

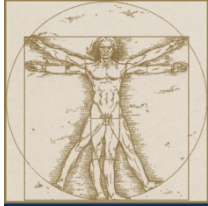
TBH

Everything you wanted to know about Delay, but have been too wise to ask.

Robert McMartin
Associate

Objectives

- To discuss and educate about the obvious and not so obvious impacts of delay on a project and a company.
- Chalk and Talk and question and answer discussion.
- To send all participants away with a renewed sense of purpose and to show the risks in delay.



TBH

Delay

delay

- **verb 1** make late or slow. **2** loiter or hesitate. **3** postpone or defer.
- **noun** an instance of delaying or being delayed.

From the Oxford English Dictionary

Wembley builders deny delay blame

Wembley Stadium builder Multiplex has denied it should be held totally to blame for delays in the project.

It was confirmed on Friday that the £757m stadium will not host any events until 2007 with delays leaving a threat of compensation hanging over Multiplex.

But Multiplex said in a statement: "The construction of Wembley National stadium had been subject to many design changes, historical and ongoing.

"The changes have implications on time and under the terms of our contract."

The Australian firm's managing director, Martin Tidd, said in the statement: "During interviews, Wembley National Stadium Limited advised that they believe that 100% of delays to the project are the responsibility of Multiplex. We wish to refute this claim.

"A fixed price contract was entered into with Wembley National Stadium Limited reflecting a defined scope of works.

The contract is adjustable in the event of change by the client
Multiplex managing director Martin Tidd

"The contract is adjustable in the event of change by the client. On a project of the size and complexity of Wembley, it would be unprecedented for no changes to have been made as suggested earlier."

The FA Cup final on 13 May was due to be the first match played at the new national stadium.

But building is now not expected to be finished until the end of September, after which three months will be needed to carry out safety tests and fit out the stadium.

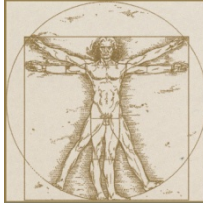
Wembley National Stadium Limited (WNSL), a subsidiary of the FA, is handling the project and its chairman Michael Cunnah claimed Multiplex had given it six revised construction programmes.

The penalty clause in the contract is believed to be for £140,000 per day and WNSL seem determined to enforce this payment.

WNSL chairman Michael Cunnah said: "The financial issues between ourselves and Multiplex are just that - between us and Multiplex and we have a fixed price contract that we are very happy to rely upon.

"We would reject any claims from Multiplex to the contrary."

But the two parties appear to be heading for a dispute after Multiplex company secretary Mark Wilson said "no further adjustments to the project's financial position are anticipated".

 PRINT THIS PAGEFrom **The Times**

January 29, 2008

Taxpayers face £500m bill for BAE projects

David Robertson, Business correspondent

Two of BAE Systems' flagship projects have experienced a massive budget blowout over the past two years, leaving British taxpayers facing a £500 million bill, it emerged yesterday.

The House of Commons Defence Select Committee said yesterday that the cost of the Astute nuclear submarine and Type 45 destroyer projects had increased dramatically, which could have an impact on future procurement.

The overspend comes despite assurances from BAE Systems, which is building the Astute and Type 45 projects, that the days of massive cost overruns and delays to MoD projects were over. BAE was forced to write off £800 million in 2003 after delays to Astute and Nimrod, the coastal surveillance aircraft, became so severe that the contracts had to be renegotiated.

Mike Turner, BAE's chief executive, said last year that all the company's contracts had been brought back on time and on budget.

The select committee contradicted that yesterday, saying that Astute and Type 45 costs had continued to escalate. According to the committee, the four Astute submarines will now cost £3.79 billion against an initial budget of £2.58 billion, a 47 per cent increase.

The six Daring-class destroyers will cost £6.46 billion compared with an initial estimate of £5.47 billion, an increase of 18 per cent. The destroyers will enter service two years late and the submarines at least six years late.

A BAE spokesman said: "Astute and Type 45 will be delivered in line with the MoD's requirements and will provide the Royal Navy with significant enhanced capabilities, the likes of which have not been available before." Defence sources blamed worsening exchange rates and price rises from subcontractors for the cost increases.

The select committee also criticised delays on the Nimrod project, which has risen in cost from £2.8



Project delays hit Woodside

Janie Freed
October 19, 2007

PROJECT delays are making it hard for Woodside Petroleum to take full advantage of the near-record oil price. Delays have forced it to lower this year's production forecast for the fourth time.

Advertisement

With oil trading around \$US87 a barrel yesterday, Woodside lowered its annual production guidance by up to 10 per cent to 70-71 million barrels of oil equivalent. It also said its third-quarter revenue had fallen 16 per cent to \$964 million, compared with \$1.145 billion during the same period last year.

In August, Woodside reaffirmed its production forecast of 72-78 million boe. It had originally predicted 80 million boe, but that was lowered to 75-80 million at a briefing in November.

Analysts were not particularly surprised by the latest downgrade: most had lowered their forecasts to 70-72 million boe before Woodside's revised guidance. But they expect Woodside's production to rise to about 90 million boe next year as projects are completed.

Woodside produced 17.6 million boe in the third quarter, compared with 19.1 million boe in the third quarter last year.

The production figures, which were released just before the sharemarket opened, sent Woodside shares down \$1.60 to \$52.58 but buyers quickly came in and lifted the stock to a close at \$55.50, up \$1.32. On Wednesday, Woodside sold at an intraday record of \$56.66.

The company has faced production problems at its Enfield oilfield and delays to its Otway and Neptune projects.

Woodside said Enfield's production was starting to improve after it repaired the highest-producing well last month. The operation is now producing 55,000 barrels a day, compared with an average of 46,000 barrels a day during the third quarter. Enfield's production is expected to increase further after a supporting water injector comes online next month.

The long-delayed Otway gas project off Victoria started production in the middle of last month. But Woodside said the plant had been shut since late last month as it worked through start-up problems, including a pipe leak.

The main development focus remains the task of increasing liquefied natural gas production. On Wednesday, Woodside started building its \$11.2 billion wholly owned Pluto LNG development after receiving approval from the Federal Government last week. It also recently signed a potential gas sales agreement with PetroChina for its part-owned Browse LNG project.

Earlier this week, Citigroup estimated the Browse project could cost \$30 billion, which would give Woodside a "quite low" internal rate of return.

This story was found at: <http://www.theage.com.au/articles/2007/10/18/1192300954192.html>

Project delays 'drive up prices'

By Carola Hoyos in London

Published: September 27 2005 03:00 | Last updated: September 27 2005 03:00

Print

Delays of big oil projects are helping to drive oil prices higher as energy companies become increasingly unreliable at delivering production from new oilfields on time, a recent analysts' report has warned.

Oil production in 2007 will be 2m barrels a day less than expected because companies are increasingly having to delay the date at which their projects deliver their first barrels of oil, according to Sanford Bernstein, an international research group.

"The industry is truly dreadful at project management, or at least at predicting the timing of project start-ups. The amount of production growth that has been lost to projects being delayed over the past few years is stunning, over 2m b/ d-2.3 per cent of expected global production in 2007," the report said.

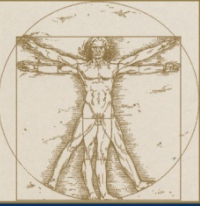
As a result Bernstein believes annual supply growth will slow to 1 per cent in the next decade, compared with the 2 per cent expected by many other analysts - including those at the International Energy Agency, the industrialised countries' watchdog agency.

Royal Dutch Shell, Europe's second largest energy group by market capitalisation, this year made headlines with delays at its Sakhalin oil and natural gas project off Russia's east coast and its Bonga oilfield in Nigeria.

But apart from ExxonMobil - the world's biggest, and possibly most tightly run energy group, the problem of 'project slippage' is industry-wide, the Bernstein report said.

The problem is caused by companies having to venture into increasingly difficult terrain and use untested technology as the world runs out of big, easy-to-find oilfields.

Meanwhile, new competitors attracted by high oil prices have made hiring exploration rigs increasingly difficult. The project delays are particularly serious in today's tight market conditions where the world's oil producing states are barely managing to keep up with strong demand, especially from the US and China.

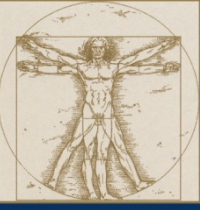


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Of the top 30 DMO projects¹, about one third are expected to deliver on time, or ahead of schedule. **The remainder are anticipating delays varying from a few months to a number of years.**

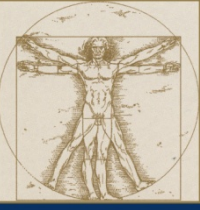
Mortimer Review, page 30. Chapter Three, Capability Acquisition

1. The top 30 projects are defined by forecast in-year expenditure by Defence in annual budget statements and annuals reports.



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- **87.5% of IT projects FAIL.**
 - Most fail due to delays in the implementation of the project, due to increase in scope.



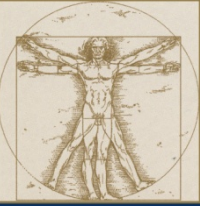
TBH

Delay

- Delay has two types of Impact:
 - Immediate or Obvious
 - Hidden
- Delay is both parasitic and exponential

Delay

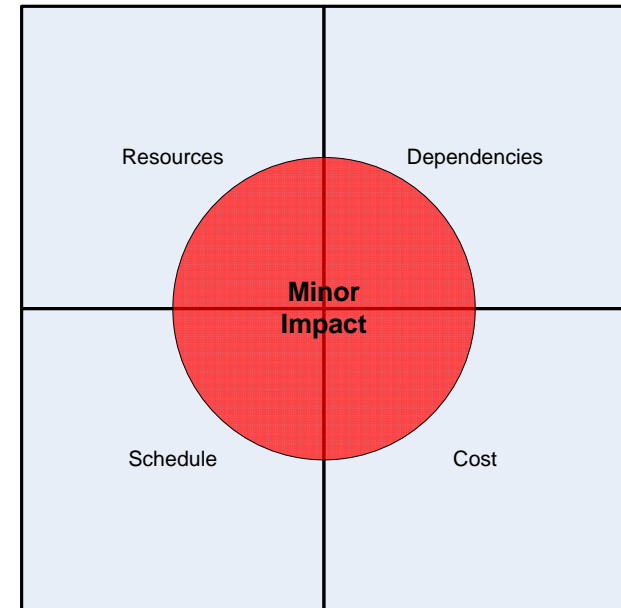
- Delay can be divided into two categories:
 - Less than 20% of the Project's Forecasted Deliverable time frame (Minor)
 - More than 20% of the Project's Forecasted Deliverable time frame (Major)
- If your project is in the Major category, it is **not recoverable**, within the original business case, as there may be too many associated issues.



TBH

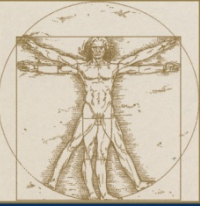
Delay

- Immediate
 - Schedule
 - Costs
 - Resources
 - Dependencies

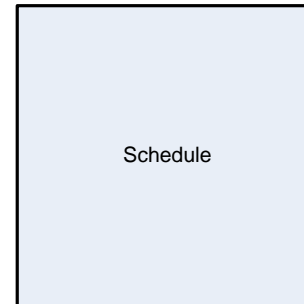


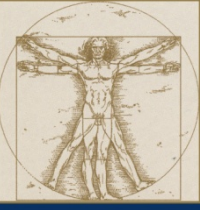
Delay

- Immediate
– **Schedule**



TBH





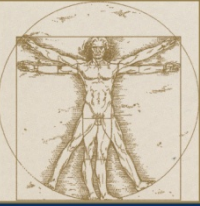
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Immediate/Obvious

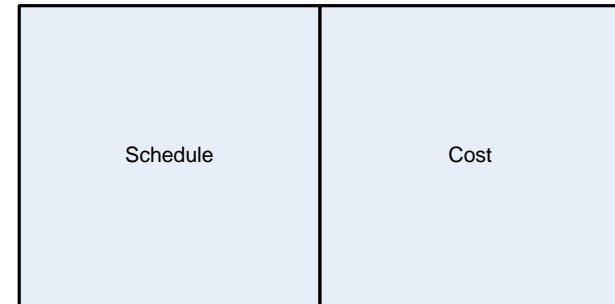
- **Schedule**
 - Time Frame
 - Completion Date
 - Tasks

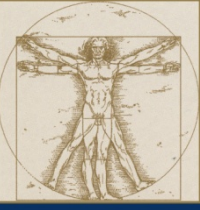
Delay

- Immediate
 - Schedule
 - **Costs**



TBH

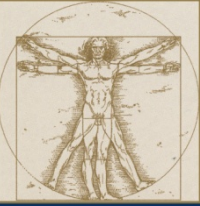




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Immediate/Obvious

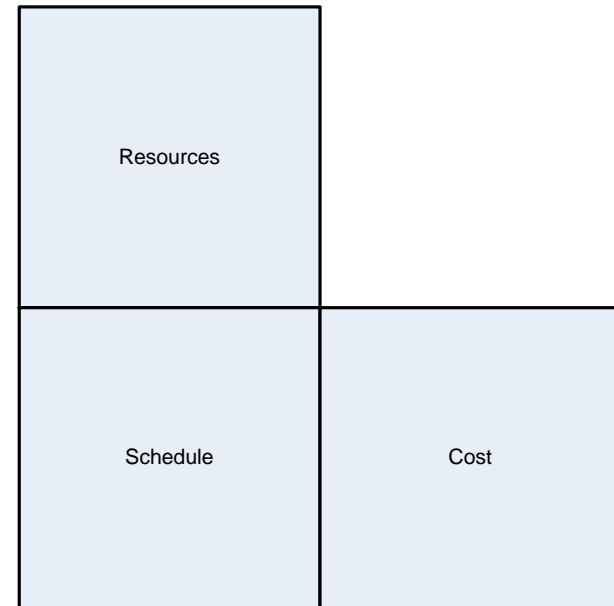
- **Costs**
 - Wages
 - Cost of Borrowing Money, or Cash invested
 - Liquidated damages
 - Lower Share Price (potentially a takeover target)
 - Less Profit
 - Lower Bonuses

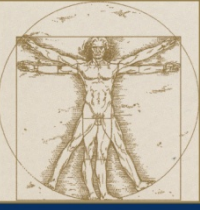


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Delay

- Immediate
 - Schedule
 - Costs
 - **Resources**

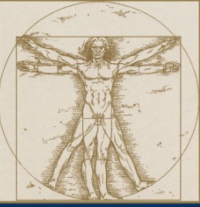




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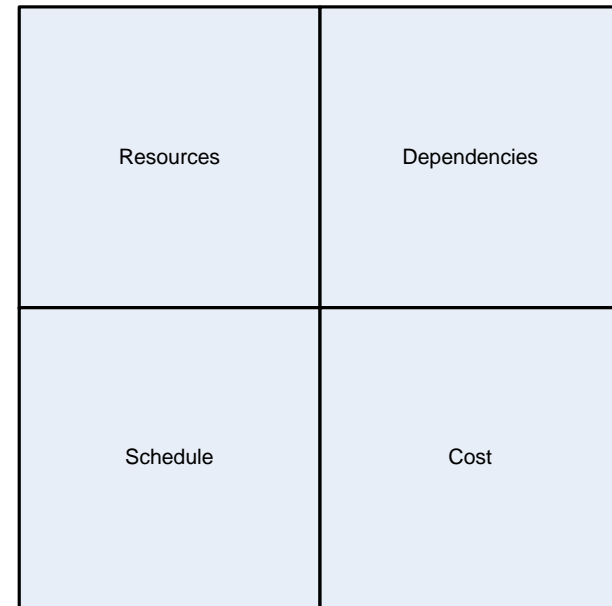
Immediate/Obvious

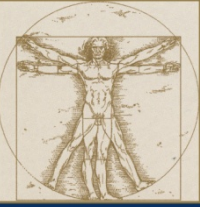
- Resources
 - Staff reassigned
 - Equipment reassigned
 - Project get a lower priority



Delay

- Immediate
 - Schedule
 - Costs
 - Resources
 - Dependencies

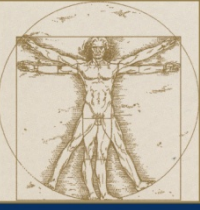




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Immediate/Obvious

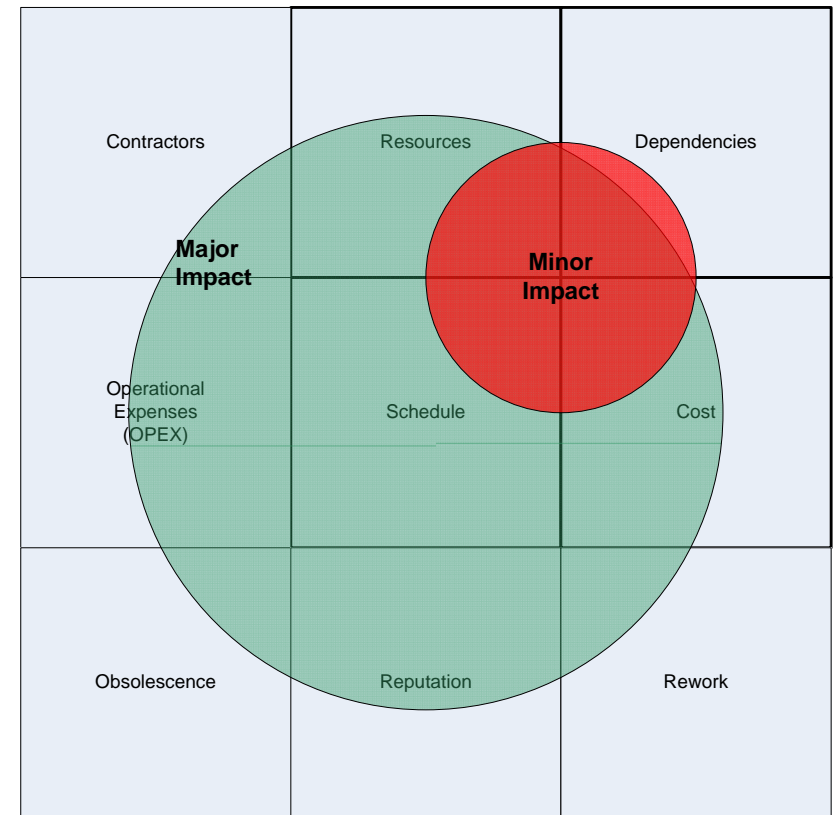
- Dependencies
 - Delays to other projects
 - Strategic Delays
 - Resources
 - Staff



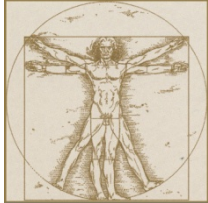
TBH

Delay

- Hidden/Compound
 - Operational Expenditure/
Deliverables
 - Reputation/Morale
 - Contractors
 - Rework
 - Obsolescence



Delay Pyramid



TBH



Obsolescence

Rework/Deliverables

Contractors

Reputation/Morale

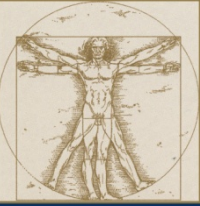
Operational Expenditure/Deliverables

Schedule

Resources

Costs

Dependencies



TBH

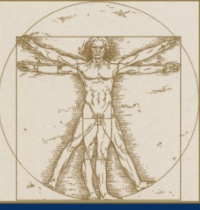
Hidden/Compound

- Operational Expenditure/Deliverables
 - Increased maintenance service costs.
 - Unrealised depreciation of equipment.
 - Failure to realise operational expenditure reductions.

Case history – Company A.

Company was reducing staff numbers to save \$2.5m per year in operational expenses.

\$35m worth of equipment sitting in a warehouse losing \$2.3m of unrealised depreciation, plus as equipment was not in service an additional \$500k was paid for maintenance of old equipment. There were warranty issues as well, due to warranty being on delivered, rather than in service.



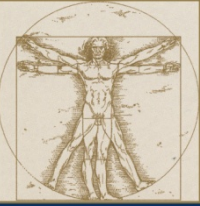
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Case History - Company A

- Reduction of staff
 - \$2.5 million saving

Which do you think was the better Investment?

- Unrealised Depreciation on \$35m
 - \$2.3 million
- Maintenance on existing equipment
 - \$500k (\$2.8m)
- Maintenance contract on new equipment (even though it was not installed)
 - -\$500k (\$3.3m)
- Logistics Costs for keeping stocks of both old and new equipment
 - \$100k (\$3.4m)
- Warranty Issues on equipment delivered but not installed
 - Priceless (\$4m + maybe)



TBH

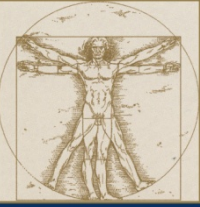
Hidden/Compound

- Reputation/Morale
 - Unreliable
 - Disorganised
 - Demoralising
 - Personal

Case history – Company B.

Every project the company ever tackled was delayed, no project ever finished on time.

The company's industry had serious concerns about the company and were continually bad mouthing the company in the press, government ministers and Banking Institutions. This company found it difficult to get finance for projects.



TBH

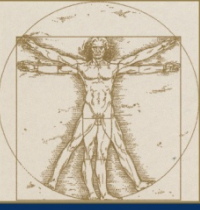
Hidden/Compound

- **Contractors**
 - Financial
 - Additional Costs
 - Staffing Issues

Case history – Company C.

Sub-Contractors routinely avoided any contracts to do with Company unless the work was short term and could be completed with a few weeks.

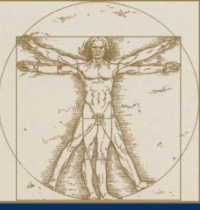
Also increased costs 30% plus were added to cover long periods where the projects stagnated due to inability of company to progress project.



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Hidden/Compound

- Rework
 - New Project Manager
 - New Staff
 - Need to relearn and rediscover
 - Double guessing
 - Direction Changes
 - Methodology Changes



TBH

Hidden/Compound

Project Life

Service Life

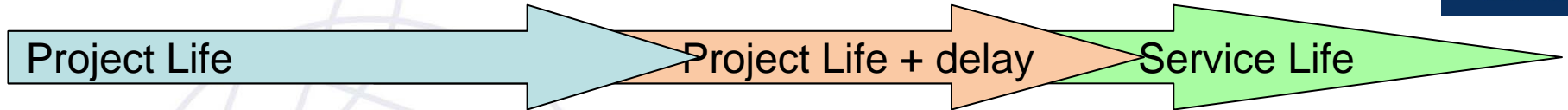
- **Obsolescence**
 - Service life of the equipment
 - Infrastructure will evolve
 - Better technology will be developed
 - Moore's Law has yet to be repealed.
 - Delay eats into service life of equipment.

Case history – Company D.

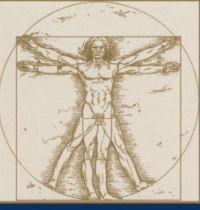
Company was installing a fibre optic to desk network to increase bandwidth for the future, project was delayed 6 months due to procurement issues.

During that delayed WiFi became available and staff preferred to be unhindered.

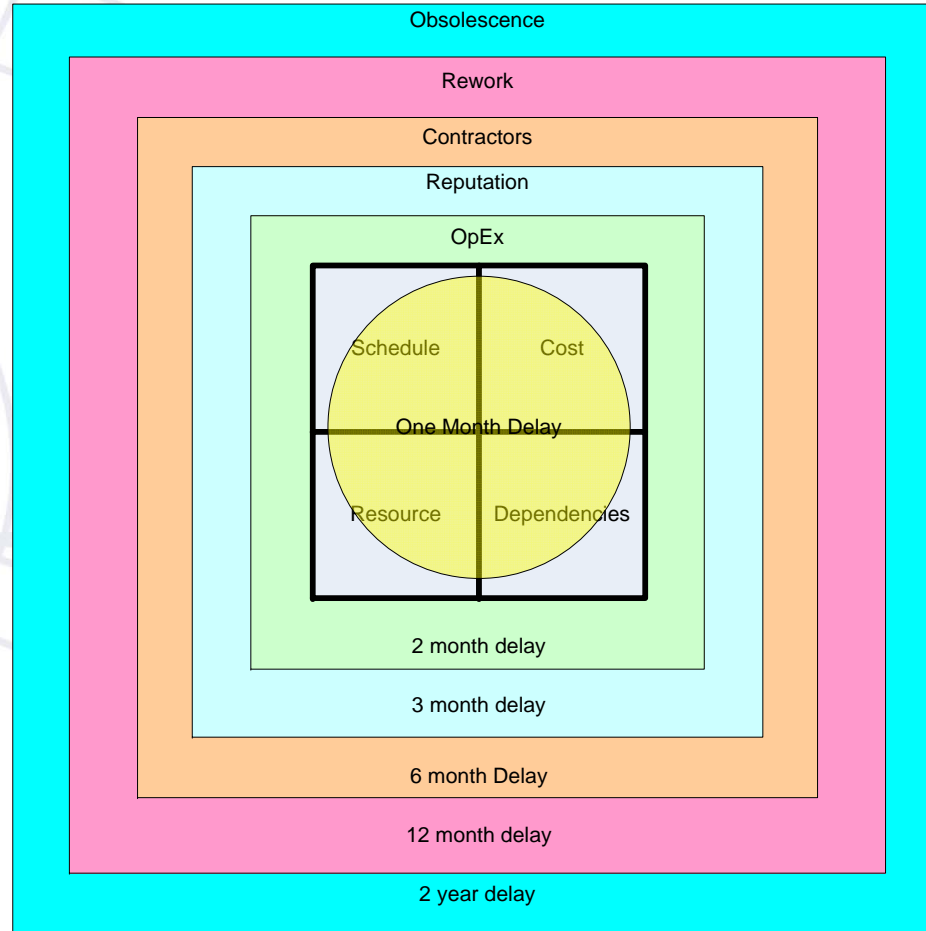
Hidden/Compound



- **Obsolescence**
 - Delay to the project severely reduces service life.
 - Leads to expensive service life extension programs



Rough Guide to Duration and Effect

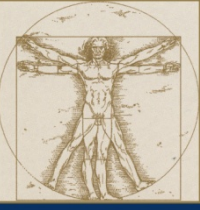


Questions to ask

- Does the delay affect the original business case?
- What are the effects of delay on OPEX?
- Are there maintenance or reliability implications?
- Can you restart the project quickly?
- Are your staff available for the project?
- How much rework/relearn is involved?
- Is there a possibility of technical obsolescence?
- Is it recoverable, or is it better to kill it and start fresh.

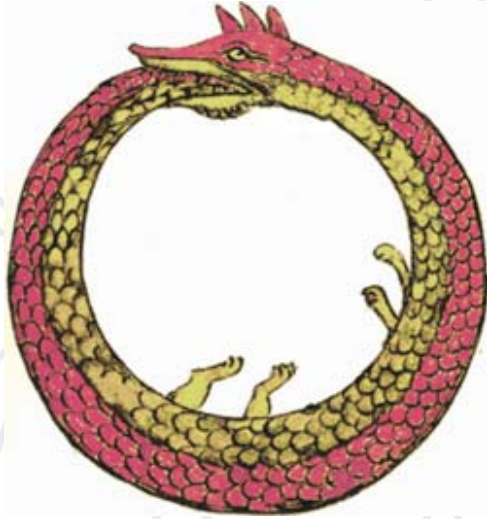
Epilogue

- A delayed project is not dead.
- Delayed projects don't die, but they do devolve (or decompose).
- No friends, or patrons of a delayed project.
- Reality dictates that the best course of events is to kill off the delayed project and start again, building on the ashes of the old.
- Failure to rebirth a project merely results in diminishing returns.



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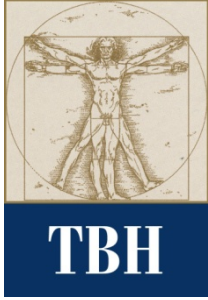
The Phoenix and the Ouroboros



- **Ouroboros**
 - is an ancient symbol depicted as a serpent, or dragon swallowing its own tail and forming a circle. It has been used to represent many things over the ages, but it most generally symbolizes ideas of cyclicity, or infinity.
 - Mascot of Diminishing Returns

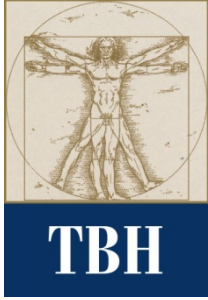


- **Phoenix**
 - A phoenix is a mythical bird with beautiful gold and red plumage. At the end of its life the phoenix builds itself a nest of twigs that it ignites; both nest and bird burn fiercely and are reduced to ashes, from which a new, young phoenix arises.
 - Mascot of Reborn Projects



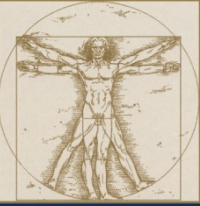
Tracey, Brunstrom & Hammond

- TBH has over 40 years proven experience in providing clients with sound, objective management advice in a diverse range of industries.
- TBH's range of services have been successfully integrated into a wide range of industries. This has led to an enviable reputation of being able to provide optimum outcome in a wide range of projects and industries.
- The following identifies some of the key industries TBH operates within:
 - Construction – Building
 - Health
 - Facilities Management
 - Environment
 - Government
 - Defence
 - Construction – Infrastructure
 - Heavy Engineering
 - Technology and Communications
- TBH can either provide Programme/Project Control Groups, or partner to assist in providing long term project solutions.



Tracey, Brunstrom & Hammond

- TBH provide clients with independent, objective and sound management advice on projects during the entire project lifecycle.
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 - Project Management Services
 - Project Risk Management
 - Value Management
 - ICT Project and Program Controls
 - Dispute Resolution



Original Delivery Date

