Agile Methodology

Scrum-agile Team

- Product owner is responsible for maximizing the value of the product and work of the Development Team. The product owner is the sole person responsible for managing the Product Backlog.
- The product owner role has many elements of functions that might be considered project management in providing direction to the project, but it goes beyond a typical project management role and includes the domain knowledge to provide the business direction to a project as well.
- Scrum Master -is responsible for ensuring Scrum is understood and enacted. The Scrum Masters do this by ensuring that the Scrum Team adheres to Scrum theory, practices, and rules.
- Some responsibilities of a Scrum Master might be considered similar to a project manager. The Scrum master is expected to track and remove obstacles that are inhibiting the performance of the team. Furthermore, the Scrum master is expected only to facilitate the team without providing much direction.
- Team The development team consists of professionals who do the work of delivering a potentially releasable increment of "Done" product at the end of each sprint.
- has some responsibilities that might be considered similar to a project manager. Each member of the team is expected to plan their activities and be accountable for delivering the results that they committed to. In a sense agile distributes downward into the team.

Software Development Life Cycle (SDLC)

- Concept Phase : Projects are envisioned and prioritized
- Inception Phase: Team members are identified, funding is put in place, and initial environments and requirements are discussed
- Iteration Phase the development team works to deliver working software based on iteration requirements and feedback
- Release Phase- QA (Quality Assurance) testing, internal and external training, documentation development, and final release of the iteration into production
- Production Phase Ongoing support of the software
- Retirement Phase End-of-life activities, including customer notification and migration

Waterfall development approach

- A waterfall approach would have suited the project if it was a smaller project where the requirements are very well understood.
- If there are no ambiguous requirements
- No working software would be produced until late during the life cycle.
- There would be high amounts of risk and uncertainty
- It would be difficult to measure the progress withing stages.

Waterfall Approach Vs. Agile Approach

Waterfall Vs Agile

Benefits over waterfall Model and Agile Model

Waterfall	Agile
Proven Model to execute Projects	Suggested model for execution Products.
Sets expectations up front for cost, schedule	Continuous delivery and feedback cycles (iterative and incremental development)
Requirements must be validated and exit criteria must be met before proceeding to next phase	Changing requirements are welcome
Customer can focus on other things in the meantime	Early testing and continuous integration
"Measure twice, cut once" means less potential for rework	Customer collaboration and acceptance of each feature as it's developed

Agile Approach and Why

Agile approaches enable organizations to adjust more quickly to market changes and complete more projects effectively. Agile software development allows the team to quickly adjust to changing needs without jeopardizing release dates. Agile also aids in the reduction of technical debt, the improvement of customer happiness, and the delivery of a higher-quality product.

Work Cited

Atlassian. (n.d.). Agile vs. Waterfall Project Management. Atlassian. Retrieved February 21, 2022, from https://www.atlassian.com/agile/project-management/project-management-intro

12 principles behind the Agile Manifesto: Agile Alliance. Agile Alliance |. (2021, October 8). Retrieved February 21, 2022, from https://www.agilealliance.org/agile101/12-principles-behind-the-agile-manifesto/