

“Controlling” Agile

Learning from the Tempest Program



Introductions



Susan Simpkin
Tempest Program Director



Rob Yates
Head of Project Management
Capability

 [linkedin.com/in/rob-yates-7aa3221a](https://www.linkedin.com/in/rob-yates-7aa3221a)

Controlling “Agile”, an oxymoron if there ever was one. Many of today’s “Mega” Projects are wrestling with how to handle “Agile”. How does an iterative lifecycle fit within a sequential process?

How do we cope with the Paradigm shift of moving away from scope being our major controlling lever? How do “Projects” stop trying to catch their tail in a VUCA world?



**TEAM
TEMPEST**

Tempest A System of Systems

The new platform is much more than a fighter jet. It will be able to communicate dynamically and in coordination with other systems, additional platforms, such as a series of remotely piloted aircraft.

This increased integration across the system will considerably increase the complexity of the program.



Collaboration at the Core

A global program

Effective international partnering will play a fundamental role in defining and meeting the goals set out in the Combat Air Strategy and our vision for Tempest.

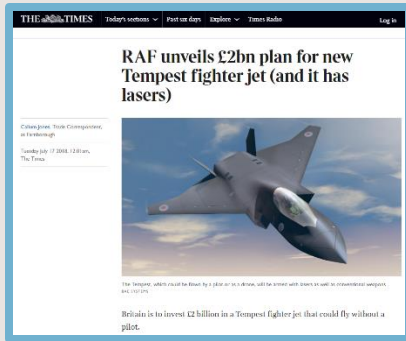
FCAS (Future Combat Air System) as a program is made up of a set of international and national stakeholders. Within the UK the key partners are: BAE Systems, Rolls Royce, Leonardo, MBDA and the UK Ministry of Defence



BAE SYSTEMS



The Program



Launch of the UK
Combat Air Strategy

Farnborough 2018



Demonstrator
Announcement

Farnborough 2022

1st Flight within 5 years



Tempest In-Service
Date

2035

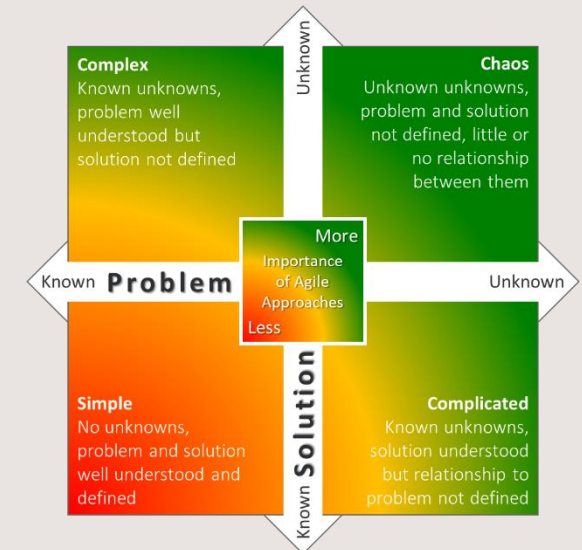
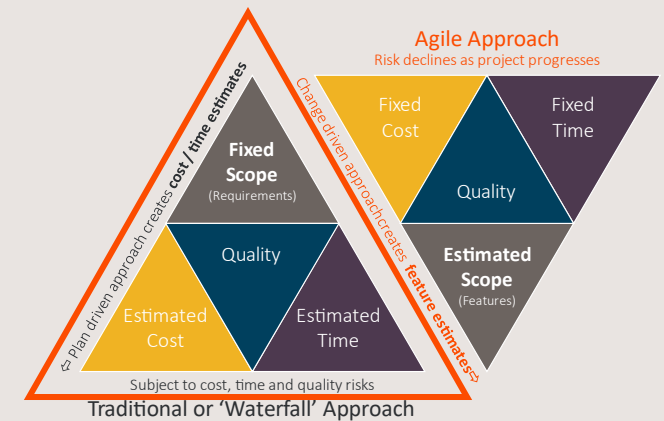
Historic Timelines are untenable

2036

2045

Why Agile: A Paradigm Shift

- Half the Time and vastly increased complexity
- High levels of change, uncertainty and instability
- Need to iterate to collectively discover
- Left Shift – Deal with problems earlier on to break the cost curve



What we did: Big Bang

- Agile across the entirety of the program
- Across 5 UK parties
- Circa 35 Scrums
- Some significant constraints increased the challenge across the partnership



Lesson One: Targeted use

To a hammer everything looks like a nail

We have learnt that **Agile isn't the solution to every problem** but that it is a powerful approach when used appropriately. We have/are:

- Developed criteria to assess scope to **understand the most appropriate lifecycle** for a particular package of work
- Strengthened the application of Agile **where appropriate**
(Using it in all packages was also diluting it's application and impact)
- Establishing a Hybrid PMO which can integrate different lifecycle methodologies

“Agile-iester” Definition: Someone who believes the solution to every problem is Agile.

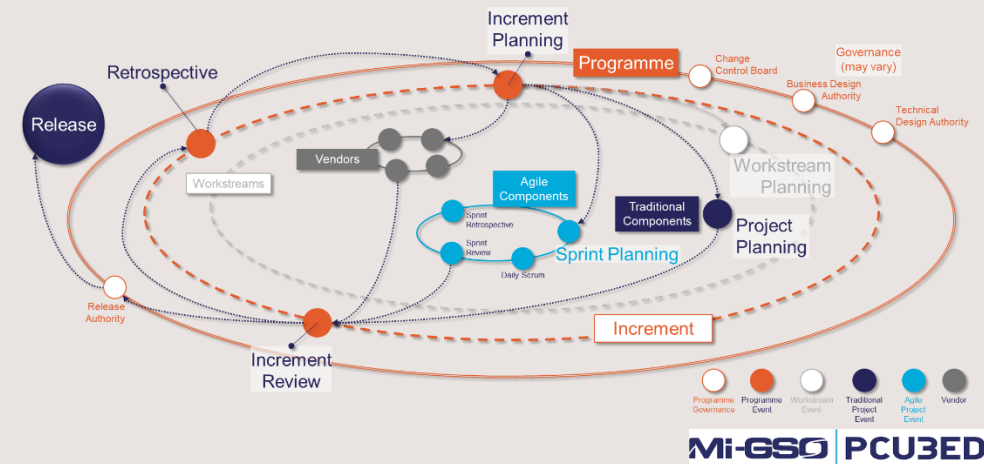


Lesson Two: Schedule is King

Credibility in the complex integration

There is a significant challenge in developing a credible schedule in a VUCA environment. This can be exacerbated when trying to integrate sequential and iterative lifecycle methodologies. We have learnt:

- This **reference point** is essential
- It needs to be at the appropriate level of **fidelity**
- It is key to start by understanding the **critical success factors** and use these to architect the schedule
- The schedule needs to provide **credibility in the complex integration**. It has to be more than “way points” to ensure the route through integration is understood. It is the complexity and the scale that needs to be thought through
- It needs to be underpinned by a **cadence that enables synchronisation** and integration

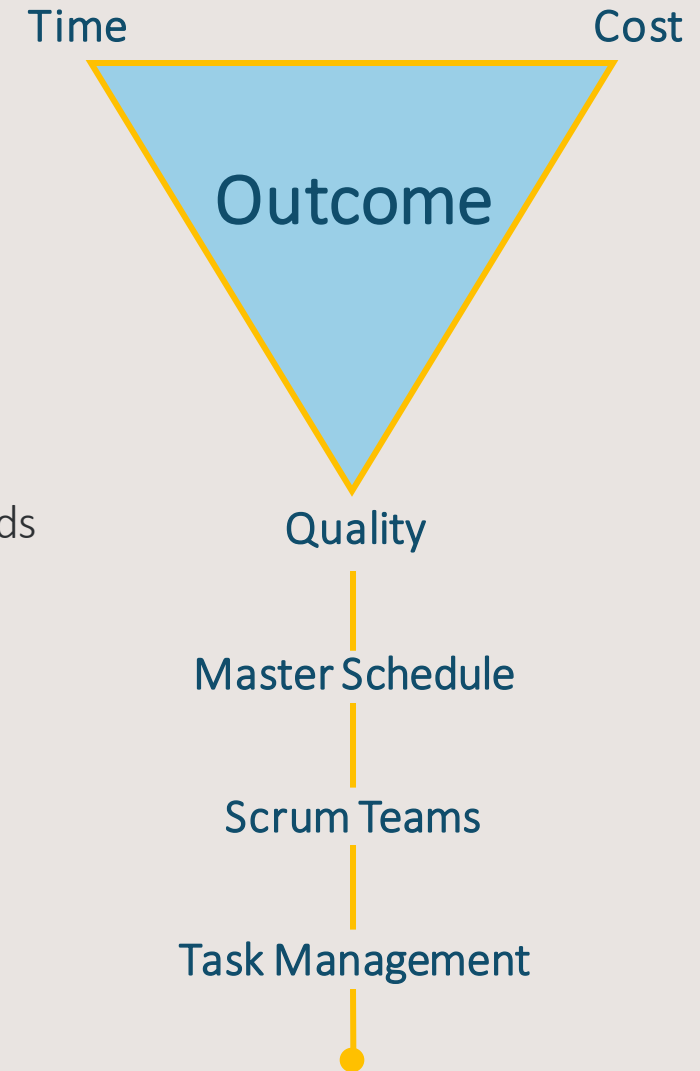


Lesson Three: Performance

There is no breaking the triangle

We have learnt:

- To **start with the end in mind**. Outcome expressed through the critical success factors needs to be the golden thread.
- Need a good data structure and architecture. This is required to “**reach through the fog**” and noise. This is enabled through linking the PCS & Task Management System (e.g. Jira)
- The “heartbeat” of our organisation (assurance and business review processes) needs to adapt to the agility of the program and take on a **learning mind-set**.

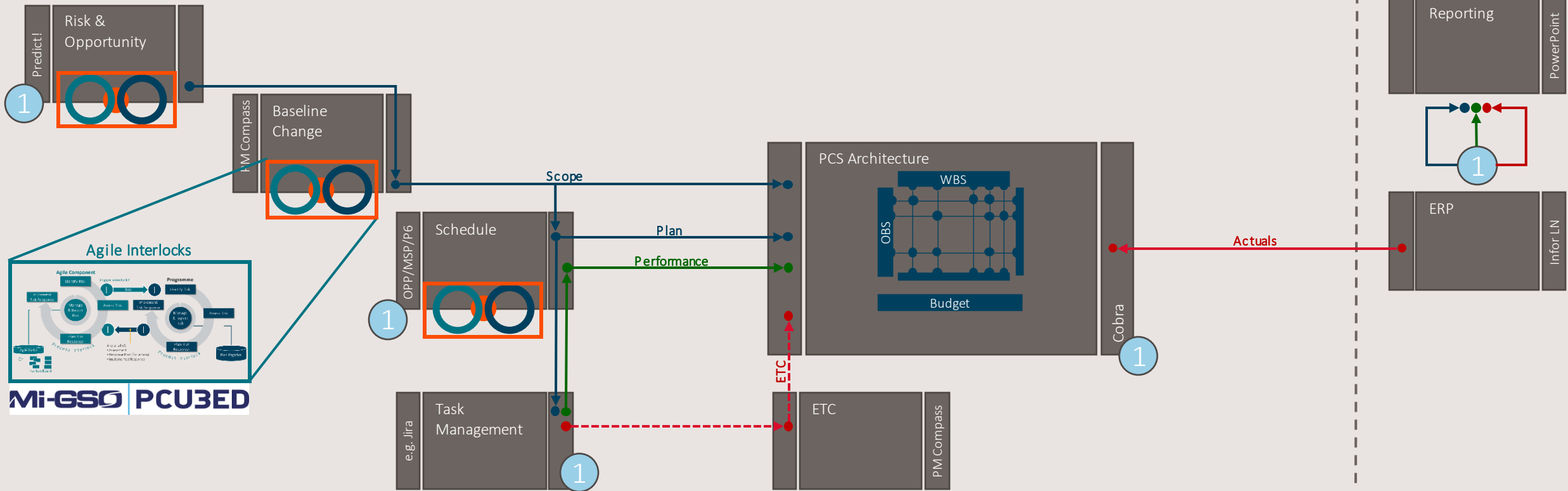


Controlling an Agile mega project: Developing interlocks

There are a number of aspects we are considering to integrate the Agile methodology.



We are exploring a number of **interlocks** between the needs of Agile and the needs of Project Control.



Benefits its given

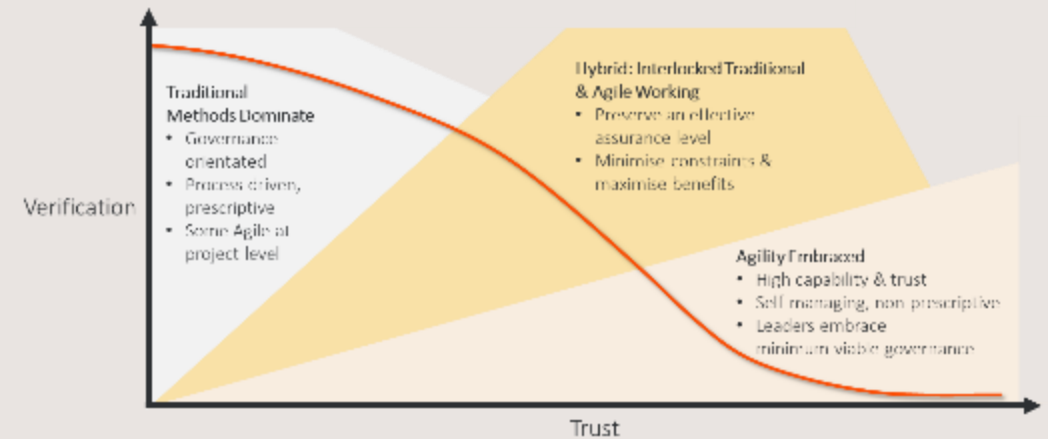
We have seen many benefits

- **Dealing with seismic shifts:** Unsurprisingly the program has had significantly greater agility
- **A Left Shifting mind-set:** This has enabled us to proactively tackle risks and reduced our risk profile
- **Concepting as a Service:** Developing an appropriately flexible commercial arrangement has been a key enabler
- **Driven Transparency:** This has led to an openness across the partnership
- **Embedded Customer** – Closer proximity has led to greater understanding of their needs and better decisions

Next Steps

A Hybrid PMO

- Establishing a Hybrid PMO
- Refining and developing the interlocks between Agile and the Project Control System
- Maturing the digital thread from our Critical Success Factors through our Project Control System and Agile teams.



Thank you & Questions

