

Project Controls Expo, Australia – 26th November 2019

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Data, data, data: is there ever thing as too much?

Geoffrey Rea

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Turner & Townsend



About the Speaker

Geoffrey Rea - Project Director Infrastructure,
Turner & Townsend

- Experienced Director with over 30 years' experience, providing Strategic Direction & Leadership in Program Delivery, PMO & Integrated Project Controls Services in the private and public sectors in Aviation, Government, Nuclear, Utilities, Construction & IT.



About the Topic

Topic outline

- *Data equals power but only if we know what to do with it. The benefits of data are enormous but there's a danger we're not using it to make intelligent, informed decisions within project controls.*

Geoff Rea's talk gives real world problems and issues from large, complex projects and programs such as Western Sydney Airport, Sydney Metro, Hinkley Point C, Nuclear Decommissioning and other government programs to show how powerful data can be if harnessed correctly.

Turner & Townsend



sydney METRO



Ministry of Defence



NCA National Crime Agency



Turner & Townsend

Project Controls EXPO
Melbourne, Australia

Management Information Requirements?



Increase in Operating overhead to capture and manage data over Project Lifecycle



Confusing and meaningless Data, KPI's and Management Reports



"If you have a number to you and do this operation and so."

Wasted Data, and inefficient use of management time in reviewing data



Inefficient Management Decision Making



"Get the right... the right way."

Reports Reports Reports

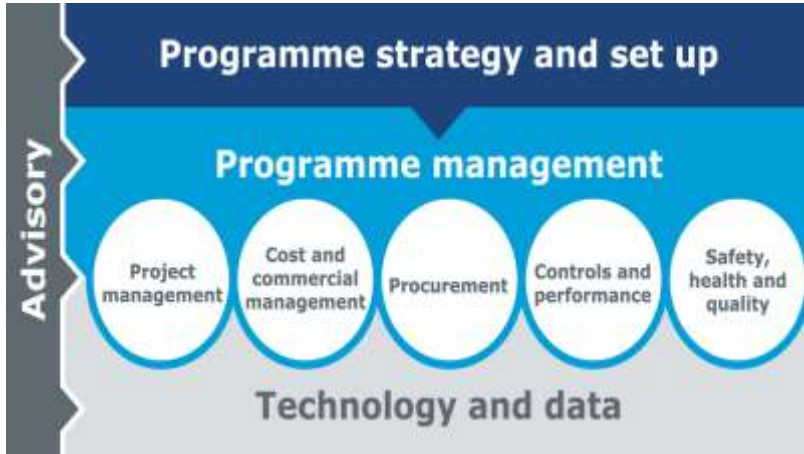




A person is shown from the chest up, holding a large white question mark sign in front of their face. The person's hands are visible, and they appear to be wearing a light-colored shirt. The background is a blurred cityscape.

I don't recognise that data?

Service Model



Setting up for success encompasses four key areas:

1. Organisation
2. Processes and tools
3. Information management
4. Change management

Traditional PMO

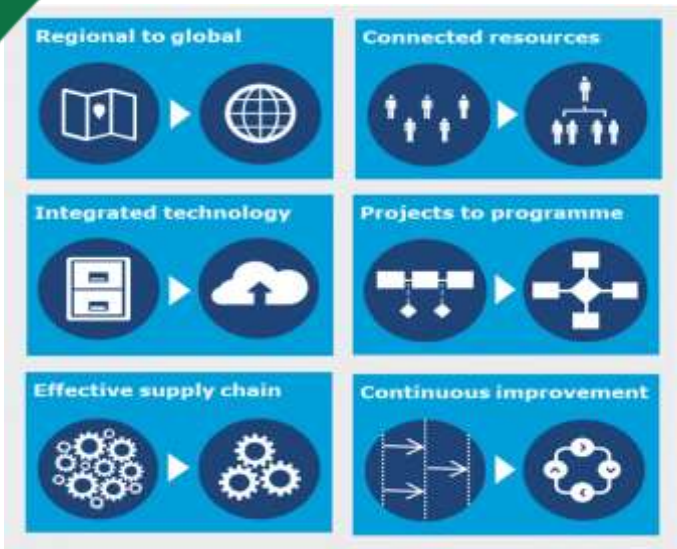
Administrates
Supports the programme manager
Fixed reporting
Standard mythologies
Monitors project activities
Low value added to projects
Inflexible change
Monitors resourcing

Good at **recording** and **reporting** data. Less effective at identifying issues may impact performance

Intelligent PMO

Enables and coordinates
Leads team collaboration
Relevant reporting
Agile – adjusts approaches
Assures outcomes
Creates value
Leads transformation
Builds capability

Pro-active in identifying and mitigating risks before they occur. Seeks out, validates and drives **improvement** opportunities.



- **Capital efficiency**
- **Performance improvement**
- **Risk reduction**

Driving Performance

Intelligent data is used to benchmark and drive performance, set improvement targets and support effective, confident decision making

Controversial opinions...

More data does not result in better decision making...

“Project Controls is really simple”

Oh and useful if done right!



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The Project Controls Cube – Simple!



Processes, Functions & Architecture



Integration



Integrated Project Controls Systems



Update Cycle & Baseline Reporting



Project Performance Reporting

What influences decisions making?



Intelligent information



Intelligent information

Project Controls are the data gathering, management and analytical processes used to predict, understand and constructively influence the time and cost outcome of a project or program, through the communication of information in formats that **assist effective management and decision making.**

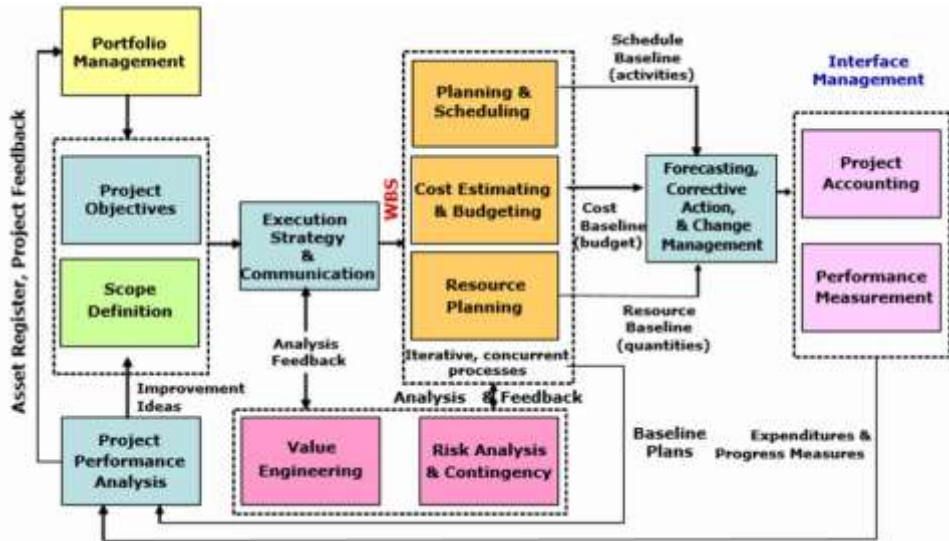


Do tools & systems add complexity?

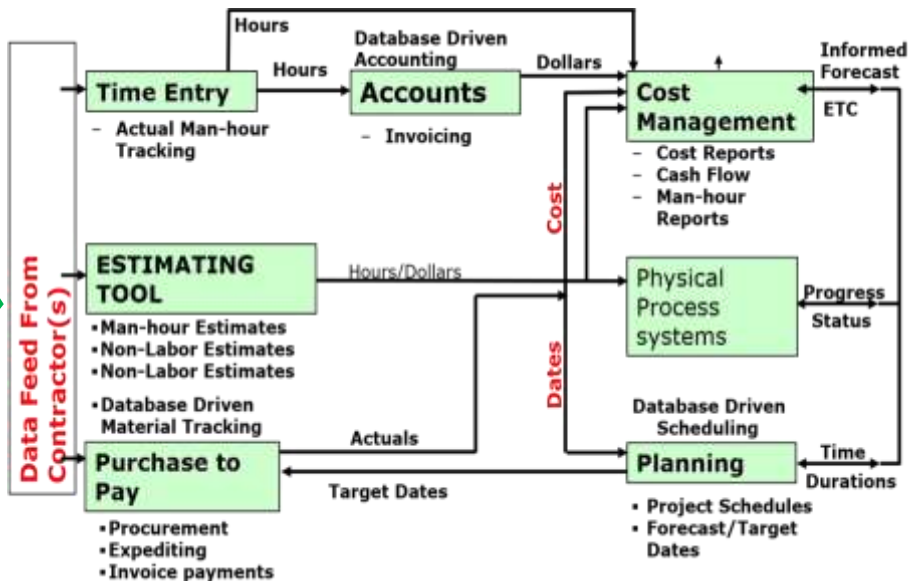
My first Major Project there was one computer on site which only the planner used!



Do tools & systems add complexity?



The contractor?



How can software help?



"I want you to start using the new software. It's 25% softer than the old software."



Conclusion...

Do tools and systems add complexity?

Yes

Is the PCM or PM still important?

Oh Yes

Quality, robust data - what does that mean?

One version of the truth?

What data is critical?

Time, cost, risk

What is needed to make good decision?

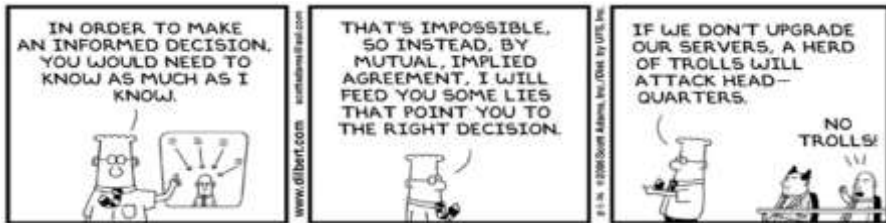
Intelligent info?

Do we need all this data?

?

Does more data lead to better decision making?

- **No** - not in itself but how we use it and intelligently communicate it does.
- **Yes** - robust systems and processes to create consistent approach without stifling
- creatively and free thinking (after all we want intelligent challenging people)
- **Less** Project Controls data does not lead to better outcomes.
- **The right data** correctly communicated is the secret to getting decisions made.



Does more data lead to better decision making?

- The **lack of** good quality data and systems integration does adversely affect the outcome
- Having **good quality data** that is fully **integrated** with robust systems and processes, does not in itself lead to better outcomes, but does increase the probability
- **Robust** estimates and baseline schedules supporting project initiation are essential

No surprises...

Make it simple

- Set up for success
- Drive performance
- Instill confidence
- Intelligent Project Controls
- Deliver & improve
- Deliver sustainable benefits

...and keep it simple



Front end effort
Detailed processes (scalable to project size) Robust systems

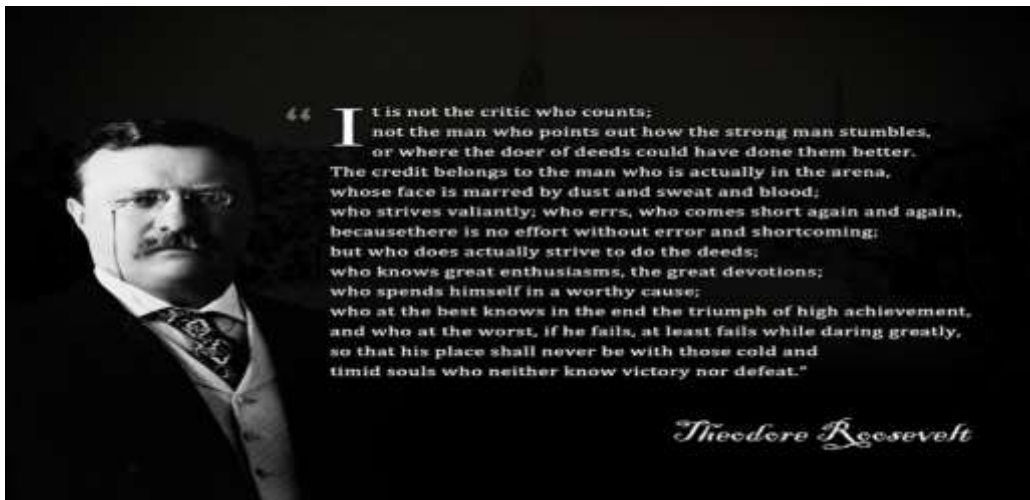


Increased complexity
Lots of measures / time consuming data



Better decisions

The men – and the women – in the arena



Sub section heading

Section divider

