Agile and PRINCE2®
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Introduction
Within the world of method frameworks it is very easy to become polarised on one specific framework and become a ‘fundamentalist’ on that one single method without considering the potential benefits of adopting a broader view.

Method fundamentalism can lead to a negative focus on why all other method frameworks are wrong, rather than adopting a positive focus on how integrated method frameworks can enable excellent delivery – which of course is the whole point of having them. Most method frameworks have something to offer and, with positive inspection and adaption, they can co-exist and deliver complementary benefit.

This whitepaper discusses the integration of agile with PRINCE2 (Projects IN Controlled Environments v2).

What is agile?
There are a number of agile frameworks that, in essence, all aim to deliver value to the customer in the shortest time to market with the most effective cycle times. This can be achieved within a product-centric delivery approach, or a project-centric delivery approach (more later on the differences).

What is PRINCE2?
PRINCE2 is an established, flexible project management framework that is applied around any delivery approach. It is part of the Best Management Practice (BMP) portfolio of frameworks. This is a family of management and delivery frameworks that have been built from learned best practice, covering complementary topics such as portfolio, programme and project, and service management.

A question of governance
Does agile always require project governance? Agile requires governance; however that may or may not be project governance.

In their New New Product Development Game, Takeuchi and Nonaka said: ‘Although project teams are largely on their own they are not uncontrolled. Management establishes enough checkpoints to prevent instability, ambiguity and tension from turning into chaos. At the same time, management avoids the kind of rigid control that impairs creativity and spontaneity.’ ¹

One definition of project governance in PRINCE2 is: ‘a project is a temporary organisation that is created for the purpose of delivering one or more business products according to an agreed business case.’ ²
So, if we go back to our original question – does agile always require project governance? – the answer is no. Governance is built into agile frameworks (e.g. scrum, XP) however what is being delivered may not be being delivered within a project. For example, BAU (business as usual), portfolio or product deliveries are not usually delivered as projects, and therefore project governance isn’t required.

Agile can be successfully scaled across very large and complex organisations without project governance frameworks such as PRINCE2. In general, businesses use two major approaches to deliver change: these are project frameworks and product (or BAU/portfolio) frameworks. A project framework is normally implemented when there is a clear business case to do something over a period of time, and the complexity requires project governance.

Product frameworks deliver without project governance because they don’t require it; they are either delivering a prioritised backlog of defects and small changes to an existing product, or they are producing a new product that has a business case but isn’t complex enough to require project governance.

Most agile frameworks actually come from the product world rather than the project world. But they can all be used within the project world if a project delivery framework – such as Prince2, AgilePM or PMBoK – is wrapped around them. This whitepaper discusses specifically wrapping PRINCE2 around agile.

**A closer look at agile**

‘Agile’ is a family of delivery and management frameworks that has been evolving since the mid-1980s and that enable continuous, frequent delivery of demonstrable value in today’s constantly changing environments.

Agile frameworks all align to an ‘Agile Manifesto’ that defines agile values and core principles (more on the principles later). These values and principles must be adopted for the framework to be considered to be agile. The agile values stated in the Agile Manifesto are:

- **Individuals and interactions** over processes and tools
- **Working products** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

Agile recognises that, while there is value in the items on the right (e.g. processes and tools), we value the items on the left more (e.g. individuals and interactions).

Agile does not however expect everyone to be a genius who knows everything about everything. Therefore, depending on the complexity of a delivery environment, it is essential that people have reference to a
'knowledge cube'; either another person who can coach them, or a set of reference information from experiences and best practice. In the project world, and for the purposes of the whitepaper, this would be PRINCE2.

Some environments are very simple and so don’t require standards and guidance. Within agile, we start with the basic agile framework. We then inspect and adapt to include other processes or documents that may be required, to evolve into our delivery approach – but only if and where the process or document clearly demonstrates value to the delivery to customer / end user.

Sadly all too often, when the BMP frameworks such as PRINCE2 are used, they are used far too strictly and without due consideration to the effectiveness of the delivery. In these circumstances it can become a case of delivering the framework for the framework’s sake, rather than focusing on delivering the product in a suitably adapted PRINCE2 implementation.

The effective and pragmatic application of agile can avoid making this costly mistake.

To help us illustrate this, here are the 12 agile principles we mentioned earlier:

Twelve Agile Manifesto principles

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable product.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer’s competitive advantage.
3. Deliver working product 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.
7. Working product 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 maximising the amount of work not done – is essential.
11. The best architectures, requirements, and designs emerge from self-organising teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.
For an agile environment to be created, the people and the organisation must have the courage to implement the agile values and principles in a disciplined way.

A closer look at PRINCE2
PRINCE2 is a project management framework that can wrap around various other frameworks. As an example, PRINCE2 can wrap around a waterfall delivery framework, with PRINCE2 providing the necessary project governance.

The erroneous assumption that PRINCE2 equals waterfall is a basic misunderstanding of what project management frameworks like PRINCE2 actually are.

Agile can, and does, coexist with PRINCE2 as long as PRINCE2 is tailored; in fact tailoring is one of PRINCE2’s seven guiding principles.

To quote Managing Successful Projects with PRINCE2:

‘The purpose of PRINCE2 is to provide a project management method that can be applied regardless of project scale, type, organisation, geography or culture. This is possible because PRINCE2 is principles-based. The seven PRINCE2 principles can be summarised as:

1. Continued business justification
2. Learn from experience
3. Defined roles and responsibilities
4. Manage by stages
5. Manage by exception
6. Focus on products
7. Tailor to suit the project environment.

It is the adoption of these principles that characterises whether a project is using PRINCE2, not the adoption of processes and documents alone.’

There is nothing in these PRINCE2 principles that enforces waterfall, and nothing that prevents agile being implemented effectively.

Integrating agile and PRINCE2
Agile and PRINCE2 can fit together well because agile can be used as the agile delivery framework, with PRINCE2 as the project governance framework.

It is important to reiterate at this point that agile can be, and has been, very successfully scaled across very large, complex organisations without any project governance.

Regrettably PRINCE2 is often implemented with an old-style ‘command and control’ mindset, rather than one of ‘facilitation and enablement’ – even
though, as we’ve seen in its principles, PRINCE2 does not recommend command and control.

When using PRINCE2 with an agile framework, we must address the following ‘traditional management behaviours’:

• A ‘contract’ being created by a waterfall-driven specification and then delivered through a ‘project manager’ who becomes a contract negotiator between customer and supplier; the agile team consists of customers (product owner) and suppliers (development team) working collaboratively together to achieve clearly defined sprint and release goals.

• Agile project managers do not command and control; instead they facilitate, enable and protect delivery teams.

• Agile project boards do not command and control project managers; instead they facilitate, enable and protect them.

• Estimates are forecast guesses based on the best information available at the time (i.e. baseline plans); forcing delivery against a fixed contract defined early in the project will achieve a significantly incorrect outcome if the delivery environment is changing.

• Delivery should be made in the form of short vertical slices of working software (or product) delivered in weeks or months, not in long stages.

We must also enable and consistently encourage the values and principles described in the Agile Manifesto.

The above list of ‘traditional management behaviours’ is not exhaustive, but it does indicate where behaviours in the use of PRINCE2 need to be inspected and adapted to enable effective agile.

Agile overlaps in certain areas with PRINCE2. However agile is typically compared and contrasted with the waterfall approach to delivery, whereas PRINCE2 is a framework for managing projects.

PRINCE2 has been designed to be used as a management wrapper for any delivery approach. PRINCE2 manages stages of projects and manages the delivery of products. It does not describe what delivery products will be produced or how; and it certainly does not mandate a waterfall delivery approach.

An example of an agile framework that could be used to integrate with PRINCE2 is scrum. Note that agile does not equal scrum. Scrum is simply one of the agile options.

Scrum is without doubt the most implemented version of agile worldwide. Scrum contains a product backlog of items; typically ‘stories’ and defects, defining what needs to be done, and this is created by a product owner.
The development team then defines tasks that define how the stories will be done, to satisfy the stories within a short delivery ‘sprint’ of typically two to four weeks.

The development team always aims to deliver working product at the end of each two to four week sprint, and of a quality that could be implemented in a live environment. However if it is inappropriate to deliver to live from the sprint, the sprint increments could be grouped together and delivered in a later release.

PRINCE2 can wrap around any delivery approach and so scrum is no exception. Scrum provides the team delivery discipline and rigour, and PRINCE2 the project management governance.

Fundamentally, when assuring delivery within a waterfall delivery approach, it is about assuring that the appropriate products are created within the waterfall stage – always a difficult and risky task. In contrast to this, agile assurance is about assuring outcomes, delivered within short manageable sprints, with all sprint outcomes being of demonstrable value to the stakeholders.

In summary
Implementation of delivery and governance frameworks is not about doing the framework perfectly. Rather, it is about using the framework in the most effective way that will work in the real world to improve delivery, and then continually transform to consistently, accurately and predictably achieve the best that the team / programme / project / business can achieve.

Successful transformation is inclusive, not exclusive. If the business mandates the use of a project governance framework like PRINCE2, the most appropriate reaction should be to figure how to make the different frameworks work together in the real world – then continually and consistently transform from that point on through to delivery and beyond.

Transformation is about evolution not revolution. Remember that if we always do what we’ve always done, we’ll always get what we always got.

References
2 PRINCE2 manual 2009
3 http://agilemanifesto.org
4 PRINCE2 manual 2009

NB. in the Agile Manifesto values and principles listed above the word ‘software’ from the original definition has been changed to ‘product’ throughout as agile is now used in diverse delivery environments, not just software.

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About the author

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Peter is a Certified Scrum Trainer, member of the BCS Agile Committee, Project Management Institute Agile Certified Practitioner, Certified DSDM trainer, Certified APMG Agile Project Management trainer and Certified Prince2 Practitioner, and is Certified within Lean IT Foundation.

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