

# Learning from Project Failures: An MPA seminar held at the Royal College of Pathologists, London on 13 November 2003

## Participants

More than 80 participants attended the seminar and the following organizations were represented:

Accenture plc, AEA Technology Rail, Anglo American Plc, BAA plc, Babbie Group, Balfour Beatty, Barhale Construction Plc, Bechtel Ltd, BMCE Bank, British Telecommunications Plc, Centre for Research in the Management of Projects (UCL), CMS Cameron McKenna, CSE International Ltd, Defence Procurement Agency, Denton Wilde Sapte, Electronic Data Systems Ltd, Ernst & Young LLP, European Investment Bank, Halcrow, Henley Management College, Kellogg Brown & Root, KPMG Corporate Finance, Linklaters, Lockheed Martin UK Ltd, London Continental Railways Ltd, Morgan Est, Mott MacDonald, MTR Corporation Limited, National Grid Transco, National Health Service, Office of Government Commerce, PA Consulting Group, Partnerships UK, PricewaterhouseCoopers, Risk Solutions, Rolls-Royce plc, Rolls-Royce Naval Marine, Sir Robert McAlpine Ltd, Taylor Woodrow Construction Ltd, Templeton College, The Nichols Group, UKAEA, Washington Group International

## *Case study 1: Root cause analysis of project success and failure at Bechtel*

In a recent analysis of its own projects, Bechtel selected three successful and three less successful projects, distinguishing between execution-related and deal-related factors.

One of the “good” projects was an ethylene plant at Borouge, Abu Dhabi. Factors for success included a front-end study that paid off well, a good safety record (correlating with overall good project performance), the decision to retain full contingency allowances despite the need for a tight bid, adherence to the estimates and time schedules, a knowledgeable project owner and good risk management.

Conducting a root cause analysis helped Bechtel to distil its understanding of project success and failure. It showed that the root causes of failure in projects were mainly related to elements at the front end, not to execution—yet senior management attention was concentrated on the execution phase.

Projects fail for a broad range of reasons. Our success in learning from project failures is linked to two areas: understanding the causes of failure and applying the lessons learned. Tools and techniques are available to help us but we can only exploit their value if we understand the underlying generic causes of project failure and the deeper question of how we learn, both as individuals and organizations.

## **Why do projects fail?**

The major reasons for project failure are:

- poor project definition
- unclear objectives
- unrealistic targets
- inadequate risk evaluation
- client inexperience
- poor forecasting of demand
- lack of an effective sponsor and strong leadership
- poor communication and lack of openness
- inadequate stakeholder management
- management focus wrongly targeted at the back end.

The seeds of project failure are overwhelmingly linked to factors at the front end of a project.

## **Why don't we learn from project failure?**

There are no real surprises in the causes of project failure, so why don't we learn from them?

- we are not making good use of the tools available—e.g. our review process may not be sufficiently robust (see box)
- political pressures and other adverse political interference may lead to unrealistic timescales
- we fail to set up a “stormy” project delivery process (as well as a smooth one), with detailed, agile plans
- we don't listen to those on the front line
- we don't understand the nature of organizational learning
- we don't invest enough in team training and development.

## **People issues**

Compounding the problems arising from process, there are a number of people issues:

- lack of experienced, high-calibre project professionals
- cultural differences in the project team
- poor management of stakeholders—stakeholders may be inexperienced and indecisive, or over-controlling, or even embroiled in internal corporate wars

*MPA events are confidential, although this summary has been compiled so as not to breach confidentiality. Full proceedings and entry to MPA events are available only to members.*

*Case study 2: Developing a robust review process*

A major engineering company recognized that the tell-tale signs of project problems and slippage were not always identified in project reviews and set about analysing this process. It concluded that its project reviews tended to reflect the personal concerns of the individual manager and lacked a standardized, holistic approach.

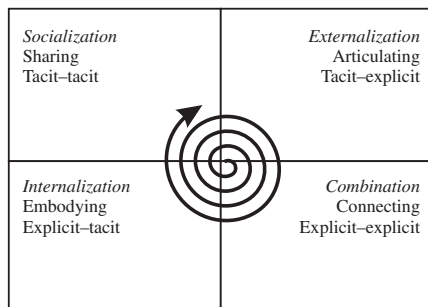
Accordingly, the company drew up material on the art of project review and made it available to staff in printed and electronic forms, with clear guidelines and an injunction to avoid an inquisitorial approach.

**How do we learn?**

According to the Japanese researcher Nonaka, learning is a spiral experience based on permutations of an explicit-tacit dialogue. When we talk to people face to face, at a party or in the office, we share tacit information through socialization (“tacit-tacit”). In another situation, we may need to articulate and externalize knowledge, e.g. in a presentation (“tacit-explicit”).

Real learning, Nonaka argues, comes from combining knowledge through making connections (“explicit-explicit”). We also combine explicit knowledge and then embody it (the “explicit-tacit” shift) and so internalize knowledge.

The process is iterated a number of times as we adopt the different forms of learning to extend our knowledge, using people-based practices for tacit knowledge and hard technologies for explicit knowledge. The sharing/socialization mode of learning, such as MPA seminars, is widely liked!



*The Nonaka model of spiral learning*

- poor management of suppliers, e.g. failure to align goals, poor communication or suppliers ingratiating their way into an extended role (with escalating costs).

**IT projects: a high failure rate**

Project failure in the IT sector is often down to:

- a protracted period of specification—and under-specification is as bad as over-specification
- poor project structure—e.g. the PFI regime has not always worked well
- failure to analyse and understand the causes of slippage
- big-bang implementation (although sometimes unavoidable)
- losing sight of the end goal and a tendency to get buried in the technical detail in the later stages.

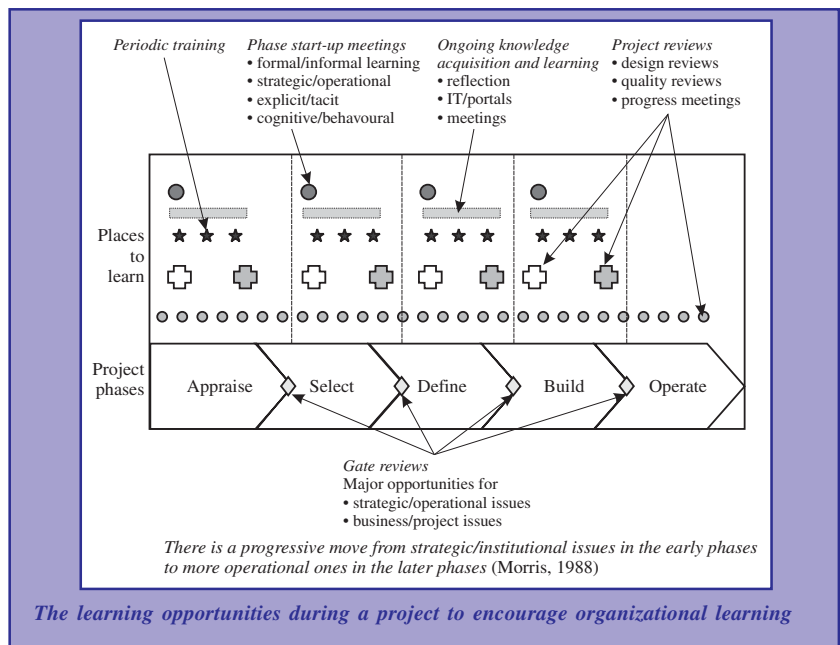
**Tools and techniques**

The seminar recommended the following:

- aligning goals to allow a partnering approach with suppliers
- clear risk apportionment
- a risk review and a risk log
- a robust review process (peer reviews can be less intimidating and more constructive)
- reviewing against a benchmark of good practice
- clear, unambiguous communication
- “lessons learned” exercises
- root cause analysis (of cause and effect)
- maintaining morale and the right culture
- keeping an uncertainty register.

**Conclusion**

Organizational learning is the ability of organizations—and people—to learn and change. It is far more complex than straightforward knowledge management. Identifying best practice is one thing: the hard part is achieving organizational improvement and getting people to apply the lessons of success and failure.



*The learning opportunities during a project to encourage organizational learning*