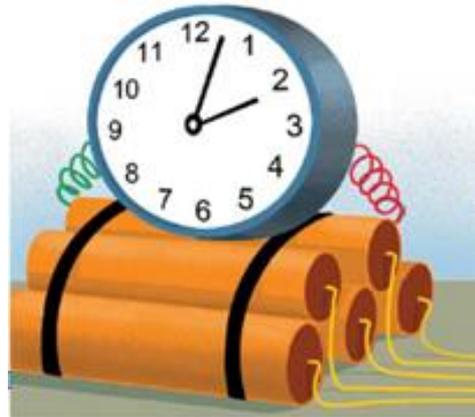


The IT Trap

It's "normal" for IT projects to "fail"



Why Your IT Project May Be Riskier Than You Think

Half of IT projects fail

Average cost over-run is >27%

75% over-run delivery by >55%

17% "explode"

Cost > 200%

Delay > 70%

McKinsey / Oxford University

- Database of 6,000 IT projects
- Audited data supplied by McKinsey global clients

University of Oxford
BT Centre for Major Programme Management
Saïd Business School

Saïd Business School working papers
AUGUST, 2011

**Double Whammy –
How ICT Projects are Fooled by Randomness and Screwed by Political Intent**

Alexander Budzier (Alexander.Budzier@SBS.ox.ac.uk)¹
Bent Flyvbjerg (Bent.Flyvbjerg@SBS.ox.ac.uk)

Why? –

- Office politics
- “Lose if you win” competitive tendering that incentivises exaggeration
- Setting targets in a state of ignorance
- Rigid, over certain plans and project management

How did we save this project?

We faced pressure to tighten project management to turn this failing project around (more detailed plans, tougher PM) ..
But.. we did the opposite

Project Management

- Converted to a social enterprise from a project machine
- Recognised success is the product of social interactions between individuals and teams
- Project management (plans, budgets, logs, reports, metrics, change management, risk management) became “tools not rules”

Agile, Spreads and Options

- Spread targets replaced fixed delivery dates and budgets
- Options theory gave us the right to change
- Agile Project Management
 - High level plans and system requirements – delegated authority to local solution making
 - Sprints and prototyping - build an MVP and refine .. not Big Bang
 - Encouraged iterative change to specifications
 - Cloud and SaaS – allow hot fixes and dynamic change

Collaboration Innovations

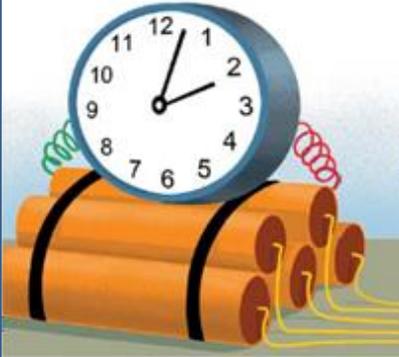
- Independent Chair and Mediator
- “Preventive” mediation
- Retainer based payment
- Blended supplier / client organisation
- Combined Project Board
- Relational contracts – allowed “open variation” to terms

High Performance Team

- Driven by strategic mission
- Prioritises collective output above individual or local self interest
- Highly collaborative
- Devolved decision making and authority
- Strong trust and mutual support
- Democratic and open feedback
- Individuals and teams ready to be creative, problem solving, sharing and adaptive
- Keen to try new ideas and break conventions

Avoiding the IT Trap - Plans & Targets

- Be realistic about setting targets when working with complexity and uncertainty
- No matter what detail we plan to, forecasting is at its most uncertain (least likely to be right) prior to the start of work
- Avoid setting specific delivery dates in the state of maximum ignorance
- Project Boards should set **spread** dates and budgets rather than **fixed** targets
- Spreads should be narrowed in the light of actual performance
- **Option theory** should be used at Milestones (Continue, Change, Pause, Scrap)
- It is acceptable to stop a doomed project – not all innovation succeeds
- Build in contingency based on the general historical track record of IT projects (**Reference Class Forecasting**) in the host organisation
- Before starting, show plans to an experienced, external practitioner for an unbiased “**Outside Review**”



University of Oxford
BT Centre for Major
Programme Management
Saïd Business School

Saïd Business School working papers
AUGUST, 2011

**Double Whammy –
How ICT Projects are Fooled by Ran-
domness and Screwed by Political Intent**

Alexander Budzisz (Alexander.Budzisz@SBS.ox.ac.uk)¹
Bent Flyvbjerg (Bent.Flyvbjerg@SBS.ox.ac.uk)

**Why Your IT Project May
Be Riskier Than You Think**

Harvard Business Review
OnPoint
ARTICLE
www.hbr.org

**Delusions of
Success**
How Optimism Undermines
Executives' Decisions

by Dan Lovallo and Daniel Kahneman

Included with this full-text Harvard Business Review article:

- 1 **Article Summary**
The Idea in Brief – the core idea
The Idea in Practice – putting the idea to work
- 2 **Delusions of Success**
- 10 **Further Reading**
A list of related material, with annotations to guide further exploration of the article's ideas and applications

The path to collaboration: selection, planning, implementation, (helped by 4 Nobel Prize Winners and a Harvard Law Professor)

Supplier "make or buy"

Transaction Cost

Coase, N

Developed Transaction Cost theory in his classic paper "Nature of the Firm". This quantifies the economic decision to "make" or "buy". It identified the transaction costs of buying :

- market research
- defining scope
- dissemination
- bargaining
- selection
- policing
- enforcement



Over the course of a long term contract, where scope is subject to change, companies tire of constantly updating transaction cost models that justify the economic advantage of external suppliers. They supplier starts to enjoy specific status.

Dependence on Supplier

Specificity

Williamson, O



Williamson advises that in long term relationships the market mechanism and contractual exchange are influenced by "soft" relationship factors

He warned that transaction cost and market choice are effected when suppliers build *specific* knowledge that allows them to "hold-up" their client

In the long run a low cost bidder will develop this "high specificity" which leads to a high transaction cost of switching. This reduces the buyer's ability to use market competition to maintain the economic value of buying instead of making

Collaborative Relationship

Bounded Rationality

Simon, H

Over time the buyer and supplier teams might work so closely that transaction costs become difficult to separate and price

Social cohesion, personal knowledge and team relationships are perceived as just as important as the economic terms of the service contract

Relational factors push the marginal price mechanism of "rational utility" to one side . The client / supplier relationship develops beyond classical economic theory of market choice and contractual exchange.



This is an example of "Bounded Rationality" that won Herbert Simon his Nobel prize

Flexible Contract

Relational Contracts

MacNeil, I.R.

Harvard law professor MacNeil acknowledged that long term, complex contracts - based on a neo classical fixed exchange of promises - degrade into relational contracts . As the scope changes the parties pursue flexible, collaborative behaviour and common benefits instead of constantly updating the contract.

Buyer and supplier teams become blended under "norms typical in the behaviour of a social group".

- long-term orientation
- role integrity
- relational planning
- mutuality
- solidarity
- flexibility
- information exchange
- conflict resolution
- restraint in the use of power
- monitoring behaviour



Independent Mediation

Outside View

Kahneman, D



Kahneman's research proved that human beings are dangerously biased towards optimism in plans and estimates. Kahneman recommends the use of remedies

As a counter balance, plans and projects should be subject to scrutiny and mediation from an independent "outside viewer"

Forecasts should be compared to previous history – so that past performance can be used to set contingency (Reference Class Forecasting)

Spread or option targets that are adjusted to actual experience are preferable to rigid targets that fail - for reasons that could never have been predicted