

Agile Special Interest Group

April 2015 Post Meeting Report

Background

Agile development has become an essential response to rising mobile and internet usage, as well as to the increasing need for IT to provide a rapid and accelerated software delivery to the business. As an industry therefore, we have started to move away from the old Waterfall development methodology to this new, more dynamic way of working.

However, Agile is not just a technology methodology/delivery method that can be adopted solely by IT. It brings with it the need for organisational transformation, embracing the culture and principles of collaboration, adaptive, continuous learning and responsiveness to change. The key questions are how do you go about doing that and does it really bring the benefits that it promises?

Learning together and continuous improvement underpins Agile. So to answer these questions, Quantum Plus has created a Special Interest Group to share experiences and thought leadership. The first meeting was held at the end of April 2015, with participants from a number of organisations across different industry sectors and with different levels of maturity in Agile.

Explaining Agile

At the inaugural meeting, it was important to achieve a common understanding of what "Agile" actually means, and to also agree the framework and objectives for the group. This activity was supplemented with thought leadership along with examples and information on the chosen theme for the day: Contracting and commercial models, measures, benefits and value realisation.

We invited a coach to facilitate group discussion and activities around getting to understand Agile, which included:

The coin game – demonstrating the benefits of team working and continuous improvement.

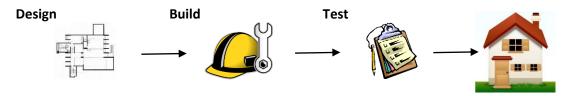
Two teams were created and given eight coins – all with heads facing upwards. Each member on the team was asked to turn all of the coins over and pass them on to the next person – a bit like a Waterfall project! This took the team 50 seconds to complete, with people reporting feelings of pressure, rushing and frustration.

In the second round, the coins were turned and passed on in batches of two, increasing throughput and speed as well as encouraging team work. With this method, individuals weren't waiting for the whole batch to be completed before starting their activities. In the second round, the teams delivered their first completed batch within 11 seconds and were 12 seconds faster in passing all of the coins to the end, clearly showing the increase in velocity that can be achieved through the utilisation of Agile methods. There was also a general consensus of reduced frustration and stress.

Quantum House

House build analogy – to represent the overall difference between Waterfall and Agile.

Building a house using Waterfall methodology:

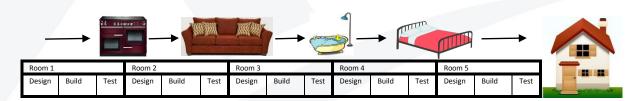


This method can create the following issues:

- The design may not be accurate for the house
- Costs can be higher than initially forecast
- There are no visible results until the end
 - therefore problems are only discovered at the end during testing
- If the situation changes half way through the build, you have to go back to the design stage

By contrast, building a house using Agile methodology:

The efforts of the house build are divided and focused around completion of each room, with each focus (Sprint) delivering a completed product.



Estimation Accuracy – the accuracy of a team

As a key part of Agile involves estimation, the accuracy of the method is often questioned, particularly due to fluidity of the estimations. The "team estimation" concept was demonstrated to prove its effectiveness.

Each person was asked to provide an estimate of how many sweets were in a jar.

The estimates ranged from 25 to 70.

The group then had a discussion around the estimates, with outliers giving an explanation as to why they had estimated as they had. Individuals were then asked to re-estimate and the range changed to 20-35. The number of sweets was 25, showing that group discussion had provided a robust estimate.

Key learnings:

- Experience leads to accuracy a first time team tends to underestimate but as they work together, estimation accuracy improves
- Work as a team, not as individuals, in order to create an accurate estimate sometimes the discussion can be more important than the outcome
- Don't always dismiss outliers they could know or have experience that the rest of the group is lacking

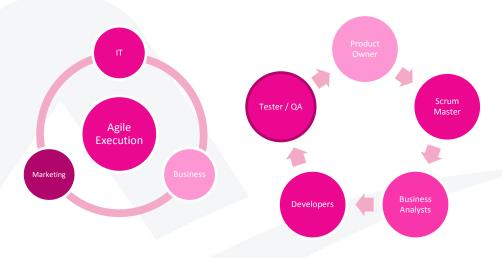


The remaining part of the meeting was broken down into the following areas to cover the theme for the day: *Contracting and commercial models, measures, benefits and value realisation*:

- The "One Team" Approach
- Measures and Metrics a new way of thinking and working
- Contracting Principles
- Sourcing Approach for Agile

The One Team Approach

Creation of a successful team, the principles of working together and the key roles of each team member were discussed.



Creating "One Team" that involves and is supported by the business AND IT is essential for Agile success. Marketing was highlighted as a key role in a team focussed on e-commerce delivery.

It was decided that a successful team should follow the guidelines below:

- Seven members, plus or minus two.
- Cross-functional members, including software engineers, architects, programmers, analysts, QA experts, testers, designers, etc.
- Ideally all team members are co-located. Adaptations are required for remote working. (How to enable Agile in an offshoring model is a theme for a future group session).
- Estimates are prepared by collaborative team techniques.
- The development team must complete the work agreed in the Sprint Planning Meeting, with the team first negotiating the amount of work it takes on.
- The team has the autonomy to determine how and when to complete its work. As long as the team finishes its work by the deadline and under budget, it is entirely up to the team to determine how that happens.



Scrum Master and Product Owner were identified as roles that were difficult to successfully fill. Advice from group members concluded that individuals from Testing make good Scrum Masters, as do Business Analysts. The type of person, their skills, personality and ability to facilitate can be more important than technical knowledge of the project.

Behaviours of the Team

It is important to align the team around a set of behaviours to encompass a framework and principle way of operation for the whole team.

Suggested themes to be discussed were:

- Focus on business need
- Deliver on time
- Collaborate
- Never compromise on quality
- Build incrementally from firm foundations
- Develop iteratively
- Communicate continuously and clearly
- Demonstrate control

Measures and Metrics - a new way of thinking and working

Putting in place measures and metrics to drive the right outcomes of Agile is essential to the success of delivery. The point of measurement is to provide feedback and so continuous service improvement.

The measures should apply to the team rather than a project – a fundamental principle that needs to be applied and can cause issues when contracting with suppliers. In addition, it is important that all measures are calibrated to the environment, in order to provide an accurate baseline measurement against which improvements can be made.

When deciding on the key measures, it is important to start with desired outcomes, not what is easy to measure. Some ideas for measures around each of the outcomes are detailed in the diagram below. There are a number of metrics that can be attributed to each of the areas and specific targets may also be put in place around productivity improvements e.g. velocity base lining and increasing throughout.





Measures can also regulate an area of concern around Agile delivery as to whether faster means lower standards. It is important that overall governance is not neglected and that quality controls and standards are always adhered to. Identification of the standards needs to be defined and agreed before any project. Quality should be measured through an assessment of adherence to company standards, evaluated every six months through peer assessment by another team. The standards are written as a description of expected behaviour. Flexibility as to how teams accomplish them should be allowed as long as the team adheres to the intent of the standard. The feedback is the basis for continuous improvement and can also identify innovations and best practice to be implemented across all teams.

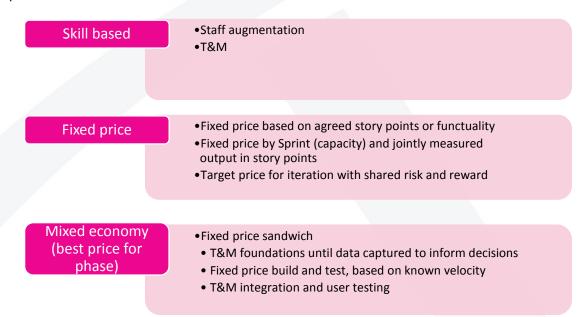
Commercial Models and Contracting Principles

A key factor of Agile success is based on "One Team" behaviours and metrics. This contradicts traditional commercial models of a clear division of responsibility through tight contracts, service definition and service level agreements. Agile contracting requires a new paradigm but one which provides predictability and comparability.

Contracts need to accommodate both the hard and soft factors associated with a successful Agile delivery, with changes to be made around requirements, approach, governance, metrics and measures, people and relationships, warranties and liabilities and pricing and commercials.

Rigid adherence to templates, processes and procedures hinder customers from adapting to the speed of change required in commercial environments. Therefore a value-based agreement can help influence behaviour and remove some of the barriers to making the relationship more fluid and meaningful. Trust is key and no single document can solve relationship challenges. Both parties must put in the commitment to "make it work" and build that trust.

There are a number of different pricing model options to be considered that were discussed by the group:



The market is quite immature at this point in time with regards to the benefits and drawbacks of each model, with most contracting on a resource augmentation and T&M basis. However, there were very successful case studies of more mature pricing models discussed, where enormous benefits had been derived for the companies involved.

Sourcing Approach for Agile

The final subject of the meeting discussed the best sourcing approach for Agile. Based on the fact that Agile is very team focussed, underpinned by collaboration and trust, a paper based, "arm's length" purely process driven RFP may not provide the right partner for the parties. It is important to focus on ways of working, culture, relationship and how the teams would integrate and collaborate. A process driven workshop based approach, with careful consideration of access to data room, workshop approach and format, agendas and overall output enables a fair and equitable method for evaluation and assessment thus delivering a better partner choice and providing the following benefits:

- Effective assessment of relationship and culture.
- Demonstrates ability to work in collaboration.
- Allows for discussion and targeted questioning/clarification.
- Allows for iteration and supplier value.
- Provides full auditability through pre-determined and weighted evaluation criteria to support the final decision.
- Builds client staff understanding and "buy-in".
- Access to a data room provides access to existing documentation in a controlled way and demonstrates how suppliers use this to understand and relate to customer.
- Final deliverables from the bidders are in the form of key contract schedules (i.e. not a sales-led proposal document).

The benefits of having two or more external providers was discussed as a way of obtaining the optimal delivery mechanism:

- The Agile development work is divided into two (or more) independent streams that run in parallel and allows comparability to help understand what good Agile working looks like and to assess relative performance to establish baselines.
- A dual supplier models allows for the gradual transfer of work to whichever Agile supplier/stream proves more successful all round and for easier replacement of a low performing supplier.
- It also provides for ongoing competitive tension.

A single external Agile supplier is the most common approach currently. This minimises supplier management costs and may be necessary for smaller scale organisations or when piloting Agile, but does not allow the performance of the Agile supplier to be tested comparatively or provide any reversionary model.

A decision should be made as part of a wider Agile sourcing strategy (or wider IT sourcing strategy) to ensure that appointment of Agile supplier(s) takes place within the context of the agreed target sourcing model.



The Group going forward

Overall feedback from the attendees has been excellent and everyone who attended benefited and learnt something new, finding the group to be very thought provoking. Our next meeting is likely to take place in Q3 and we already have a list of topics, generated by the group to consider as the theme for the meeting. In the interim, a private LinkedIn group has been set up to continue ongoing discussions and experiences.

If you are interested in joining the group or require any more detailed information about the meeting, please do get in touch with <u>Lesley Michaelis</u>.

