BA15a – Overview of Agile

Credits: 7 PDUs / 1 Day

Course Level:
Intended for provide an overview for executives and team members

Course Description:
This course aims at introducing its attendees to the core values, principles, and practices of Agile. This course discusses how to plan and manage Agile practices, not only those in Scrum. The course also goes into greater depth about all the roles and responsibilities on the team and not just the Scrum Master and Product Owner roles.

The use of agile as an approach to managing projects has been increasing dramatically over the last several years. Gartner predicts that by the end of 2012, agile development methods will be used on 80% of all software development projects. PMI's research has shown that the use of agile has tripled from December 2008 to May 2012.

Learn how to apply Agile to current projects: explore how your projects can easily and successfully make the transition to an effective Agile environment.

Prerequisites:
No prerequisites - This course is suitable for both novice and experienced professionals who need to manage and implement a project. It is recommended that participants have a basic understanding of project management and business processes and business analysis.

Course Overview:
Many of today's Project Management and Business Analyst Professionals are finding themselves leading, managing and conducting analysis while on Agile development teams. We have found that many of the tools and techniques applied during a traditional project management approach no longer work as effectively, or at all. In order to do more than survive in this iterative development environment, today's Project Managers and Business Analysts must employ additional project management and business analysis tools and techniques to effectively lead their teams and deliver projects successfully.

This course will explore how your projects can easily and successfully make the transition to an effective Agile environment.

Agile is an incremental, iterative framework for project management and software development - where requirements and solutions evolve through collaboration between self-organizing cross-functional teams. This disciplined project management process involves:

- A leadership philosophy that encourages teamwork, self-organization and accountability
- A set of engineering best practices intended to allow for rapid delivery of high-quality software
- A business approach that aligns development with customer needs and company goals.

Overall Objective:
The overall objective would be to leverage training and education as part of a six step role out process for Agile adoption in the organization.

1. Training /Educate for common language and understanding of Agile
2. Process assessment and realignment
3. Select a pilot project
4. Realign roles and responsibilities related to agile
5. Identify metrics for validation and continuous improvement
6. Educate the business on the value of Agile

Learning Objectives:

- Plan, manage and close requirements for a project in reduced time using Agile practices
- Minimize project uncertainty and risk by applying Agile principles
- Ensure your project delivers required functionality and adds value to the business
- Create an environment of self-management for your team so that they will be able to continuously align the delivered product with desired business needs, easily **adapting** to changing requirements throughout the process.
- Learn how to apply Agile by measuring and evaluating status based on the undeniable truth of working, testing software, creating a more accurate **visibility** into the actual progress of projects.

Section 1: Introduction Why Agile?

Exercise 1a: Waterfall-Lean-Agile Simulation

- The Agile Lifecycle
- Introducing Agile to the organization - benefits of Agile – why organizations implement this approach
- Concrete industry statistics confirming the organizational and business benefits of using Agile
- Roles and Responsibilities that executive leadership must adopt before transitioning to Agile
- Establishing core hours - How will the team work during a day?
- Description of how a pilot project can be used as a prototype before rolling out Agile to the broader organization

Section 2: Value Driven Delivery – Identify the Stakeholders

- Value-Driven Development: Understand why agile development focuses so heavily on working products, its more general casting as "value-driven" development, with incremental, iterative and risk-driven approaches. Themes, theory and applications.
- How to build end-to-end systems in early iterations
- Value-based work breakdown, tracking progress, incremental-based planning and associated risk
- Setting Expectations with Stakeholders Prototypes, demos and feedback

  Exercise 2a: Identify the "Product Owner"
- Identify Project Success Criteria

  Exercise 2b: Review the Scrum Cheat Sheet

Section 3: Stakeholder Engagement – Envision the Product

- Setting expectations with stakeholders. Understand the value, the concepts, the theory, and some applications for working with stakeholders, buyers and users to get an optimal result.
- Envision the Product vision with your product owner and other stakeholders

  Exercise 3a: Review Agile Checklist
- Document Business Functionality

  Exercise 3b: Product Vision Goals and Strategies
- Document Technical Functionality

Section 4: Plan the Iteration (Sprint)

- Sprint Zero activities
- Elements of a successful Sprint Planning meeting
- Create a Sprint Backlog
- How to create a task board
- Create a Sprint plan – Establishing Sprint success metrics
- Managing the Solution Scope and Requirements using 2-4 week Sprints
- Adapting a change-driven (Agile) Project plan that works – what are the key differences from traditional (waterfall) project plans?
- Finalize the Iteration Plan and how the team will operate
- Managing your Scrums
- Prepare for the Sprint review
- Obtain customer acceptance of the product increment
- Hold a Sprint retrospective Update the product backlog

  Exercise 4a: Hold a Sprint Review and Retrospective

Section 5: Estimating ad Prioritizing Effort

- Planning Releases. Understand the value, the concepts, the theory and some applications for learning and adapting at all levels and on all topics (the product, the process, the team, and the organization).
- Establishing decision and acceptance criteria for user stories
- Different processes/methodologies for different situations
- Preparing for change
- Communicate status
- Create a Sprint backlog
- Establishing Sprint success metrics
- Estimating the level of effort (LOE) The art of slicing user stories
- Prioritize themes and releases
- Prioritize user stories
- Estimating team velocity
- Preparing for change – Is the organization ready?

  Exercise 5a: Hold a daily Scrum

Section 6: Tools and Techniques for Managing Scrums

- Agile Tools and Techniques Agile estimating, analysis and design Envision product, project outcomes and Project chartering
- Compile the product backlog
- Create a Sprint backlog Plan sprints and releases

  Exercise 6a: Discussion and handout – Tools and Techniques for Scrum
- Planning, Monitoring and Adapting
- Scrum Task Board
- Agile Estimating
- Agile Analysis and Design
- Team Velocity

  Exercise 6b: Create a Scrum board and hold a Daily Scrum
- Soft Skills Negotiation

Section 7: Boosting the Team Performance

- How to implement Agile – What it takes to make it work Create an environment for continuous improvement Manage the 'learning curve' of introducing any new type of project improvement approach Increasing team cohesion, visibility displays, and collaborative requirements/planning applications.

  Exercise 7a: Review Discussion - Remove Impediments to Progress
  - Discussion regarding the unique challenges faced by the organization while attempting to move from Waterfall to Agile

    a. How to work with labor unions who will not agree with the idea of cross-functional roles?
    b. How to deal with external vendors who do not consider themselves part of the Agile team?
    c. How to transform an organization from a traditional (hierarchical), to one that is open and self-managing?
    d. How to make Agile work when faced with challenges both internal and external
    e. How to meet aggressive Agile sprint goals, when most of the resources are working on multiple projects at the same time?
    f. How to negotiate the dependencies of enterprise groups (i.e., architects and database designers) when Agile teams demand their involvement in order to meet their sprint deadlines
- Coaching the Team – How to keep them motivated and moving forward towards the desired outcome
- How to promote processes that promote sustainable development
- Verifying and validating using an Agile approach
- What does sign-off really mean?

Section 8: Additional Information

- Useful books and links on Agile