ComputerWeekly.com

Why major IT projects are more likely to fail than any others

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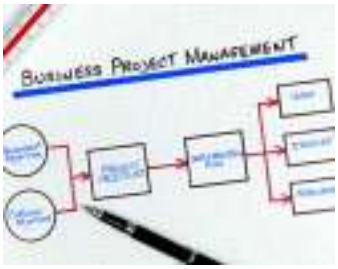
Tuesday 23 August 2011 16:44



Major IT projects are 20 times more likely to fail than other business initiatives because project managers are ignoring unpredictable events by focusing on the average performance of previous IT projects when planning.

By neglecting to take into account the variability in the success of previous projects, IT project leaders are not only putting their own careers at risk but also the future of the organisation they work for, according to a major study by Oxford University's Said Business School.

The research analysed 1,500 global projects worth a total of $245bn, with an average cost of $170m. It found that large IT projects are on average 27% over budget and take 55% longer to complete than originally planned.

But Alexander Budzier, a Phd student and one of the Oxford University researchers, says such statistics are not as bad as they seem: "If you compare to the spectacular IT project failures these [figures] are very small."

He says research of major projects in the construction industry, such as road and bridge building, shows similar results. But IT planners are focusing on the average performance of previous IT projects and are ignoring potential disasters, he says.

As a result IT projects are 20 times more likely than other projects to spin out of control. Troubled projects are putting an early end to the careers of senior executives and could put companies out of business, say researchers. The Said study says such "black-swan IT projects" have high-impact outlying events which cannot be predicted. Budzier says the cost over-runs come at the end of these projects and catch project managers by surprise.

He says "black-swan" projects, which are impossible to predict, go 197% over budget on average, and take 68% more time than expected.

He says the research did not reveal major disparities in industry sectors but there were some in the project types. For example, the risk of cost over-runs in hardware infrastructure projects is low whereas in bespoke software projects it is high.

Budzier says the problems arise in high-risk projects because the requirements change. "These scope changes are introduced after the contract is signed," he said.

To avoid risky projects, Budzier says companies must ensure the scope of projects remains stable and that every decision in the project is based on business benefits. He says only 20% of the projects analysed the business benefits of decisions.

Budzier says project managers or project owners have four opportunities to reduce risk:

- A benchmarking study should be carried out;
- Projects should not be under-priced at the start, which often happens as project leaders seek approval or suppliers try to win contracts;
- Project lengths and complexity should be reduced; and
- The right experience must be brought in to run projects.

He says the IT industry could take a leaf out of the construction industry's book: "In construction they have identified who the master builders are and they need to do this in IT projects." Budzier adds that the research showed similar results for UK public and private sector IT projects.

Robert Morgan, director at sourcing broker Burnt-Oak Partners, says almost all IT projects experience changes in scope. "This is what causes projects to fail. To prevent this you need good project management that will say no to changes unless a business case is given for a change."

He says scope changes are inevitable as projects move forward. "As they go along, the business becomes more and more educated about the system's functionality. As a result pressure is put on project managers to make changes," said Morgan.

The problem is that IT projects are extremely complex and business users do not understand how a change will impact on other parts of the business or systems, multiplying costs and introducing delays. "If you have a weak project manager they will give in to changes and this will lead to over-runs," said Morgan.

He says it is often difficult for a project manager to say no to an executive such as the CFO, particularly as many project managers are contractors.

Changes in scope add costs directly and have knock-on effects. A contract signed between EDS and the then Inland Revenue saw costs rise 135% from about £1bn to £2.4bn between 1994-2000. These increases in costs were partly due to new work and projects (£533m).

See details of 105 public sector projects that suffered cost overruns, delays and terminations.

Read Said Business Schools's findings here >>