

Why IT Projects

Fail

Is it true that IT projects have a phenomenal rate of failure? **Adeline Teoh** looks at the research and examines what makes IT projects prone to failure and what good project managers can do about it



When project managers talk about IT projects, they more often than not mean business projects with a substantial IT component in them. Sometimes they mean IT product development projects or projects that involve building IT infrastructure, but even these need to have a business case as a foundation so that an organisation can understand the benefits to be derived from the product or implementation and accept the project.

"Ideally there would be no such thing as an IT project, they would all be business projects," defines John Roberts, vice president and distinguished analyst at Gartner CIO Research (Asia/Pacific). "If we look in the application area of IT, it's typically building or taking a package and adapting it to apply to a particular business environment."

Recent research conducted by Gartner shows that, in the Asia-Pacific region, the top three reasons businesses conduct IT projects is to improve business processes, reduce enterprise costs, and manage enterprise change initiatives, showing that upgrading technology or infrastructure is a symptom of the business case, not the other way round.

Marco Cattaneo, subject coordinator of IT Masters at Charles Sturt University, sees an IT project as a change in the current IT infrastructure "from the old operational equilibrium to a new one to meet either new business or IT requirements". Thus, even projects with large IT components have a business aspect to it, he believes.

Also wary of the term 'IT project' is Brent Cahill, product manager of software project delivery system Process Mentor at Object Consulting. "There's no such thing as an IT project, it's a business project that has an IT component," he says. "The distinguishing factor is how much of a project is IT. You can have infrastructure projects with 90 percent IT, but nothing is 100 percent IT—there is always a business component."

“
THERE'S NO
SUCH THING AS
AN IT PROJECT,
IT'S A BUSINESS
PROJECT THAT
HAS AN IT
COMPONENT”

It is this business component of an IT project that gives a clue as to why many so-called IT projects fail; they are often treated as a pure IT projects without sufficient regard to their respective business cases and thus fail to meet



the organisation's objectives. But do IT projects fail more often than other types?

THE MYTH OF CONSTANT FAILURE

IT projects have a reputation and unfortunately it isn't a good one. The Standish Group, well known as a research organisation that collects data on projects in the IT industry, first released the now famous CHAOS Report in 1994, revealing that only 16 percent of IT projects were completed 'successfully', that is, on time, on budget and meeting user requirements. The remaining projects were either 'challenged' (eventually completed, but with schedule, budget and/or requirement problems—53 percent) or 'failed' (cancelled or delivered and never used—31 percent). Since then, the CHAOS Report has tracked the fortunes of IT projects worldwide. The 2009 version

shows an improvement with the success rate double that of the 1994 figure at 32 percent, 44 percent considered challenged, and 24 percent recorded as failed.

What the research doesn't tell you is how this compares to projects in other sectors; in fact, there is little research available that could assist comparison. The focus on IT project failure is therefore disproportionately unfavourable, when the success/challenged/failure ratio appears quite normal for all projects conducted worldwide.

Other research is specific to Australia and concerns IT projects in the public sector. Sir Peter Gershon's 2008 *Review of the Australian Government's Use of ICT* examined the execution and effectiveness of Federal Government IT projects. Gershon's main finding was around weak governance and disconnect between the government's agenda and the projects. He also noted that many agencies conducted projects their own way, the lack of uniformity contributing to "sub-optimal outcomes in the context of prevailing external trends, financial returns, and the aims and objectives of the current Government".

Considering both Standish's CHAOS Report and the Gershon review, IT projects may have very public problems, but they are certainly not doomed to fail any more than any other type of project. The task is therefore to find out what does cause them to fail and whether the solution is one that project managers in any sector can take on board.

INTANGIBLE BENEFITS

One theory on IT project failure centres on their relative intangibility. "I used to be an engineering manager and I could always walk down to the plant and see the current status of a project. IT projects are a little more virtual than that," remarks Roberts. >

> Especially for inexperienced IT project managers, intangibility makes it harder to define scope. In many cases, true scope may not be revealed until some time after a project schedule, budget and the business case has been presented for approval. "Often it takes some time before people actually understand exactly what the project scope really is," says Roberts. "The real weakness is a lack of a proper risk assessment or a quality assurance test about that project cost and project timing and resourcing." Although IT projects may be difficult to scope, budget and schedule, he adds that organisations frequently miss the most important question: 'Are we on track to deliver the business benefits?' "If we don't have baseline measures in IT, it means when there's a scope change we can't tell whether it's meeting objectives," Roberts notes. "People create a business case to justify the project, but oftentimes it's an estimate that cannot be subsequently audited to say 'did we deliver this?'"

Cahill says that intangibility and scoping difficulty is often overused as an excuse for why IT projects fail. He points to the relative immaturity of the industry—"construction has been around for thousands of years; IT is a relatively new industry"—but adds that even this is an excuse because IT projects have both fixed and unfixed elements just like other projects.

“WE ARE MANAGING A CHANGE, WE ARE NOT JUST DELIVERING AN IT PROJECT”

Essentially he agrees with Roberts: the problem is the lack of recognition that an IT project needs to realise benefits for the organisation. "The organisation may not have any formal or informal notion around benefits realisation, but projects can still start with what it wants to achieve," explains Cahill. "Not having this, projects lose their way, not even realising that they've lost their way because they've never had anything to follow. And this becomes more fundamental than scope."

When a project is bereft of its true objectives, it is then difficult to engage stakeholders and garner buy-in from executive management. Cattaneo nominates lack of management commitment and involvement as one possible cause of failure. "The project may well be forced upon the organisation and may not fit the current business agenda. By asking the right questions and building an understanding of whether management clearly sees business value from the project's outputs, 'true' commitment can be better gauged," he says.

Involving the right stakeholders at the beginning of the project and communicating with them will also help to formalise the requirements, which in turn informs the scope and the business benefits to be realised, Cattaneo adds.

A COMPLEX ISSUE

Delivering a project on shifting ground is yet another challenge for IT projects. IT is one of the few sectors where the speed of change in technology and business requirements has such a profound effect on an unfinished project. "Both business strategies and IT capabilities seem to be subject of ever decreasing lifecycles," notes Cattaneo. "Many projects start, and halfway through execution, the environment changes, for example, new business requirements emerge, or new technologies supersede older ones."

Cahill calls this complexity, and includes the effect of the organisation's other projects in the mix. "IT project managers need to be cognisant of other projects likely to impact from a technical perspective or from a shared resource, or political, or stakeholder management perspective," he says.

Roberts agrees: "IT projects rarely exist in isolation, they have to fit with other things where you might have to tie information into some other existing application."

He concludes that, fundamentally, IT projects fail because they do not articulate the changes that will occur in the business and therefore fail to prepare an organisation for delivery. "It's rare that in implementing a project that the technology does not work," he states. "Invariably the failure comes from lack of a definition of the way the new business process will work or the fact that people have not been trained to work in a different way. It's change management."

GOOD PROJECTS FOR A CHANGE

Catherine Smithson, managing director of change management firm Being Human, agrees that IT project managers rarely encounter technical problems and have more trouble engaging people. To prevent failure on this count, she says project managers need to first identify how much of an IT project is actually a change project. "Understand the degree to which an IT project is going to cause people to change the way they do their work," she says. "It might be a change in terms of the systems that they use, or it might be a change in business processes. Do an impact assessment; look at the change from their perspective.

If there is a change—either a little bit or a lot—you are managing a change, not just delivering an IT project." >



> Fortunately, Smithson sees IT project managers leading the way when it comes to recognising the change aspects of a project. However, there are still organisations out there that deliver the IT component of a project, only to find “that perhaps people aren’t ready for change, they don’t understand the need for change, they’re not on board with the change and they’re very reluctant to adopt the change”.

The key to success is full stakeholder acceptance, which “delivers people ready willing and able,” says Smithson. This approach may require more planning time upfront, but the projects tend to move faster, encounter fewer problems “and people are responsive”.

THE ROLE OF EDUCATION

One frightening example of why IT projects fail is clear from an anecdote Cahill tells about a project manager he knew who deliberately changed metrics to mislead sponsors about the progress of a project. “He changed how many lines of code were being developed over time. He wanted to show it was increasing so that there was progress,” he recalls. “If he’d instead said ‘lines of code have gone backwards but we’ve made the product more stable and it performs faster’ that would have been progress. We come back to benefits realisation and knowing what we’re expected to achieve.”

Poor stakeholder education leads to this kind of behaviour, and proper communication with executive management and stakeholders would put benefits realisation at the forefront of the project’s progress. “A good place to start would be formal project education,” Cahill suggests. “They don’t have to understand the technical aspects, but they need to know that it’s not just about delivering software. I would rather not sell someone a product if they don’t take care of the change management part because then failure is often blamed on the product.”

Education is also required when IT people meet business people to ensure that the business benefits and project execution are closely aligned, says Roberts. “Who you want to take the lead is someone with a strong understanding of business requirements and the understanding of what’s possible from a technology perspective in doing it. Good project managers in the IT industry are a rare breed because it’s a complex job.”

He further notes that the PMO should take on a knowledge management role by conducting a formal post-implementation review, documenting lessons learnt and creating a repeatable methodology: “There’s a clear advantage to being able to leverage and learn from PMOs.”

Sharing experiences and learning from others’ mistakes is the backbone of collaborative learning, which Cattaneo endorses. “Each subject I deliver is based on my motto ‘Making it better together’,” he says. While his classes follow the syllabus, he believes “real value comes from live sessions with the students, talking through case studies, and experiencing first-hand pain and pleasure as felt by the students working in their own project management space”.

Another way project managers can arm themselves against failure is through “using a set of policies, processes, procedures, work instructions, job descriptions, checklists, templates and toolsets that are based on world proven practices, rather than reinventing the wheel,” says Cattaneo—the rest is skills, knowledge and attitude, which they can get through formal education and training or on-the-job experience. And while formal education can underline the importance of communication, it’s certainly a skill a project manager needs to develop for his or herself, he adds.



TOP 5 REASONS FOR WHY IT PROJECTS FAIL

1. Undisciplined project management practices
2. Poorly functioning governance
3. Too little executive support or sponsorship
4. Inexperienced project management skills/experience
5. Business needs/value missing

Source: Gartner (www.gartner.com)

THE PROJECT MUST DIE

It’s unfortunate that The Standish Group sees cancelled projects as ‘failed’ because sometimes killing the project is the best decision a project manager can make. “It takes courage to kill a project and it also takes an understanding to say ‘it’s dead’,” says Cahill. “You can do that by asking: is this delivering the value we want it to?”

Killing a project can be highly emotional, and sometimes political if the sponsor has decided to throw good money after bad, he remarks, but if a project manager is serious about delivering value to an organisation, it may be the only viable move: “Project managers need to take the ego out of it because you’re better off killing a bad project and succeeding at a good one.”

The best way to prevent this scenario, in addition to identifying the business benefits upfront, is good governance. “Without this level of governance, you attach risks to the project. Measure it in dollars: here’s a risk, what is it going to cost to fix if it becomes an issue?” he says. “Then identify the point at which to stop, assess and manage risk before the project can continue.”

Despite the gloom around the apparently low success rate of IT projects, Cahill says things are looking up. “IT project failure will decrease,” he states. “I am seeing a maturing around the understanding of risks in IT projects and that will help.” ♦