Today's Webinar:
Planning for SAFe
PI Planning

Featuring
Jack Caine
Planning for SAFe PI Planning Webinar

3 August 2017

Jack J. Caine

ICAgile Certified Professional – Agile Coaching & Agile Team Facilitation (ICP-ACC, ICP-ATF)
Scrum Alliance Certified Scrum Professional (CSP)
Scrum Alliance Certified Scrum Master (CSM)
Scrum Alliance Certified Scrum Product Owner (CSPO)
Accredited Scaled Agile Framework Program Consultant Instructor (SPC4 Instructor)

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### Trainer, Mentor, Coach & Facilitator @ Many Companies

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<thead>
<tr>
<th>AmerisourceBergen (Pharma Distribution)</th>
<th>Barclays (Financial)</th>
<th>Fiserv (Financial)</th>
<th>ISO Verisk Analytics (Insurance)</th>
<th>Kremsa (Digital Agency)</th>
<th>Motorola Mobility (Telecom)</th>
<th>Walmart (Retail)</th>
<th>ASPE &amp; CPRIME (Training)</th>
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<td>Cisco (Telecom)</td>
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### Certifications

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<thead>
<tr>
<th>Scrum Alliance</th>
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<th>ICAgile</th>
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<tr>
<td>Certified ScrumMaster (CSM)</td>
<td>SAFe Program Consultant (SPC4)</td>
<td>Certified Professional in Agile Coaching (ICP-ACC)</td>
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<td>Certified Scrum Product Owner (CSPO)</td>
<td>Instructor for the SSM, SASM, PMPO, SA and SP courses</td>
<td>Certified Professional in Agile Team Facilitation (ICP-ATF)</td>
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<tr>
<td>Certified Scrum Professional (CSP)</td>
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<td>ACI Agile Coaching Bootcamp (ACI-ACB) (via ACI)</td>
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<td>Instructor, Agile Fundamentals (via ASPE)</td>
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### Other Activities

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<tr>
<th>B.S. Biochemistry (UCLA)</th>
<th>Editor of Jack’s Agile Notebook (1300+ slides)</th>
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<tr>
<td>Founder, ADH Hockey Association (Costa Rica)</td>
<td>Author on Mob Programming (Scrum Alliance)</td>
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<tr>
<td>Lead Mentor at NYC Scrum User Group</td>
<td>Speaker at PMI, Agile User Groups, AgileCamp</td>
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<tr>
<td>Creator of Jack’s TOMP Matrix</td>
<td>Previously a Dev, BA, QA, PM, Prod. Mgr., Cost Center President</td>
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I help people make better decisions
Polls

1. What is your role at work?

2. What type of experience do you have doing PI Planning?

3. What level of expertise do you have facilitating or planning for PI Planning?
In this webinar, we will cover:

• What resources are available to help you plan your PI Planning session
• What steps you might consider in preparing for your PI Planning session
Let’s Start with the Basics First
Values & Principles

VALUES

PRINCIPLES
Never forget that better principles, not better practices, are what organizations really need.

Jurgen Appelo
The Agile Manifesto states, “The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.”

- **Program Level Face-to-Face Conversations.** PI Planning is a routine, face-to-face event, with a standard agenda that includes a presentation of business context and vision followed by team planning breakouts.

- **Iteration Plans & Objectives.** The teams create their iterations plans and objectives for the upcoming PI Facilitated by the Release Train Engineer (RTE). This event includes all members of the ART, whenever possible.

- **2-Day Event.** It takes place over two days, and occurs within the Innovation and Planning (IP) Iteration. Holding the event during the IP iteration avoids affecting the timebox, scheduling, or capacity of other iterations in the PI.

- **PI Objectives.** The result of planning is a commitment to an agreed set of Program PI objectives for the next PI.

Adapted from [http://www.scaledagileframework.com/pi-planning/](http://www.scaledagileframework.com/pi-planning/)

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Standard 2-Day PI Planning Agenda

Day 1 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 Context & Lunch
1:00-4:00 Team Breakouts
4:00-5:00 Draft Plan Review
5:00-6:00 Management Review & Problem Solving

Day 2 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
2:00-2:15 Confidence Vote
2:15-??? Plan Rework?
3:00-5:00 Planning Retrospective & Moving Forward

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Iterative & Incremental Development

"iterating" builds a rough version, validates it, then slowly builds up quality

A more iterative allows you to move from vague idea to realization making course corrections as you go.

"incrementing" builds a bit at a time

Incrementing calls for a fully formed idea.
And, doing it on time requires dead accurate estimation.

Iterating  Incrementing
Progressive Refinement

Incremental & Iterative Development
Reduce Uncertainty Over Time

Agile Boot Camp - Agile2016 (Diana Larsen)

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Incremental Delivery
# Application of the Scrum Pillars

<table>
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<tr>
<th>Transparency</th>
<th>Inspection</th>
<th>Adaptation</th>
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<tbody>
<tr>
<td><strong>Common Process Language.</strong> A common language referring to the process must be shared by all participants</td>
<td><strong>Frequent.</strong> Scrum users must frequently inspect Scrum artifacts and progress toward a Sprint Goal to detect undesirable variances.</td>
<td><strong>Adjustment Determined.</strong> If an inspector determines that one or more aspects of a process deviate outside acceptable limits, and that the resulting product will be unacceptable, the process or the material being processed must be adjusted.</td>
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<td><strong>Common DoD.</strong> Those performing the work and those accepting the work product must share a common definition of “Done”</td>
<td><strong>Non-Inhibitory.</strong> Their inspection should not be so frequent that inspection gets in the way of the work.</td>
<td><strong>Adjustment ASAP.</strong> An adjustment must be made as soon as possible to minimize further deviation.</td>
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<td><strong>Skilled Inspectors.</strong> Inspections are most beneficial when diligently performed by skilled inspectors at the point of work.</td>
<td><strong>4 Events for I&amp;A.</strong> Scrum prescribes four formal events for inspection and adaptation, as described in the Scrum Events section of this document:</td>
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Planning & Adaptation

Agile in the Enterprise – Planning, Inspection & Adaptation @ Every Level

- **Portfolio (Strategic)**
  - (Vision)
  - (Themes)
  - (Initiatives)
  - (Epics)
  - (MVP Benefit Hypothesis)
  - (Business Use Case)

- **Solution (System of Systems)**
  - (Integrated Solution)
  - (Capabilities)
  - (Solution Roadmap)

- **Program (System – Team of Teams)**
  - (Integrated System)
  - (Minimal Marketable Features)
  - (Minimal Business Increment)
  - (Program Roadmap)

- **Team**
  - (Working Software – Product Increment)
  - (User Stories)
  - (Tasks)
  - (MVP Spikes)
  - (Sprint Goal)
Planning & Adaptation

Product Roadmap

A Product Roadmap...

• A *schedule* of events and milestones that communicate planned deliverables OR objectives over a timeline.

• **MAY** include *commitments* of objectives (outcomes) for the planned, upcoming time period

• Offers visibility into the deliverables OR objectives *forecasted* for future time periods

• **MAY** include *milestones* and *stretch objectives*
Planning & Adaptation

Lean-Agile Product Roadmap Example (Program Increment Based) (SAFe)

PI 3
- Road Rage ported (part I)
- Brickyard port started
- Distributed platform demo
- ALL GUIs for both games demonstrable
- Multiuser architecture
- New Road Rage features (see objectives for details)
- New Brickyard features (see objectives for details)

Stretch Objectives —
- Demo of Beemer game

Committed

PI 4
- E3 Expo Tradeshow!
- Road Rage completed (single user)
- Brickyard Ported (single user)
- Road Rage multiuser demonstrable
- First multiuser game feature for Road Rage

Forecast

PI 5
- Road Rage (multiuser) first release
- Brickyard ported multiuser demo
- New features for both games (see backlog)

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Planning & Adaptation

Release Slices

User goals

necessary

less

optional

optionality

more

optional

Source: Creating Alignment with The Product Wall Release Planning Workshop (Alan Dayley)
Product Backlog Refinement

Reasons to Dedicate to Time for the Backlog Refinement Process

Make Product Backlog Items “Ready” for the Next Sprint (INVEST & DoR)

<table>
<thead>
<tr>
<th>Letter</th>
<th>Meaning</th>
<th>Description</th>
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<tr>
<td>I</td>
<td>Independent</td>
<td>The PBI should be self-contained, in a way that there is no inherent dependency on another PBI.</td>
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<tr>
<td>N</td>
<td>Negotiable</td>
<td>PBIs are not explicit contracts and should leave space for discussion.</td>
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<td>V</td>
<td>Valuable</td>
<td>A PBI must deliver value to the stakeholders.</td>
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<td>E</td>
<td>Estimable</td>
<td>You must always be able to estimate the size of a PBI.</td>
</tr>
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<td>S</td>
<td>Small</td>
<td>PBIs should not be so big as to become impossible to plan/task/prioritize with a certain level of accuracy.</td>
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<tr>
<td>T</td>
<td>Testable</td>
<td>The PBI or its related description must provide the necessary information to make test development possible.</td>
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Definition of Ready (DoR) Example

- Story defined and written
- Story traceable to source document (where appropriate)
- Acceptance criteria defined
- Dependencies identified
- Size estimated by delivery team
- User experience included (where appropriate)
- Performance criteria identified (where appropriate)
- Person who will accept the user story is identified
- Team has a good idea about how to demo the user story

Backlog Refinement

**Backlog Item Format**

| User Story (Team) [Card | Conversation] | Feature (Program) [Benefit | Hypothesis] | Epic (Portfolio) [Outcome Hypothesis] |
|----------------------------------------|----------------------------------------|----------------------------------------|
| As a [user role] I want [activity] so that [business value] {Role | Goal | Benefit} | Feature: [description] Benefit: [description] Outcome Hypothesis: [description] |
| Acceptance Criteria [Confirmation] | Acceptance Criteria [Confirmation] |
| BDD Format [Given | When | Then] Or Test Steps Recreation Steps Use Cases | Availability | Capability Or Test Steps Recreation Steps Use Cases |

**Given | When | Then**

Or**

Test Steps

Recreation Steps

Use Cases

Epic Hypothesis Statement

For <customers>
who <do something>
the <solution>
is a <something – the "how”>
that <provides this value>
Unless <competitor, current solution, or non-existing solution>
our solution <does something better – the "why”>

Outcomes hypothesis:
Leading indicators:
NFRs:
Backlog Refinement
Prioritization Methods

- Business Value
- ROI
- MoSCoW
- Kano
- WSJF

WSJF = CoD/Size or Duration
CoD = (BV + OE|RR + TC)

Must Have
Should Have
Could Have
Won’t Have

Delighters
Questions So Far?
What resources are available to help you plan your PI Planning session?
Planning Resources

Free Online Resources

SAFe Big Picture:  www.scaledagileframework.com

PI Planning Abstract:  http://www.scaledagileframework.com/pi-planning/

• Organizational Readiness – strategic alignment and teams and trains setup
• Content Readiness – management and development preparedness
• Facility Readiness – the actual space and logistics for the event
Planning Resources
Resources Available to SAFe Program Consultants (SPCs) [Program Increment Toolkit]

• Prepare the ART
  1. ART Readiness Workbook (V4.0.4)
  2. PI Planning Overview for Stakeholders (V4.0.4)
  3. Preparing Day 1 Briefings (V4.0.4)
  4. Program Backlog Workbook (V4.0.4)
  5. Program Calendar (V4.0.4)
  6. Capacity Allocation (V4.0.4)

• Facilitate PI Planning
  1. Facilitator’s Guide to PI Planning (V4.0.4)
  2. PI Planning Meeting Template (V4.0.4)
  3. Scrum of Scrums PI Planning Radiator (V4.0.4)

• Execute & Improve the ART
  1. SAFe Program Events & Activities (V4.0.4)
  2. Inspect and Adapt Workshop Template (V4.0.4)
  3. PI Performance Reports (V4.0.4)
  4. Program Predictability Measure (V4.0.4)
  5. Pareto Analysis (V4.0.4)
  6. SAFe Team Self-Assessment (V4.0.4)
  7. SAFe Program Self-Assessment (V4.0.4)
Next Steps

What steps you might consider in preparing for your PI Planning session
Next Steps
Preparing for Your PI Planning

Get Some Certified Training (Role-Based Options)

• Implementing SAFe (SPC Course & Certification) (4 Days)*
• Release Train Engineer (RTE Course & Certification) (3 Days)*
• Leading SAFe (SA Course & Certification) (2 Days)
• Product Owner | Product Manager (POPM Course & Certification) (2 Days)
• Advanced Scrum Master (SASM Course & Certification) (2 Days)*
• Scrum Master (SSM Course & Certification) (2 Days)
• SAFe for Teams (SP Course & Certification) (2 Days)

(* Has Prerequisites)
Choose A Mode

- **On Your Own.** Plan & execute on your own

- **Hire an SPC.** Hire a certified SAFe Program Consultant (SPC) to help you plan & execute your first program increment and/or execute your first agile release train
Next Steps
Plan & Execute On Your Own

Study the PI Planning Abstract

- Link: [http://www.scaledagileframework.com/pi-planning/](http://www.scaledagileframework.com/pi-planning/)

Study the Individual Role Abstracts in SAFe

- Development Team Member: [http://www.scaledagileframework.com/dev-team/](http://www.scaledagileframework.com/dev-team/)

If Building a Solution, Study the Pre- & Post-PI-Planning Abstract

Next Steps
Plan & Execute On Your Own

Get Content Ready. Prepare the Inputs to PI Planning:

• **Business Context** (Developed by the Business Owner)
• **Roadmap & Vision** (Developed by the Product Manager & Systems Architect)
• **Top 10 Features from the Program Backlog** (Developed by the Product Manager & Product Owners)
Get Organization Ready. Strategic alignment and teams and trains setup:

- Do value stream mapping and create feature teams under ARTs
- Create an environment of team learning to drive cross-functionality
- Train your people on XP, Scrum, Kanban, and SAFe
Next Steps
Plan & Execute On Your Own Without SPC Support

Get Facility Ready. Prepare the Actual Space & Logistics for the Event:

• **Facility** – This must be roomy enough for all attendees, with breakout rooms if necessary.

• **Facilities/Tech Support** – These people need to be identified in advance and reachable during setup, testing, and the event itself.

• **Communication Channels** – For distributed planning meetings, primary and secondary audio, video, and presentation channels must be available.
# References

## Post-Webinar Reading

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<tr>
<th>Agile Manifesto &amp; 12 Principles</th>
<th>Scrum Guide</th>
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<tbody>
<tr>
<td>The Manifesto for Agile Software development consists of 1 page. The Agile Manifesto’s accompanying 12 principles consist of 2 pages.</td>
<td>The Scrum Guide is a 17 page document written by the creators of the Scrum Framework, Jeff Sutherland &amp; Ken Schwaber.</td>
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