

The Society of Actuaries in Ireland



Project Management for Actuaries: Achieving the Impossible?

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Objectives

- Provide some background to project management
- Raise awareness on the art and value of project management
- Debate how actuaries tend to relate to, or work with, project managers
- Discuss typical features of good project management
- Help actuaries to be more effective project managers or to work more effectively with project managers



Case Study – Recent Scottish Project

Guess the project...

- 7 year project, ran from 1997 – 2004
- Originally due for completion 2001
- 18,000 changes ordered through project
- ‘Multi headed’ client
- Total cost £470m. Original estimate was £10-£40m!



Case Study – Recent Scottish Project

Scottish Parliament building

- Rigid project (tight timescales but no compromise on quality = cost impact)
- Scope creep/poor initial specification – 18000 changes!
- ‘Catastrophically expensive decisions’ – particularly as not with stakeholders consent
- Quote for the project ‘if it could go wrong, it did go wrong’
- Not updating/informing stakeholders of progress (particularly of cost vs budget)
- Original estimate clearly wrong – why no reality check?
- ‘Of total cost about £150m wasted’



Case Study - Insurance

Scope

- Actuarial model development – 1 accounting basis was in scope but 3 further bases were not considered.

Team & Resourcing

- 'APL is the way to go on this' (said the only person on the IOM who knew APL)

Risks & Issues

- Single global admin platform - \$100m grew to \$300m in 2 years

Project Delivery

- This system has major errors in it – 'you didn't ask us to test it'

Benefit Realisation

- Co. spent \$15m building own system and then started again



Agenda

Task Name	0	5	10	15	20	25	30	35	40	45	50	55
Introduction	█											
Project Cycle		█										
Characteristics of a Good Project			█									
Health Check								█				
Q & A									█			

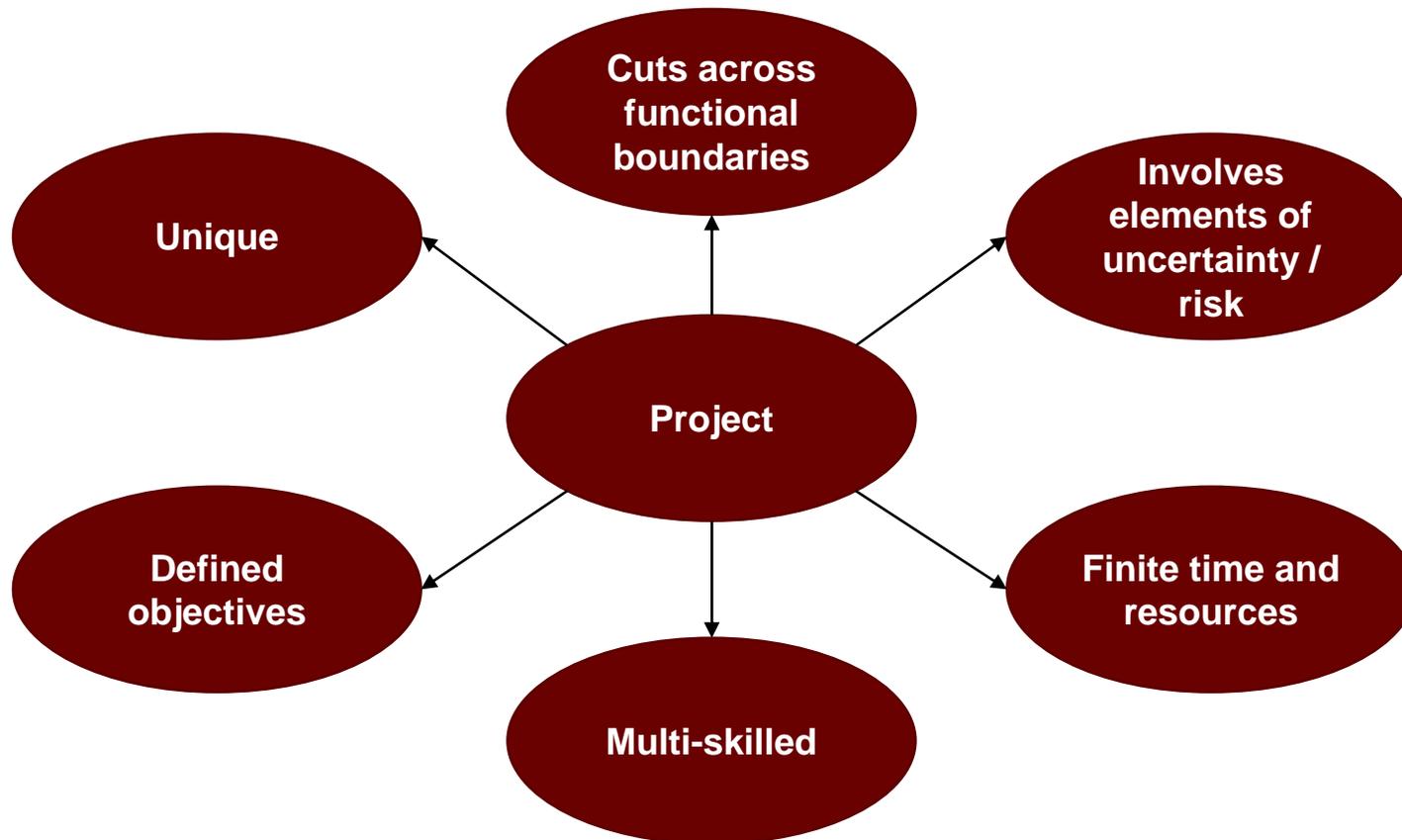


Agenda

Task Name	0	5	10	15	20	25	30	35	40	45	50	55
Introduction	█											
What is a Project	█	↓										
A Brief History of Project Management		█	↓									
Do actuaries make good project managers?			█									
Project Cycle			█									
Characteristics of a Good Project					█							
Health Check									█			
Q & A										█		



What is a project?



A project is a series of tasks, arranged in a defined sequence or relationship, that produce a pre-defined output or effect.

A project always has a start, middle, and an end.

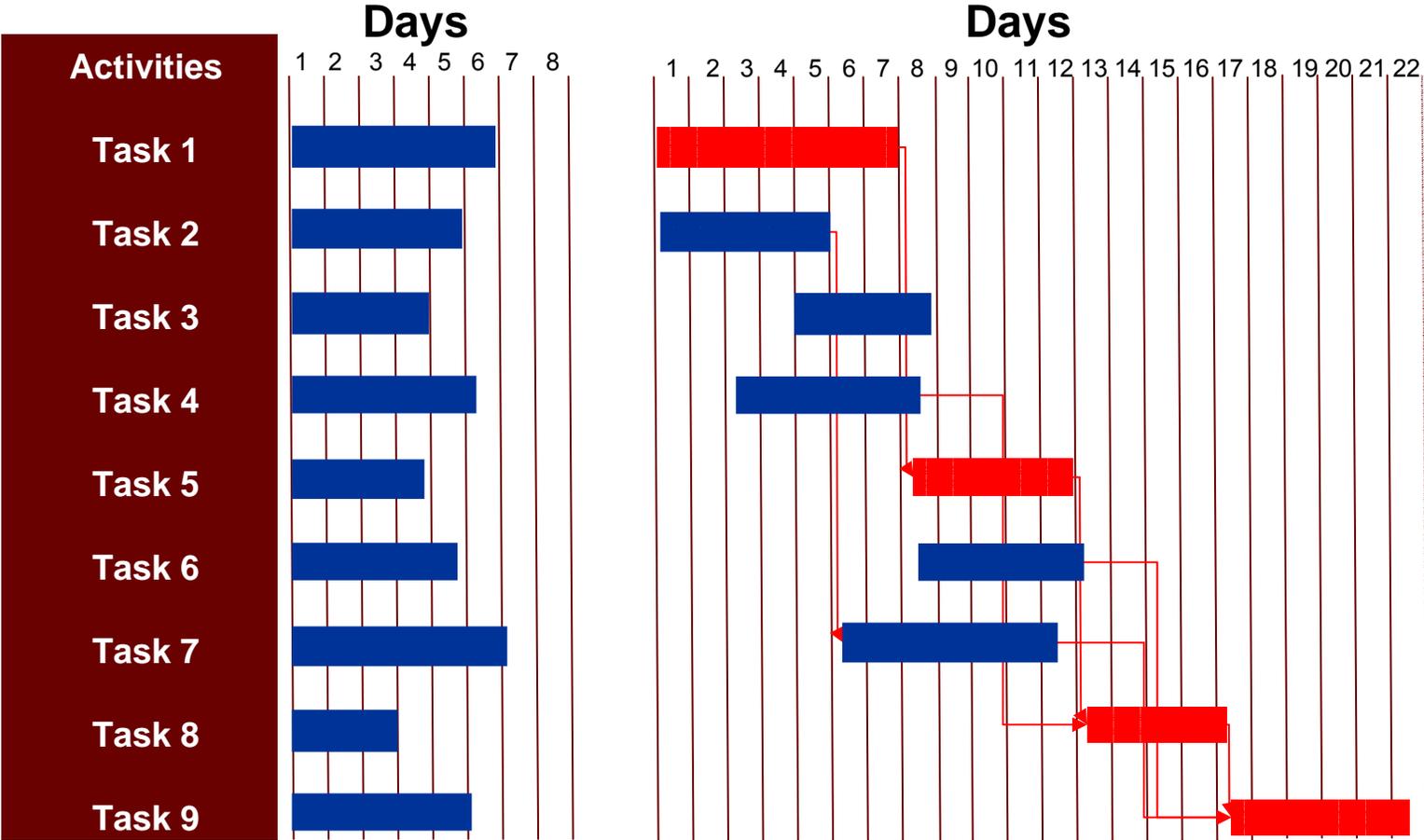


A Brief History of Project Management

Gantt (early 1910)



Project Evaluation & Review Technique (PERT)



Do Actuaries make good Project Managers?

Typical Actuary

- High intellect / technical excellence
- Works best in single-disciplinary teams
- Tend to be detail focussed
- Process-driven
- Lack of commercial judgement
- Not all are good communicators, especially to non-actuaries
- Can find it hard to live with risk

Source: Actuarial Profession Strategy Review – Discussion Paper (September 2005)

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Good Project Manager

- Sufficiently technical to understand the issues
- Works well in multi-disciplinary teams
- Focus on ‘big picture’
- Delivery focussed
- Avoids over-engineering the solution
- Good communicator across disciplines & levels
- Risk Manager

Actuaries may not make *natural* project managers...



Working with specialists

- Leave me to it
- Focus on the final deliverable
- Project meetings are a waste of time - I know what I'm doing
- Trust me – I'm an actuary
- It will take as long as it takes
- I'm just finishing it
- I'll tell you if I have a problem
- E-mails
- Give me another half-hour...



Project Management Misconceptions

- It's all about planning and progress reports
- Their only interest is in keeping costs down
- Meetings, meetings, meetings
- Extra layer of bureaucracy
- Doesn't understand the business process
- Gets in the way / slows the 'do-ers' down
- Focus on process at expense of content
- Prioritises the Status Report over the work

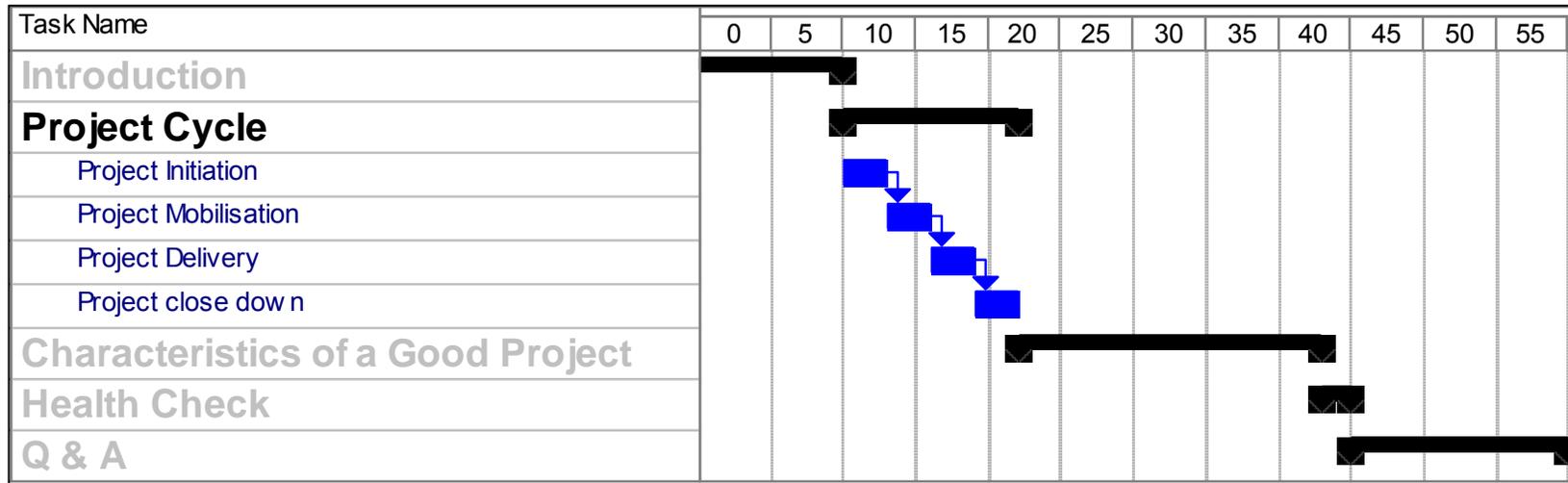


Project Management is about People

- Managing expectations of Project Team and stakeholders
- Allocating activities to the right people at the right time
- Communicating understanding / goals / deliveries
- Ensuring each individual delivers what they should when they should to a minimum quality standard
- Acting as a Gatekeeper
- Communication, communication, communication



Agenda



Project Initiation

Key Activities

- Define the opportunity / problem
- Initial investigation & feasibility study
- Identify **stakeholders**
- Produce Business Case
 - Define objectives & scope
 - High level plan
 - Cost-benefit analysis
 - Identify/assess risks & issues
- Secure appropriate sponsor
- Gain approval
- Detailed planning, including resourcing

Typical Pitfalls

- Blue sky thinking
- Jump to solution
- **Failure to obtain buy-in from stakeholders**
- Focus on project outcome, not business benefit
- Understate costs, ignore opportunity costs & inflate benefits
- Unrealistic plan (ambitious resource allocation, underestimating time, no contingency)
- Lack of communication



Project Mobilisation

Key Activities

- Initiate governance, obtain buy-in
- Identify resource requirements & build project team
- Internal v external resource
- Full-time v part-time
- Mix of skills
- Energise team
- Allocate **clear responsibilities**
- Allocate tasks
- Refine / manage risks & issues

Typical Pitfalls

- Allocating BaU staff <100% to the project
- Getting internal – external balance wrong
- Failure to ensure everyone has a common view of the project scope or objectives
- Unrealistic resource allocation
- **Lack of clarity in responsibilities**, e.g. Sponsor, Project Director, Project Manager, Subject Matter Expert, etc.
- Poor communication



Project Delivery

Key Activities

- Hit the milestones – build & maintain momentum
- Progress tracking & reporting
- Manage stakeholder & customer's expectations – “**no surprises**”
- Quality assurance / control
- Budget control
- **Change Control**
- Risk management & mitigation

Typical Pitfalls

- ‘**Back-end**’ the project / continue to believe in the ability to catch-up
- Fail to raise red flag early enough
- Get bogged-down in detail / over-engineer
- Allow team to get side-tracked
- Unnecessary budget overruns
- Scope creep
- Lack of communication



Project Close Down

Key Activities

- Post-implementation review / lessons learned
- **Integrate resource back into business**
- Integrate project outcome into BaU
- Close down project – admin, legal, contract staff, cost centres, etc.
- **Celebrate success!**
- Formal sign-off & handover to BaU

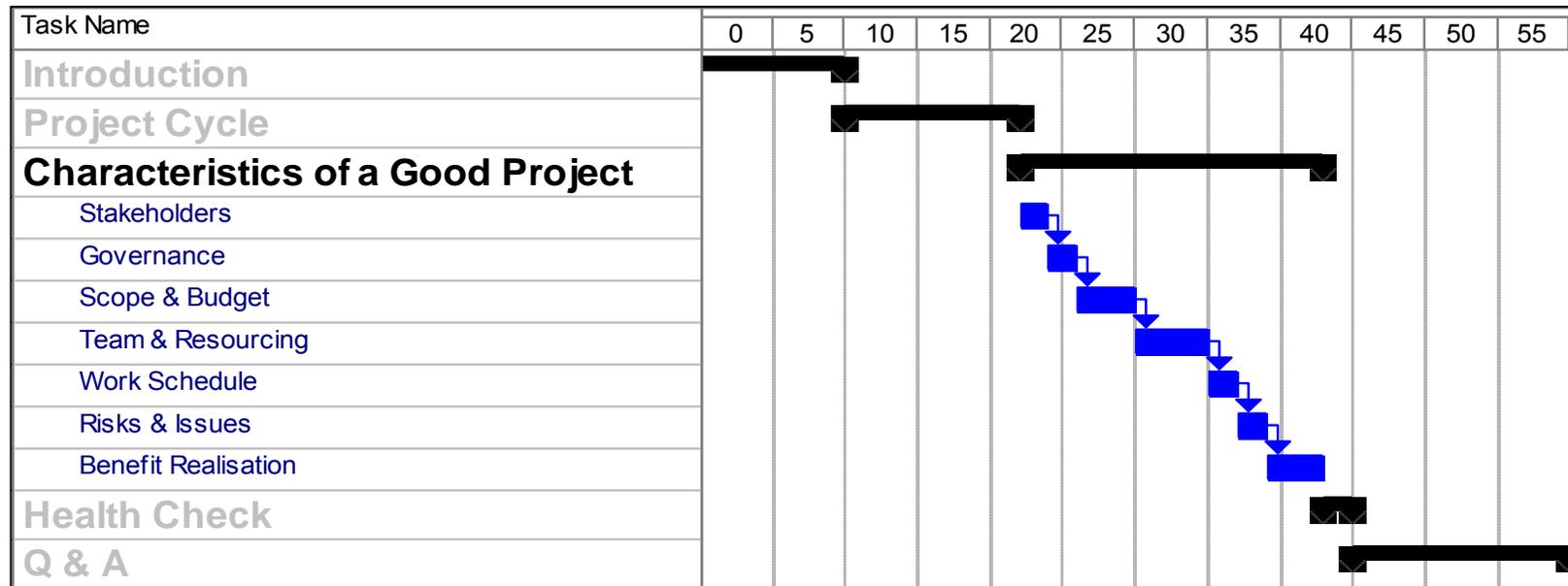
Typical Pitfalls

- Failure to review project effectiveness & embed lessons learned
- Project resource have nowhere to go (back to)
- **Project outcome left to wither**
- Failure to realise benefits

**“The only unforgiveable failure
is the failure to learn from past failures”**



Agenda



Stakeholders

- Don't underestimate the need to manage stakeholders' expectations, particularly in a large project
- They are the people who can make or break the project
 - Ensure those who could block are at worst neutral
 - Who controls access to the power (gatekeepers)
 - Need to get supporters who can help you deliver
- How do I manage them to achieve my project outcomes?
 - Who can influence them?
 - What involvement should they have / do they need?

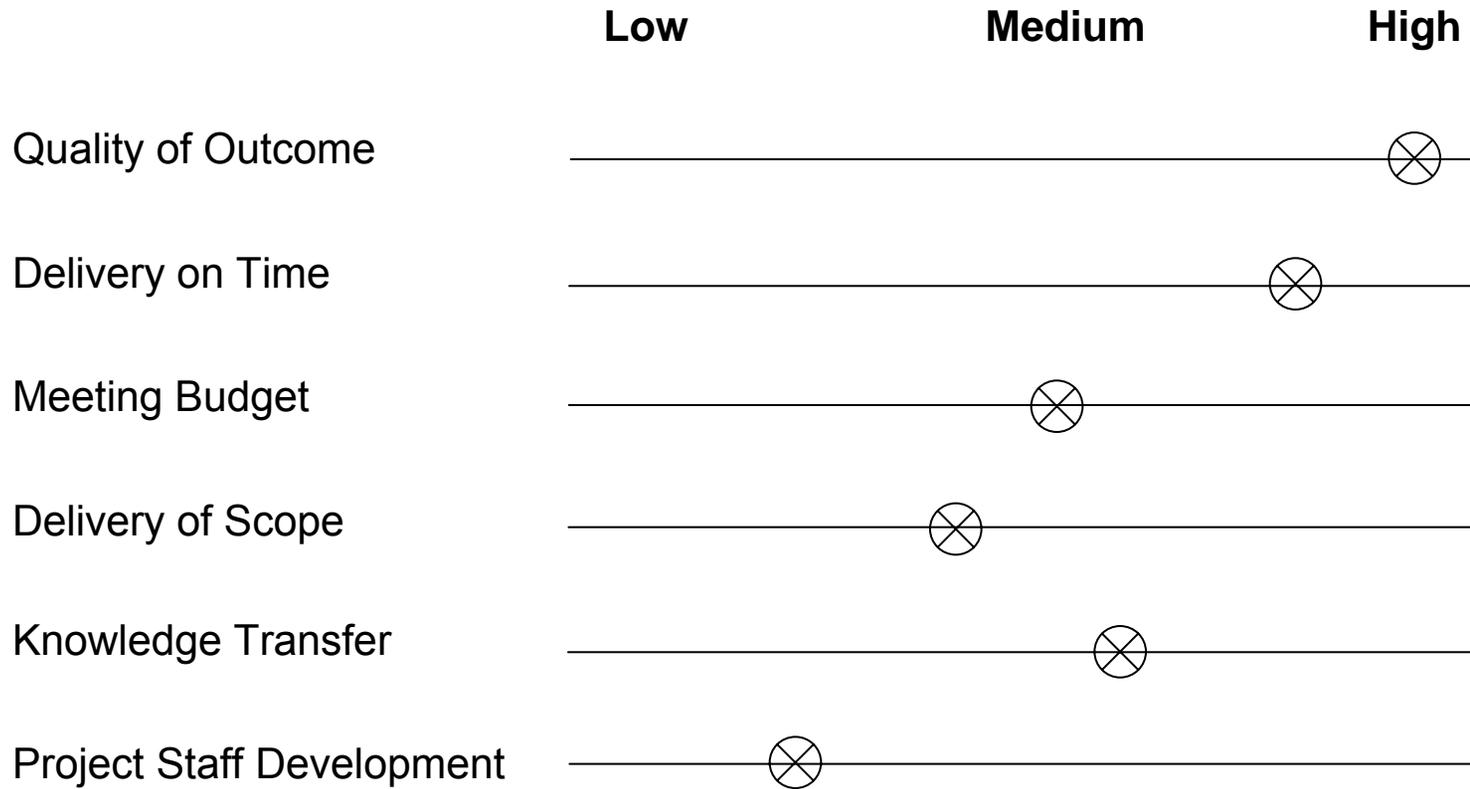


Project Priorities

- It's important for the Sponsor to define what's important.
 - Difficult to deliver top quality within fixed budget and timescales (increases the risk of failure)
 - Need to know which drivers can be flexed and which ones cannot
 - Think about each driver - the more important it is, the less it can be compromised
- It's important for the Project Team to understand and buy in the priorities.
 - Projects that don't have aligned understanding of priorities generally don't deliver



Project Priorities



Governance

- Ensure the right governance is in place for your organisation and the magnitude of the project
- Good governance
 - Adds discipline to a project
 - Can help manage stakeholders & customers
 - Gives guidance, avoiding costly rework
 - Acts as gatekeeper on scope
 - Takes responsible approach to Change Control
- Bad governance
 - Can distract a project, slowing progress
 - Delays decisions, seeking additional justification
 - Allows or even encourages scope creep
 - Generates reporting overheads for no added benefit
 - Too many layers of project management



Team & Resourcing

- Projects will only deliver if the team has:
 - The right mixture of skills and experience
 - The right resources in the right place at the right time (equipment, space, support as well as people)
 - Sufficient full-time permanent resource and the right mix of internal / external staff
 - A clear, shared and understood goal – a sense of unity
 - Clear communication of progress, issues, risks and expectations
- Don't forget the basics – project teams have careers too & need development
- A successful project should enhance the CV



Team & Resourcing

Consultant View

- Fishing trips
- Please write down your approach to
- 'You are one of 6 providers pitching for a £50k job'
- Right solution => right people to deliver?
- Contractors v consultants
- Procurement departments
- Buying decisions based only on price
- Buying based on corporate CV (different individuals)

Client View

- Not being taken seriously
- Talking up their expertise / coming to be trained before selling to my competitors
- Expecting top rates for bodyshopping
- Not investing in the relationship
- Work expands to fit the time available
- Introducing more of own team
- Deliberate over-engineering
- Embedding / outstaying welcome



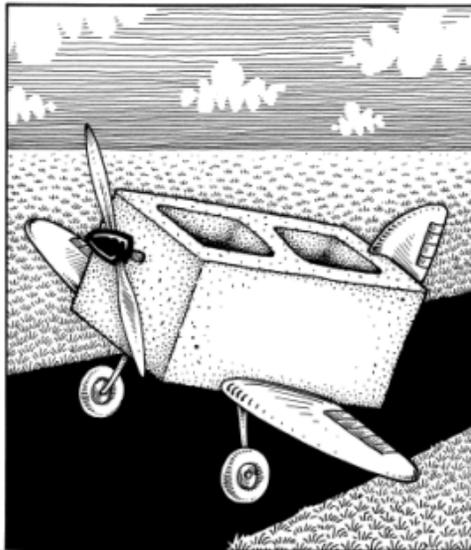
Scope and Budget

- Agree the scope upfront & stick to it
- Maintain the boundaries (avoid scope creep)
 - Manage proposed changes in scope or budget through formal Change Control procedure, clearly identifying impact on project
- Deliver what's achievable, not what you'd like to do
- Agree the budget, consider explicit contingency
- Manage the budget (justify overruns or under runs)



Case Study I – Managing Scope Creep

The Starfighter was a US designed single engine jet fighter from the 1960's. It weighed about 6 tons and was generally acknowledged to be short of wing area and if the engine failed while flying at low altitude there was little time for the pilot to escape.



The German Luftwaffe bought a version of this plane, but they wanted some additional weapons / features, which brought the weight up to about 9 tons. They did nothing about the wings. It flew, just, but became known as the 'widow maker' or 'flying coffin' as about 1/4 of those bought by the Luftwaffe crashed (270), often killing the pilot. Engine failure resulted in a gliding performance little better than that of a house brick.



Work Schedule

- “Failing to plan is planning to fail”
 - “Overplanning will lead to analysis paralysis”
- } **Balance**
- Go for the happy balance and be prepared to change the plan
 - Information not available – use best estimates
 - Some tasks overrunning – build in checkpoints
 - Can we re-scope the task to deliver what is needed in the time / budget available?
 - Maintain flexibility



Risks & Issues

- Projects fail because they don't identify and manage risks and issues
 - Define your risks and review them regularly
 - Quantify probability of risk & likely impact
 - Define appropriate mitigation actions (to reduce the chance of a risk becoming an issue)
 - Define contingency plans (if the impact of a risk becoming an issue merits it)
 - Review progress and define new mitigation actions as the project progresses
 - Escalate risks as they become more likely or high impact
 - Risks can become issues, e.g. Buncefield oil terminal

- Take Risks & Issues seriously!



Case Study II – Mitigation & Contingency Planning

- NPI demutualised and was taken over by AMP on 1 January 2000!!
- To achieve this, the company had to go through year end, Y2K and the biggest software release in its history.
- Risk was that the process would not complete by start of first business day 4 January 2000 – and it would be perceived as a Y2K problem
- Risk mitigation involved detailed planning, phone cascades and trial runs
- Contingency planning was having a parallel system available as at 31 December 1999, which customer service teams could access to answer policyholder and IFA queries – so giving the impression NPI was open for business.
- **What happened? The normal year end run failed and the resulting delays meant that the systems were not available in time; but the customers weren't aware as their questions were answered!!**



Benefit Realisation

- The Sponsor is responsible for the delivery of the business benefit
- Project are generally perceived to fail, not because they don't deliver the project outcome but because the business benefits are not realised (“it doesn't do what I want it to do”)
- Business benefit should be the key focus throughout the project life cycle
- Why are we doing this & what change will it bring about?
 - 50% fail to identify all benefits
- What do we need to ‘say’ to get sign-off?
 - 26% admit overstatement



Case Study III – Benefit Realisation

The construction was done to budget (about £50 million) but hundreds of millions £ have been lost. The marketing had clearly been flawed and the design of the attractions and visitor control left a lot to be desired.



The aims of the millennium dome were too general and a large proportion of the general public was not interested in seeing the attractions.

Lack of focus on the benefits, benefit realisation and the project aims often contribute to unsuccessful projects.

Contrast with the London Eye.



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Health Check

Healthy Signs

- Simple solutions
- Tangible benefits
- Good resource freely made available
- Good evidence of control
- Good morale
- Diverse team
- Lengthy issues log
- Written agreements are in place
- Executive incentives aligned to realising project benefits
- Stakeholders freely promoting the benefits of the project

Unhealthy Signs

- People ask “why are we doing this?”
- Time is unimportant / cost is over-important
- Good staff are unavailable
- Surprise at missed deliveries
- High staff turnover
- Tense environment
- Poor working conditions
- “Issue” is a bad word
- Nothing is in writing
- No executive sponsor in place
- Stakeholders undermine project



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Questions??



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