**Agile Benefits**

1. Benefits to Vendors, Customers, Development teams, Project Managers, program managers, [Product Managers](https://www.educba.com/product-manager-interview-question/), Management Executives, etc.,
2. It gives a high product or project quality.
3. More customer satisfaction.
4. Reduction in risks and increase in the project controllability.
5. Early starting of Development and faster returns on investment.
6. Focuses more on the business model and generates faster revenues.
7. Faster product releases and frequent deliverables.

#### **What is an iteration in Scrum?**

**Answer:**  
**Iteration in Scrum is defined as the Complete Development Life Cycle in an Agile methodology of a Project. This term is commonly used in the Iterative and Incremental Development process.**

## **What is Agile? List some Agile frameworks you have used until now.**

Agile is a methodology that promotes continuous development and testing throughout a project. It encourages rapid and flexible response to any change. Some commonly used Agile frameworks include Kanban, Lean Development, Scrum and SAFe.

## **2. How do Agile and SAFe Frameworks differ? What are the four core values of SAFe?**

Agile is a broad term that covers several frameworks, out of which one is SAFe. This framework, established by Dean Leffingwell, is specifically for large-scale enterprise projects as it scales up other models like Scrum to an enterprise level. It is based on three fundamental principles: Agile Development, Lean Product Development and Systems Thinking.

**The four core values of SAFe are:**

1. Alignment - Keeping pace with the rapid changes
2. Built-in quality - Every element must be up to the quality standards
3. Transparency - Trust and reliability
4. Program Execution - Deliver continuously and efficiently

## **3. What are the various dimensions of built-in quality?**

**Built-in quality has five dimensions:**

1. Flow
2. Architecture and Design Quality
3. Code Quality
4. System Quality
5. Release Quality

## **4. What are the different levels of SAFe?**

**The four levels in version 4.5 of SAFe are:**

1. Team: Involves a small Agile team of 5-10 people to deliver a working system in two weeks
2. Program: Multiple teams (100-125 people) work together, including other stakeholders; this is called the Agile Release Train (ART)
3. Value Stream: At this stage, there is a collaboration between the solutions architect and the value stream engineer, who acts as a guide
4. Portfolio: This is a collection of value streams. Portfolio managers are responsible for delivering business results.

## **5. What are the core competencies in the latest version of SAFe (v 5.0)?**

**SAFe 5.0 was launched in January 2020 and has seven core competencies revolving around customer-centricity. They are:**

1. Enterprise solution delivery
2. Agile product delivery
3. Team and technical agility
4. Lean-Agile leadership
5. Lean portfolio management
6. Continuous learning curve
7. Organisational agility

## **6. What metrics are used in SAFe?**

Metrics are pre-decided parameters which are used to measure how well an organisation is performing and progressing to achieve its objectives. In SAFe, four metrics are considered:

1. Portfolio
2. Large solution
3. Program
4. Team

## **7. What is a Value Stream in SAFe?**

Value Stream is a collective term for all the steps involved from the time of customer order to the time of delivery. It includes the people who develop new solutions and technology and the continuous flow of information or materials to the customer. The steps involving people who deliver come under "operational value streams" while the steps involving the people who develop the products come under "development value streams".

## **8. What is the role of a Release Train Engineer (RTE)?**

The RTE is the coach of an Agile Release Train (ART). Their primary responsibility is to accelerate the ART events and assist in delivering the value. RTEs must have excellent communication skills, and they are the ones who usually interact with the stakeholders as well.

## **9. What do you know about the Innovation and Planning (IP) Iteration in SAFe?**

An essential feature of SAFe - and Agile in general - is continuous improvement. It is done through innovation and planning sprints. IP is also aided by constant learning. This way, the people get time to innovate and explore beyond the iterations dedicated towards the delivery of the product. One crucial part of IP is called PI (Program Increment) system demo, which integrates all the developments throughout the project.

## **10. What is iteration review in SAFe?**

It is a regularly occurring event where every team analyses the increment at the end of every iteration (the standard fixed-length time window) and accordingly modifies the team's backlog based on the feedback of the stakeholders and the product owner. It gives the Agile teams a chance to showcase their work and for the stakeholders to monitor the progress.

## **11. What does "story" mean in the context of SAFe Agile?**

Stories are short descriptions of some desired functionality and feature written in the user's language. They are mainly used to define system behaviour in Agile. Most details are not revealed until the story is ready for implementation. Accepting stories is the responsibility of the product owner, but anyone can write a story.

## **12. What's the difference between user stories and enabler stories?**

User stories are stories which deliver functionality directly to the end-user. These are usually written in simple language that the user can understand, and this language will also help the Agile team appreciate what the user wants.

Enabler stories give an insight into the work items needed to support exploration, architecture, infrastructure and compliance. These may never be seen by the end-user, and are often written in technical language.

## **13. What is an "epic" with regards to SAFe?**

An epic is typically defined at the portfolio level. It is a container for a significant solution development initiative. The two types of epics are:

* Business epics - They are customer-facing initiatives that directly deliver business value.
* Enabler epics - They are used to develop the Architectural Runway (existing code, components, and technical infrastructure) to support future business epics. These epics typically cut across different values streams.

## **14. What is a feature and what is a capability?**

Both feature and capability are part of the artifact hierarchy defined by SAFe. A feature is a service that fulfils the requirement of a stakeholder. The two concepts of a feature are benefit hypothesis and acceptance criteria. A capability is similar to a feature but is a higher-level solution behaviour that cuts across multiple ARTs.

## **15. What are some disadvantages of SAFe or Agile?**

In general, any method or framework will have pros and cons, and it is good to be aware of both to have a balanced viewpoint. Although Agile methodology is followed across industries, it does have limitations like:

1. Since Agile deals with continuous development and innovation, long-term goals are rarely set; there is considerable incoherence in long-term planning.
2. In SAFe, managers are often assigned multiple projects at once, and this could make the process less efficient because of delayed responses. The actual product developers don't have as much freedom in the SAFe model as they do in other models like Scrum.
3. SAFe adopts too much of a top-down approach. The project goes in sequential order, i.e. the project development team proceeds to next stage of development only if the previous step is completed successfully - while most industries are attempting to move away from this model to more efficient ones.

## **16. What are the nine principles of SAFe?**

The principles of SAFe are based on Lean and Agile methods, as well as lessons learnt from plenty of actual deployments.

1. Take an economic view
2. Apply systems thinking
3. Assume variability and preserve options
4. Build incrementally with integrated learning cycles
5. Base milestones on objective evaluation of systems
6. Visualise and limit work-in-progress, reduce batch sizes, and manage queue lengths
7. Apply cadence (timing), synchronise with cross-domain planning
8. Unlock the intrinsic motivation of knowledge workers
9. Decentralise decision-making

Recently, a 10th principle is also stated: "Organise around value".

## **17. How does decentralised decision-making fit into the SAFe model?**

The primary motivation behind this concept is to shorten the lead time, or in other words, the feedback process is faster because there's no delay in waiting for specific higher authority to respond. Note that the decisions which have a far-reaching impact or those which are beyond the scope of certain teams will need the intervention of a higher authority, but, by and large, the time-critical decisions are decentralised.

**18. What are the shared services? Does SAFe benefit from this in any way?**

Shared Services consists of the people, services and speciality roles needed for an ART to succeed, but which cannot be devoted full-time. Shared services can improve efficiency by quickly assigning experts of an area of the system that requires unique knowledge, without looking for a full-time availability.

## **19. What is meant by tipping point?**

An enterprise reaches its tipping point when the dominant organisational motive is to achieve change rather than resist it. The status quo becomes so unacceptable that making a change is the only way forward.

## **20. What does "Release on Demand" mean?**

It is the last element of the continuous delivery pipeline. It is the ability to deploy new functionality and release it immediately based on customer or market demand.