

The background image shows an industrial facility with several tall smokestacks emitting plumes of white smoke into a blue sky with scattered clouds. The facility itself consists of various buildings and piping. Overlaid on this scene are semi-transparent, light blue graphical elements: a large circular arc, a grid of data points, and various icons representing technology and industry. The overall aesthetic is modern and data-driven.

The Impact of Portfolio Management on Capital Projects in the Utility Industry

An IDC InfoBrief, sponsored by Oracle | February 2018

In This Study

Key Takeaways for Project Management in Energy Companies

- Capital projects are now focused more on asset upkeep and life extension.
- Smaller, more easily managed projects are becoming the most common types of projects.
- Successful capital project management means managing a portfolio of projects.
- Change management is still the Achilles' heel of even advanced project organizations.
- Financial and operational transparency are the attributes of a successful project management office.
- On-time and on-budget are still the king of KPIs, but resource and capital prioritization is what drives successful portfolio management.



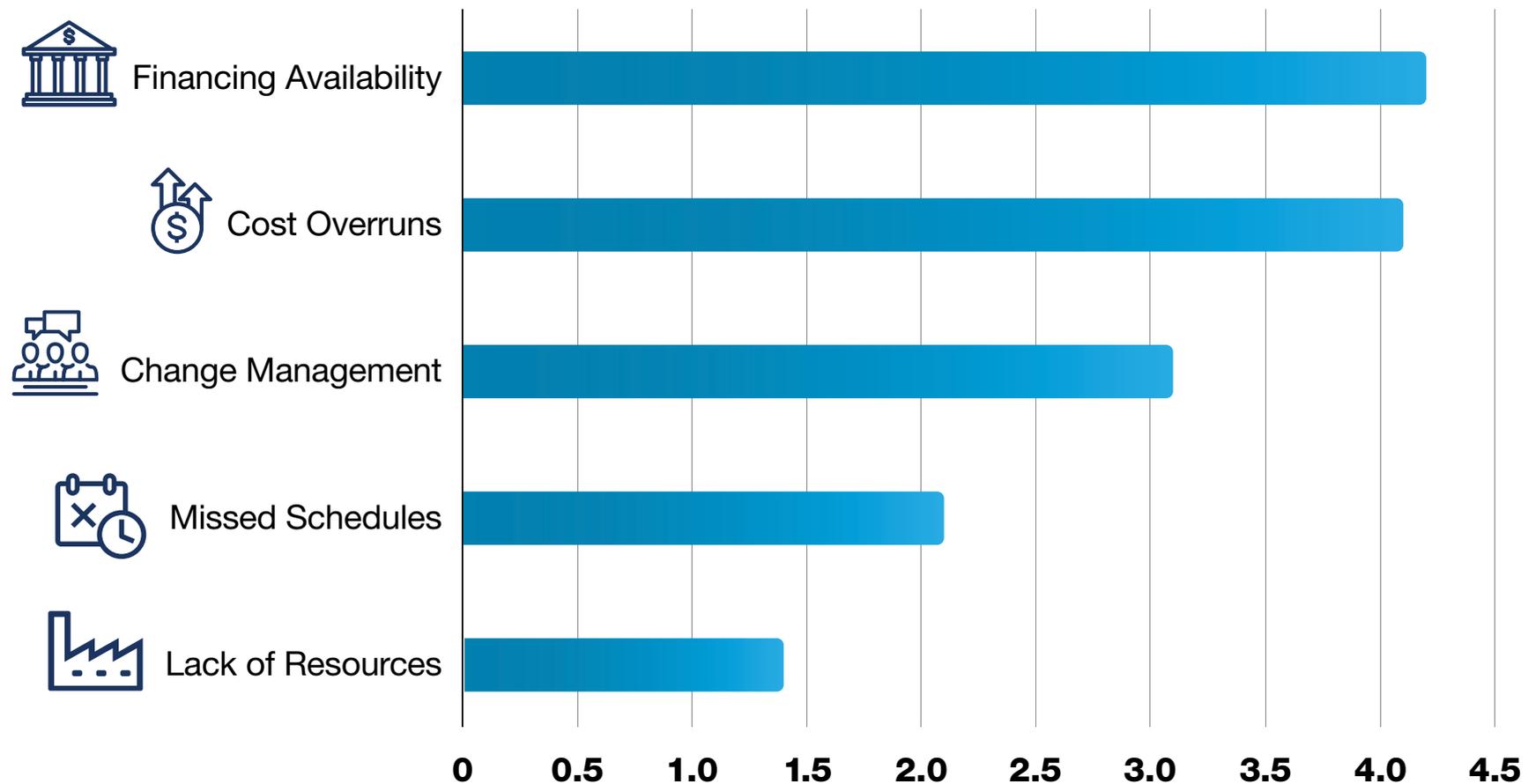
Capital Project Management Today

- The average project size has decreased 27%, while the number of projects has increased 40% since 2000.
- In utility companies, less than 10% of large projects complete on-time and within budget.
- While the number of projects has increased, both project management and construction staff have decreased.
- Oil & Gas companies are focused on collaboration with engineering and construction (EPC) companies.
- There is a lack of timely visibility into project performance and change management.
- An unstable capital financing environment drives the need to improve portfolio decision-making.



Top Challenges to Successful Capital Project Management for Energy Companies

Ranking Importance of Challenge

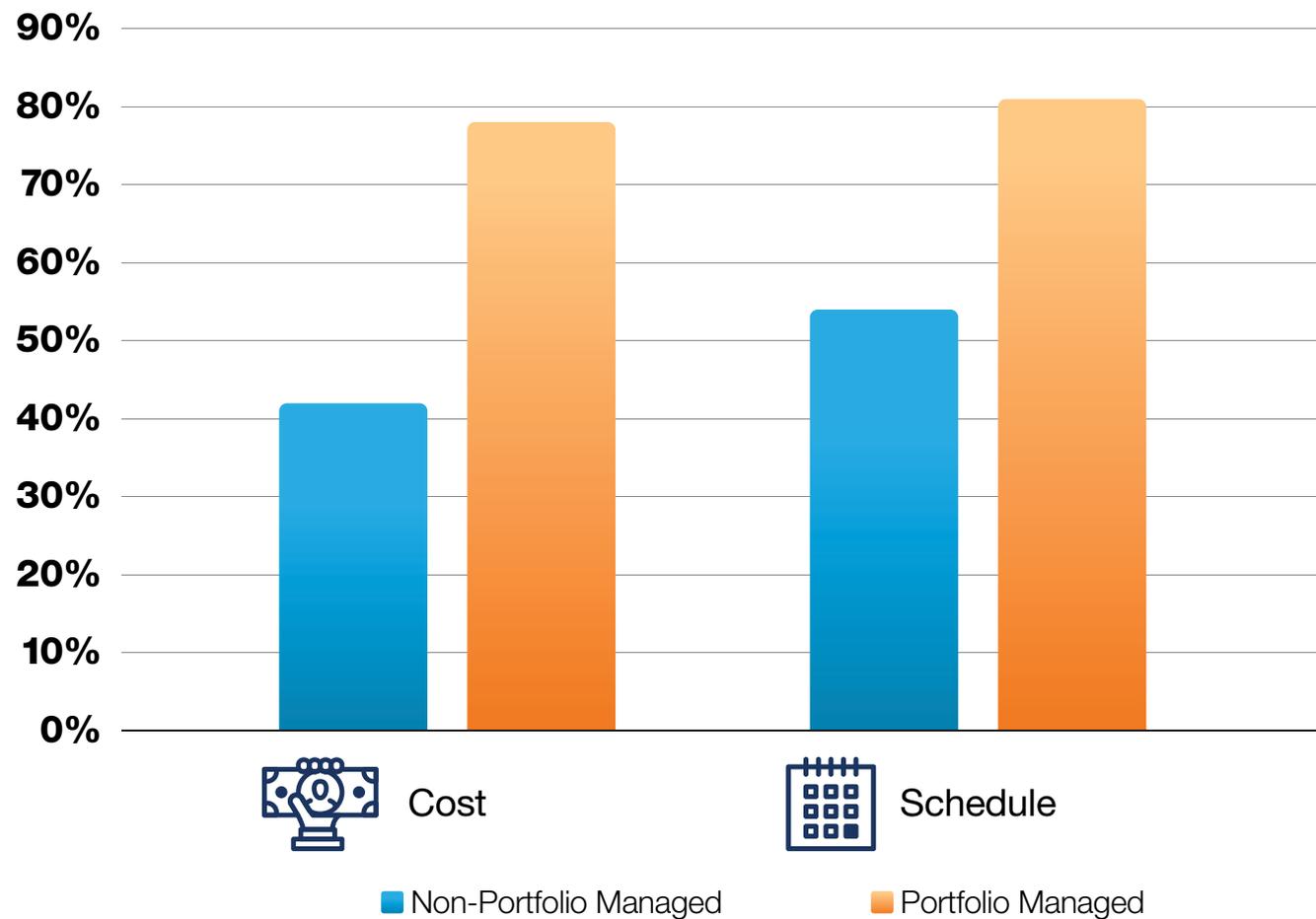


Note: 5=most important, 1=least important; (n=29)

Source: Survey on energy company operations, IDC Energy Insights, December 2017

Project Performance in Non-Portfolio Managed Energy Companies

Enterprise Project Management Methodology Performance Comparison



Source: Survey on energy company operations, IDC Energy Insights, December 2017; (n=29)

Impact of Transparency in Project Management

- Improved cost reporting for tracking potential problem areas
- Significantly improved prioritization of resources
- Improved decision-making for larger number of projects
- Significant improvement in predictability for impact of change orders
- Reduced number of projects missing both time and financial deadlines
- Better risk mitigation on troubled projects



Enhancing Project and Portfolio Management

- Use project management systems that can cross all silos
- Adopt a portfolio management strategy to manage a larger number of smaller projects
- Build the organization around predicting the impact of change orders
- Develop enhanced project hand-off capabilities from contractors to owners
- Create executive investment dashboards for senior executives to use to prioritize tight financial resources



Enhancing Decision-making With...

- Real-time analytics on project data
- More frequent project investment reporting cycles with near-real time information
- More accurate forecasting of change order impact
- More dynamic financial modeling that takes advantage of accessible project data
- Continuous adjustment loop on forecasting models from real world data
- 87% of organizations surveyed use an enterprise-level project management tool for decision-making



What Justification Do Most Energy Companies Need to Invest in Enterprise Project Portfolio Management (PPM)?

 **82%** require ROI to gain funding

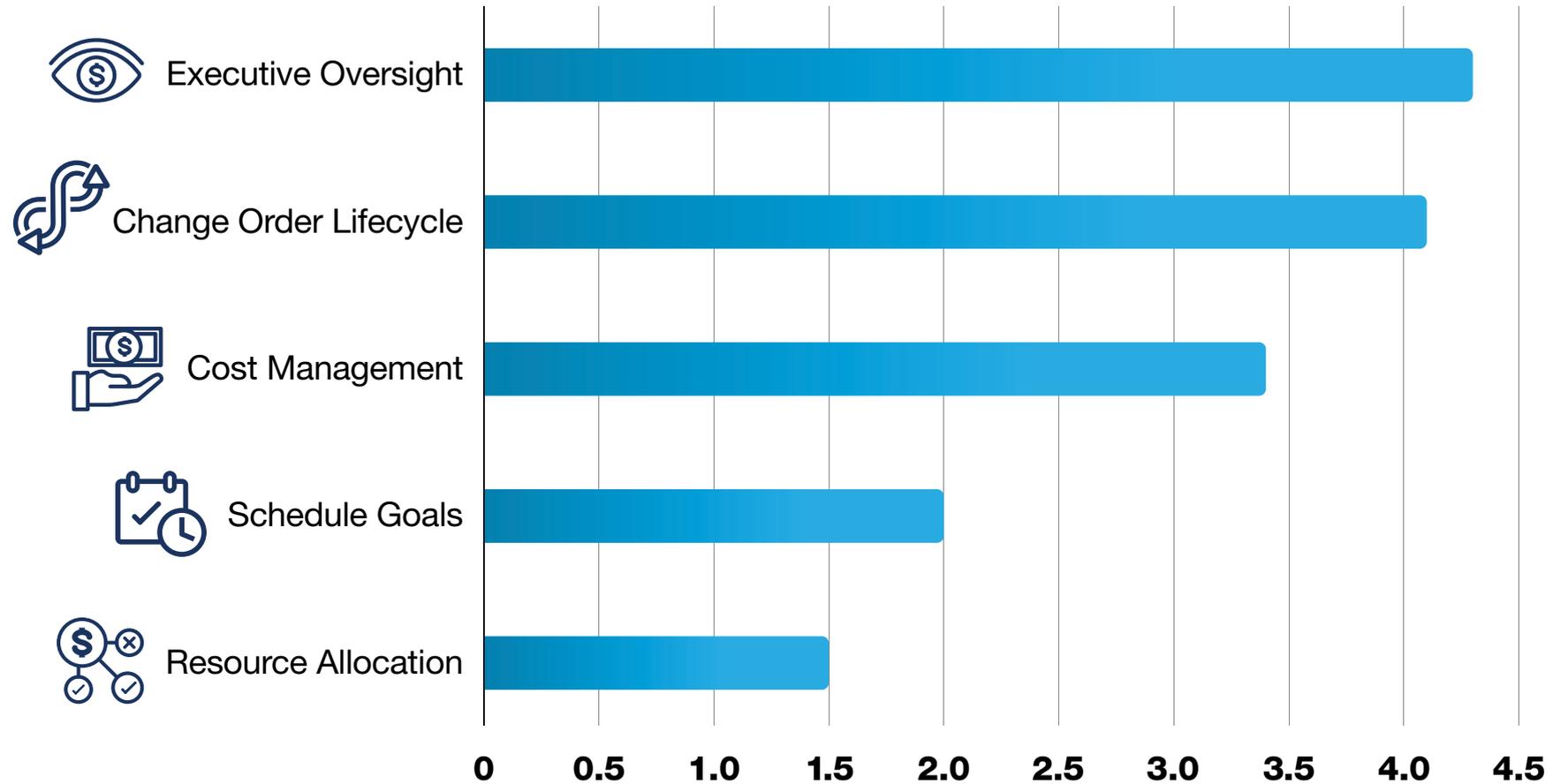
 **63%** need a cost reduction to justify the investment

 **65%** consider the payback period to justify the investment

Source: Survey on energy company operations, IDC Energy Insights, December 2017; (n=29)

Impact of Enterprise PPM System

Impact of Enterprise PPM System on Project Metrics



Note: 5=most important, 1=least important; (n=29)

Source: Survey on energy company operations, IDC Energy Insights, December 2017

The Bottom Line



- PPM is crucial for capital management.
- Change management will continue to require significant organizational focus to keep it under control.
- The PPM system must provide enterprise-wide accessibility to project data.
- Tracking current project performance and historical performances for benchmarking and forecasting is the one key function utilities miss.
- Make sure you have a COE for project management.
- As portfolio management becomes the standard, expect to see significantly better project performance with less management intervention.

In conclusion:

- An enterprise PPM system is needed to manage the increasing number of complex technology-driven projects in energy companies.
- IDC Energy Insights expects the number of smaller projects to increase at least 17% on a CAGR from 2016 to 2021. Energy companies must start managing the projects as an aggregated portfolio to maintain control.
- Both Utilities and Oil & Gas companies are driven by capital availability and larger portfolios of smaller projects.