

DEVELOPING MAJOR PROJECTS

A new formula for success.

It has been widely reported that 'mega projects' worth in excess of \$1 billion have a failure rate of 65% while major projects worth less than \$500 million have a failure rate of 35%.¹

Failure is defined as:

- Running over time by 50%;
- Going over budget by 25%; or
- Having significant operational problems into the second year of operation.

At the major or 'mega' project level, these are catastrophic outcomes.

Why do projects fail?

Projects generally fail due to inadequacies in project definition, project structure, project communication and management competency. These are not new ideas and in response the industry has previously turned to alliance models aimed at avoiding the conflicts associated with accelerating delivery. Unfortunately, this has not been the panacea.

The other fundamental question associated with 'mega project' success is what level of confidence is there that they will meet forecast needs in 10-20 years, given their typical decade long delivery programs and the paradigm shifts occurring in society due to the influence of megatrends.

The key elements that set the foundations for project success are:

1. Clear definition of the project vision and rigorous testing of the assumptions underlying the vision
2. Clear definition of the project scope, risks and opportunities
3. A project delivery plan that matches procurement to project definition and risk; provides clarity in the communication of the project definition; and establishes a framework for high performance outcomes from a multi-disciplinary project team and key stakeholders.



¹ AIPM

A new formula for success.

> Test the project vision: The influence of megatrends

Megatrends are large scale, sustained changes in society, technology, macro-economics, environment or political landscapes that influence our cultures, economy, business or personal lives and thereby define our future world.

The study of megatrends is important in long term forecasting as today's project decisions affect project success on a 10-20 year horizon. In testing the project vision, megatrend analysis can be used as part of a STEEP or PESTLE analysis that addresses the key forecasts of social, technological, economic, environmental, political and legal trends over the known project horizon.

The inter-relationship of megatrends is complex and trends rise and recede depending on the influence of other trends. Our research through Thinc Beyond seeks to map and track these trends and apply this thinking to our application of project foresight techniques.

Megatrends map

Megatrend analysis tends to suffer from information overload and a key aspect of this approach is the distillation of the trends and their inter-relationship in the context of a particular project.



The key global megatrends for projects

There are hundreds, possibly thousands, of global megatrends in various stages of maturity. In the context of a STEEP analysis, some of the more dominant trends include:

Social

- Changing demographics
- Growing world population
- Ageing western societies
- Increased urbanisation
- Rising middle class in developing world

Technological

- Global connectivity
- Diffusion of technology
- Invisible internet
- Pace of innovation (expediential growth)

Economic

- Globalisation
- Rise of the BRIC economies
- Export growth and transport logistics

Environmental

- Climate
- Climate change
- Energy demands
- Resource depletion

Political

- Globalisation
- Fall of Rome
- Global knowledge base
- Global culture

The distillation, analysis and adaptation of these trends within a given project context provides the opportunity to explore the opportunities and implications of a range of project scenarios and possible futures.

This should be undertaken as part of a three phase Project Foresight strategy that ultimately informs the project definition:

1. The situation analysis
2. The opportunity and risk analysis
3. Project response strategy

+ Match information to procurement and risk project definition

With a clear project vision, the project now needs to be defined and decisions made on who will assume the delivery and performance risk. The more complex the project, the more difficult the task of accurately designing and defining the project. 'Mega projects' often also include proprietary elements that can't be designed and co-ordinated until the head contractor or specialist subcontractor has been appointed.

We are finding there is a move away from alliance contracting back to 'hard dollar' contracting that shifts design responsibility back to the client group. The capacity of clients, management teams and design teams to handle this shift is yet to be tested and understandably there may be a lack of recent experience in the client teams.

We advise adopting a strategic approach to procurement analysis and risk management to identify the issues and provide solutions that deliver outcomes commensurate with the appetite for risk.

We recommend adopting the following robust four-step approach to procurement analysis:

1. Understand and define the key project objectives
2. Identify the project complexities and constraints
3. Identify the key project risks and risk tolerance
4. Determine a procurement strategy that aligns risks and responsibilities

The risk analysis phase of the procurement study is the key to successful project definition. It also sets the framework for the delivery of risk management throughout the course of the project and as such remains a dynamic process.

The key elements of risk analysis in the project definition phase include:

1. Identifying risk sources
2. Developing response strategies – making the intolerable tolerable
3. Implementing mitigation options
4. Continual review and control

Incorporating this understanding into the procurement strategy ensures the appropriate marriage of risk and responsibility.

A new formula for success.



+ Plan for success: People make projects

The best-defined and structured project relies on the efforts of a multi-disciplinary team of professionals and contractors to work together seamlessly to deliver unique outcomes in a high-pressure environment. These are made up of organisations of different cultures and competing economic frameworks with significant legal responsibilities and liabilities. This is, typically, not an environment that engenders trust, teamwork and co-operation.

Often, it is just assumed that the professionals will get on with the job in the best interests of the project. In reality, outstanding performance can only be achieved with shared understanding, values and objectives. An often forgotten key ingredient to major project success is investing in the creation of a high performance team environment.

The essential characteristics of a high performance team environment are:

- **Clarity** – A clear understanding of the common purpose, goals and direction of the project thereby establishing a ‘road map’ for project team success
- **Culture** – An embedded value system of integrity, trust, support, honesty and commitment
- **Alignment** – The interests of all team members are aligned and focused in the same direction

We recommend adopting a structured approach to manage relationship risks and create high performing teams. The plan should be grounded in project reality, with a scope, schedule, budget, defined objectives, risks and key performance indicators (KPIs).

We suggest a simple but robust four point plan:

- **Plan for success** – create a project vision and agree objectives; define roles and responsibilities; create governance and decision-making structures; identify the cultures & values of your team; and define the most appropriate procurement model.
- **Team building/development** – undertake a planned, risk-based, collaborative approach to preparing a relationship management plan that identifies relational risks. Build and agree processes around different leadership abilities and communication styles within the team.
- **Coaching & control** – follow a structured process to ensure performance is measured against the relationship management plan KPIs. Use coaching to maintain team motivation, promote effective communication and to eradicate inappropriate behaviours, such as intimidation.
- **Close out** – conduct a ‘lessons learned’ workshop to assess the team’s performance; evaluate the processes followed; identify positive and negative attributes and implement an action plan to improve future project performance.

Communication, effective relationships and team work have a major impact on project success and they can be quantified, qualified, monitored and controlled, just like any other risk.

Conclusion

The successful delivery of ‘mega projects’ is the exception and not the norm. Contemporary wisdom points to the systematic failure to adequately structure and define the project in the initiation phase leading to the manifestation of significant risk in the delivery phase.

We need to overcome our industry’s obsession with mobilising tangible physical delivery as early as possible at the expense of considered and structured project initiation.

The five steps for mega project success are:

1. The **validation** of the vision for the project in the context of megatrends over the project horizon
2. The **implementation** of comprehensive risk analysis and management strategies from the earliest stages of the project
3. **Analysis and selection** of the appropriate procurement strategy that reflects the risk appetite and tolerance of the key stakeholders and informs the project definition
4. Rigorous **management, analysis and documentation** of the project definition providing clarity and certainty in project scope and understanding of the risks and implications of areas of poor scope definition
5. The **adoption and implementation** of high performance team development principles to provide clarity, culture and alignment of project teams in the delivery of project objectives.

Ultimately, the core decision to adopt these strategies sits with the project sponsor. The failure rate of ‘mega projects’ is certainly a compelling argument that something has to change.

Darren Vaux
CORPORATE ADVISORY
02 9256 4700
dvaux@thinc.com.au

Adam Sevdalis
GENERAL MANAGER – ADVISORY
03 9654 6799
asevdalis@thinc.com.au



THINC
ADVICE+ACTION

Thinc is a leading, independent management consultancy, specialising in projects. We operate across the health, infrastructure, private, social infrastructure and resources sectors. At any given point Thinc will be providing advisory and delivery services on projects ranging in value from a few million dollars to several billion dollars. Active across Australia and Asia-Pacific, we aspire to make a difference economically, socially and environmentally. For more information, visit www.thinc.com.au