to market
- QSM research

We experienced a 20-50% increase in productivity
- BMC Case Study

Our agile programs introduced 50% less defects into production
- Confidential
Scrum is to team as

SAFe is to enterprise
2 Weeks

- Daily scrum
- Sprint 2 weeks
- Product backlog
- Sprint backlog
- Product increment

www.rallydev.com

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5 to 9 Members

Cross-functional Team with 7 (+/- 2) Members

Developer
Developer
Developer
Tester

Tech Lead
Developer
Tester

Product Owner
Scrum Master
2 Weeks

Daily scrum

Sprint
2 weeks

product backlog
sprint backlog

product increment

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5 to 10 teams

50 to 125 People
Program Roles

Product Manager
Program Roles

System Architect

Arch.
Program Roles

Arch.

UX

UX
Program Roles

- Release Train Engineer
- Arch.
- UX

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Program Roles

Arch.

UX

RTE

System Team

Release Management
Implemented now...

...to support future features

Architectural Runway
Iteration (Sprint) is to team as Agile Release Train is to program
2 Weeks

Daily scrum

Sprint
2 weeks

product backlog

sprint backlog

product increment

www.rallydev.com
10 Weeks
10 Weeks
Develop on Cadence. Deliver on Demand.

Development occurs on a fixed cadence. The business decides when value is released.
Make Planning Routine and Lower Cost

The planning calendar can be set a year in advance

**Program Level Calendar**
- Release Planning Meetings
- PSI Demos
- Inspect & Adapt Workshops

**Team Level Calendar**
- Sprint Planning Meetings
- Sprint Demos
- Sprint Retrospectives

Reprinted by Permission of Discount Tire Company
The Release Planning Meeting

The Release Planning Meeting is the “pacemaker” of the Agile enterprise.

- Two days every 10 weeks
- Everyone attends in person if at all possible
- Product Management owns feature priorities
- Development team owns story planning and high-level estimates
- Architects, UX folks work as intermediaries for governance, interfaces and dependencies
- Result: A committed set of program objectives for the next PSI
Day 1 Sample Agenda

8:00-9:00  Business Context

9:00-10:30  Product/ Solution Vision

10:30-11:30  Architecture Vision & Development Practices

11:30-1:00  Planning Requirements & Lunch

1:00-4:00  Team Breakouts

4:00-5:00  Draft Plan Review

5:00-6:00  Management Review & Problem Solving

Day 2 Sample Agenda

8:00-9:00  Planning Adjustments

9:00-11:00  Team Breakouts

11:00-1:00  Final Plan Review & Lunch

1:00-2:00  Program Risks

2:15-??  Plan Rework If Necessary

After Commitment  Planning Retrospective & Moving Forward
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-9:00</td>
<td>Business Context</td>
<td>State of the business and upcoming objectives</td>
</tr>
<tr>
<td>9:00-10:30</td>
<td>Product/Solution Vision</td>
<td>Vision and prioritized features</td>
</tr>
<tr>
<td>10:30-11:30</td>
<td>Architecture Vision &amp; Development Practices</td>
<td>Architecture, common frameworks, etc.</td>
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<td>Agile tooling, engineering practices, etc.</td>
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<tr>
<td>11:30-1:00</td>
<td>Planning Context &amp; Lunch</td>
<td>Facilitator explains planning process</td>
</tr>
<tr>
<td>1:00-4:00</td>
<td>Team Breakouts</td>
<td>Teams develop draft plans and identify risks and impediments</td>
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<td>Architects and Product Managers circulate</td>
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<tr>
<td>4:00-5:00</td>
<td>Draft Plan Review</td>
<td>Teams present draft plans, risks, and impediments</td>
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<tr>
<td>5:00-6:00</td>
<td>Management Review &amp; Problem Solving</td>
<td>Adjustments made based on challenges, risks, and impediments</td>
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Sample Agenda for Day 2

8:00-9:00 Planning Adjustments
- Planning adjustments made based on previous day’s management meeting

9:00-11:00 Team Breakouts
- Teams develop final plans and refine risks and impediments
- Business Owners circulate and assign business value to team objectives

11:00-1:00 Final Plan Review & Lunch
- Teams present final plans, risks, and impediments

1:00-2:00 Program Risks
- Remaining program-level risks are discussed and ROAMed

2:15-2:15 PSI Confidence Vote
- Team and program confidence vote

2:15-??? Plan Rework If Necessary
- If necessary, planning continues until commitment is achieved

After Commitment Planning Retrospective & Moving Forward
- Retrospective
- Moving Forward
- Final Instructions
References

- Cohn, Mike. 2009. *Succeeding with Agile: Software Development Using Scrum*
- Cohn, Mike. 2005. *Agile Estimating and Planning*
- Rally Software. 2013. *Scaled Agile Programs with SAFe.*
Other Resources

- Scaled Agile Framework: [ScaledAgileFramework.com](ScaledAgileFramework.com)
- LinkedIn Group: Scaled Agile Framework Community ([http://www.linkedin.com/groups?gid=4189072&trk=hb_side_g](http://www.linkedin.com/groups?gid=4189072&trk=hb_side_g))
- Agile Release Train supplies ([http://amzn.com/lm/R1DH1Z8MIHB44P](http://amzn.com/lm/R1DH1Z8MIHB44P))