: What are various agile approaches?

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Information technology/Information Systems professionals have been refining and trying various agile approaches for more than 25 years. Originally focused on completing software development projects, Agile is now viewed as a mindset and a way of thinking about tasks and work. For example, agile principles guide the decision making of agile teams. Different sources include various approaches, frameworks or methods in the overall category of agile approaches. There are many approaches including Scrum, Kanban, Lean, Extreme Programming (XP), Crystal, Dynamic Systems Development Method (DSDM), Feature Driven Development (FDD), and Test-Driven Development (TDD) Learning about multiple frameworks will increase your versatility and help you participate in a wide variety of projects. The following are four major approaches.

The most popular agile approach is Scrum. Extreme Programming (XP) is widely used for coding intensive software development projects. Teams generally pick one or possibly combine two agile approaches.

Scrum is a lightweight agile project management framework that can be used to manage iterative and incremental projects. Scrum projects by their nature typically involve knowledge-intensive work. Scrum clearly defines key roles in the project i.e. Scrum Master, Product Owner which promotes task transparency and task ownership for the duration of the project lifecycle. Scrum teams commit to developing working software in set intervals called sprints. Scrum has gained increasing popularity over the years due to its simplicity, proven productivity and performance gains, and ability to incorporate various overarching practices promoted by other Agile approaches.

Both Scrum and Kanban are frameworks that help teams adhere to agile principles. Kanban is about visualizing your work, limiting work in progress, and maximizing efficiency. An agile team uses Kanban boards to continuously improve the flow of work. At its core, Kanban is concerned with incremental process improvements.

The "Lean" concept is widely combined with terms such as Lean product development, or Lean software development. Lean, as a concept, is an approach for creating more value for customers with fewer resources. Lean agile follows agile principles using fewer resources. Managers in a lean organization understand the importance of delivering customer value and they focus on continuous improvement of key processes (https://www.lean.org/WhatsLean/).

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Extreme Programming (XP) aims to produce higher quality software and a better quality of life for the development team. XP is the most specific of the agile frameworks regarding appropriate engineering practices. XP is intended to improve software quality and responsiveness to changing customer requirements by promoting simplicity in software development design, development, maintenance, and revision.

Feature-Driven Development (FDD) is a client-centric, architecture-centric, and pragmatic software process. It is an iterative and incremental software development process. It uses any processes and practices that promote a client-valued functionality perspective. FDD emphasizes walkthrough of domains, as well as design, code, and inspection.

Scrum is the most popular and widely followed Agile framework worldwide, but it is not always the best for a specific project. Choosing the most appropriate approach depends upon the objectives of the project, the resources available (including staff and time constraints), and the stakeholders involved. All of the above approaches share the same philosophy, as well as many of the same characteristics and practices. Each of these approaches promotes stakeholder engagement with the aim of delivering the right product to the right customer at the right time.

Agile is a mindset and an umbrella term that includes several project management approaches, including Agile project management (APM). Agile approaches can help individuals, teams and organizations respond to uncertainty and unpredictability.

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