**SSW 555 Agile Methods for Software Development**

**Quiz 11 :  Scaled Agile Framework**

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**-------------------------------------------------------------------------------------------------------------------------------1. Describe 2 limits of Scrum that prevents it from being effective on large projects.**

* It is not scalable because as the team size increases with large projects it becomes difficult to co-ordinate.
* Lack of alignment with single objective as there are different parts in the project.

**2. Describe the 3 levels of organization in the Scaled Agile Framework (SAF).**

The 3 levels are:

* Portfolio - Long-term planning
* Program - Large system management
* Project - Traditional Scrum teams

**3. What are pods of agile teams? Why are they needed in SAF?**

* Pods of Agile Teams are small custom agile teams, ranging from four to eight members, responsible for a single task, requirement, or part of the backlog.
* For clean resource management, we need groups of teams for large systems.
* A large system may have 3-10 teams cooperating with one another.
* Result is 50-100 people collaborating face-to-face.

**4. Describe the role of Scrum/Agile Master on an agile team in SAF.**

The Scrum/Agile Master role involves:

* He trains and coach teams in use of Scrum.
* He acts as "management/leadership proxy" – His work is to assist the team in its transition to the new strategies and continuously facilitate a team dynamic intended to maximize team performance.

**5. What is the purpose of a "hardening" iteration?**

* In agile development, new functionality is typically built in short time-boxed, events called iterations.
* For each release, there are 4 development and 1 hardening iteration.
* The hardening iteration serves the purpose to stabilize the current release-ready product. That is the product is developed and tested successfully for the changes made in the development iterations and all the features planned for this iteration are completed from the iteration backlog.

**6. Describe 2 reasons why the product of an iteration might not be released.**

* Each iteration produces a "potentially shippable increment".
* But you may not want to release the product during every increment if there are :
  + defects, refactoring to remove technical debt.
  + interference with customer's licensing and service agreements.
  + potential disruption to customer.

**7. What is the purpose of the Vision for a product?**

* The Product Management team is primarily responsible for maintaining the Vision of the products, systems, or application in their domain of influence.
* The purpose of Vision is to make clean questions like:
  + What problem does this solve?
  + What features and benefits does it provide?
  + For whom does it provide it?
  + What performance, reliability, etc. does it deliver?
  + What platforms, standards, etc. will it support?
* Not only this but vision must also consider, non-functional requirements like reliability, accuracy, performance, quality, compatibility standards.

**8. What are Investment Themes? Why are they needed?**

* The set of investment themes for an enterprise, or a business unit within the larger enterprise, establishes the relative investment objectives for the entity.
* These themes drive the vision for all product teams and new epics are derived from this decision.
* The derivation of these decisions is the responsibility of those who have answer the stakeholders.
* In most enterprises, this happens at the business unit level based on annual or twice annual budgeting process and the following factors are decided:
* Existing offerings (enhancements,
* support and maintenance)
* New offerings
* Futures – require investment now, but will not contribute toward revenue until later
* Sunset – ending support for existing products and services

**9. What is Architectural Runway? Why is it needed?**

* Definition: "A system with architectural runway has existing or planned infrastructure sufficient to allow incorporation for current and near term requirements without excessive refactoring."
* Failure to maintain architectural runway may lead to:
  + missed release dates due to large-scale refactoring
  + slowed velocity
  + inability to create new features