Why Megaprojects Seem to Fail

By Phanish Puranam , INSEAD; Colm Lundrigan, Manchester Business School; and Nuno Gil, Manchester Business School

Megaprojects come with big expectations. But a project's success is often in the eye of the beholder. Can managers avoid the conflict – and cost – when competing stakeholders seek to influence large scale development?

Despite their socio-economic significance megaprojects – delivering airports, railways, power plants, Olympic parks and other long-lived assets - have a reputation for disappointing performance. With cost and schedule overruns difficult to avoid in an ever-changing, often unpredictable environment, initial targets are rarely met. By re-setting performance baselines in response to these vicissitudes, project leaders risk complaints that the scheme is inefficient and spiralling out of control. Yet leaders cannot ignore the fact that schemes which fail to adapt are also held in contempt by their stakeholders and labelled ineffective.

When does a project fail?

Critics will often attribute a project's failure to actions by its initiators, blaming inflexible supplier contracts, escalation of commitment, scope creep, or sunk cost fallacies. They may accuse project leaders of under-

investment in front-end planning; excessive reshaping of the project's initial design; or even blatant misrepresentation to get the project started.

All of these explanations assume that megaprojects are controlled by a single, unitary actor, who is (almost schizophrenically) guilty of incompetence as well as Machiavellian intent.

In reality, megaprojects are produced, not by a single organisation, but rather a network of private and public entities following goals and strategies forged by a core group of key stakeholders – a meta-organisation representing governments, land and resource ownership, public interest and local communities - whose consensus is needed to bring the project to fruition. Agreements are reached through dialogue as much as through mutual bargaining and compromise-seeking between these often conflicting groups, with each committed to different time and cost baselines and holding different ideas of efficiency and effectiveness.

In our research paper **The (Under) Performance of Mega-Projects: A Meta-Organisational Perspective** we look at megaprojects as a form of meta-organisation and how the structure of that organisation – and the interaction between its members - explain the project's outcome.

Based on the longitudinal analysis of three private and publicly funded megaprojects in London -- the £7.1bn Olympic Park, the £2.6bn Heathrow T2 development, and the £15.8bn Crossrail development -- we found that the controversial under-performance of megaprojects may actually be a result of how its organisational structure develops, rather than due to the incompetence or malfeasance of a single "super-architect".

The influential core

The analysis found a megaproject's organisation is far from static. The influential core group of stakeholders is periodically extended to include new actors who may demand a substantial change in tack, forcing the renegotiation of contracts relating to cost, scheduling, and scope. These modifications plus changes in the external environment (recessions, changes of government, market regulations etc) can see targets revised several times during a project's life.

In fact, the baseline agreed to as the project comes to conclusion may be very different to the initial stated goals. It is this gap in expectations – what

was expected at the beginning of the project compared to what is expected at the end - and the failure to achieve complete consensus between competing interest groups making up the core, that result in the project being seen in a negative light.

Our analysis identified five key decisions and their underlying trade-offs that megaproject leaders should manage carefully.

1 Timing the announcement of project targets

As a megaproject's performance is frequently judged on the gap between its initial and late stage targets, managers could do more to persuade leading stakeholders to delay the release of time and budget estimates for as long as possible.

This may be easier for private projects as government-backed schemes are invariably influenced by political masters operating within rigid electoral cycles. In both cases, pressure can be eased by committing to flexible performance targets, such as soft openings instead of rigid opening dates. Both T2 and Crossrail had some success with this tactic.

2 Building slack into the system for resilience

Building substantial contingencies into the scheme's budget envelope before releasing performance targets helps to buffer performance expectations. London 2012 and Crossrail ensured their business plans left plenty of room to work with and found that the window of opportunity helped resolve conflicts between key players and satisfy individual and sub-group objectives without undermining the scheme's legitimacy in the eyes of third parties.

There is an obvious tradeoff here. Large contingencies make it harder to sell the scheme in the early stages and encourage opportunistic members to make even greater claims on the final scope. London2012 for example depleted its entire contingency and Crossrail, according to one respondent, is likely to do the same.

3 Managing the composition of the core

The more members there are in the core, the more difficult it gets to reach consensus and engage in effective negotiations. Allowing the core group to expand too much may delay the start of the project considerably, or even see it scuttled completely. With this in mind it may be tempting to fend off

interested parties who don't seem to have much to offer. However, while limiting membership may bring short-term benefits, it can undermine the legitimacy of the group's early decisions and increase the chance of conflict and tumultuous changes later on, particularly if the entry is forced and a coalition formed to over-turn previous high-level decisions.

4 Balancing peer-to-peer negotiations with hierarchic design decisions

Paradoxically, because megaprojects are based on coalition leadership rather than command and control structures, it is important there is some system of hierarchy in terms of design choices. While the participants may be more or less equal, the choices are not. Which decisions are fundamental and must come first must be decided before opening up the bargaining process around particular decisions.

5 Managing transparency with media

Headlines screaming "white elephant" and "cost over-runs" often originate from dissatisfied core group members unable to get what they want out of consensus decisions. Megaproject managers could make it a part of their process to keep the media (and political opponents) appraised of developments – a strategy adopted by all of the megaproject's in our study. In this way the negative impact of late changes to targets can be swiftly neutralised.

However, this transparency also implies greater scrutiny at early stages in a project, and the possibility of provoking objections from stakeholders who otherwise might not have reacted because the project was too far along.

Success is in the eye of the beholder

The performance of a major project is never clear cut, its success or failure depending on whether it has delivered to cost and to quality in time, which is in-line with an individual's expectations. In the same way that beauty is in the eye of the beholder, when it comes to megaprojects different actors see different things. Their assessments of performance are often political and shaped by expectations that they choose to adopt as the baseline. In this sense the megaproject's success relies on the consensus of key stakeholders and the organisational structure through which their bargaining over decisions is managed.

Find article at

About the author(s)

Phanish Puranam is the Roland Berger Chaired Professor of Strategy and Organisation Design at INSEAD.

About the research

The (Under) Performance of Mega-Projects: A Meta-Organizational Perspective is published as an INSEAD Working Paper.