**Agile at a Glance**

Agile is an incremental and iterative method for system/product development. Agile was designed primarily as a response to the limitations of traditional methods, such as waterfall, by prioritizing people and processes and interactions over extensive documentation. It de-emphasizes design and long-range planning upfront.

**Key Features**

- **User provides requirements needed by the system.**
- **New or changed requirements/changes immediately in backlog.**
- **The focus is on in-course/inside mentoring (Sprint).**
- **Key decision makers are used to standardize configurations.**

**Benefits**

- **Change Enabled** Changes to requirements and priorities are more easily accommodated. Only the current iteration has fixed scope.
- **Quality** As a result of getting feedback early it enables teams to improve quality in an iterative manner.
- **Faster Time to Deliver Solution** Small teams are able to work at a much higher productivity level. Each iteration delivers a new capability.
- **Early Feedback** There is usually a demo after each iteration. Stakeholders provide timely feedback after each iteration. Feedback can result in new or changed requirements.

**Waterfall vs Agile**

- **Plan-driven**
  - Less frequent client communication
  - Typically Long Releases (12 months)
  - Requirements are locked before development begins
  - Development in layers: presentation, business etc.
  - Testing immediately before implementation
  - Requirements: Design, Build, Implement, Maintain

- **Learning driven**
  - Continuous communication
  - Short Release (duration to be defined within the project)
  - Development in cross-functional teams
  - Testing occurs through the iteration
  - Requirements: Sprints and Backlogs are transparent. Problems are not hidden and can be addressed early.

- **Typical Features**
  - Waterfall: Plan, Design, Build, Test, Deploy
  - Agile: Sprint, Plan, Build, Test, Deploy