# THE IPA INSTITUTE

# Megaprojects: Concepts, Strategies, and Practices for Success

Over half of all large, complex industrial projects are failures. Discover the leadership requirements to overcome the challenges of complexity and deliver better business results.

# A REVAMPED 'MEGAPROJECTS' COURSE

It is the complexity of industrial megaprojects rather than size that presents the greatest challenge and leads so many down the pathway to failure. By identifying the root causes of success and failure and sharing strategies to succeed, the IPA Institute has educated project professionals around the globe for the last several years on how to navigate the complexities of megaprojects.

However, complexity transforms the leadership requirements from project management to project leadership. New IPA research shows that successful leaders display very different personalities and backgrounds from unsuccessful leaders. Building on the IPA Institute's original Megaprojects course, this revamped version shares key research findings linking project leader background, education, and personality characteristics to actual project outcomes.

Those responsible for leading complex projects will gain greater insight into personal strengths and areas for improvement. Project organizations as a whole will benefit by better understanding how to select the right person to lead a complex project and deliver the desired business results.

### BENEFITS

- Understand the project leader's role in generating successful project outcomes
- Gain insight into the unique characteristics of successful leaders of complex projects
- Learn different strategies required for megaprojects, versus smaller, less complex projects
- Understand the critical drivers of megaproject success
- Identify the key criteria to select megaprojects that best meet business needs
- **Recognize** the resourcing needs to effectively manage, plan, and execute a megaproject
- **Discover** the risks for defining and executing megaprojects and risk mitigation approaches
- Implement a formal opportunity shaping process to stabilize the project environment

# **REGISTER ONLINE** www.ipaglobal.com/events



# **PRIVATE DELIVERY**

This course is currently only available for private delivery. It can be tailored to your organization's needs and delivered at your preferred location.

Contact the IPA Institute for more information: ipainstitute@ipaglobal.com

# **UPDATED COURSE**

New topic covered:

**Teams & Leadership** 

#### WHO SHOULD ATTEND?

This course is intended for those with at least 5 years of project management experience, including assignment to at least one complex or difficult project. Attendees should be knowledgeable about phased, stage-gated processes for project development and basic project concepts.

# **REQUEST INFO**

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All course instruction, presentations, and supplementary course materials are rooted in IPA's decades of experience evaluating projects and project systems, and conducting quantitative research into capital project issues and trends. IPA maintains a proprietary Megaproject Database with detailed information on hundreds of megaprojects in the petroleum, minerals, chemicals, and power industries. These projects represent an average cost of \$3.5 billion (in 2010 terms) and over 80 sponsor organizations. Each megaproject is characterized by over 3,000 project attributes that enable IPA to perform detailed analyses regarding the project phases, project management practices, and performance.

#### **COURSE TOPICS**

| IPA Data and<br>Methodology                       | Introduction to the IPA approach. The basics of benchmarking. Essential terms and concepts. Overview of IPA's megaproject database.  |
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| Outcomes and<br>Trade-Offs                        | Megaproject outcomes. Understanding trade-offs. Trade-off patterns for megaprojects. Misguided trade-offs.   |
| The Opportunity<br>Shaping Process                | Defining shaping and its importance. Shaping process steps. Creating clear objectives.   |
| Devising the<br>Shaping Strategy                  | Overview of shaping strategy. Shaping and project development process coordination. Linking shaping errors and omissions to failure. Successful and unsuccessful shaping examples.   |
| Basic Data  | The meaning of basic data. When the basic data should be complete and available. Risk areas for basic data problems. Consequences of incorrect basic data. Root causes of basic data mistakes.   |
| Teams and<br>Leadership                           | Owner teams and their leadership are critical to success. The project leader's role in delivering successful results. The characteristics of successful complex project leaders versus unsuccessful leaders.   |
| Organizing<br>Megaproject Teams                   | Megaproject organizational complexity and challenges. The role of organizational charts. Organizational models.  |
| Translating Ideas<br>and Data to Scope<br>(FEL 2) | The goals of Front-End Loading (FEL) 2. FEL 2A: Scope selection. FEL 2B: Scope completion.   |
| Preparing to<br>Execute (FEL 3)                   | Measuring FEL. The role of FEL in maintaining value. Megaproject FEL challenges. Critical project context areas. FEL duration considerations.  |
| Contracting                                       | Contracting approaches. Contracts and project outcomes. Relating success to contract types. Contract selection decision making. The role of external financing. Use of a project managing contractor.  |
| Control of Execution<br>Risks                     | Overview of project controls. Monitoring and control priorities during<br>execution. The importance of detailed engineering slip. The effect of<br>labor availability and productivity. Practices to address labor-short<br>environments. Risk management. |
| Megaprojects<br>and Corporate<br>Governance       | The connection between megaprojects and corporate governance. Historical trends. The business / engineering interface problem. The trap of outsourcing.  |



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Why the IPA Institute? The IPA Institute is the training and education division of Independent Project Analysis (IPA), the world's leading advisory firm on capital projects. Our courses equip industry leaders and capital project practitioners with Best Practices for projects, portfolio, and project system management/delivery. All course instruction, presentations, and supplementary course materials are rooted in IPA's unparalleled capital project knowledge.