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

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<u>Audience Composition</u>

A total of 23 participants with the following skill sets:
- 8 participants are certified PMPs (Project Management Professionals)
- 13 participants have project management experience
- 6 of the participants where new to Agile
- 8 participants have moderate Agile experience
- 2 participants have more advanced Agile experience

Objectives and thoughts from **participants** during the introduction and first presentation:
- Team has gone Agile and are looking to help them be successful
- PMP teaches leadership whereas Agile teaches facilitation – how does this mesh?
- Ways to take 'off' project/program management from coaches so they can focus on teams
- Project Manager on some projects and Scrum Master on others – how does / can this work?
- Want to understand what the impacts would be to an organization

<u>Mood of the Room</u>

What comes to mind when you think of 'PMI':
- Structure
- Certification
- Process Heavy
- Gantt charts
- Rigid
- Continuous Education
- Safe
- Standardized
- Command and Control

What comes to mind when you think of 'Agile':
- Collaboration
- Leadership
- Less process / documentation
- Uncertainty
- Facilitation
- Adaptable
- Chaotic
- Developer driven
- Trust
- Confusion over metrics - some thing we have meaningful metrics, others don't
- Speed

- Inconsistency in implementation

<u>Break Out Session</u>

Participants broke out into groups of 4 to 6. Each group were assigned 2 of the PMI Knowledge Areas and asked to discuss and consider the following:
- o Do these activities have a place in Agile?
- o If so, why and where should they take place relative to Scrum?
- o If not, why not?

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 – still useful in Agile
    - o Required in Agile
    - o Sufficient starting point (i.e. 'just enough')
    - o Develop Preliminary Project Scope Statement:
        - Backlog of preliminary epics / themes (in essence the scope statement)
        - As part of sprint 0
- Develop Project Management Plan:
    - o Outcome of iteration 0
    - o Release plan
    - o Backlog broken down
    - o Estimation of backlog performed (initial estimate but no commitment)
- Direct and Manage Project Execution is a natural bi-product of the iterative Scrum process
    - o Execution of Scrum (iteration n) – sprint plans, execution, reviews and retrospectives
    - o Empowered teams vs. 'command and control'
- Manage and Control Project Work and Integrated Change Control:
    - o Inherent in scrum process
    - o Scrum welcomes and supports change
    - o Burn down charts and metrics
    - o Sprint demos
    - o Retrospectives
    - o Re-forecast / re-estimate
    - o Sprint planning
    - o Manage backlog – based on retrospective and new requests
- Close Project
    - o Release / hardening iteration
    - o Release retrospective

Further discussion:
PMI tends to focus on 'hard edge' completion of phases before moving forward (i.e. sign-off) vs. Scrum that supports activities crossing phases (i.e. Scope Management crosses many sprints at the same time as work begins). Kelly added that PMI recognizes 'rolling wave' planning (more detail as the time gets closer) and the overlapping of phases.

Project Scope Management [team 4]
PMBoK Chapter 5
- Project Scope Management:
  - Product backlog development and management

The team ran out of time at this point

Project Time Management [team 4]
PMBoK Chapter 6
- Activity Definition done sprint by sprint and at the release level
  - Release planning
  - Sprint planning
  - Story crafting
- Activity Sequencing – a bit of debate on how 'formal' to be
  - Informally done during product backlog prioritization – to show dependencies
  - Iteratively done:
    - Performed during release planning
    - Performed during sprint planning
    - Performed during daily stand ups
- Activity Resource Estimating – need to have a rough idea of skill sets needed for the core team, but can augment core team with specially skill-sets as needed (i.e. DBA)
  - Project / release planning
  - Sprint planning
- Activity Duration Estimating:
  - Release planning – number of work periods defined
  - Sprint planning – tasks with hours by iteration
- Schedule Development – not as co defined as a Gantt chart, but it happens
  - Release planning
  - Sprint planning
- Schedule Control – in Agile you DO know where you are, the output just 'looks' different
  - Release planning
  - Sprint planning and reviews
  - Daily stand ups
  - Burn down charts

Project Cost Management [team 2]
PMBoK Chapter 7
In traditional project management, scope is fixed and schedule and cost are somewhat fluid (even though stakeholders want to know them early). In Agile, you can fix the cost and then manage the scope and schedule.
- Resource costs are easier to predict in Agile
- Infrastructure / hardware costs are more challenging with Agile – because don't always have 'big' planning up front
- Cost management needs to happen regardless of the methodology used (i.e. waterfall or Scrum)
- Estimates evolve over time in Agile
  - At the start of the project clients still needs to know how much the project will cost
  - As you know more this estimate will evolve
  - Can predict future resource costs based on velocity

Further discussion:
Infrastructure / hardware cost planning should take place during iteration 0. Kelly also added that Agile provides better transparency into value related to expenses. The client is able to decide to stop project at 80% of value delivered with a significant reduction in overall spend.

Project Quality Management [team 3]
PMBoK Chapter 8
The team did not have enough time for this one

Project Human Resource Management [team 2]
PMBoK Chapter 9
- Planning and acquiring still relatively the same – but a mind shift change about work because of transparency
- Scrum involves having more 'projectized' teams
    - De-emphasizes functional organization structure
    - This is a big challenge for many organizations moving forward
    - Kelly's thoughts – organizational change is needed to fully support agile (broader than projects, teams)
- Scrum is focused on self managing teams (in theory) – but there is always some type of leadership
    - This involves a migration from manager to leader to facilitator
    - Influence and coach vs. Command and control
    - Try to shift responsibility onto the team itself

Further discussion:
Kelly and Tania raised the point that a distinction needs to be made between leadership vs. management. Reporting relationships that exist between team members will add additional strain to an Agile team.

Project Communication Planning [team 1]
PMBoK Chapter 10
- Key stakeholders are involved in the Scrum – via stand-up and sprint planning and review
- Determine initial information radiators that the team will maintain and display
- Retrospectives
- Collaborative working environment
The team ran out of time at this point

Further discussion:
Kelly mentioned that Scrum by it's nature provides all the communication planning for the team and key stakeholders. However, the organization itself may require additional reporting artifacts.

Project Risk Management [team 3]
PMBoK Chapter 11
'Traditional' scrum training may not call out specifically the area of risk planning and management, but by the nature of following scrum principles, risk is addressed
- Risk Management Planning:
    - In Sprint 0 and beyond
    - Additional activity as part of print 0

- Risk Identification:
  - Part of the Agile process – identification of impediments
  - Feedback loops
- Qualitative and Quantitative Risk Analysis:
  - "Risk Wall" – additional activity (to make risks visible)
  - Product backlog prioritization – Pull forward risky items, stories
- Risk Response Planning:
  - Iterative planning
  - Scrum provides high visibility – to risks early that might get 'hidden' in waterfall
  - Create "risk tasks" – is an option
- Risk Monitoring and Control:
  - Iterative (planning and retrospectives)

Further discussion:
There was a lot of discussion and debate within the team that discussed Project Risk Management. During their report out they noted that there seemed to be little in Agile literature about risk management and specifically risk management strategies and techniques in Agile. They agree that Agile methodologies themselves (e.g. Scrum and XP) inherently address a large degree of software development risk but they cautioned that if teams do not consciously manage risk they may get burned. Finally they agreed that having a background in traditional project management would be very helpful in this regard.

Additional Discussions

During the report out one of the teams highlighted the following pain points that they had experienced during Agile adoption:
- The Agile schedule feels too fluid
- It has been challenging to identify and track meaningful metrics – specifically in non software development project efforts.

Another team shared that they had had a good discussion about how all of the concepts covered by the knowledge areas represent things that should be considered on every project regardless of the methodology being applied. The key difference being the role that the 'project manager' plays in ensuring that these are done. It is unclear what the role of the 'project manager' is in the Agile environment.

Project managers need to make a move from 'management' to 'leadership' and eventually 'facilitation'. This can be a very big shift for many traditional project managers. If traditional project managers cannot make this shift then there may well not be a place for them in Agile projects.