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Why are capex projects so difficult?

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Why are capital expenditure (capex) projects so difficult?

An industry expert offers his opinion on this issue's big question

Projects are hard. A team of people is assembled; they have not worked together before, have different employers and are doing something that has never been done.

Mankind has been doing projects for millennia, so you might think that we would have got quite good at it by now. But research says this is not the case. According to Professor Bent Flyvbjerg of the University of Oxford, "more than 90 per cent of the world's infrastructure projects are either late or over budget".

Former Toyota CEO Katsuaki Watanabe said: "Brilliant process management is our strategy. We get brilliant results from average people managing brilliant processes. We observe that our competitors often get average – or worse – results from brilliant people managing broken processes."

When we want to improve the performance of our projects, how often do we take the opposite approach to Toyota? Get better people and our projects will be better, we think. But are 'better people' the best leverage point? Good, experienced people are in short supply, take decades to develop and are expensive.

Improving performance by process is not as simple as it sounds. How many ISO 9000 implementations have improved process documentation, but not really increased performance? It might seem sacrilegious to say, but I am not talking about just following the *APM Body of Knowledge* – or, for that matter, PMI's – or PRINCE2®. They are not enough. Being so broad in coverage, they don't highlight the leverage points – the one per cent of changes that can bring 30 per cent improvements.

What we need is a way to manage projects that is virtually guaranteed to deliver substantial changes to project performance with the same people. You may feel this is pie-in-the-sky thinking, but it isn't. I've spoken to hundreds of people who have done this and seen it, as well as having been there myself.

Mazda changed its project management process for new product development in 2009. Within three years, it was delivering at least 30 per cent more projects with the same people, and project durations were reduced by up to one-half. This change returned Mazda to profitability.

Then there's Amdocs, a $4bn revenue IT company. It spent 18 months training its teams. Not much changed. Within a year of changing its process, it delivered 14 per cent more projects, 20 per cent faster, and eliminated board-level crisis interventions.

All that these companies did was implement critical chain project management (CCPM). The same method was used on most of Japan's major public infrastructure projects from the late 2000s.

CCPM was developed in the late 1990s and is the kind of 'great process' that makes a difference. It requires a highly collaborative team to work, and the way most projects are procured is far from collaborative – one reason why CCPM is still rare in construction. It is not that easy on capex projects, because almost all of the project team isn't employed by the client. There are contracts that get between the team members.

THERE'S NO DOUBT THAT CRITICAL CHAIN PROJECT MANAGEMENT WORKS, BUT IT REQUIRES A CHANGE IN PROCUREMENT STRATEGY

There's no doubt that CCPM works, but it requires a change in procurement strategy. And that, to many people, is too hard. But it needn't be.

In the late 1990s, I was involved in one of the first 'project alliances' in mainland UK. This was a collaborative contract involving the client and two contractors. The latter were selected on competence, not price, and their rewards were linked to the overall project success. In the end, the client got a very difficult project completed on time and under budget, and the contractors made about twice their normal profit.

Project alliances – known as 'integrated project delivery' in the US – were developed for capex and construction projects. They have been used the world over, and they work. They deliver great projects with minimal problems and disputes. We all intuitively understand the logic: a collaborative team will deliver better results than one where the team members are in conflict.

But then what do we do? We use procurement approaches that embed conflicting interests, and we try to force certainty onto the project with fixed-price contracts and liquidated damages for lateness. All of these inhibit collaboration. In fact, the forcing of 'certainty' onto projects is at the core of most of the problems we see today in performance.

Projects are uncertain. Both CCPM and project alliances embrace this uncertainty, and are designed to work with it, not to pretend it isn't there. That is why they deliver great results.

Combining these two approaches makes an unbeatable combination that will deliver projects on time in less time, on budget at lower cost, without having to compromise on scope, and without having to employ project superheroes.

It is a win, win, win: a better, faster and cheaper project for the client; higher profits and productivity for the supply chain; and higher job satisfaction and less stress for the project team members. P

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