

Digitalisation of Project Controls

About the Speakers

Simon Springate

Head of Jacobs Project Controls discipline in Australia. He is recognised as an expert with over 35 years of providing project control to major infrastructure projects and the professional head of project controls in public and private organisations.

Michael Maslen

Michael leads Jacob's digital project delivery capability with over 25 years of experience in the field. He is responsible for leading engagements with organisations to help them find innovative ways technology can be used to achieve predictable outcomes, improve project performance and minimize risks.

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 **Project Controls**
EXPO
Melbourne, Australia

About the topic

With over 60 years of Project Control systems and delivery experience between them, Michael and Simon believe that the use of Project Controls tools has stagnated over the last 20 years.

This situation manifests itself in the separation of Estimation, Scheduling and Cost control into silos with often no data exchange.

Today, it is technically simple to integrate all aspects of project information, so why is it not happening and how we guide our customers to accelerate this maturity journey?

Why we are doing this

Jacobs

Challenging today.

Our unique approach to challenge what's accepted, using our expertise and knowledge to **rethink the way we solve problems.**

Reinventing tomorrow.

The outcome, from the **innovations we build for our clients** to the positive impact our solutions have on the world.

To create a more connected, sustainable world.

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Agenda

- The promise of 'digital'
- Today's operating conditions
- What does digitised project controls look like? (what's on the 'tin')
- Steps along the journey
- How to get started

The promise of Digital – key to maximising value to those that depend on us



Increased productivity

Digital delivery will lower the cost of doing business and support enhanced margins and competitive pricing.



Higher quality, fewer errors

Digital tools and a modern way of working increases quality and lowers the number of errors.



Lower impact on the environment

The use of human intelligence + parametric design. AI and Machine Learning will lower the environmental impact of programs



Create better designs

Deliver programs faster and with reduced: **Total Cost of Ownership (TCO)**



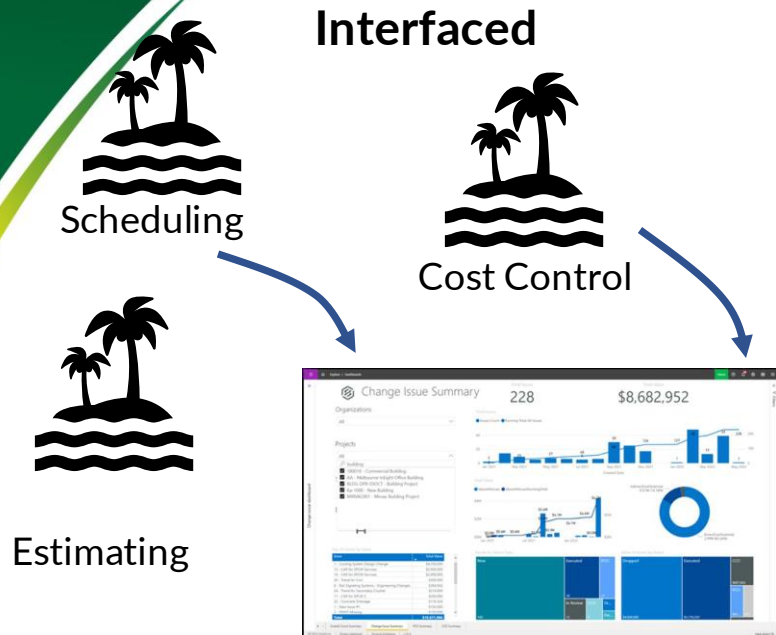
New business models realised

Digitisation opens the door to alternative revenue sources and value-based business models.

Current Operating conditions

- Construction (& allied sectors) lags many industry sectors in the use of technology and data – low rate of innovation
- The flow of data through infrastructure projects remains very slow + inconsistent data quality
- Low productivity, rising project complexity, low margins, the skills gap and the high volume of waste generated
- Lack of an integrated systems thinking approach & rigid systems that fail to adapt

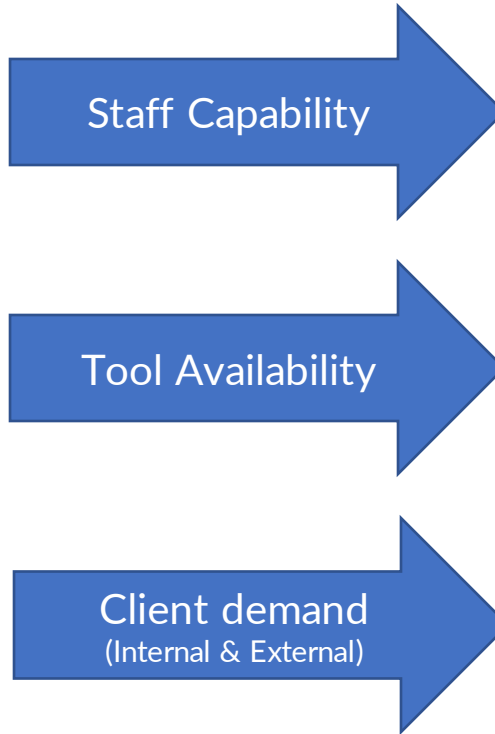
Jacobs inside-out view of our clients / peers



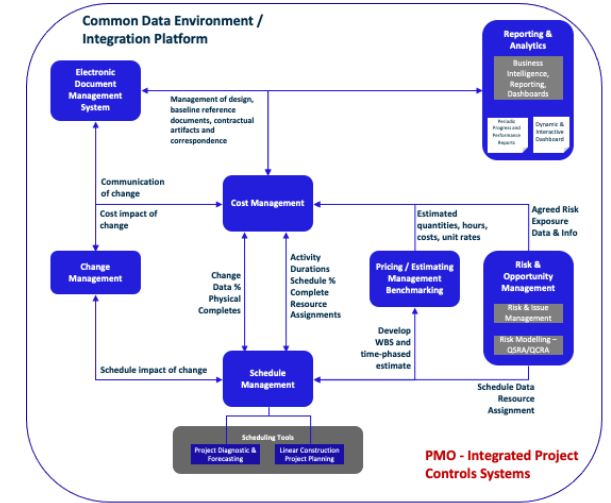
Dashboards give a veneer of data integrity

Team members use essentially standalone (1 off) tools and then make it appear sophisticated through Power BI dashboards

Transition



Integrated

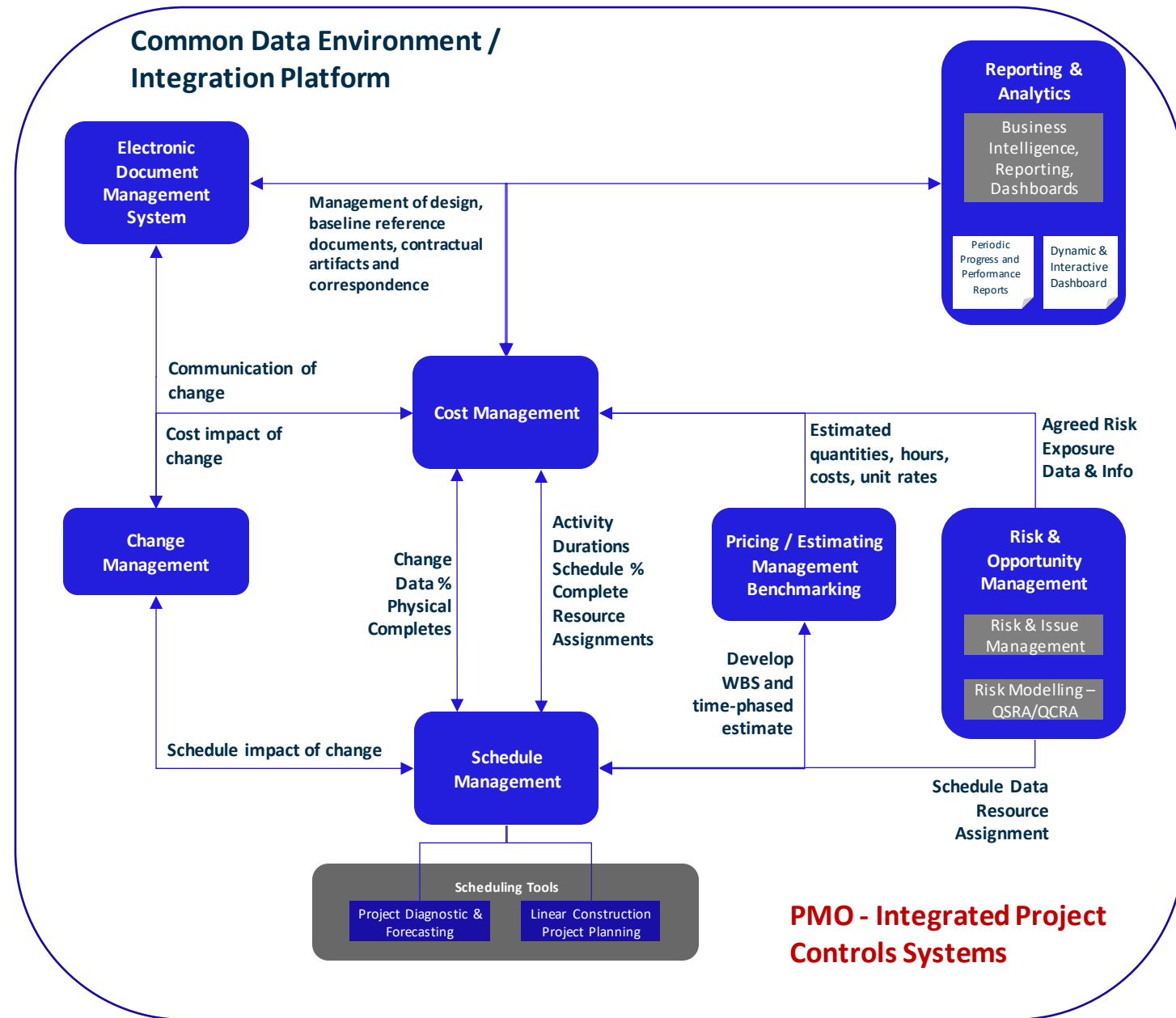


Skilled team members using the single operating environment effectively and therefore need smaller headcount for the same service

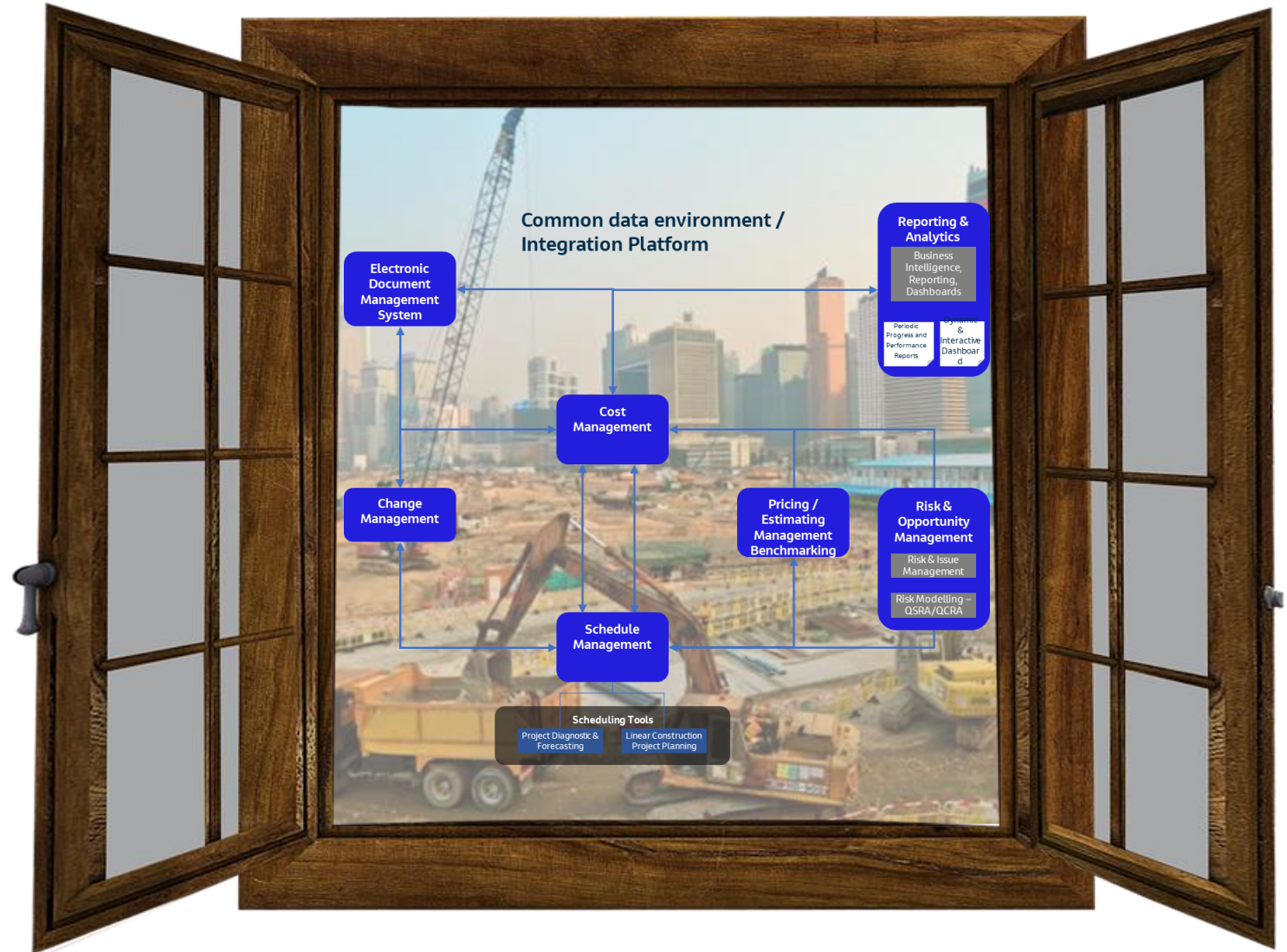
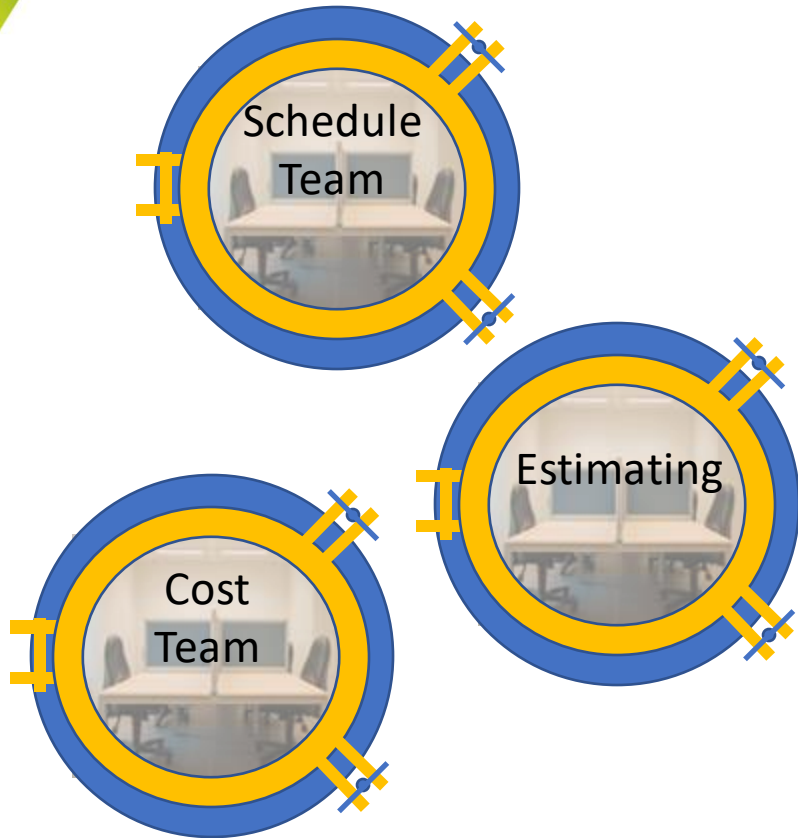
Focus on the Core

What does a Single Operating Environment look like?

- Process completeness
- Connected & automated – with itself, and outside
- Collaborative
- Flexible – modular
- Minimal environments – close to one!
- Vendor(s) Actively invested – roadmap
- Strategically aligned



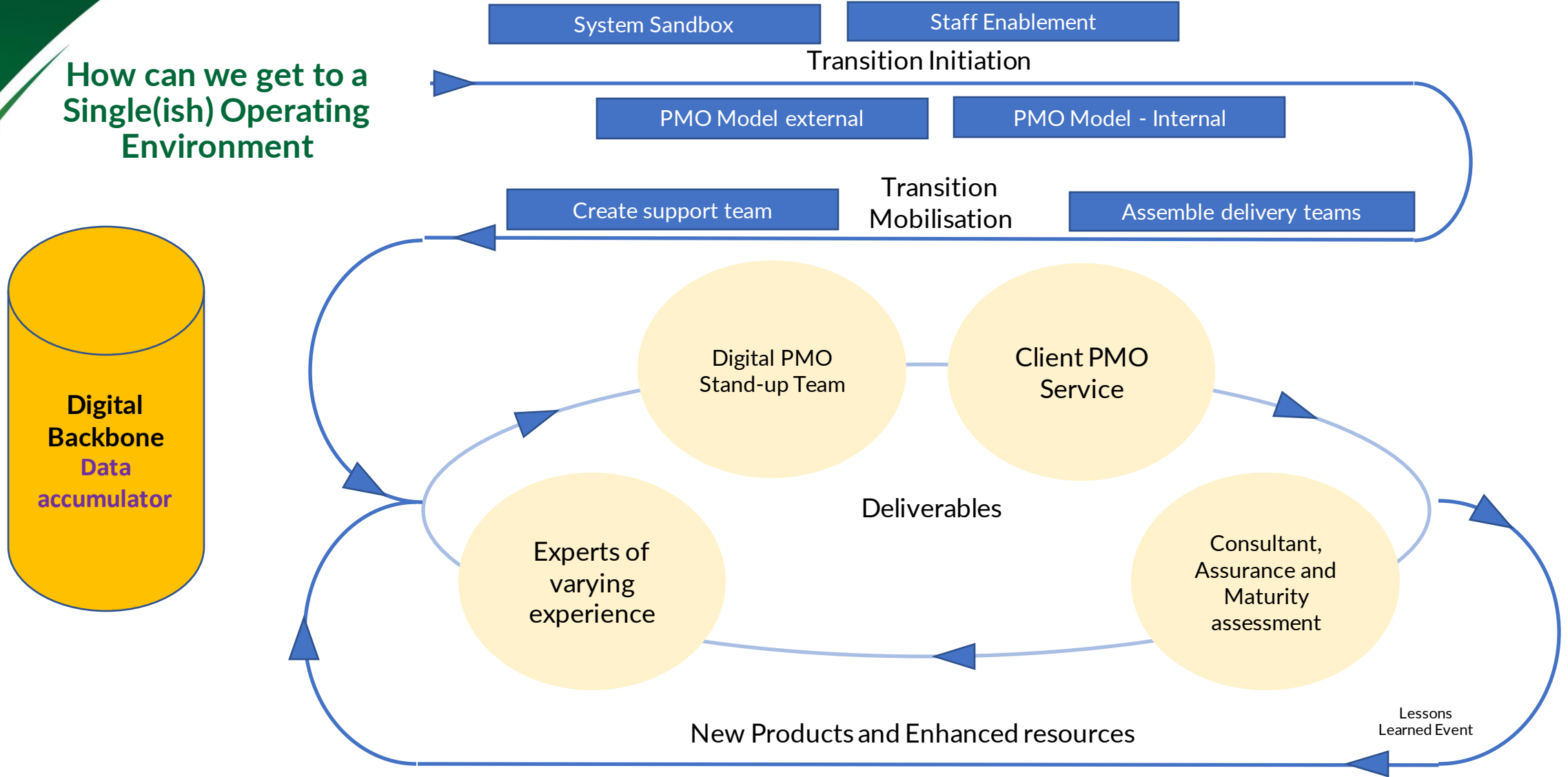
An Integrated window on the Program



How can you get to a Single Operating Environment

- Staff capability
 - Staff need to be generically more data-aware than today, comfortable with tools (rather than building Excel solutions)
- Tool Availability
 - Sandbox and rapid roll-out of tools needs to be enabled with a dedicated cadre of stand-up specialists
- Promote the skill set of Controls across the internal projects
 - Ensure that the team are performing well and keeping to our environment – not building customised, un-reusable Excel
- Client Demand
 - Demand will lead to expansion but need to create the seed stock to satisfy the demand

How can we get to a Single(ish) Operating Environment



End State

**We have the
Capability,
Models &
Tools**

Give us the problem



THANK YOU

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