

Report to Improvement and Change Sub-Committee

5th November 2018

Agenda Item: 6

REPORT OF THE GROUP MANAGER, BUILD CHANGE AND ENGAGEMENT (FINANCE, INFRASTRUCTURE AND IMPROVEMENT)

PROJECT MANAGEMENT METHODOLOGY USE IN ICT SERVICES

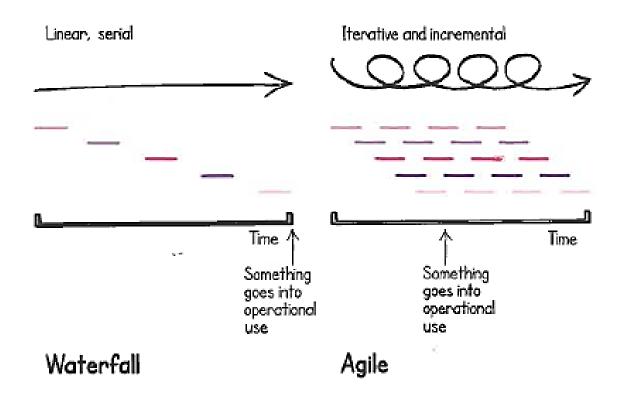
Purpose of the Report

1. To describe the current project management methodology approach within ICT services, how this differs from the corporate standard, and what benefits the approach brings through project delivery.

Information and Advice

- 2. Since the Improvement Team was conceived in 2009, the corporate standard adopted by the Authority in relation to project management methodology has been Prince 2. This has since been used by the ASCHPP Transformation team and has historically provided the foundation for delivery of projects in ICT Services.
- 3. Prince 2 (PRojects IN Controlled Environments, version 2) is an industry-wide recognised methodology that provides a framework for delivering discrete pieces of change activity in a controlled manner and to defined standards, whilst delivering identified and measurable benefits. The Prince 2 approach fits well with the Authority's process of identifying options for change to deliver savings and efficiencies, and focuses on 6 areas for delivery: cost, timescale, quality, scope, risks and benefits. It can be applied to any project and can be tailored to the environment to accommodate any type, size or complexity whilst giving senior stakeholders regular, consistent and reliable information through identifiable products and reports.
- 4. Prince 2 is currently used to build a business case from an option for change, then identify a set of deliverables that form a scope; plus the benefits to be achieved once the outputs are successfully delivered; and the costs, timeframe and risk to the business that will be incurred whilst the deliverables are accomplished. It is reliant therefore upon a clearly defined scope and a set of roles and responsibilities that are managed in the project framework, and overseen by products such as PIDs, plans, reports, benefits plans etc. A Prince 2 approach allows the Authority to respond to emerging needs from the business in a controlled manner that brings rigour, oversight and a defined workflow process whilst enabling benefits to be measured once deliverables are approved and complete.
- 5. From an ICT Services perspective the adoption of Prince 2 and the creation of a PPMO to oversee the project management approach has also brought rigour and control to the change process. It has allowed the ICT Directorate to ensure that the service is delivering against the agreed outcomes as defined in the ICT Strategy (3-4 yearly) plus the annual ICT Service Plan and is supported by the quarterly sprint

plan that is reported upon at Improvement & Change Sub Committee. However the linear approach to project management, especially to change and release elements, as defined in Prince 2 can sometimes be seen as restrictive in a development environment, and it is considered that adopting a more Agile approach can sometimes be beneficial. The diagram below depicts why:-



- 6. In a Prince 2 or Waterfall environment, the scope of a product to be delivered must be clearly defined at the outset and must incur change control protocols if scope is changed during the project lifecycle. This means that a linear approach is taken to delivery: there will be one timeline for deliverables; the end to end process of delivery must take place before a product is signed off as acceptable and only then can the release of a product be made; this usually means that benefits can only be realised towards the end of the timeline, or after the project has finished.
- 7. In an Agile environment however, there tends to be iterative and incremental developments, which are much smaller themselves but contribute to the overall deliverables of the project; because of this a small part of a product can be defined for delivery, built, tested and released before the whole product is completed and signed off. New developments can be released earlier to the customer; new, additional or overlooked requirements can be identified as the product is built; changes can be made to optimise the end product; earlier releases can be made and consequently benefits can be realised earlier.
- 8. Agile methodology, like Prince 2, has a set of principles; however in an Agile approach, rather than these being a set of rigid guidelines, these are used to underpin a set of softer skills or behaviours that focus upon collaborative delivery of the outputs required. Agile principles encourage the project team to look at why something is needed, work in a transparent manner where feedback is encouraged, deliver early and often, and empower and motivate teams to collaborate to achieve their shared goals. Agile behaviours can be seen in the figure below:

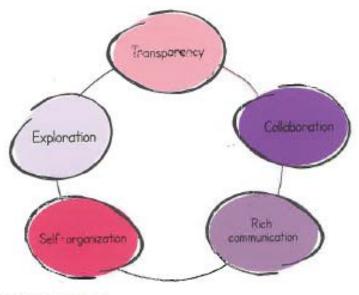


Figure 7.1 PRINCE2 Agile behaviours

- 9. An Agile approach tends to be far more responsive to emerging needs from the business and is much more flexible to responding to customer needs. The Agile manifesto reads:-
 - "...uncovering better ways of developing software by doing it and helping others to do it. Through this work we have come to value:

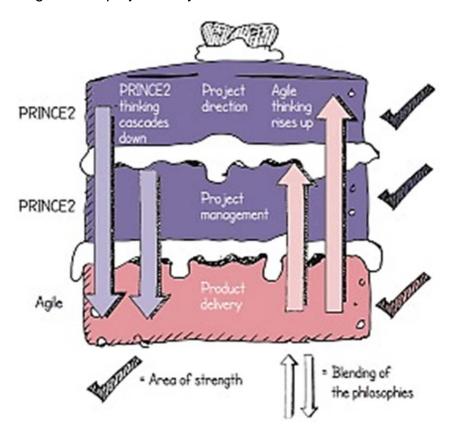
over	Process and tools
over	Comprehensive
over	Contract negotiations
over	Following a plan
	over over

That is, where there is value in the items on the right, we value the items on the left more."

- 10. By bringing the best of both together in a Prince 2 Agile Blend, it is possible to retain all of the values from Prince 2 on the right, which give visibility, clarity and assurance to senior stakeholders that the right changes are being made, for the right reasons, at the right time, in order to maximise potential benefits; whilst enabling those who prefer to concentrate on delivering beneficial changes to be able to do this in the most responsive, flexible and interactive manner, and embrace the values on the left. The customer remains at the heart of the delivery process and, due to the flexibility in approach, it is possible to identify an option for change with some identified benefits but allow the development of the solution to remain flexible in its approach and respond to changing customer needs.
- 11. ICT Services are embracing the formal approach to a Prince 2 Agile methodology blend. The aspiration of adopting a blended approach is that all parties involved customers, senior stakeholders, project managers and development teams alike will be empowered to deliver the best possible output available. Also, that autonomy will be increased within the project team: it will allow the right people who can deliver, to get on with doing what they do best. It retains the familiar control and visibility for senior stakeholders through the products and governance/ structure in Prince 2, but allows freedom and flexibility in the delivery process for those who

are providing the new functionality. It continues to meet our corporate standards and expectations and ensures that there is still due diligence around project discovery, approval and initiation, as well as during transition and handover, project close and benefits review. The retention of Prince 2 also retains the ability to forward programme work and continues the formality around update cycles through highlight reports.

12. The figure below shows how a blended approach brings the best of both methodologies together and how ICT can focus on the right approach for the right stage throughout the project lifecycle:

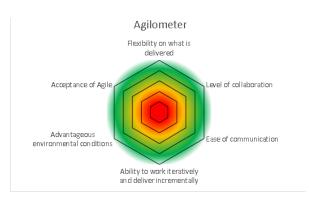


13. ICT Services have been developing their use and adoption of Prince 2 Agile as a project management methodology over the last 12 months; this has supported their commitment to providing a quality, responsive, value for money service to the Authority. Since the inception of Prince 2 Agile approach the high level milestones delivered against the quarterly plan have been:

Year	Quarter	Milestones delivered	Project delivery
		(%age)	scores (out of 9)
2016/17	4	71	9
2017/18	1	80	9
	2	81	8.67
	3	89	9
	4	86	8.2
2018/19	1	84	8.1

14. It is important to understand when a formal approach aligning with Prince 2 is preferred, or when a flexible approach under Agile is more suitable. With this in mind ICT Services have implemented the use of an Agilometer:

Agilometer	
Flexibility on what is delivered	
Level of collaboration	
Ease of communication	
Ability to work iteratively and deliver incrementally	
Advantageous environmental conditions	
Acceptance of Agile	
Suitability of Agile	0.00



- 15. An example of when a project would be more suited to Prince 2 would be the Cloud Programme: here we need certainty around the outcomes and deliverables; costs timeframes, levels of risk and security. A programme such as this, with very clear scope and outcomes required in a specific format would not lend well to a less formal approach. In contrast, a project such as development of the customer portal for the highways Asset Management System would benefit from a more Agile approach; this would involve software developers writing code to create a web based service and a customer portal for the general public to register issues with the highway. Software development in an Agile environment would allow small developments to be created, tested and released quicker for the end user to receive benefits earlier, and iterative development would ensure that the product would be honed and improved, or snagged if necessary, as the product remains live and in use. In this way a Prince 2 Agile blended approach would mean the Authority's products and services would work in the same manner as Microsoft or Apple where releases are many and often with users able to feedback future requirements or highlight issues.
- 16. When engaging with ICT services for project input going forwards, our customers and stakeholders may experience some subtle differences in our approach, as the most important thing to establish in Prince 2 Agile is to work out what is important: both to the customer, to the Authority and, in some part, to ICT Services ourselves. There is likely to be a greater focus upon business requirements gathering at project start up in order to understand what is a priority deliverable in terms of a solution, against an essential requirement. Other requirements will be gathered but these will be prioritised, within the project and across the portfolio; and there should be an understanding that in the global delivery profile and the finite resource pool, not everything will be important enough to be delivered by the capability available.
- 17. The proposed bringing together of the Business and ICT elements of Transformation and Change within the Finance, Infrastructure and Improvement element of the new Chief Executive's Department will offer the opportunity to further develop the blended Prince and Agile approach to Project Management and extend it where appropriate into other areas of transformation and change.

RECOMMENDATION

It is recommended that the Improvement and Change Sub Committee consider the Project Management methodology adopted within ICT Services and support its potential rollout to other areas of transformation and change within the Authority.

Sue Milburn Group Manager Build, Change and Engagement (Finance, Infrastructure, and Improvement)

For any enquiries about this report please contact: Sue Milburn on 0115 9773196

Constitutional Comments: (CEH 21/10/2018)

The recommendation falls within the remit of the Improvement and Change Sub-Committee under its terms of reference

Financial Comments: (CSB 22/10/2018)

There are no specific financial implications arising directly from the report.

Background Papers

Acknowledgements

Figures are extracted from Axelos Prince 2 Agile Book:

- Figure 2.2: The contrast between Waterfall and Agile phases (Paragraph 5)
- Figure 7.1: Prince2 Agile behaviours (Paragraph 4)
- Figure 3.1: Blending Prince 2 and Agile together (Paragraph 13)

Electoral Division(s) and Member(s) Affected

ΑII