

Developing strategies for the effective delivery of capital projects



consulting | technology | outsourcing

Study background

Huge capital spend

 \$38 trillion forecast to be spent on energy infrastructure projects to 2035

• Challenges are rising

- Project delays and cost overruns
- Scarce experienced talent
- Technological complexity
- Uncertain regulatory approach and energy policy

• Capital delivery is a major focus for energy companies

- Best performers can create market differentiation
- Consequences of poor performance are significant

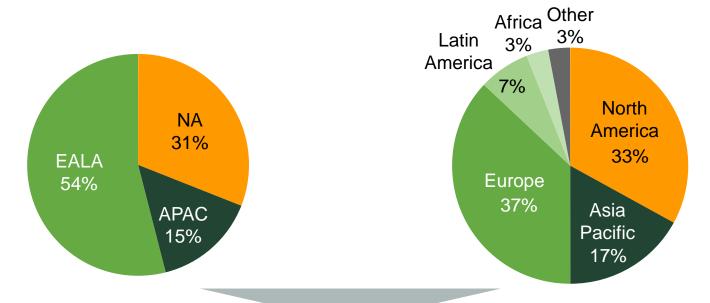


Methodology and Leading Companies

Geographic distribution of survey sample

Total Sample





21 companies were identified as leading in capital project delivery (34 percent of companies in the combined energy and utilities sample)



Summary of key findings

Key findings Leading performers in capital project delivery generally exhibit a distinctive set of capabilities

Many energy companies are struggling to meet their targets

Delivery challenges are likely to increase

Effective capital delivery is critical to future performance



Summary of key findings (continued)

Key findings Value is being lost from lack of integration from planning to operations

Regulatory issues are driving delays and changes to project plans

Talent is the number one project delivery concern for many companies



Finding!

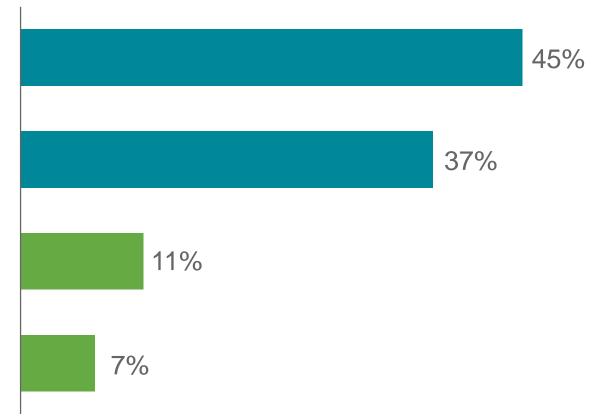
Regulatory issues and talent availability are driving delays to project commencement In which of the following areas do you most commonly have the greatest challenges in getting projects started?



Workforce/skills availability

Local joint venture partners

Special interest opposition





Finding!

Talent is the number one project delivery priority for many energy companies

What are your top three priorities to optimize capital project management in the next three years?

Ensuring availability of the right leaders and talent

Improved front end loaded planning and scheduling

Ensuring effective stakeholder engagement

Safety management

Improved contracting strategies

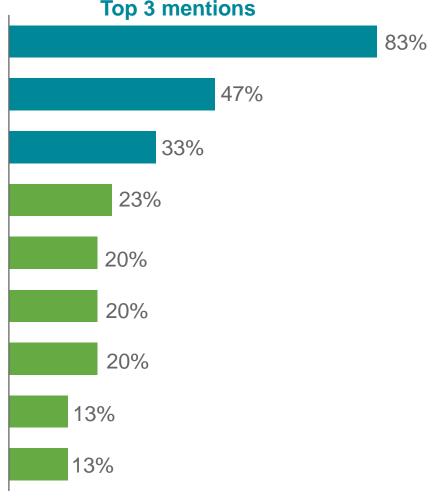
Ensuring ready for start-up/management of handover process from projects to operations

More effective change management

Implementing the correct organizational design

Improved alignment to organization strategy





Finding! Once underway, the schedule is prone to change from up-front planning failures

What drives/typically causes the changes to the project schedule?

New or unconsidered regulatory requirements

Insufficient detail during the planning stage

Changes in asset scoping/specifications – design changes driven by new requirements

Unforeseen contractor and supplier constraints

Original assumptions prove to be incorrect or incomplete

Availability of resources/ talent

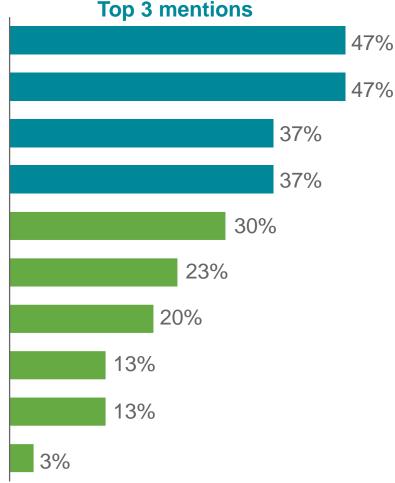
Poor controlling / management

Changes to budget

Poor productivity

Changes in asset scoping/ specifications driven by new technology





Finding Leading performers exhibit a

common set of distinctive capabilities

Distinctive attributes of leading performers

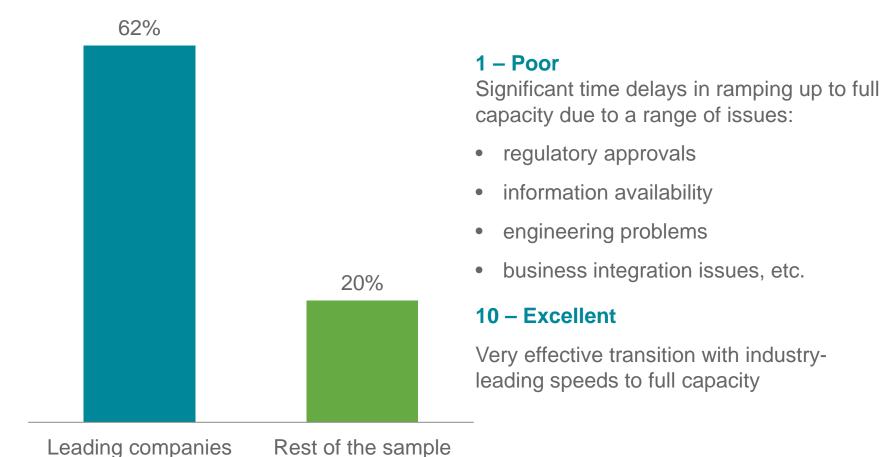
The leading performers are survey respondents who delivered most consistently against cost, schedule, quality and business value targets

- Less project plan revision and rework during delivery
- More mature delivery capabilities
 - Well developed culture of delivery excellence
 - Higher maturity project delivery methodology, guidelines and support
 - More effective decision making
 - Better access to data during project delivery
 - Broader range of KPIs used for all projects
- More effective transition from project to operating asset



Finding!

Revision of projects during construction is significantly less common among the leading performers Percent of organizations where project schedule is delivered as originally specified (rate 8-10)







Finding! Leading performers are more likely to have greater maturity across a range of core project capabilities

The types of KPIs used to monitor the delivery of all major capital projects

External stakeholder KPIs

Contractor and employee KPIs linked to business KPIs

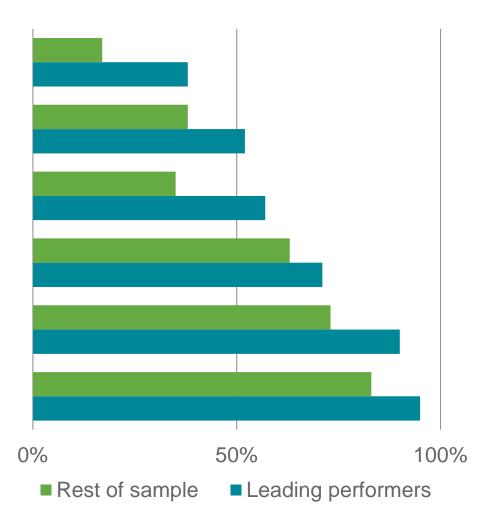
Process KPIs

Portfolio KPIs

Delivery output KPIs

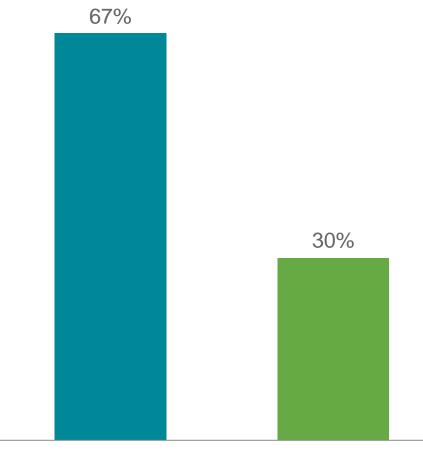
Safety KPIs





Finding!

Leading companies are better at managing the transition from projects to operating assets Percent of organizations with effective transition from projects delivery to operation assets (rate 8-10)



Leading companies

Rest of the sample

accenture

1 – Poor

Significant time delays in ramping up to full capacity due to a range of issues:

- regulatory approvals
- information availability
- engineering problems
- business integration issues, etc.

10 – Excellent

Very effective transition with industryleading speeds to full capacity

Three recommended areas for focus

- Comprehensive and rigorous up-front planning (front-end loading)
- Developing and retaining talent
- Improving the transition from the construction phase to a producing asset



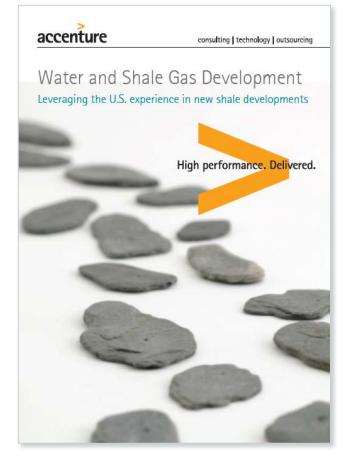
About the Accenture Innovation Center for Energy and Utilities

Accenture Innovation Center for Energy and Utilities brings innovation, thought leadership and insight across the energy and utility industry landscapes.

With knowledge hubs in strategic industry locations including Beijing, Houston, London, Perth and Rio de Janeiro, the Center develops and publishes insights to advance high performance in the energy and utilities industry across key topic areas: Capital, Customer Influence, Innovation, Policy and Sustainability, Resources, Talent and Technology.

To learn more, visit www.accenture.com/innovation-center







Questions