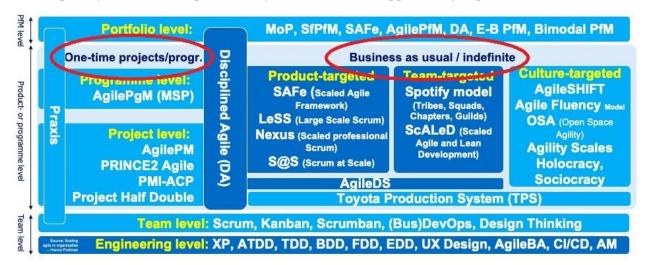
MUHAMMAD OMER SIDDIQUI 19B-004-SE

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Select topic of your choice and post it with your name on whatsapp course group



Source: https://thedigitalprojectmanager.com/projects/pm-methodology/agile-methodologies/

Deadline: 16 nov

You have to provide

1. Introduction about topic

INTRODUCTION

The nexus development model is a new approach to software development that emphasizes the need for close collaboration between different teams involved in the software development process. It is based on the idea that the traditional siloed approach to software development, where each team works in isolation from the others, is no longer effective in today's fast-paced, constantly changing business environment.

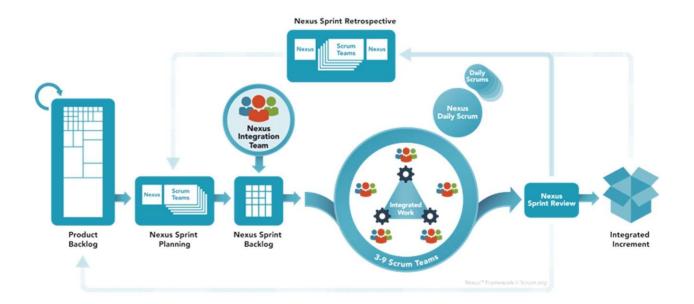
The nexus development model is based on the following four principles:

- 1. Close collaboration between different teams
- 2. A focus on the customer
- 3. A focus on the business value
- 4. A focus on the delivery process
- 2. Who invented/created, his first source of knowledge (book and/or research paper), download its first (most cited) research paper and /or Book, then add it to folder < material –topic> in your assignment folder

Ken Schwaber talks about the need for scrum in large organizations, and how scrum can help them to scale their operations. He also discusses some of the challenges that come with scaling scrum, and how to overcome them.

3. Official diagram of <topic>, by author

NEXUS™ FRAMEWORK





4. Brief description about its components/terminologies/ of diagram

The core of the Nexus framework is the integration team which consists of a Product Owner, ScrumMaster, and one or more members from each team. The purpose of the integration team is to coordinate the work of all the Scrum teams to be sure their completed work intermeshes together and is in harmony and not conflict. The need for an integration team becomes even more essential the larger the number of Scrum teams all working on the same project using the same product backlog.

The Product Owner is the person responsible for the product backlog. This person must work closely with the stakeholders of the project to be sure the backlog items are in proper priority and that the product backlog is adequately populated with backlog items. The Product Owner is responsible for approving the delivery of the product increments at each of the integration sprints.

The ScrumMaster is responsible for coordinating the work of the integration team. This person ensures all the integration team members are aware of their responsibilities. The ScrumMaster also coordinates the meetings and activities of the integration team, and is responsible for maintaining the integration team's backlog of tasks.

The integration team members are responsible for the actual integration of the completed work. This includes such things as reviewing the work of the other Scrum teams to be sure it integrates, testing the integration to be sure it works as expected, and making modifications to the work of the other teams to make it work with the completed work of the integration team. Integration team members also take on other tasks as needed to support the integration process.

5. Best viewed video about <topic> by author, and place it in template below

Introduction to large scale scrum
(1906) What is Scaled Scrum? - YouTube

Scrum.org

In this video it describes the introduction of scaling of scrum by Ken itself and solution for the problem. He included companies or organization that want its solution. Scrum as large scale development model.

Ken Schwaber explanation video (1907) Ken Schwaber - Scaling Scrum to Sustain Productivity - 2015 COHAA The Path to Agility Conference - YouTube 1:02:51 Min



In this video it describe problems of traditional agile for scaled projects. And explaining NEXUS framework with solutions including all the practices.

Short Questions to be answered from original source

Deadline: 23 nov

1. Which activities are iterative

Nexus framework is an scaled version of scrum and is similar to the scrum but the only difference between these two is to view the bigger picture of scrum with more teams for a single product. Planning, estimation, and backlog refinement are all iterative activities in scrum.

2. How analysis is handles

In the Nexus framework, analysis is handled by the use of Scrum and Kanban. These two methods provide a way to break down work and track progress in a way that is transparent and easy to understand.

3. How design is handled

Scaled scrum generally relies on product owners and scrum masters to work with designers to ensure that product backlog items are properly designed. In some cases, a separate design team may be used to support the scrum team.

In Nexus, design is handled through a process known as Scrum. This process involves dividing work into small pieces, called sprints, and then working on each sprint until it is completed. Design should be dealt with incrementally by the team, both in advance of a sprint as well as during. Most teams incorporate backlog refinement as an ongoing activity to review the upcoming backlog items. This is a perfect time for the team to architect and design enough of the solution to estimate the effort. Any artifacts created should be attached to the story. During the sprint, more fine grained architecture and design activities should occur. Attach these artifacts as well. When the story is completed there should be a rich amount of information about the solution provided.

4. How iterations are managed

The iterations in scaled scrum nexus are managed by the scrum of scrums. The scrum of scrums is responsible for integrating the work of all of the scrum teams and ensuring that all of the teams are working together towards the same goal.

5. How coding/construction is handled

In scaled scrum nexus, coding is typically handled by a team of developers who work together on a codebase. This team is responsible for ensuring that the codebase is maintainable and scalable. The team may use a variety of tools and techniques to achieve this, including code reviews, automated testing, and continuous integration. In some cases, the team may also be responsible for writing documentation or providing support to other teams who are using the codebase. The team may use a variety of development methodologies, such as Agile, Scrum, or Kanban.

6. How testing is performed

Scaled scrum nexus testing is performed by dividing up the work into smaller pieces and then assigning each piece to a different team. The teams then work on their assigned piece and report back to the central team. The central team then decides if the work is up to par and if it is, they give the green light to move on to the next piece.

However, unlike in Scrum, there is the Nexus Integration Team. The Nexus Integration Team is often, but not necessarily, made up of members of individual Scrum Teams that make up the Nexus. The Nexus Integration Team is accountable for ensuring that there is a Done Integrated Increment produced by the Nexus at least once a Sprint. Therefore, some integration and test

activities may be performed by the members of the Nexus Integration Team rather than one of the Scrum Teams.

7. How user acceptance is performed

User acceptance is typically performed during the integration phase of a scaled scrum nexus. This is when new features or changes are integrated into the main code base. During this phase, testers will test the new features or changes to ensure that they meet the requirements set forth by the product owner.

8. How re-work and maintenance is handled

In scaled scrum nexus, re-work and maintenance is typically handled by a separate team that is responsible for addressing technical debt. This team works closely with the development team to ensure that new features can be delivered quickly and efficiently.

How do you deal with design in Scrum? - Software Engineering Stack Exchange

Overview of the Nexus Framework for scaling Scrum | Scrum.org

Scaling Scrum with Nexus | Scrum.org

How is testing performed in the NEXUS framework? Is it different from testing which is done in Scrum? - Quora

Deadline: 30 nov

1. List practices if any

Common activities may include identifying cross-team issues, raising awareness of dependencies early, and ensuring integration tools and practices are understood and used. To minimize dependencies, it would be important to look at team structure and architectural structure, visualize cross-team dependencies, and focus on modern technical practices.

2. Is it extended/tailored by other agile methodology.

Yes, it is extended by the SCRUM which is also an agile methodology.

3. List principles if any, and add them to template mentioned at end.

No specific principle is specified by author.

4. Are there any special roles?

The main difference between the Nexus framework and Scrum is the addition of an "integration team" (which is actually the special role) that is focused on facilitating the dependencies between the teams.

The Nexus Integration Team consists of:

The Product Owner: A Nexus works off a single Product Backlog, and as described in Scrum, a Product Backlog has a single Product Owner who has the final say on its contents. The Product Owner is accountable for maximizing the value of the product and the work performed and integrated by the Scrum Teams in a Nexus. The Product Owner is also accountable for effective Product Backlog management. How this is done may vary widely across organizations, Nexuses, Scrum Teams, and individuals.

A Scrum Master: The Scrum Master in the Nexus Integration Team is accountable for ensuring the Nexus framework is understood and enacted as described in the Nexus Guide. This Scrum Master may also be a Scrum Master in one or more of the Scrum Teams in the Nexus.

One or more Nexus Integration Team Members: The Nexus Integration Team often consists of Scrum Team members who help the Scrum Teams to adopt tools and practices that contribute to the Scrum Teams' ability to deliver a valuable and useful Integrated Increment that frequently meets the Definition of Done.

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5. How customer is involved

There isn't any involvement of customers. There is a Product Owner that manages and looks after all the changes & he is who has the final say on its contents. Product owner is the member of NIT.

6. How team interact with each other.

Nexus Daily Scrum

The Nexus Daily Scrum is an event for appropriate representatives from individual Development Teams to inspect the current state of the Integrated Increment and to identify integration issues or newly discovered cross-team dependencies or cross-team impacts.

During the Nexus Daily Scrum, attendees should focus on each team's impact on the Integrated Increment and discuss:

Was the previous day's work successfully integrated? If not, why not?

What new dependencies or impacts have been identified? What information needs to be shared across teams in the Nexus?

7. What is role of documentation

There isn't any role of documentation. The Product Owner discusses the Nexus Sprint Goal during Nexus Sprint Planning. The Nexus Sprint Goal describes the purpose that will be achieved by the Scrum Teams during the Sprint. Once the overall work for the Nexus is understood, Nexus Sprint Planning continues with each Scrum Team performing their own separate Sprint Planning. The Scrum Teams should continue to share newly found dependencies with other Scrum Teams in the Nexus.

8. How changes are managed

The Development Teams uses the Nexus Daily Scrum to inspect progress toward the Nexus Sprint Goal. At least every Nexus Daily Scrum, the Nexus Sprint Backlog should be adjusted to reflect the current understanding of the work of the Scrum Teams within the Nexus. The individual Scrum Teams then take back issues and work that were identified during the Nexus Daily Scrum to their individual Scrum Teams for planning inside their individual Daily Scrum events. This event is finished when the last Scrum Team's Sprint Planning is done.