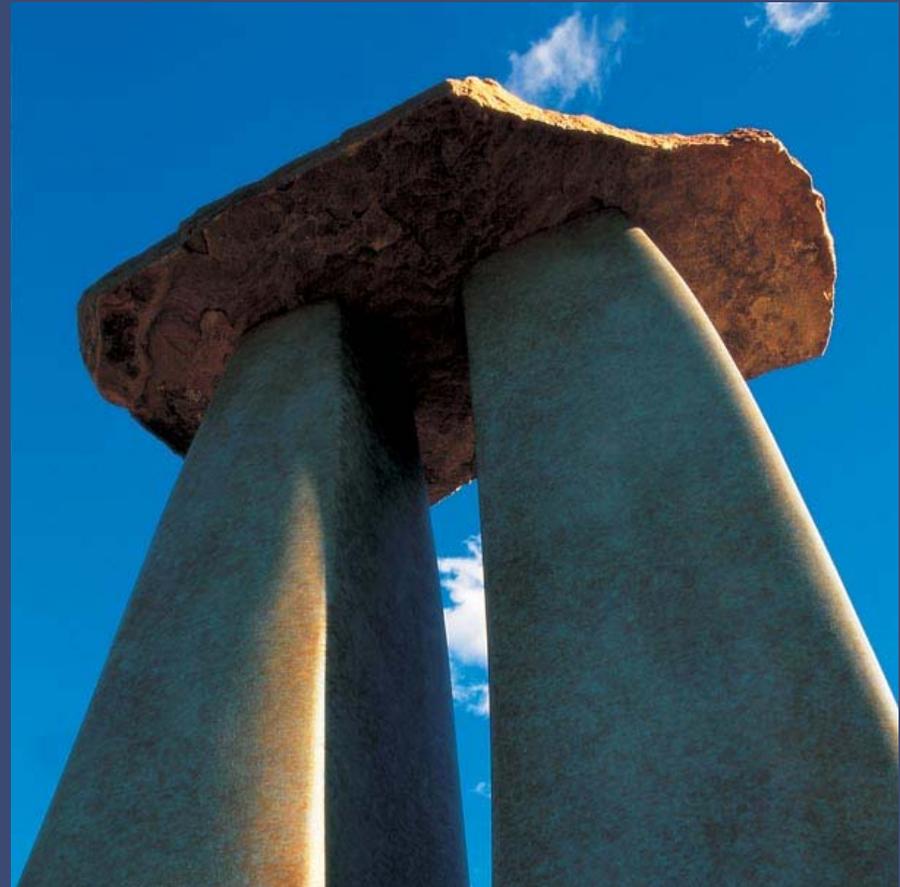


Managing risk in construction projects – how to achieve a successful outcome*

Project risk and controls –
Slaying the dragon

Scott Jardine



*connectedthinking

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Background to the dragon
Project risk management
Project controls



Background

“No construction project is risk free.

Risk can be managed, minimised, shared, transferred, or
accepted

It cannot be ignored.”

Risk management - The commercial imperative
... Sir Michael Latham 1994

Background

- Project risks include....
 - Quality and safety
 - Cost management
 - Time management (programme / schedule)
 - Scope & change management
 - Procurement & contracts
 - People management
 - Information management
 - External influences

Background

- What happens if it is ignored?
 - Increased costs
 - Loss or reduction in profit
 - Damage to brand / reputation; and at worst
 - Disposal of the business or insolvency

Project risk management

- How do you manage the risks?
 - Identification
 - Assessment / quantification
 - Reduction
 - Implementation
 - Monitoring

Project risk management



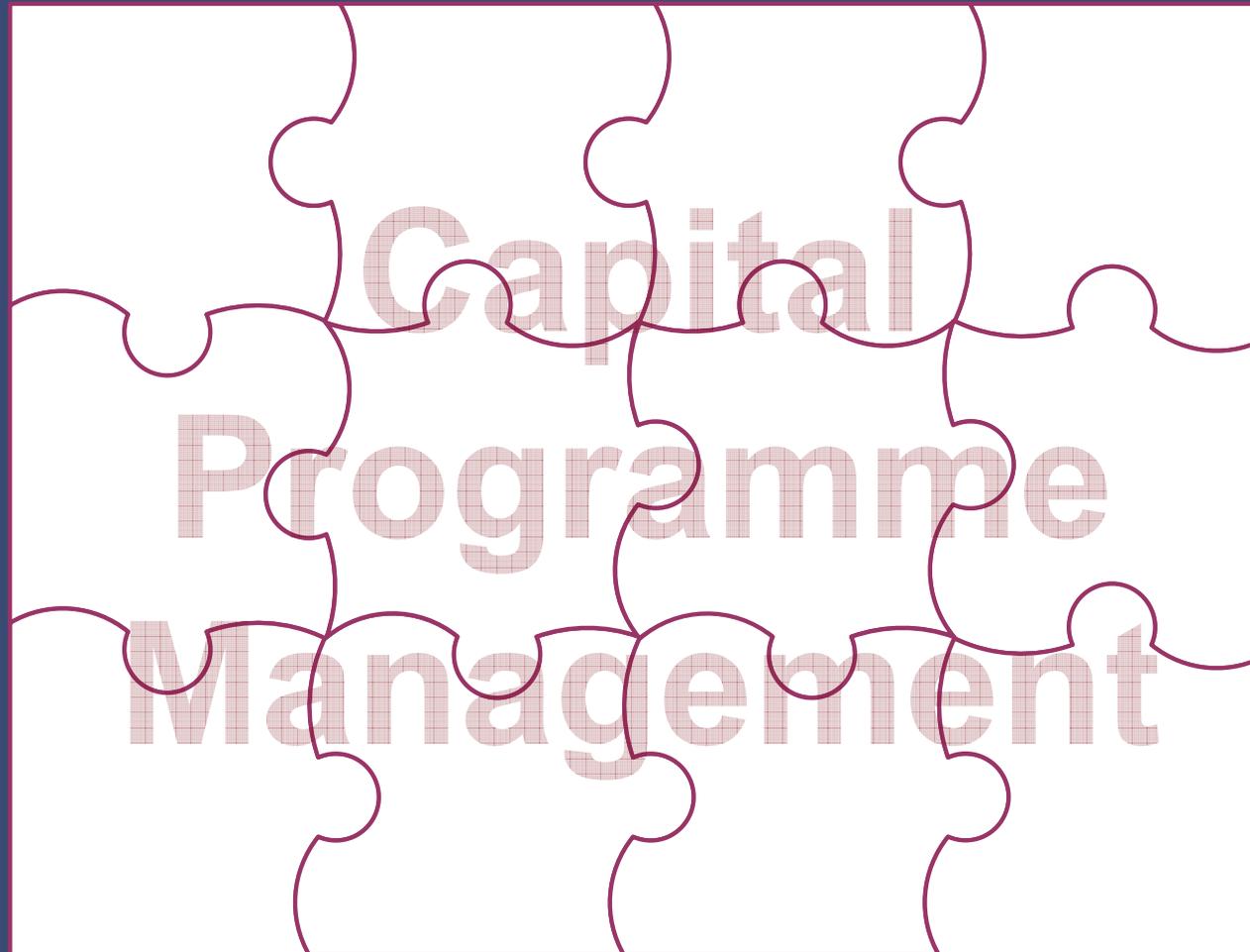
Project risk management



Project controls

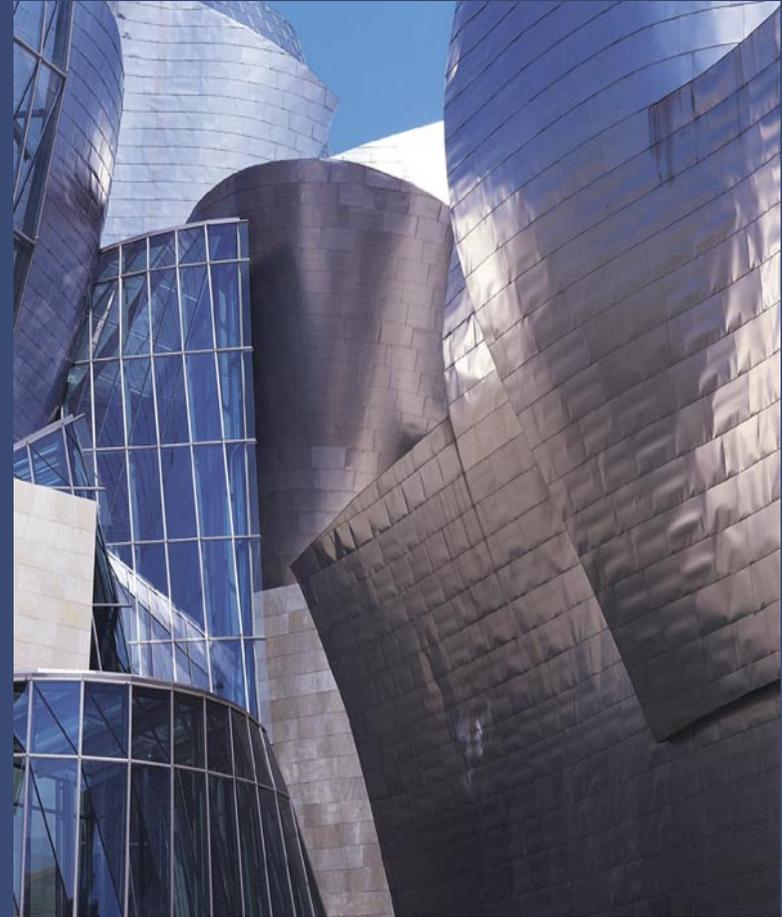
- Project controls
 - Policies and procedures to ensure the efficient coordination, monitoring and management of a project
- What do project controls include?
 - Risks
 - Communication
 - Roles and responsibilities...
- Are they separate?

Project controls – integral components



Project controls

- Risks change throughout the project lifecycle and the controls need to match
- Risk and uncertainty poses opportunities as well as challenges
- Cost, time and quality impacts need to be considered together
- Can consider them in 'function' groups

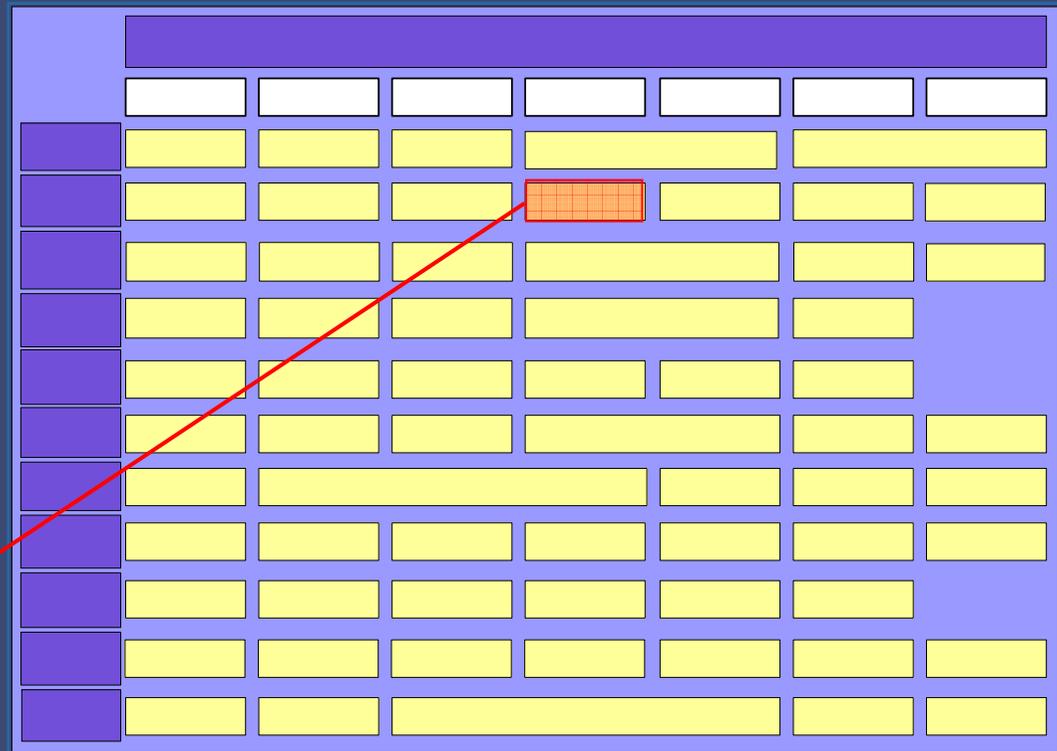
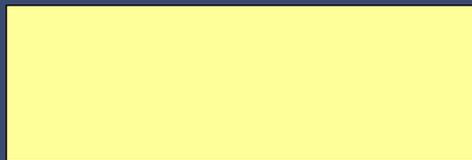


Project Risk Management Life Cycle Matrix

	1.0 Planning	2.0 Program	3.0 Design	4.0 Construction	5.0 Testing	6.0 Close-Out	7.0 Ops & Maint
1. Business Environment	1.1 Program Planning Process	2.1 Project Purpose Funding & Approval	3.1 Business Needs Review	4.1 Executive Oversight & Support		6.1 Continuous Improvement Review	
2. Integration	1.2 Program Management Policy	2.2 Project Delivery Method	3.2 Project Integration Review	4.2 Daily Project Management Process	5.2 AE/CM/GC Contract Compliance Review	6.2 Capital Project Review	7.2 Operations Project Planning Process
3. Scope & Change Control	1.3 Facilities Master Plan/Planning Process	2.3 Project Requirements Definition	3.3 Building Design	4.3 Change Control Process		6.3 User acceptance Process	7.3 Operations Acceptance Process
4. Time Management (Schedule)	1.4 Facilities Annual Plan (1-3 years)	2.4 Project Schedule Requirements	3.4 Baseline Project Schedule	4.4 Detailed Schedule Management		6.4 Schedule Completion Check List	
5. Quality & Inspection	1.5 Facilities Design and Specification Standards	2.5 Project Concept Design & Themes	3.5 Design Review & Approval	4.5 Quality Assurance Process	5.5 Conduct Inspections & Quality Review	6.5 Close Out Check List	
6. Cost Management	1.6 Program Cost Management Guidelines	2.6 Project Funding & Capital Budgeting	3.6 Cost & Schedule Forecast	4.6 Cost Control		6.6 Final Payment/Retention Release	7.6 Operating Budget Process
7. HR Management	1.7 Facilities Management Organization	2.7 Project Management Staffing			5.7 Staff Reductions/Transfers	6.7 Operations Staff Planning	7.7 Ongoing Requirements/Skills Review
8. Comms. & Reporting	1.8 Program Reporting Requirements	2.8 Project Reporting Requirements	3.8 Project Status	4.8 Project Cost & Budget Variance	5.8 Project Quality Performance	6.8 Project Close-out Performance	7.8 Final Status & Financial Report
9. Safety, Insurance & Risk	1.9 Safety, Insurance & Risk Mgt Policies	2.9 Project Safety Program & Insurance Strategy	3.9 Safety Program Training & Compliance	4.9 Risk Tracking & Resolution	5.9 Safety & Risk Mgt Compliance	6.9 OCIP Close-out Review & Report	
10. Procurement & Contracts	1.10 Contracting Approach & Controls	2.10 AE/CM/GC Selection & Contracting	3.10 Subcontractor Qualification Process	4.10 Subcontractor Selection/Contracting	5.10 Contract Compliance Review	6.10 Punch List	7.10 Vendor Qualification/Selection
11. Issue Management	1.11 Issue Management Policy	2.11 Project Issue Management Planning	3.11 Issue Tracking & Resolution			6.11 Confirm Issue Resolution	7.11 Ongoing Issue Management process

Project controls

- Each area of the project is analysed to identify ...
- Risks
- Control procedures
- Monitoring controls



Project controls – Daily Project Management Process

- Risks
 - Lack of knowledge of project tracking
 - Failure to recognise and develop responses to risk and opportunity
 - Lack of timely resolution of issues as raised by various stakeholders
- Claims
- Contract administration
- Lack of compliance with project requirements
- Unnecessary legal liabilities or loss of entitlement

Project controls – Daily Project Management Process

- Control procedures
 - Project management plan
 - Risk and opportunity registers
 - Issues registers
 - Clear documentation of contract procedures and the like
 - Regular, documented meetings to consider key risks

Project controls – Daily Project Management Process

- Monitoring controls
 - Compliance to prescribed policy and procedures
 - Regular project status meetings to review action list and responsibilities as agreed
 - Regular formal assurance and expediting reports
 - Formal up-to-date project management tools incorporating current information/issues and “as built” information

Project controls - Summary

- Project risk management is important to your business as a whole
- Project controls provide a framework to manage the project
- Project controls cover a full spectrum including,
 - Risks
 - Cost and schedule forecasting
 - Business needs



Project controls - Summary

- But are yours comprehensive?
 - Will it stand up to Internal Audit scrutiny by your business?
 - Are records suitable for dispute resolution?
 - Does the process have the knowledge or is it with the staff?
- Control the risk and slay the dragon!



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