

Semester Project

Slide 1: Title Slide

Slide 2: Why Agile?

When developing software, requirements constantly change. These changes can occur if you, the customer, change your minds about something or if the business happens to change the services it offers. Changes in requirements are normal and the Agile software development process welcomes these changes. In Agile, business personnel, such as yourselves, and the developers must work together so that these changes will be addressed and understood. This collaboration allows you all to be closely engaged in the development process and allows the development team to deliver faster and better.

Slide 3: The Agile Team

Agile teams consist of you, the product owner, and the cross-functional development team. You might be wondering what a cross-functional development team is. Well, simply put, a cross-functional development team is a team that has all of the necessary skills and capabilities to complete the project from start to finish.

Slide 4: Team Roles and Responsibilities

In Agile, your primary responsibility as the product owner is to decide what the development team will work on and when they will work on it. You will do this by creating a ranked list of things for the development team to work on. The development team's role is to figure out how to get the work done and suggest changes where they think they are needed. However, both you and the development team must communicate with each other to ensure transparency on both ends. For example, you may meet with the development team to discuss acceptance criteria for the work.

Slide 5: Agile Team Qualities: Interpersonal Skills

In the Agile software development process, interpersonal skills within the team are very important. In particular, Agile requires the ability to give and receive feedback and coaching. Teams that possess these interpersonal skills innately understand the

importance of respect, which is crucial for maintaining a safe environment where the team is able to effectively collaborate and learn from one another.

Slide 6: Agile Team Qualities: Technical Excellence

Agile teams strive for technical excellence. In software engineering, technical excellence refers to the consistent and disciplined application of good development practices such as high quality craftsmanship and continuous improvement. When a team strives for technical excellence, they also improve their development speed significantly as this practice reduces defects, conducts thorough testing, as well as automates tests on the software.

Slide 7: Agile Team Qualities: Valuable Meeting Culture

Meetings are very prominent in the Agile software development process. These meetings are designed to accomplish many different things, such as planning, reviewing progress, and facilitating communication among team members. Regular collaboration through meetings ensures that the Agile team stays aligned, adapts to changes efficiently, and maintains a shared understanding of project goals and priorities.

Slide 8: Agile Teams Deliver Features

A “feature” refers to a distinct and valuable functionality or characteristic of a software product. In Agile, teams practice continuous delivery, which is the practice of delivering features and updates to features for demonstration or release on a regular basis. This practice allows for the team to continually demo their work to show its value to you as the product progresses. It also allows for you to give feedback and for the team to receive feedback; continuing on the themes of collaboration, learning, and adaptability.

Slide 9: Project Management

All projects need some form of management. In Agile, teams manage themselves; not through a project manager but through servant leadership where team members take on this role. These leaders are self-aware individuals who help and enable other team members. These individuals will also be the ones who represent the team in reporting to you, the executives, about the status of the project.

Slide 10: Visualization Tools

Next, I want to talk about visualization tools, which the Agile software development process uses with abundance. These tools are used to evaluate performance as well as to help the team manage their project. These tools can include workflow boards such as scrum boards and kanban boards or charts like burndown and burnup charts.

Kanban boards such as the one you see here at the top, help the team manage their work while the burndown charts, such as the one you see here on the bottom, show work completed over time.

Slide 11: Reporting the Project State

Agile teams are able to report the status of their project in many different ways. One includes using the visualization tools I spoke about a few moments ago. For example burndown and burn charts can be used in reporting project state as it shows the progression of completed features over time. Another effective way to show project state is to demonstrate a working product. Agile teams may also leverage regular status meetings to provide real-time updates, fostering open communication and ensuring alignment with project goals.

Slide 11: Conclusion

As we conclude our journey through the Agile software development process, it is evident that Agile provides a dynamic and collaborative framework that embraces change and delivers value consistently. By fostering a close partnership between business stakeholders and cross-functional development teams, we not only adapt to changes but thrive on them. In Agile, we prioritize effective communication, continuous improvement, and the delivery of valuable features through a transparent and collaborative process. Our focus on teamwork, technical excellence, and a culture of feedback ensures that we not only meet but exceed expectations. Agile is not just a methodology; it's a mindset that values collaboration, adaptability, and delivering meaningful outcomes. This is why Agile is the correct process for your project. Thank you.