



Why Projects Go Wrong

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C3 Projects



Outline



- Definitions
- Case studies – mega projects
- Examples from the floor
- What the research says
- How to ensure success
- Process
- The Risk Management loop
- Close

Definitions



- Project
 - A temporary endeavour undertaken to achieve a particular aim.

- Wrong
 - Not in accordance with what is usual or expected
 - Improper, defective

- For projects, the evidence is often cost/schedule overrun or defective engineering

Sydney Opera House



- Brief – to create a world class concert and opera venue
- Problems
 - Unexpected difficulties
 - Political issues
 - Plan change.
- “Malice in Blunderland”

	Expected	Final
Cost	\$7m	\$102m
Time	6 years	16 years

The Big Dig (Boston)



- Sinking Boston's main highway into a tunnel, and other roadworks.
- Problems
 - Financial & political
 - Substandard materials
 - Geological & archaeological issues
 - Delayed environmental clearance
 - Inflation



	Expected	Final
Cost	\$5.8b	\$15b
Time	13 years	15 years

Channel Tunnel



- To provide a rail link between England and France
- Problems
 - Financing issues
 - Staffing issues
 - Conflicts of interest
 - Construction initiated before design completion
 - Contractual disputes
 - Inflation

	Expected	Final
Cost	£4.9b	£10b
Time	5.5 years	6.5 years

Wembley Stadium



- To build a 90,000 seat national football stadium
- Problems
 - Financial/political
 - Wrong type of foundations concrete
 - Design changes
 - Contract issues
 - Ground movement



	Expected	Final
Cost	£326.5m	£975m
Time	3 years	7 years

Your Turn!



- Please help us with examples of projects, small or large, that you know of that have failed.
- If you know some of the reasons, even better!

Research on Costs - 2002



- Research based on \$90b of transport infrastructure projects (258 in all)
- Cost estimates used for decision making, consistently underestimated the true cost – intentionally misleading.
- Average cost increases by sector in Europe:
 - Rail 34%
 - Tunnels/bridges 43%
 - Roads 22%
- Forecasting errors (imperfect techniques, inadequate data, etc.) are insufficient to explain the consistent bias

OGC Research on Project Failure



- 8 broad causes identified:
 - Lack of clear link between the project and the organisation's key strategic priorities, including agreed measures of success
 - Lack of clear senior management leadership
 - Lack of effective engagement with stakeholders
 - Lack of skills and proven approach to project & risk management
 - Too little attention to breaking the project into manageable steps.
 - Proposal evaluation driven by price, not value-for-money
 - Lack of understanding of supply industry at senior levels
 - Lack of effective project team integration between clients, supplier team and the supply chain.

Construction Project Failures



- University of Johannesburg study identified some common causes of failure in the construction industry:
 - Poor top team communication (PM, Architect, QS, Engineer)
 - Lack of sufficient stakeholder involvement
 - Poor project design & leadership – the different groups need to work together, not in isolation
 - Lack of simultaneous planning of design & construction
 - Poor project definition

How can PM's change this?



- Ensure inclusion:
 - of stakeholders, end-users, designers, builders, project managers, quantity surveyors.
- Have clearly defined aims and objectives
- Plan, Plan, and Plan some more.
 - The planning should include, *inter alia*, change management and risk management.
- Ensure good communication at all levels
 - This includes clearly defining roles and project breakdown.
- Provide leadership

Leadership



Influencing and directing the performance of group members towards the achievement of organisational goals.

- Keep an eye on long-term goals while focusing energy on short-term objectives.
- Set a personal example with visible, memorable symbols and behaviours.
- Instil optimism and self-confidence while staying grounded in reality.
- Maintain personal stamina—and let go of guilt.
- Reinforce the team message: “We are one—we live or die together.”
- Minimize status differences while stressing courtesy and mutual respect.
- Deal with anger in small doses, engage dissidents, and avoid power struggles.
- Always find something to celebrate and something to laugh about.
- Be willing to take the “Big Risk.”
- Continually strive for creative solutions—and refuse to give up.

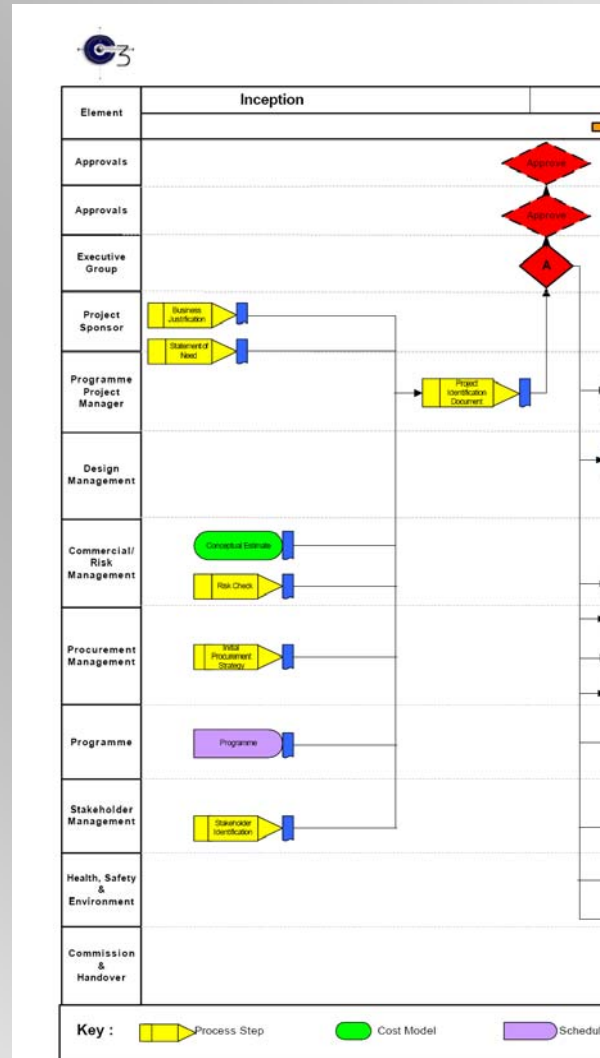
Key components



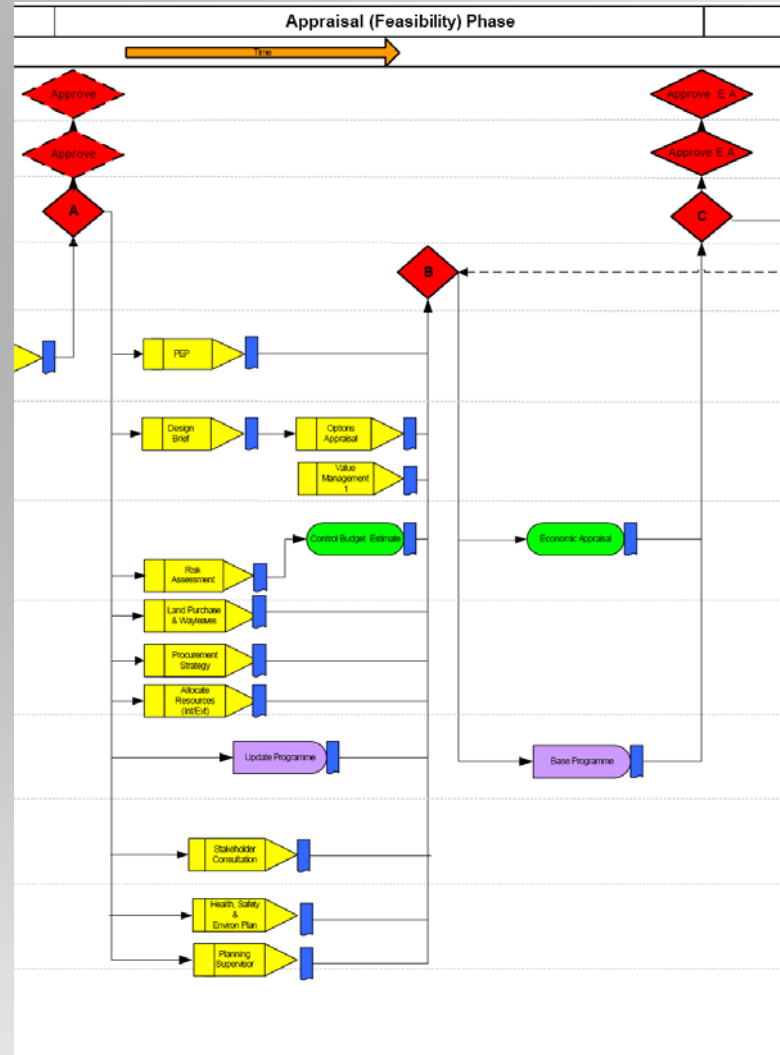
- Project Life-cycle
 - inception, appraisal, design & procurement, implementation, and operation & maintenance

- Inception includes the key issues of:
 - Business justification
 - Statement of need
 - Conceptual estimate
 - Risk check
 - Initial procurement strategy
 - Programme
 - Stakeholder identification

Process Flow Chart 1



Process Flowchart Part 2



Project Management Tools

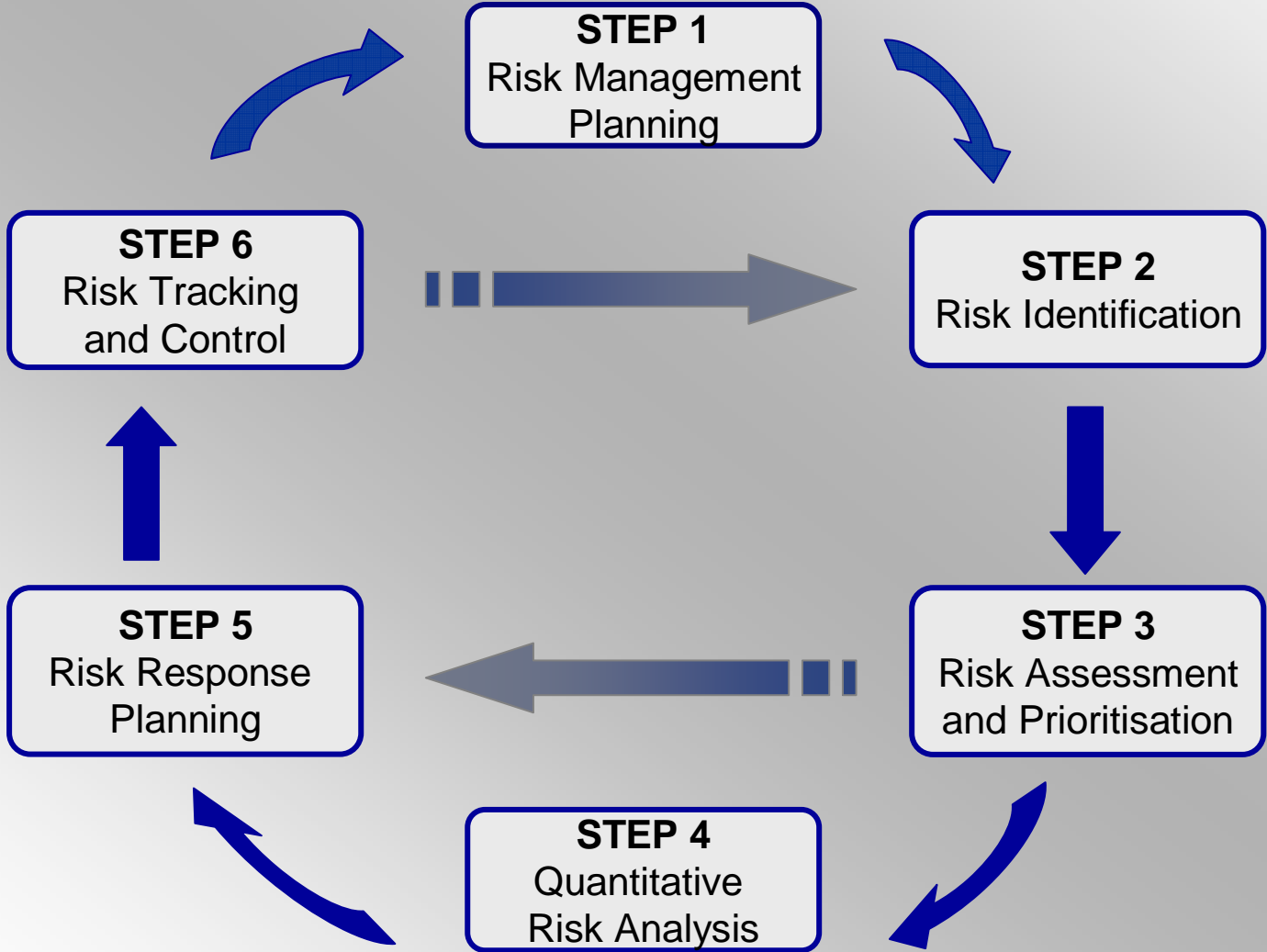


- Another key tool for delivering a successful project:

Risk Management



Risk Management 6 Steps



Summary



- Historically, projects have gone wrong, as evidenced by cost and schedule overruns or products unfit for purpose
- Causes are numerous. Often, however, they can be seen to result from self serving estimations, planning failure, communication failure or leadership failure
- Combining good planning, communication and leadership with change and risk management can deliver a successful project.

Questions?



How the customer explained it



How the Project Leader understood it



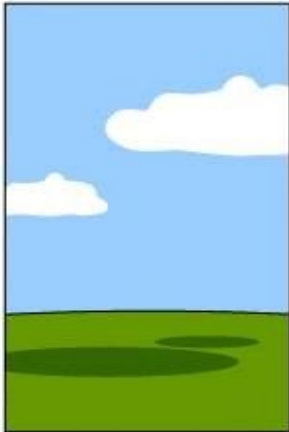
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



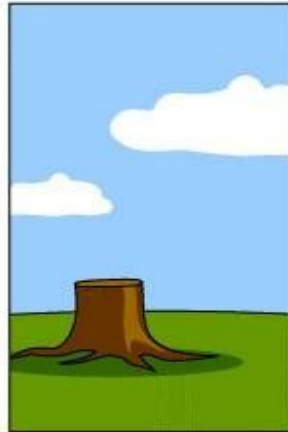
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed