

PMI and Agile – Oil and Water or Can They Coexist?

Part of Agile Workshop at PMI CVC Chapter

Audience Composition

An approximate total of 65 participants:

- Approx. 61 participants are certified PMPs (Project Management Professionals)
- Approx. 57 participants are project managers
- Approx. 50% are managers
- 1 Program / platform manager
- 1 Capital Planning Support
- 1 COTAR

Mood of the Room

What comes to mind when you think of ‘Agile’:

- Nothing
- Noisy rooms
- Recursive
- High performance
- Team effort
- Adaptable
- Undisciplined
- Iterative
- Not applicable for all
- Anarchy
- No documentation

65% of attendees come into the workshop with a positive feeling about Agile

Break Out Session

Participants broke out into groups of 6 to 8. Each group were assigned 1 of the PMI Knowledge Areas and asked to discuss and consider the following:

- How do these activities align with Agile?
- Where and why should they take place relative to Scrum?
- Do they conflict with Agile and if so, why?

The notes produced by of each of the teams have been recorded below by Knowledge Area:

Project Integration Management [team 1]

PMBok Chapter 4

- Develop Project Charter
 - Spirit aligns with Agile principles
 - Scrum assumes that the project has charter
 - Agile / Scrum does not dictate a formal Charter document
- Develop Preliminary Scope Statement:
 - Aligns with Agile principles
 - The Scrum Product Backlog defines scope
 - Agile / Scrum does not dictate a formal Scope Statement document

The team did not document beyond this point

Project Integration Management [team 2]

PMBok Chapter 4

- Develop Project Charter
 - Empowers team
 - Q: How does resource organization work with a larger company?
- Develop Preliminary Scope Statement:
 - Define features at initiation
 - Redefine at each Sprint planning
 - User Stories within Sprint
 - Sprint Backlog
- Develop Project Management Plan:
 - Tools such a burn-down charts
 - Cork board of stories and other info
- Direct and Manage Project Execution:
 - Daily stand-up
- Manage and Control Project Work:
 - Daily stand up
 - Retrospectives
- Integrated Change Control:
 - Product Backlog
 - Sprint Backlog
 - Retrospectives
- Project Close:
 - Retrospective

Project Scope Management [team 3]

PMBok Chapter 5

- Scope Planning:
 - The Scrum process!
- Scope Definition:
 - Product Backlog
- Create WBS:
 - Sprint Backlog
- Scope Verification:
 - Sprint Retrospective
- Scope Control:
 - Continuous throughout process

The main difference between the PMBok's approach to Scope Management is that it encourages the completion of the WBS at planning, whereas in Agile the WBS is fluid and continuously evolving

Project Scope Management [team 4]

PMBok Chapter 5

- Scope Planning:
 - Agile does not preclude having a plan
 - Define = Product Backlog
 - Verified = Product incremental review by customer
 - WBS = backlogs (less details) task planning
- Scope Definition:
 - Ties to Product Backlog

- Prepare up front, revisit and validate regularly
- Challenge = intra-sprint dependencies with others
- Create WBS:
 - Product – Sprint – Tasks
 - Up front with each sprint
 - Within sprint during daily stand up
- Scope Verification:
 - Review product with customer at the end of each sprint
 - Demo of product increment
- Scope Control:
 - Traditional, documentation / process oriented, owned by role VS. Iterative, team oriented with customer through-out

Project Time Management [team 5]

PMBok Chapter 6

- Activity Definition – fits within Agile under:
 - Milestones = Product Backlog
 - Activity list = Sprint Backlog
- Activity Sequencing:
 - Project schedule = Daily stand up and Product Backlog
 - Network diagrams = Daily stand up and Sprint backlog
- Activity Resource Estimating :
 - Resource requirements = Daily stand up, Product Backlog and Sprint Backlog
 - Resource breakdown structure = Daily stand up, Product Backlog and Sprint Backlog
- Activity Duration Estimating:
 - Duration estimates = Product Backlog and Sprint Backlog
 - Attributes = Daily Stand Up and Sprint Retrospective
- Schedule Development:
 - Project schedule = Product Backlog
 - Schedule model data = Sprint Backlog and Daily Stand ups
- Schedule Control:
 - Performance measure = Daily stand up and Sprint Retrospective
 - Requested changes = Sprint Retrospective, Product Backlog and Sprint Backlog

Project Time Management [team 6]

PMBok Chapter 6

- Activity Definition:
 - Sprint 0: story backlog to do in period
- Activity Sequencing:
 - Scope that is scheduled into the sprint
 - There is no formal document for this in Scrum
 - The Daily Stand up handles scheduling and sequencing
 - Scrum does not have a formal WBS or Network Diagram
 - Could be hard to identify and manage the critical path
- Activity Resource Estimating :
 - Takes place during Sprint 0
 - Ideal Scrum team consists of 7 people (+/- 2)
 - Challenge = no infrastructure / how do you plan for hardware?
- Schedule Development:
 - One sprint at a time

- Schedule Control:
 - Daily Stand up

Project Cost Management

PMBok Chapter 7

Not assigned

Project Quality Management [team 7]

PMBok Chapter 8

- Quality Planning:
 - Done in the Sprint Backlog
 - Issue: Expectations of quality may vary between performers
- Perform Quality Assurance:
 - Happens within the Sprint
 - Constantly measured and adjusted
 - Issue: timely resource availability (also an issue in traditional methodologies)
- Perform Quality Control:
 - Happens within the Sprint Retrospective

Project Human Resource Management

PMBok Chapter 9

Not assigned

Project Communications Management [team 8]

PMBok Chapter 10

- Communication Planning:
 - Scrum promotes information sharing and includes methods for tracking progress
 - Burn-down chart
 - Retrospectives with customer team
 - Movement of cards / user stories
- Information Distribution:
 - Status is always available and visible
- Performance Reporting:
 - Regular reviews with stakeholder
 - Decision based on burn-down
- Manage Stakeholders:
 - The role of Product Owner brings stakeholders closer to the team
 - Aids in the removal of impediments

Project Communications Management [team 9]

PMBok Chapter 10

- Communication Planning:
 - Established at the beginning of the project in Sprint 0
 - Takes place daily during the stand up
 - More dynamic in Agile – no formal plan
 - Issue: Agile does not address how to communicate outside the team
- Information Distribution:
 - Information displayed in the team room

- Daily stand ups
- In Agile the Product Owner is expected to communicate outside of the team but this is more the role of the Project Manager in traditional methods
- If the Product Owner is not in the room they may miss vital information and hamper progress
- Cultural issue: External stakeholders may still expect formal communications
- Performance Reporting:
 - Daily Stand up
 - Less formal
 - Issue: In some organizations reporting needs are more formal so need reporting beyond the Agile team
- Manage Stakeholders:
 - Discuss impediments in Daily Stand up
 - Product Owner plays key role in communicating to other stakeholders
 - Sprint Reviews are where stakeholders see through put
 - Issue: Outside stakeholders may be used to hierarchy and upper management may expect higher level of contact

Project Risk Management [team 10]

PMBok Chapter 11

- Risk Management Planning:
 - Product Backlog
 - Sprint retrospective
 - No inherent conflict – more of a continuous process
- Risk Identification:
 - More focus on fixing risks instead of just documenting them
 - Occurs throughout Scrum process
 - Helps to identify and fix the REAL risks instead of the ‘regular’ and ‘common’ risks
- Qualitative Risk Analysis:
 - Occurs throughout Scrum process
- Quantitative Risk Analysis:
 - Less of a natural fit as it is more difficult to put numerical value to risks
 - Elaborate analysis may not be possible due to time constraints
 - Tend to not look too far ahead
- Risk Response Planning:
 - Occurs during Product Backlog and Sprint Retrospective
- Risk Monitoring and Control:
 - Occurs throughout Scrum process

Ideally risk manage does not conflict with Agile as long as there is someone tasked with the long term planning and view of the project.