### **Akashdeep Vasisht**

#### Slide 1: Title/Introduction

## Slide 2: Introduction to Agile Software Development

A project is defined as a series of tasks with a specific goal, employing knowledge, skills, tools, and techniques to deliver value within a temporary timeframe. Examples, including software development and event organization, illustrate the project's diverse nature. The slide also addresses key issues in traditional project management, such as changing requirements and sequential handovers, emphasizing the challenges faced. This establishes the groundwork for understanding the necessity of an adaptive approach like Agile in software development projects, aligning with the CFO's vision for the grant application project.

## Slide 3: Building Cross-Functional, Collaborative Teams

Cross-functional teams encompass individuals with varied skills, from developers to testers, fostering a comprehensive approach. The Product-Development Team adapts to product needs, emphasizing the role of a Product Owner in managing the backlog. Agile Teams, defined by stability and shared goals, empower members to commit to their work and make crucial decisions collectively. Understanding these team dynamics is crucial for implementing Agile successfully in the grant application project.

# Slide 4: Building Teamwork with Interpersonal Practices

Acknowledging team members as individuals rather than resources, this chapter emphasizes the need for a human-centric approach. The Agile methodology, known for its collaborative nature, thrives on effective interpersonal communication and teamwork. As the grant application project advances, understanding and implementing these interpersonal practices will be pivotal for creating a positive and productive team culture.

# Slide 5: Agile Requires Different Project Leadership

While traditional projects may have a project manager dictating tasks, Agile projects thrive on servant leadership and coaching. The responsibilities of Agile project managers, who facilitate the team's processes, and product owners, who prioritize and manage deliverables. As we navigate the grant application project, understanding and adopting these Agile leadership principles will be paramount for project success.

## Slide 6: Start Your Agile Project Right

By breaking down the project into manageable stages, it allows for focused planning and better control over project outcomes. Key elements include the Project Charter, defining the project's purpose and boundaries, creating a clear vision, and establishing release criteria. The chapter emphasizes collaboration within the team, early identification of project type, risk assessment, and the evolving nature of project architecture. By avoiding common traps like Iteration Zero and detailed planning, teams can set the stage for a smooth and Agile project journey.

#### Slide 7: Teams Deliver Features

The traditional challenges of working on projects for extended periods without delivering tangible outcomes are contrasted with Agile iterative and value-driven approach. Emphasizes the importance of planning, showcasing the roadmap and releases, and delivering value incrementally. We get the concept of a "Walking Skeleton" and the significance of creating Minimum Viable Products (MVP) and Minimum Viable Experiments (MVE). By addressing common pitfalls such as excessive planning and recognizing value traps, Agile teams can optimize their delivery processes.

#### Slide 8: Rank the Work

Importance of prioritizing tasks and work items effectively introduces different strategies for ranking work, including tackling the shortest tasks first, choosing the most interesting tasks, and prioritizing the most relevant tasks. The benefits of addressing short work first are highlighted, emphasizing the value of quick wins and visibility into completed tasks. Additionally, the concept of the "Cost of Delay", emphasizing the implications of delaying work on future revenue and overall demand. Also, the significance of valuing learning in the ranking process, advocating for a better understanding of features through small experiments and spikes. Common ranking traps, such as relying solely on estimation or succumbing to external pressures, are addressed to help teams navigate the prioritization process more effectively.

#### Slide 9: Visualize Your Work with a Board

Starting with paper boards is recommended, as physically moving cards enforces a more tangible and interactive process. The limitations of electronic tools are discussed, particularly their tendency to reinforce old habits and hinder the creation of smaller stories. The concept of iteration-based boards, such as Scrum boards, is introduced. These boards involve team commitment for each iteration, with columns like "Ready/To Do" and "Today" to manage workflow. Kanban boards, highlighting the significance of WIP (Work In Progress) limits to visualize flow and identify bottlenecks. Practical examples and considerations for creating and managing boards are provided, emphasizing the team's ownership and the need to respect WIP limits to maintain agile practices.

#### Slide 10: Create Technical Excellence

In the pursuit of technical excellence, a structured approach is essential, much like preparing a meal where understanding and planning play crucial roles. Teams are encouraged to optimize their processes, focusing on reading and refactoring code, embracing early delivery, and working with small stories. Product quality is emphasized, with an early release strategy for small increments of value, learning from feedback, and a gradual shift to defect focus as the product nears mainstream usage. Continuous integration (CI) and continuous delivery (CD) practices are introduced as effective tools for enhancing predictability and obtaining rapid feedback. Working as a whole team is advocated, utilizing practices like pairing, swarming, and mobbing to limit work in progress and foster collaboration.

# Slide 11: Agile Estimation: The Good, The Bad, and The Ugly

This slide delves into the nuances of Agile estimation, emphasizing its role in setting realistic expectations for project timelines. The challenges surrounding estimation, such as unknown code complexity and team instability, are highlighted. Estimating stories involves the product owner's role in creating and ranking the backlog, along with the significance of including diverse perspectives from developers, designers, testers, project managers, and product owners. The shift from traditional estimates to story points is introduced, providing a more effective and collaborative approach to estimation.

#### Slide 12: Know What "Done" Means

This slide explores the concept of what "done" means in project management, drawing a distinction between non-Agile and Agile approaches. In non-Agile projects, challenges may arise during the demo week or the Go/No-Go decision. In Agile, the focus shifts to specific criteria, including acceptance, unit testing, code review, and product owner approval. Emphasizing the importance of acceptance criteria, working agreements, and iteration completion. The transition to releasing features often and early is introduced, along with considerations for customer preferences and nonfunctional requirements.

### Slide 13: Agile Team Measurements

This slide introduces the concept of Agile team measurements, emphasizing the importance of tracking progress and work in progress. Highlighting key metrics such as WIP and Defects as crucial indicators for understanding a team's performance. Encouraging teams to learn from different measurement tools, including feature or story burnups, iteration contents, cumulative flow, cycle time, and defect escapes. These metrics offer valuable insights into feature progress, work completed, iteration contents, work in progress, and defect patterns, aiding teams in making informed decisions and continuous improvement.

# Slide 14: Help Your Meetings Provide Value

This slide introduces the topic of optimizing meetings for value within Agile teams. Highlighting the common issue of meetings lacking value, particularly in traditional settings with status meetings that lack decisions or action items. Contrasting this with Agile meetings, listing various types such as retrospectives, daily standups, and demos. The goal is to emphasize that Agile meetings are designed to be purposeful, fostering collaboration, decision-making, and continuous improvement.

## Slide 15: Report Your Project State

This slide emphasizes the importance of effectively reporting the project state. Covers various strategies to communicate progress to different stakeholders. Encourages showing a working product through demos, using charts for feature progress, and displaying multitasking requests and WIP. Additionally, suggest creating regular status reports and keeping communication channels open through project team websites. The "Traps" warns against pitfalls, such as the misconception of doubling velocity without understanding specific features and the risks of comparing velocities between different teams. Aiming to guide teams in choosing the most suitable ways to communicate project status and progress.