Effective Contingency management – governance or controls?

Adam Paterson, Director, HKA
Mark Woodhouse, Director HKA

HKA

Project Controls EXPO
Melbourne, Australia

Adam Paterson

- Experience in delivering risk products (Management processes/ documentation/implementation, Quantitative Analyses) through;
  - all phases of project delivery;
  - in Energy/O&G, Transport and Utilities Infrastructure sectors;
  - and projects throughout Australia, UK and Europe.

HKA

Project Controls EXPO
Melbourne, Australia

Mark Woodhouse

- Over the last 20+ years I have worked on most of the UK's biggest Transport Infrastructure programs
- Most of that time has been leading performance, controls and change
- I strive to enable technology to make the lives of people on projects easier

HKA

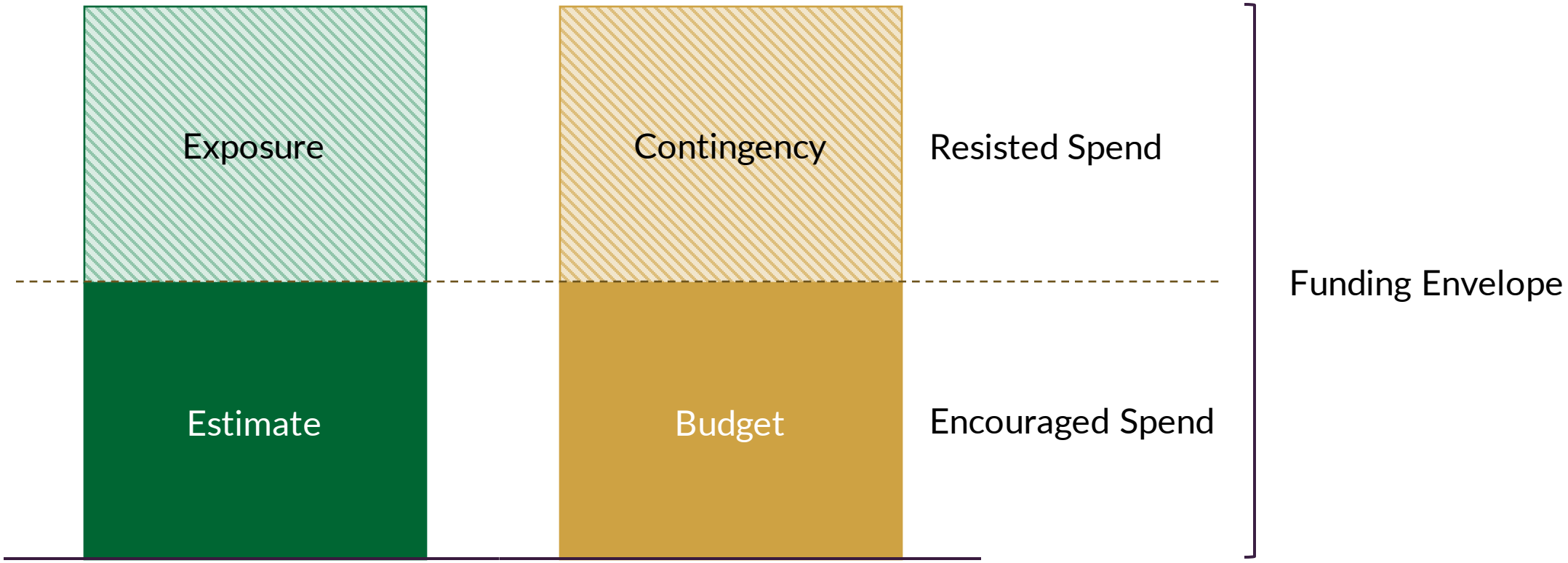
Project Controls EXPO
Melbourne, Australia

Presentation Purpose

- To discuss what contingency management is and what ‘effective’ looks like
  - One size does not fit all - especially on mega projects.
- To then identify things that can be implemented to help to ensure effective contingency management.
- To understand the potential future of contingency management.

Contingency Definition

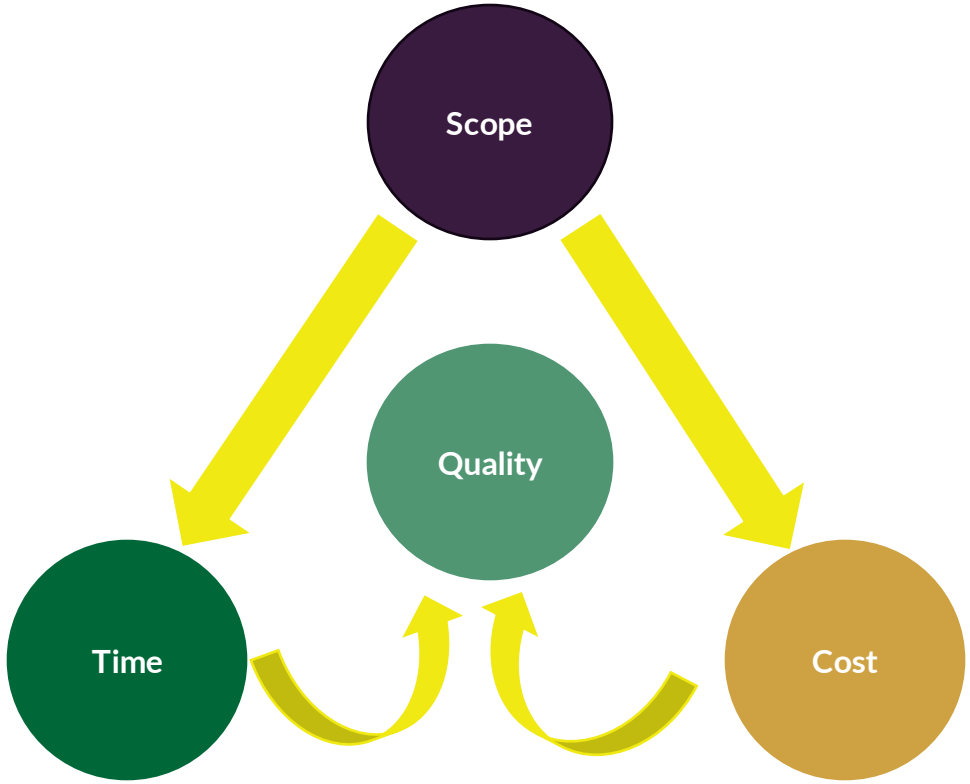
- What is contingency?
- Why should we manage contingency?



Governance Definition

It is the framework of authority

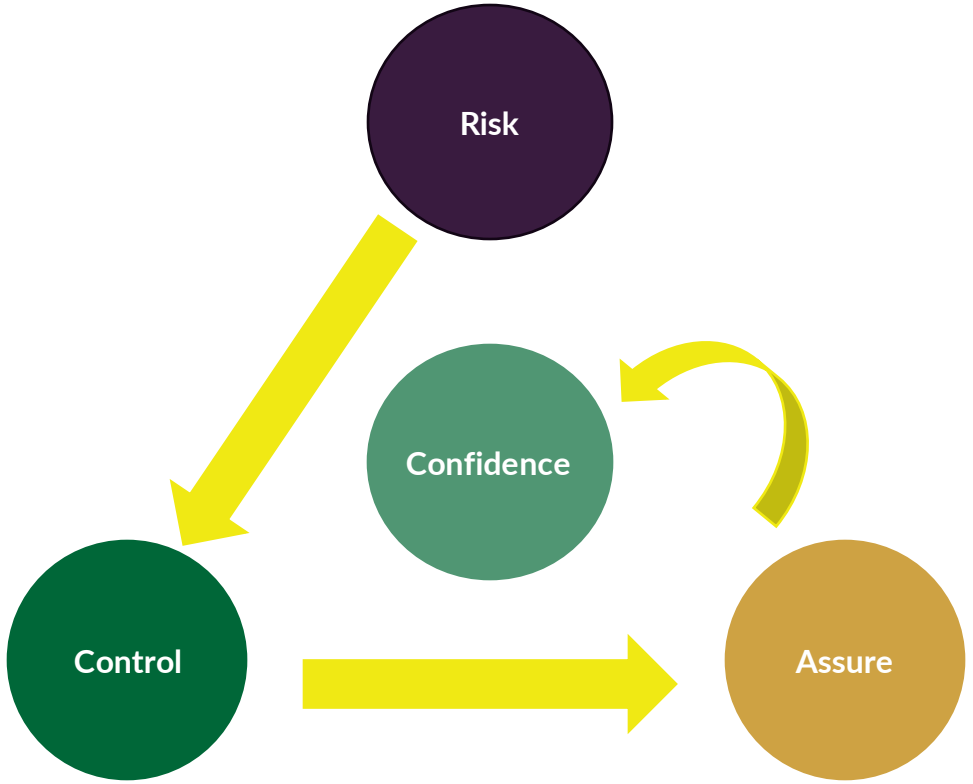
1. Defines the accountability
2. Defines how decisions will be made
3. Ensures that outputs, outcomes and benefits are achieved
4. Ensures compliance



Control Definition

Control is used to determine the behaviour that you want to adopt in delivering your change.

1. Identify the risks to not delivering the outputs, outcomes or benefits
2. Identify how you can monitor those risks
3. Identify the actions that you need to take if those risks are identified
4. Test to make sure that actions are having the desired effect



Contingency Frameworks

Top Down

- Arbitrary fixed amount.
- Reactive to issues.
- High governance effort.

Basic Risk

- Relative value based on risks.
- Reactive RM but with some early warning.
- Linear projection of use.
- Moderate governance effort.

Risk Led

- Probabilistic value based on risks.
- Proactive RM with an understanding of exposure.
- A level of forecasted exposure.
- Baked in governance.

Something Else?

- Probabilistic value based on risks and the past.
- Proactive based on trends.
- Advanced forecasting based on algorithms.
- Real time governance.

HKA

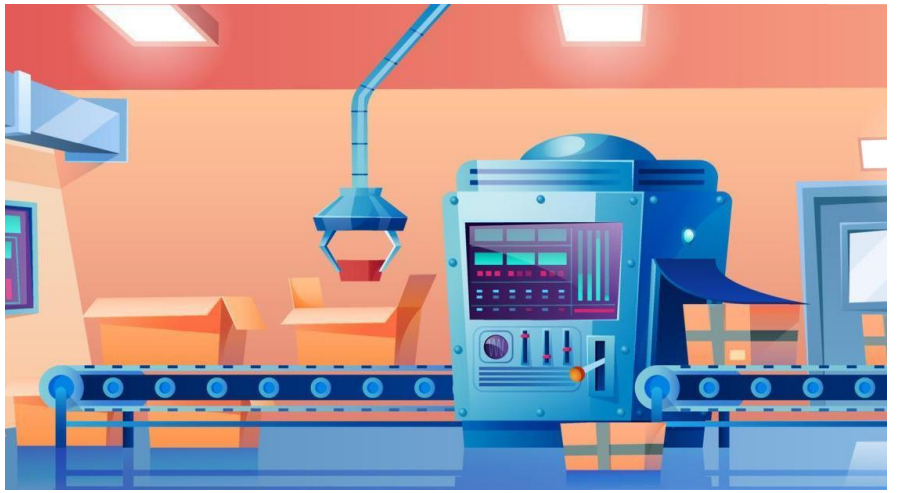
Project Controls EXPO
Melbourne, Australia

Top Down

1. This is the simplest way to define contingency. By making it an arbitrary amount it makes it easy to administer though it isn't necessarily good contingency management.
2. It does not provide advance warning or forecasting of issues that could increase the cost, time or impact the quality on the project. This is a bureaucratic way of managing contingency which is more around the governance put in place, alongside managing the billings.
3. This type of contingency management lends itself to low complexity long lead time activities. I have seen this effectively used on the utilities elements in mega projects.

Basic Risk

- Includes some mechanism to identify projects that are ‘risky’.
- Enables the linking of higher risk projects with higher contingency allowances.
- Allows for structured risk management.
- This type of contingency management lends itself to low complexity repeatable activities. This has been effectively used for renewal activities within mega projects.



Risk Led

- Expands upon the ‘basic risk’ approach and introduces probabilistic outcomes.
- It provides the ability to forecast the contingency needs to a ‘level of confidence’. It also provides baked in governance through controls procedures that monitor performance. This is hard to achieve as it needs a lot of specialist resources as well as a level of capability and maturity across the project.
- This type of contingency management lends itself to any type of project it comes down to the appetite to manage in this way. Often implemented initially but remains a challenge to effectively provide throughout project delivery.

Something Else?

How do we utilise technology to enable success and effective contingency management?

1. Use the past to help predict what is coming.
2. Use the past to put the controls in place to avoid, reduce, transfer or accept risks.
3. Advanced analytics and access to data through a golden thread of information.
4. Enable the computer to assess the management of risk and identify trends.
5. To use technology as an enabler not the solution.

Conclusions & Outcomes

- There is no right or wrong answer it is about appetite. Each way of managing contingency has a place in megaprojects.
- Technology is not the solution, but it is an enabler to make things more cost effective and efficient.
- It isn’t about less governance it is about having the controls in place to ensure governance is managed and maintained.

THANK YOU

HKA

Project Controls EXPO
Melbourne, Australia