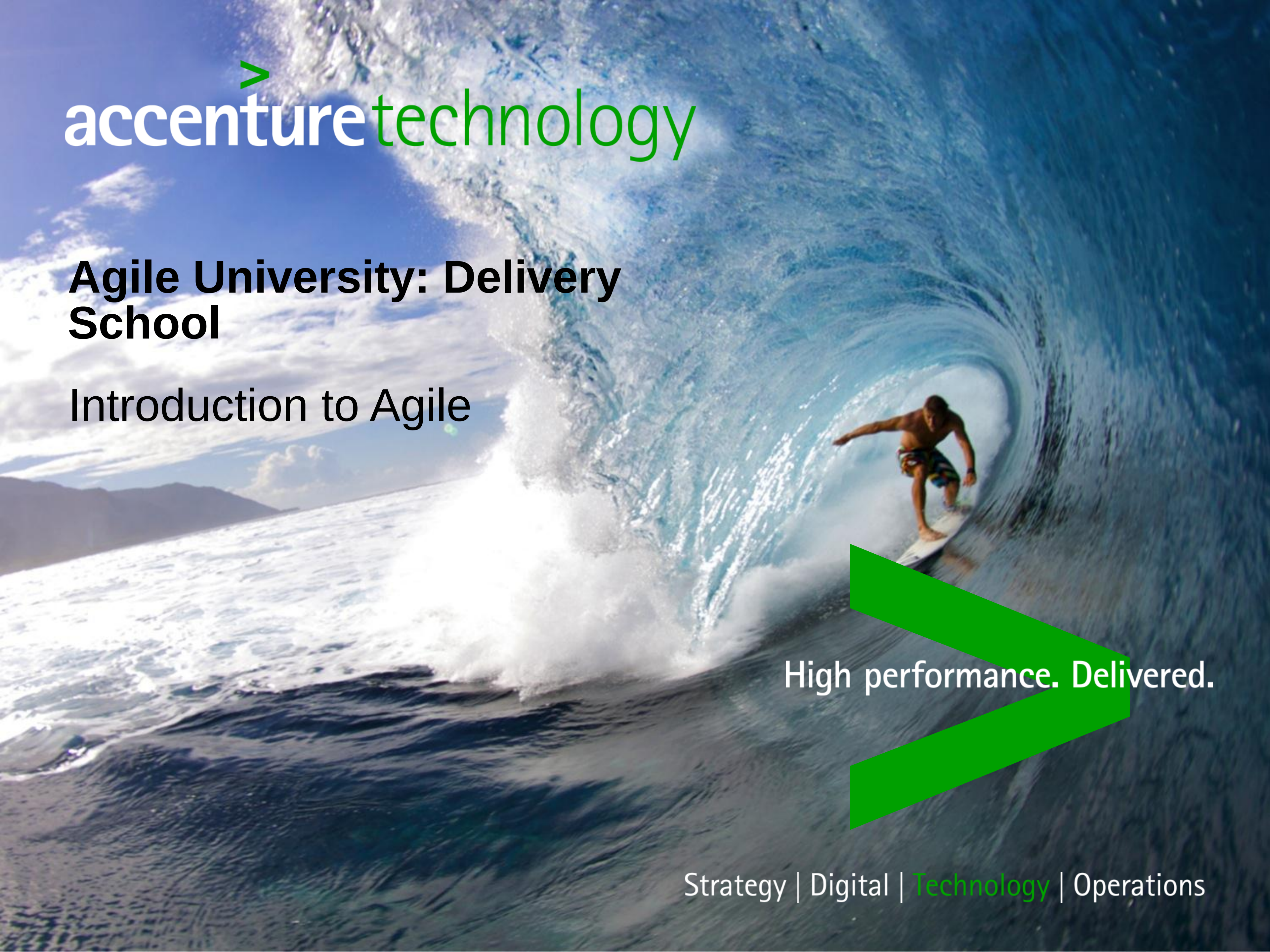

accenture technology

Agile University: Delivery School

Introduction to Agile

High performance. Delivered.

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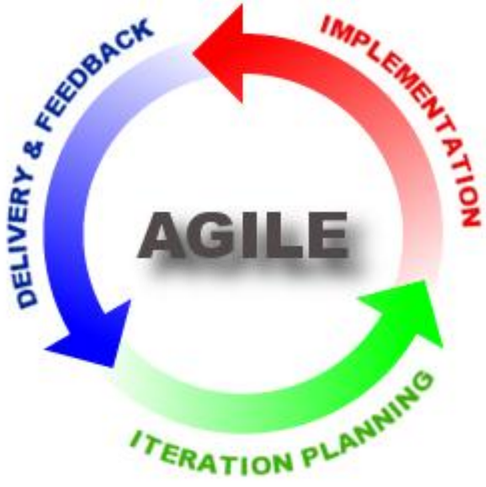
What is Agile?

Umbrella term for different methods that promote a project management and delivery approach rooted in Iterative and Incremental development, with **Frequent Inspection and Adaptation**.

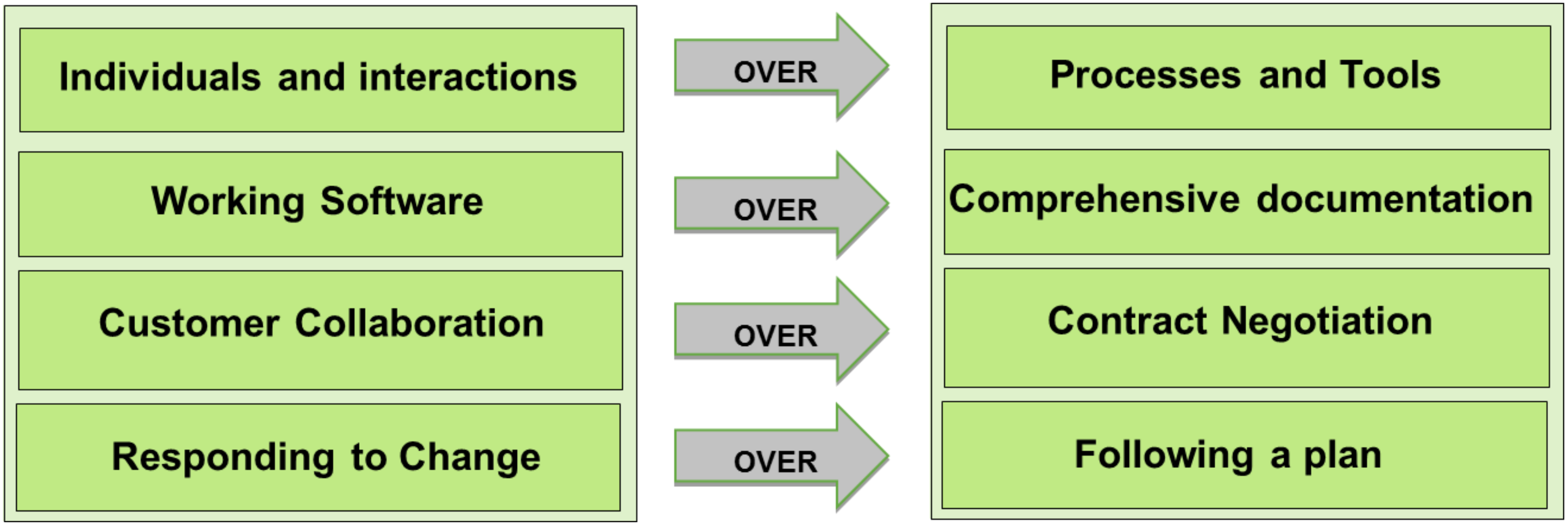
Agile is much more than a “**new process**”, it’s a **culturally different way** of building software. It is encapsulated in a simple Agile Manifesto written in 2001, emphasizing **frequent involvement** and **team work**.



Agile Manifesto - Values

The Agile manifesto (http://agilemanifesto.org) was written in 2001 by 17 personalities in their respective contributions areas.

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:



Individuals and interactions OVER Processes and Tools

Working Software OVER Comprehensive documentation

Customer Collaboration OVER Contract Negotiation

Responding to Change OVER Following a plan

That is, while there is value in the items on the right,
we value the items on the left more.

Source: [1]http://agilemanifesto.org/

Agile Manifesto - Principles

Supplementing the Agile Manifesto, the twelve principles further describe what it means to be Agile.

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage

3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

4. Business people and developers must work together daily throughout the project.

5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Source: http://agilemanifesto.org/principles.html

Agile Manifesto – Principles

7. Working software is the primary measure of progress.

8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.

10. Simplicity--the art of maximizing the amount of work not done--is essential.

11. The best architectures, requirements, and designs emerge from self-organizing teams.

12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Source: http://agilemanifesto.org/principles.html

Scrum Basics & Roles

- **Scrum – I**terative and incremental Agile software development framework for managing software projects and product or application development.
- **Sprint –** Time-boxed iteration during which a potentially releasable product Increment is created.
- **Design**, **Build** and **Test** activities are performed within the Sprint.
- **Sprint Duration:**

  Can be between 2-4 weeks; typically it is 4 weeks *

  Can be between 3-5 weeks; typically it is 5 weeks **
- Optimal SCRUM team size is 7-10 empowered and self-organizing members.

* Custom Development Projects; ** Packaged Development Projects

Scrum Basics & Roles .. continued

- A Sprint begins with a **Sprint planning** meeting and ends with a Sprint Review and Retrospective meetings.
- **Daily Stand Up** - A short organizational meeting that is held each day. Limited to 15 minutes long, and is referred to as a stand-up, or a daily scrum. Each team member has to answer the following three questions:

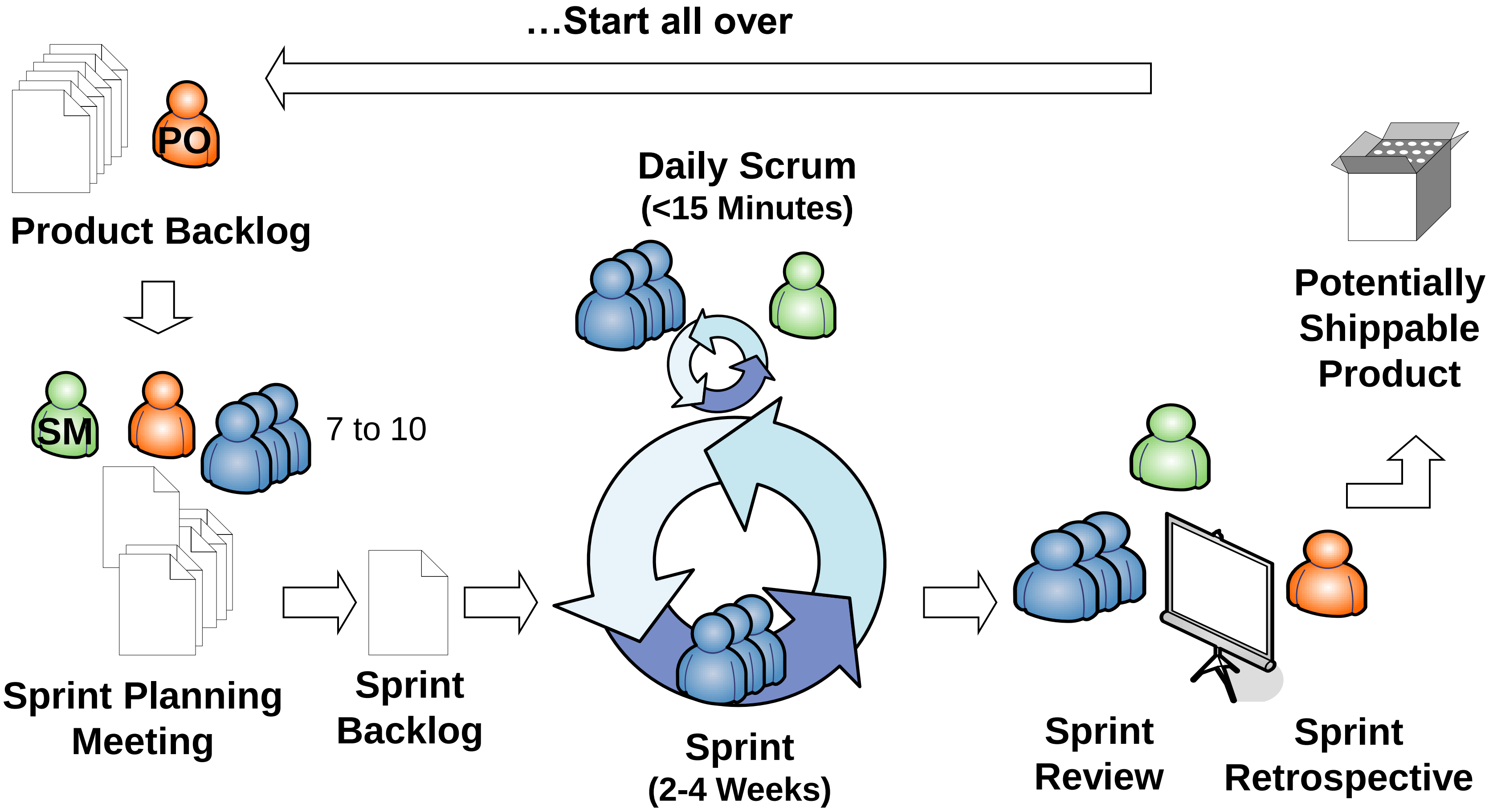
  1) What did you do yesterday?

  2) What will you do today?

  3) Are there any impediments in your way?
- **Sprint Review:** A meeting with project Stakeholders to demonstrate the completed solution capabilities from that Sprint
- **Sprint Retrospective:** A meeting with the Project Team to reflect on the experiences of the Sprint
- **Scrum Roles:** Product Owner, Scrum Master, Team

Scrum Basics – an Overview

Scrum is an iterative and incremental agile software development framework for managing software projects and product or application development.

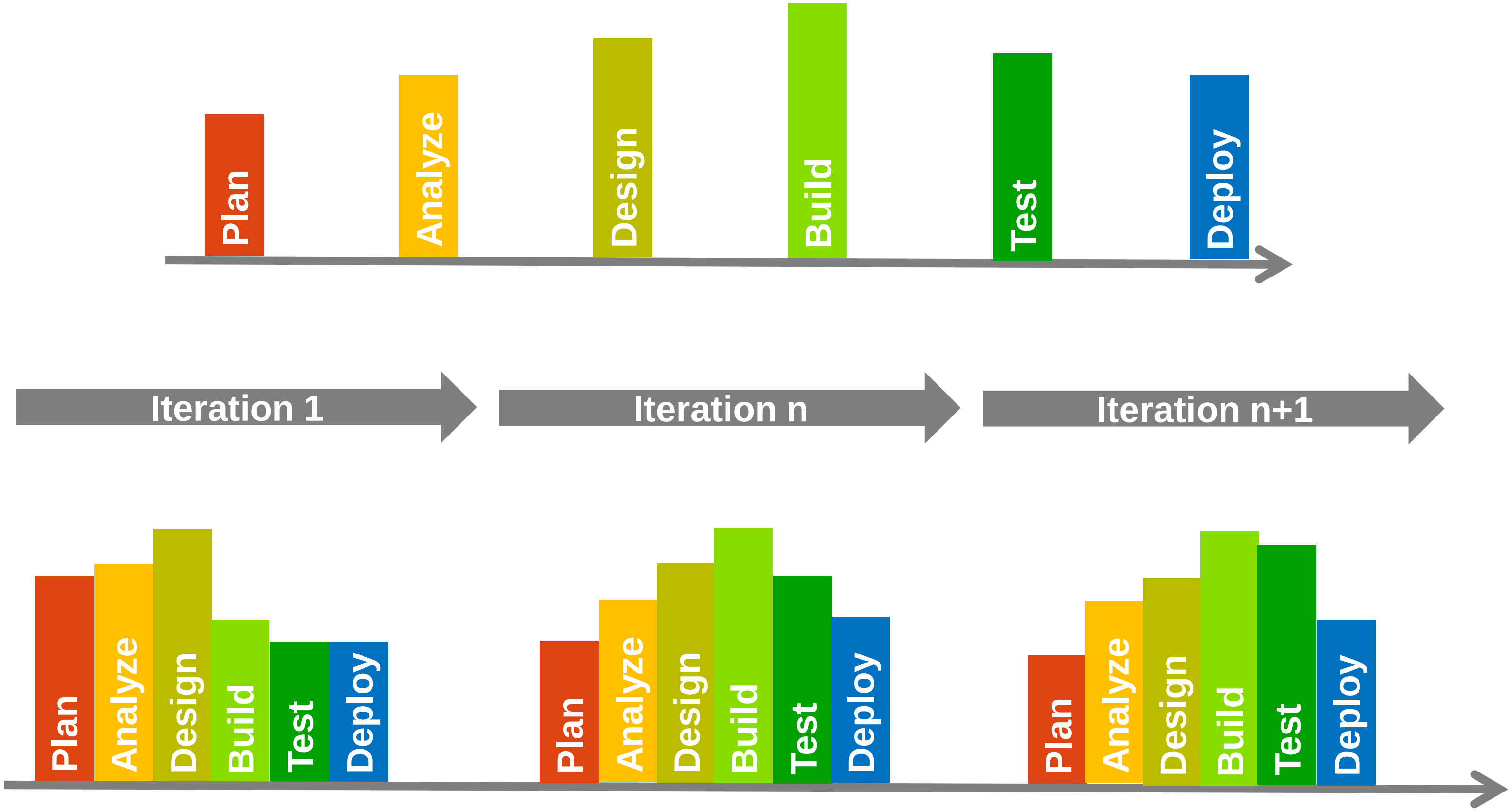


Scrum Artifacts

- **Product Backlog** - Evolving Prioritised list of requirements or features
- **Release Backlog -** Subset of product requirements that will be delivered in a given release
- **Sprint Backlog -** Subset of the highest priority work items taken from the product backlog that the Team selects and commits to delivering during a given sprint.
- The **Burn-down chart** – Based on the daily view of the sprint, this chart expresses the work left vs. time left.
- The **Burn-up chart** – Based on the daily view of the sprint backlog, this chart highlights the cumulative customer value (story points) being accrued over the duration of a sprint.
- The **Impediment Log** - Means of a risks and issues tracker.

Agile Vs. Traditional Approach

Agile Development is focused on an **iterative** (addressing all aspects of the lifecycle in each iteration), **incremental** and **flexible** approach to software development

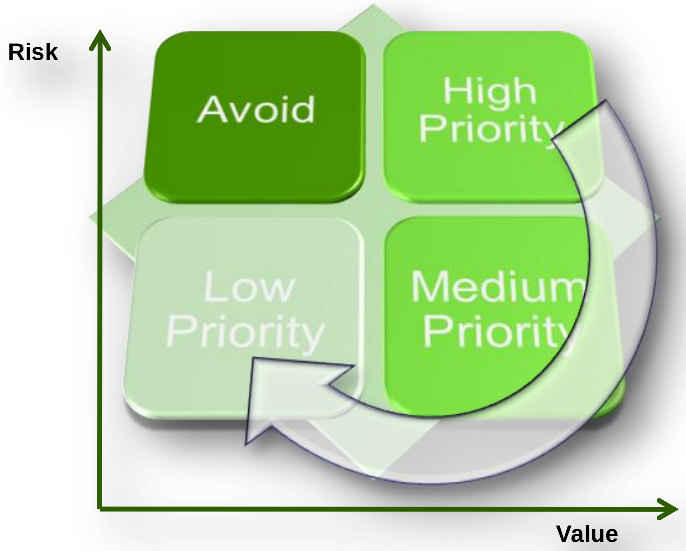


Activity 1 – Agile Vs. Waterfall

- The aim of this activity is to:
  - Demonstrate the efficiencies gained in an Agile production environment when compared to waterfall environments.

Potential Benefits of Agile

- Fast Time to Market
- Early Delivery of Customer Value
- Early and Frequent Testing
- Transparency and Visibility
- Early Risk Identification & Mitigation


Risk
Avoid
High Priority
Low Priority
Medium Priority
Value