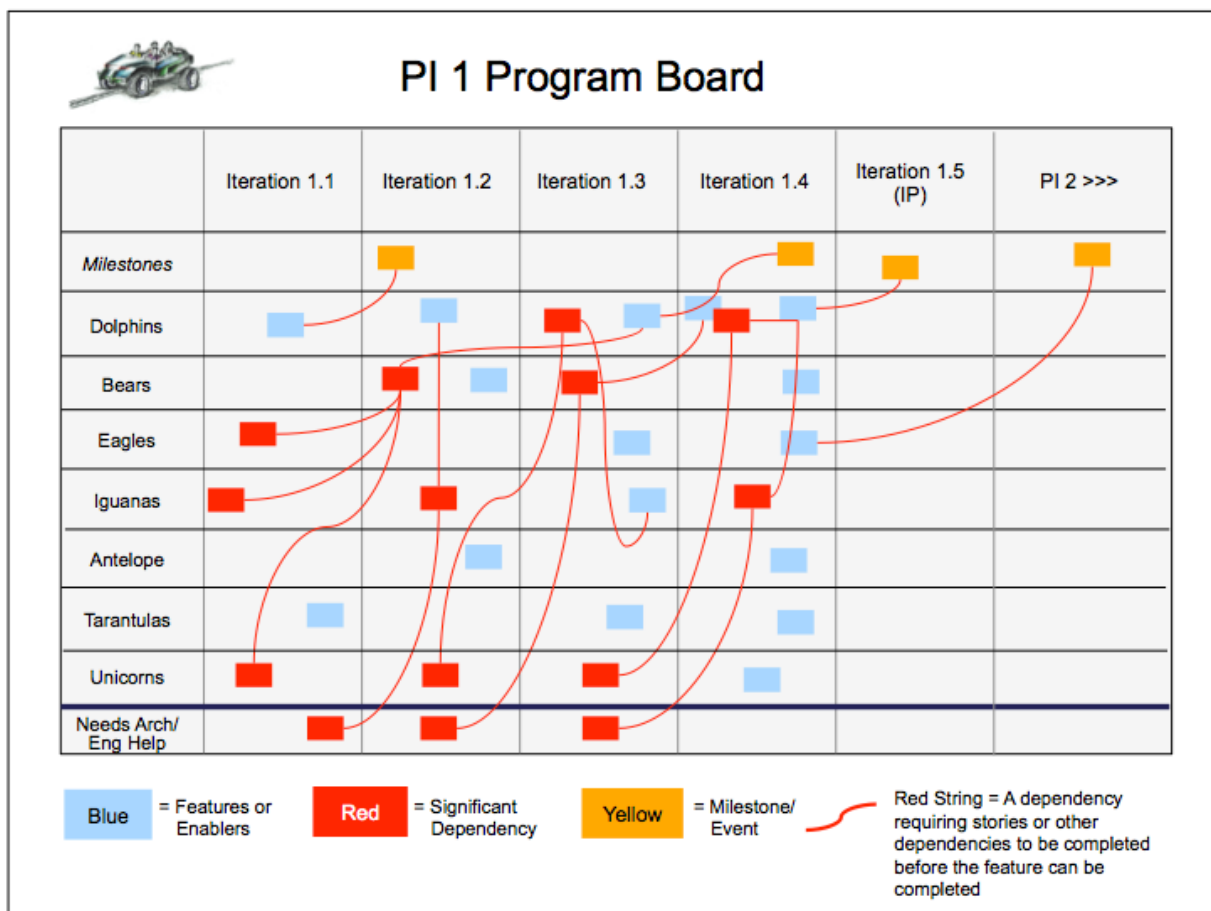


# What is PI Planning? Challenges of Remote PI Planning <sup>1</sup>

Ajay Shenoy

Program Increment (PI) Planning is the heartbeat of the Agile Release Train. Or, perhaps more accurately, it lays down the tracks for the train to make sure all the train cars go in the same direction. Large-scale SAFe development is a finely tuned machine that must be maintained.



*Scaling Agile across teams helps organizations deliver larger, more complex outcomes by coordinating workstreams.*

PI (Program Increment) Planning is the key event in encouraging true agile behavior in SAFe®.

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It is a whole team event where the whole program - the set of smaller agile teams working closely together as a single team-of-teams - come together in a big room (hence it is often referred to as Big Room Planning) to agree a plan for the next 8 – 12 weeks. The goal of the event is to create alignment, encourage collaboration, enable self-organization, eliminate waste and exploit the synergy between the teams.

*It is the beating heart of the agile release train and any SAFe® implementation.*

## Why is PI Planning Important?

Program Increment (PI) is one of the most critical part for successful PI delivery. If PI planning is not done properly due to any reason like insufficient backlog, or improper grooming, the whole PI will be chaotic and full of challenges.

Scaled Agile Framework (SAFe) helps development teams tackle the challenges of coordinating multiple teams, processes, and programs to deliver a unified product.

The Agile Release Train (ART) is the core of all the teams working together for a common goal. In very large enterprises, there may be two or more trains working together, and that is why every eight to 12 weeks the teams need to step back and make sure they are still working toward the business goals and the overall vision.

PI Planning is scheduled at the beginning of each Program Increment and after the Inspect & Adapt Iteration. Although some companies may start the PI Planning event with the Inspect & Adapt meeting, that is not the focus of this article. [The outcomes of the Inspect & Adapt event](#) should be a part of the content of the PI Planning going forward. These items become action items for the next Program Iteration.

## Steps of PI Planning

PI Planning normally lasts for two days which involves many ceremonies. Complete two-day agenda is defined to include the following

### Day One Agenda

- Business Context – This is an update given by a member of upper level management or a business owner giving the teams perspective on how the business is doing and how well they are keeping up with the market and the consumer needs.
- Product/Solutions Vision – Product management will present the vision for the business for the upcoming PI. This will often include the top 10 features as determined by business management that will help meet these goals.
- Architecture Vision & Development Practices – Systems Architect or IT department will outline the systems and architecture vision for improvements to the infrastructure that will help to improve the time to market and may impact

development during the coming PI. A senior development manager may outline any Agile-related changes in process that will improve velocity and communication.

- **Planning Context & Lunch** – The Release Train Engineer (RTE) outlines how the PI planning process will work and what is expected from the teams and the overall meeting. They will often outline what the expected outcomes are for the meeting and answer any questions that the teams may have about the process.
- **Team Breakouts** – Teams will gather around the boards (either analog or digital) to estimate their velocity for each iteration and look over their backlogs and what will need to be brought forward to support the features outlined in the vision. Teams will submit their draft plans for all the teams to review and give feedback. They will need to identify risks and dependencies. This is the time to call out where their iterations will need to connect with other teams and even other ARTs. Communication between teams is encouraged.
- **Draft Plan Review** – This is a time-boxed meeting where the teams present their draft plans so that business owners, product owners, stakeholders and other teams can give feedback. Teams can use the feedback to refine their drafts before the management review or outline potential problems to be solved by management in the review.
- **Management Review and Problem Solving** – In most cases, the draft plans will bring up issues with architecture, scope, and people and resource constraints. These issues can sometimes only be solved by management renegotiating scope and possible features. This meeting is organized by the RTE (Release Train Engineer) and the stakeholders and business owner must come out of the meeting with a new set of priorities or features for the teams to use the next day.

## Day Two Agenda

- **Program Adjustments** – The day begins with any adjustments or decisions that were made by management and stakeholders in the problem-solving meeting. These are presented to the teams and can sometimes result in a new top 10. These will be posted on the program board, so all the teams can see and reorganize.
- **Team Breakouts** – The teams take the adjustments back to their planning and come back with their PI objectives for the program board. Business owners will assign values to each of the objectives to rank them for implementation. Teams will then have a better idea where their objective will fit in the coming iterations.
- **Final Plan Review and Lunch** – During this meeting, each team brings their plans to the front and presents them. At the end of the presentation, they list out the

risks and dependencies. This is not the time to try to solve these issues. The plans are posted so that the teams can see them all together and get feedback.

- Program Risks – In the prior step, all the teams listed out their risks and dependencies. Now that all the objectives are posted, the teams can address each risk in turn and determine if they can be overcome. The issues are placed in one of these categories: Resolved, Owned, Accepted, Mitigated.
- Confidence Vote – Once all the risks and objectives have been outlined and discussed, the teams will vote on their confidence that the objective can be accomplished in the coming PI. This is a *five-finger* vote. The team members will hold up their hands with one to five fingers. Anything less than a three-finger vote will need to be addressed. The team member that has a problem with an objective will need to explain the issue so that it can be addressed by the teams. If the problem is satisfied, the objective is voted on again to reach a confidence vote for the coming PI.
- Retrospective – At the very end of the meeting the RTE will hold a small retrospective on the PI Planning event to gather feedback on what went well for the event and what needs to be changed or improved for the next event.

## PI Outputs

### Committed PI Objectives

- SMART objectives that are created by each team
- Program Managers will use these to update the Program Board

### Program Board

- Accepted Features
- New Feature Delivery Dates
- Feature dependencies (between teams and other ARTs)
- Milestones

## Business Benefits of PI Planning

PI planning delivers many business benefits, including:

- Establishing face-to-face communication across all team members and stakeholders – It is extremely important to have everyone focused on the event.
- Building the social network the ART depends upon – Even for remote team members, ice breakers and team-building games help build trust and comfort.

- Aligning development to business goals with the business context, Vision, and [Team and Program PI objectives](#) – The event brings everyone together so that they can understand the company vision and feel like part of the process.
- Identifying dependencies and fostering cross-team and cross-ART collaboration – In many large companies, people finally get to put a face with a name that they have been emailing for months. When addressing problems, risk, and dependencies, it is important that everyone feels comfortable reaching out for help and working out how the teams can work together.
- Providing the opportunity for “just the right amount” of architecture and [Lean User Experience \(UX\) guidance](#) – Different teams bring different perspectives to tackling a problem.
- Matching demand to capacity, eliminating excess Work in Process (WIP) – Team members are together to ask all the right questions and tie up loose ends.
- Fast decision making – When everyone is together, there is no waiting for someone to get back to you or wondering if they got your email. Discussions, debates, and decisions happen in a matter of minutes or hours instead of days or weeks.

## Remote Challenges of PI Planning

### Remote Teams need to be engaged and accountable

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

The challenge of keeping the remote team members engaged and focused on the planning tasks can be tough. There are a number of video conferencing services on the market that allow teams to video conference individual members but to also have cameras focused on local teams. This makes it possible for everyone to see and interact with each other in the same way as if they were all sitting together in a meeting room. Applications such as Zoom offer team video conferencing but also breakout sessions for PI planning. Remote members should be required to keep their cameras on so that everyone can see each other. They should also plan to be in a quiet place so that there are no distractions and they can focus and participate in the planning sessions.

### Real-time digital program boards for PI Planning

- SAFe board templates include: Objectives, Portfolio, Program, Risks, Teams and Value Boards

- Program boards can bring together all of the teams' ideas during the meeting. The top 10 features can be loaded in the Feature Funnel to the left and moved into Iterations or even moved to the next PI if time and resources will not allow the feature during the current PI.
- Risk boards can help the ART to work through the risks and dependencies that the teams bring to the Program board. Using the Risk board allows everyone at the meeting to focus on the risks and how to best tackle them. This board uses the categories for the Program risks that are outlined by SAFe 4.5.
- Team Boards can help Teams in their breakout sessions so that all the team members can see and add to the board no matter where they are. Groomed stories can be loaded in the story backlog and moved to PI integration as the team works on their objectives.

### **Sharing the brainstorming boards and chats**

If local teams still want to use analog planning games, teams can assign one member to work with a remote team member to create their local contributions. For example, if Jenny is remote, she can use chat or other tools to send her teammate John an idea for the board. That way, she can still contribute with the team planning breakout sessions. One team member can also be charged with updating any online digital boards so that ideas are ready to share with the rest of the meeting at the end of the breakout session.

### **Social interaction**

Teams should be encouraged to do team-building games and ice breakers early in the meeting or during the breakout sessions so that team members can get to know one another. These games can easily include the remote team members on video conferencing. Ice breakers can include "little known facts about me," sharing pictures from a vacation, or an event such as "show and tell." Remote team members should always be required to have video. Seeing each other builds trust between members when they can see body language and facial features.

### **Conclusion**

In the grand scheme of today's development world, teams are becoming more and more distributed. While many of the team members may be onsite and can attend the PI Planning meeting, there may be entire teams that cannot. For SAFe to evolve, consideration and thought will need to be given to how best to include the valuable input of these remote teams.

As online tools emerge, RTEs and business owners need to think outside the box and plan how to coordinate and train teams to use these tools for collaboration. The more teams use the tools on a day-to-day basis, the easier it will be to use them for big events

such as PI Planning and other iteration meetings and ceremonies. Even teams working within the same building can benefit from having a digital source of information and a single source of truth within the organization for answers to questions. It can also serve to allow team members to know their stakeholders and product managers so that the right people can answer the right questions at the right time.

Teams that rise to this challenge will have the largest pool of skills and talent for their team members and the greatest chance of success in this fast-paced market.

Ref: ScaledAgile Framework



## About the Author



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**Ajay Shenoy**, a certified Scrum Professional and Agile Coach, has been involved in Technology Solutioning since 2007. He started working as a Solution Engineer and slowly incorporated into a technical program manager. He is a Certified Scrum Professional and has good knowledge on Prince2, Agile, Lean, Scrum, Kanban and SAFe frameworks. Along with expertise in Project management, he has deep interest in Technology side. With these skills, Ajay can help people understand process as well as Agile. Ajay has a perfect blend of project management with technical skills and business acumen.

Ajay started his Agile journey in 2012, as part of engineering teams. He practiced scrum and other agile frameworks in delivering successful products within limited time frames. Ajay is proficient in Engineering practices such as Scrum, Lean Software development, and Kanban and has designed several solutions and market rollouts working with product/services companies. He believes in following key agile practices like Just In Time, Value Stream mapping, Refactoring, Improving lead and cycle time.

He single handedly built a group comprised of 700 employees with different skills/roles. He indulges in several meets/ conferences and sharing knowledge on public platforms like linkedIn with reference to Agile. Ajay has coached/trained several teams in different organizations; he was part of an agile team to improve an existing framework.

He has a Master's degree in IT & Finance and is currently based out of Bangalore. You can reach him on his email @ [shenoyajay82@yahoo.com](mailto:shenoyajay82@yahoo.com).