

The Capital Project Services Office Toolkit

Designed to improve
time to value and
increase capital efficiency

High performance. Delivered.

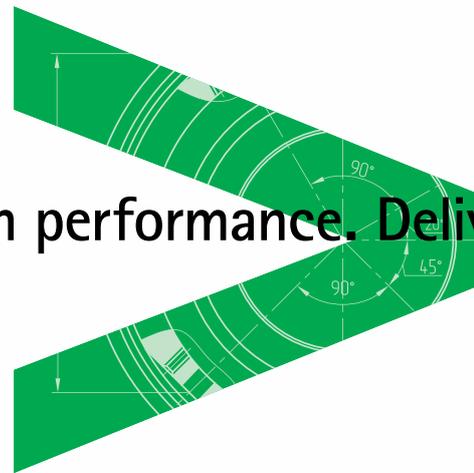
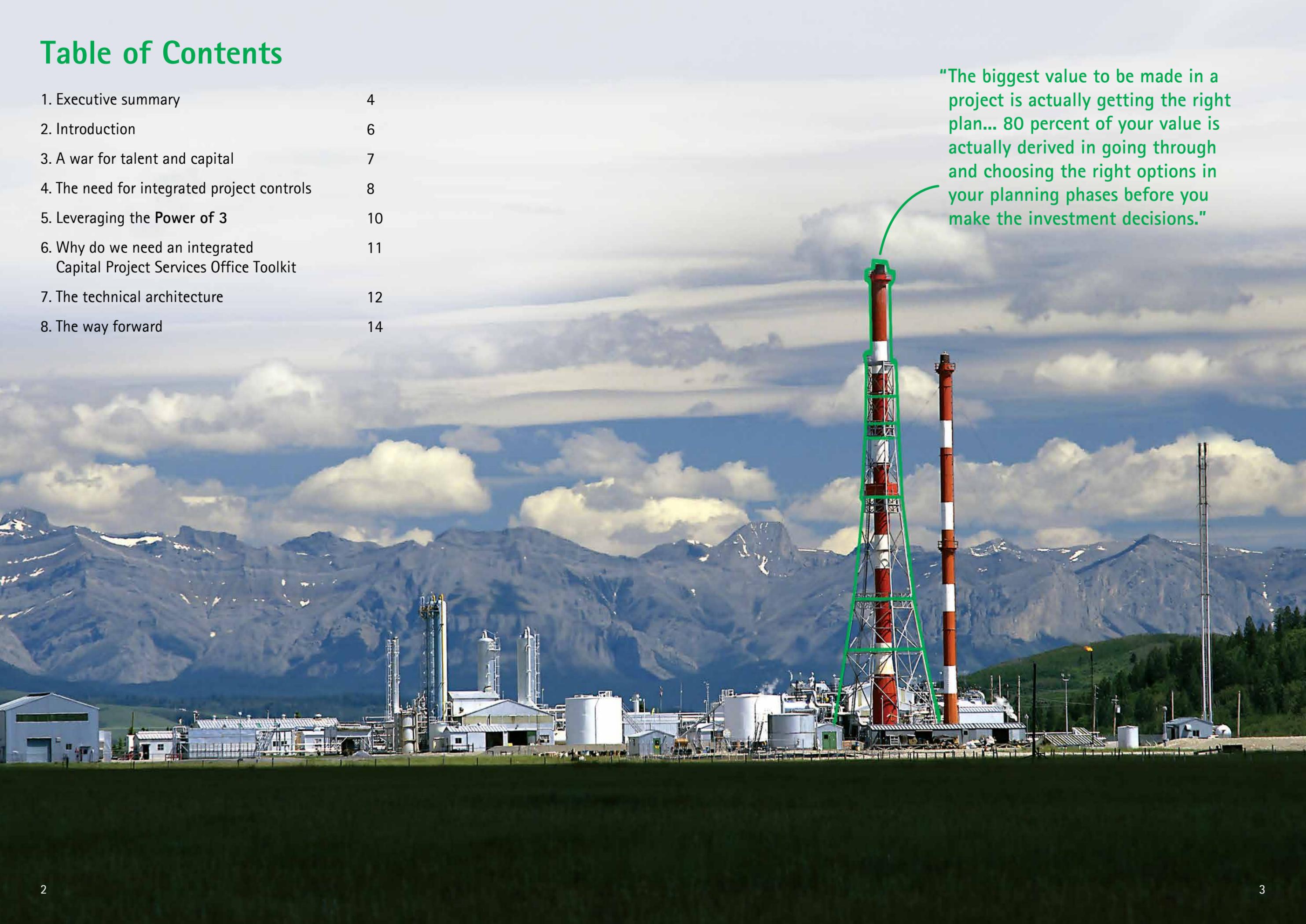


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"The biggest value to be made in a project is actually getting the right plan... 80 percent of your value is actually derived in going through and choosing the right options in your planning phases before you make the investment decisions."



Executive Summary

As much as US\$48 trillion in future spending is expected across all of the resources industries,¹ but many companies still find it challenging to deliver projects safely, on time, within budget and in line with original assumptions. Accenture, Microsoft and their joint venture Avanade have collaborated to develop an integrated Portfolio and Project Management solution—the Capital Project Services Office Toolkit. The toolkit seeks to address the need for increased real-time visibility into project status and overall portfolio health. This innovative solution has been developed from Accenture's extensive practical experience supporting clients with complex project planning and execution, and helps safeguard project delivery, and enhances operational and executive-level decision making in project and portfolio management.

"You can't rescue a bad project through good construction. So if you choose the wrong option and then try and recoup it through the construction process and save money in construction, you will never recoup the value, you will lose."

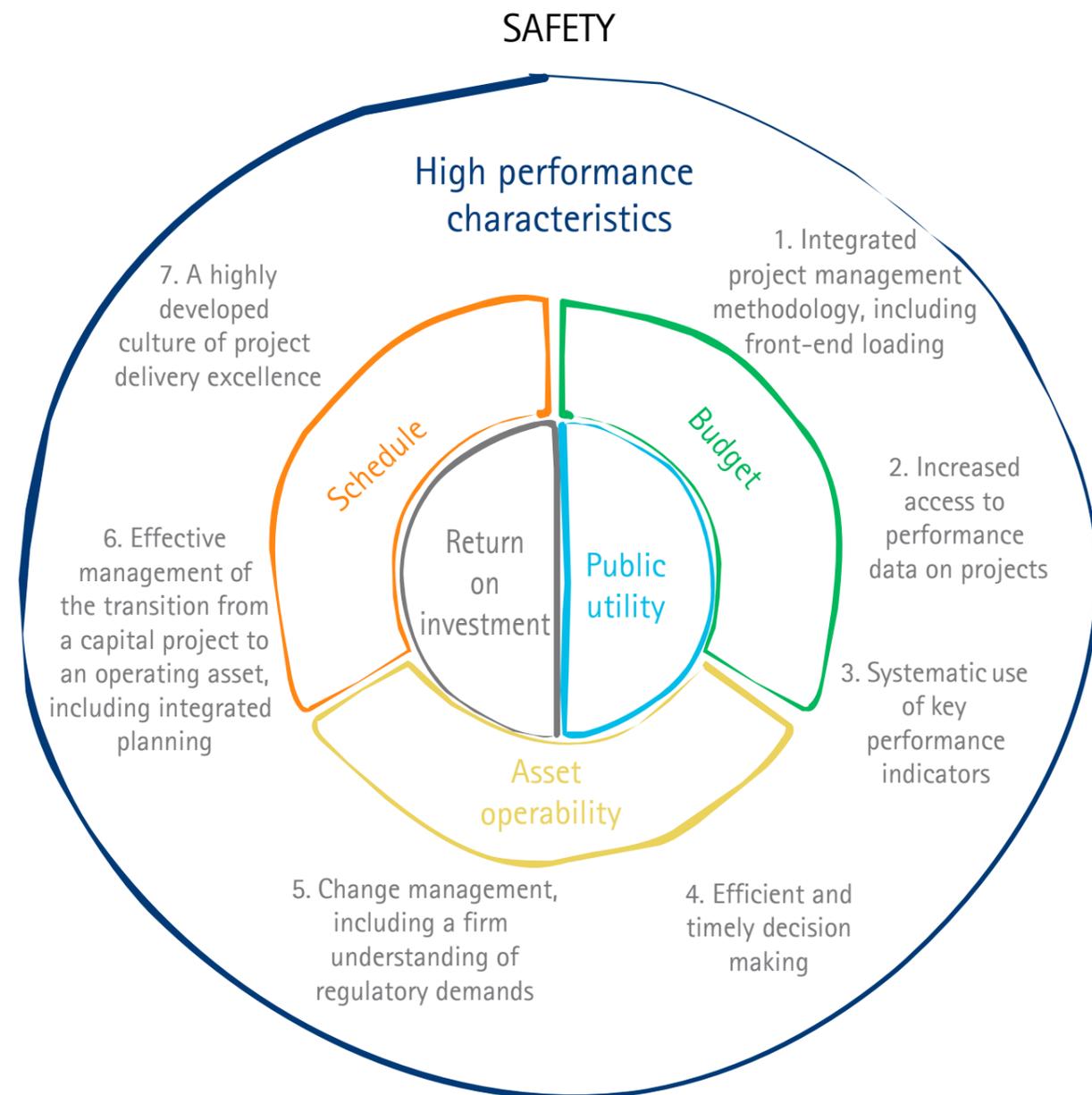


Introduction

In an increasingly volatile global economy where resources projects are vulnerable to rising expenditure and costs, CEOs are placing capital project management high on their agendas. The latest World Energy Investment Outlook from the International Energy Association (IEA) estimates that more than US\$48 trillion, including US\$23 trillion in oil and gas, will be spent in meeting energy demand from

resources industries (including coal and power expenditures and energy efficiency measures) over the next two decades.² Accenture's research on capital projects found that such projects are grappling with a set of unique challenges related to cost overruns, timeline delays, growing scarcity of talent and a rapidly changing regulatory environment.³

Figure 1. Managing the complexities: Treating capital projects as businesses can significantly influence their success



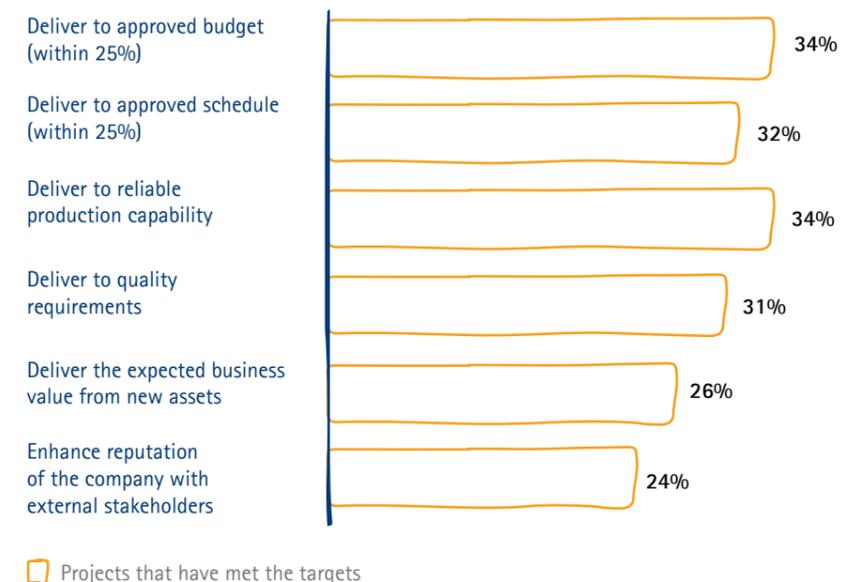
A war for talent and capital

Accenture's multi industry capital investment research that involved 101 executives in oil and gas, chemicals, metals, mining and utilities in more than 25 countries have quantified the impact of these challenges. The research found that capital projects suffer from large deviations in budget, planning and operational performance—ranging from more than 30 percent in cost overruns to 28 percent in timeline slippage (Figure 2).⁴ Asked what they would prioritize to better utilize capital project management and delivery in the next three years, 83 percent of the executives felt availability of competent leaders and talent was critical. Improved front-end loaded planning and scheduling (47 percent), and ensuring effective stakeholder engagement (33 percent) were found to be the next most important priorities.

Qualitative and quantitative evidence indicate that executives' concerns are not misplaced. According to a recent survey by Oilandgaspeople.com, the world's largest oil and gas jobs board, the sector needs to find 120,000 new staff in the next 10 years if they are to fill the skills gap left by retiring workers.⁵ Indeed, Oil and Gas UK, the country's leading oil and gas industry association, cites the skills shortage as the biggest barrier to growth.⁶ As the booming shale gas industry fights for talent, experienced engineers are commanding sky-high salaries from headhunters.⁷ Shareholders are also questioning what they consider inefficient use of capital and are rewarding companies that exhibit capital stewardship. As a respondent said, "The overruns that are occurring in projects, the amount of capital we destroy at the moment is just astonishing... it is [due to] putting people into roles they're not able to do. As more and more projects have come along, we've promoted less and less capable people up into more and more senior roles."⁸

The value at risk and the cost overruns resulting from poor execution at an industry level could run into millions of dollars and can affect shareholder value. With the stakes so high, getting the right approach to appropriately manage these projects is critical. Accenture believes that capital project management should focus on running the activities associated with projects in the same way as a business does—with a clear strategy, a business model and an operating model that delivers on the strategy (Figure 1). Capital projects need to consistently execute a defined set of processes, apply appropriate governance and create insight into project performance to help enable effective decision making. Finally, capital projects, similar to businesses, need to plan for and anticipate the dynamic environment in which they operate.

Figure 2. Many capital projects are not meeting their targets



More than half of the organizations surveyed were unable to take advantage of their major projects due to implementation challenges, resulting in a cost deviation ranging between 10 percent and 20 percent. Just over a third of respondents reported that their companies had remained within 25 percent of their approved budgets for all projects; the remaining two-thirds had missed their targets.

The need for integrated project controls

Accenture's research indicates that leaders in resources industries have a pressing need for integrated project controls. The research found that more than 70 percent of companies believe that the complexity and size of projects as well as their overall portfolio of projects will potentially increase in the next five years, and more than 87 percent are convinced that effective project delivery is among the top three drivers of high performance.⁹ To better manage unscheduled and unexpected changes—such as new or unconsidered regulatory requirements, insufficient detail during the planning stage, changes in asset scoping/specifications and design, and unforeseen contractor and supplier constraints—operators need integrated project controls and key performance indicators (KPIs) to systematically monitor delivery.

Among the 10 trends that Accenture research has found to be shaping our clients' capital projects agenda, three are specifically relevant to project management and controls.¹⁰

Common toolsets with consistent data: Standardization and greater integration appear across the project control application suite.

Methods to process: Revised stage gate methodologies to focus on front-end loading activities and a more inclusive functional view of requirements per life cycle phase.

Information to insights: Tools and decision support centers that enable the visualization of project data for timely decision making and the use of analytics to understand indicators.

Additionally, there is the emerging trend of digital. The convergence of digital technologies and tools associated with social collaboration, mobility, analytics and cloud computing have created new opportunities for today's capital projects to be delivered with greater success. Although the priorities for resources companies include procuring experienced project leadership and delivery talent, and front-end project loading and stakeholder engagement, current IT capabilities of a majority of them do not support effective project delivery and cost control. Burdened with an increasing amount of information, data and decision points, companies today are seeking integrated project control tools and insight-driven analytics to better manage project risks, schedule, talent, budget and safety.

The digital capital project will provide new, integrated and collaborative project controls supported by improved asset and document management. It will also help improved time to value and increased capital efficiency, resulting in a new high-performance business capability. Finally, the digital capital project will impact key project control processes, applications and the future operating model by seamlessly integrating all phases of the capital project life cycle.

Accenture Capital Project Services (ACPS) has been designed based on practical client experiences and industry insights supported by the industry business model to help leaders deliver greater value from their projects as well as improve capital efficiency of the project portfolio by enabling better control, reducing time to market, minimizing budget variances and improving asset performance.

ACPS's Project Management and Assurance Services solution focuses on the design and execution services to establish a Capital Project Services Office (CPSO) that seeks to bring strong governance, methodology, transparency and collaboration across the project ecosystem. The new Capital Project Services Office Toolkit is one of the integrated, enterprise-ready portfolio and project management (PPM) assets ACPS employs to support the CPSO.

Accenture research has found 10 trends are shaping our clients' capital projects agenda

1. Common toolsets with consistent data: Standardization and greater integration across the project control application suite
2. Engineering data management ownership: More prescriptive set of requirements and applications associated with the nature, format and data types
3. Methods to process: Revised stage gate methodologies to focus on front-end loading (FEL) activities and a more inclusive functional view of requirements per lifecycle phase
4. Resource and talent management: Focus on contingent labor management and opportunities for knowledge management and harvesting
5. Information to insights: Tools and decision support centers that enable the visualization of project data for timely decision making and the use of analytics to understand indicators
6. Knowledge harvesting and collaboration: Tools, processes and collaboration facilitating the collection and cataloging of organizational knowledge and the lessons learned
7. Management of non-operated joint ventures: An active approach to managing non-operated joint ventures through refined governance structures and information sharing
8. Offer to the nation: Increased expectation regarding the use and development of local workforce and supplier programs to enhance the economic "multiplier" effort
9. Evolving contracting models: A migration towards new types of contracting models and the use of service intermediaries for capital project execution
10. Global fabrication: High in-country labor costs, skill availability, fabrication capacity and complex technologies have moved towards offshore fabrication and modular development

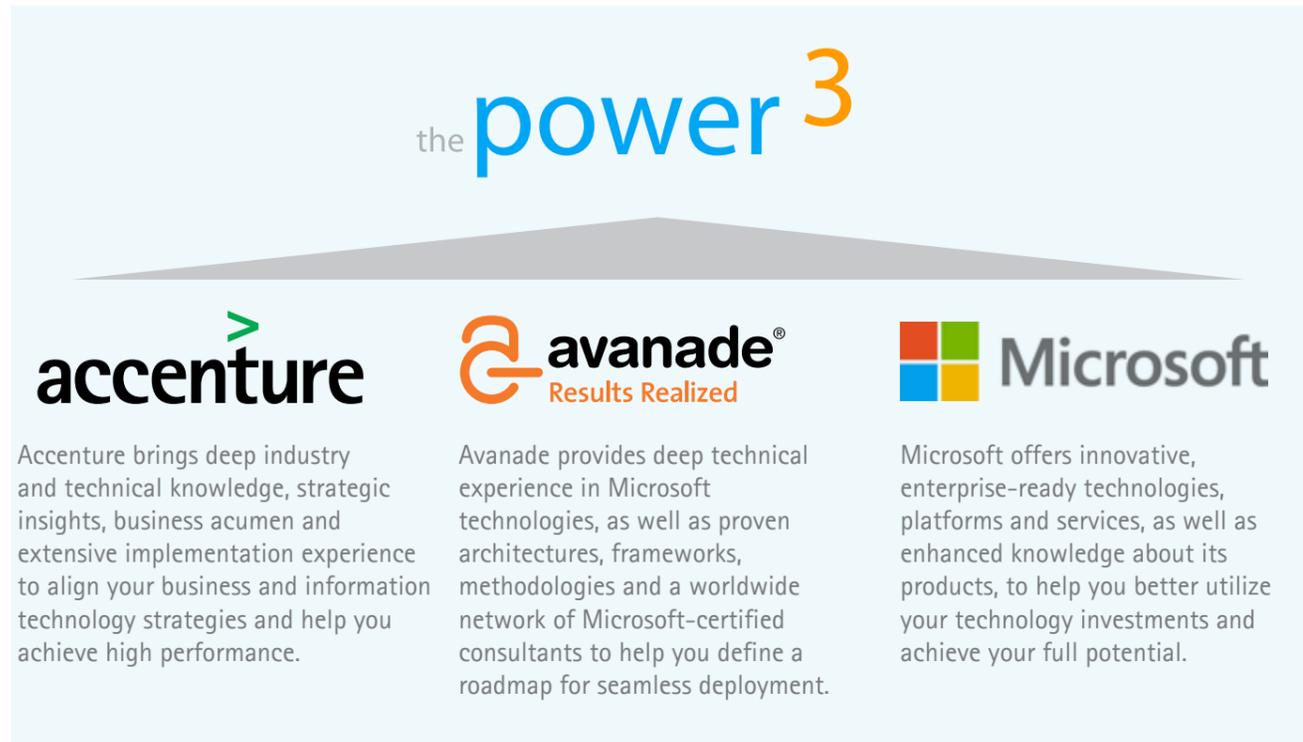
Leveraging the Power of 3

The collective capability of Accenture, Avanade and Microsoft can help leaders in resources industries make a clear assessment of their own strengths and weaknesses, and improve their capital project execution capabilities

and performance to help their next capital project deliver on its requirement and realize potential new value and revenue by exploiting key digital technologies and tools. Working closely with Avanade and

Microsoft, Accenture has developed a broad range of solutions aimed at helping clients make the most of their Microsoft investments, including the new CPSO Toolkit.

Figure 3. The Power of 3



Designing an integrated suite of solutions

The CPSO Toolkit offers an integrated suite of business services and technologies that help improved time to value and increased capital efficiency of our clients' capital programs throughout their life cycle. It offers a framework of solutions built on Microsoft technologies, with business capabilities designed

to support capital project management, control and delivery. The solution offers a technology platform that harnesses the digital capabilities of cloud, analytics, mobile and social media to create a high-performance business capability.

The CPSO Toolkit leverages:

- Accenture's industry insights and business process knowledge.
- Avanade's extensive Microsoft technology integration experience.
- Microsoft's leadership in enterprise-ready technologies.

What is the CPSO Toolkit?

- It is an integrated solution based on Microsoft Project Server that facilitates resource, project and portfolio management.
- It provides workflow and tracking tools related to issue management and risk management with the ability to assign responsibilities and timelines.
- It facilitates real-time access to project data through effective document and knowledge management and collaboration tools.
- It supports more effective collaboration between various stakeholders—internal and external to the capital project.
- It includes a process engine to support the management of change process—with integration into cost and schedule tools.
- It is delivered via a simple and customizable user interface.

Why do we need an integrated CPSO Toolkit?

Accenture, Avanade and Microsoft have jointly invested to create this new solution based on years of capital project delivery experience with a global portfolio of resources clients. Accenture's experience and insight into the challenges clients face when managing their projects using off-the-shelf software have helped us create an integrated, innovative project and portfolio management offering that provides specific functionality to support stage gate management, project risk and cost analysis, and project and portfolio data aggregation.

The toolkit

- Supports cost, resource and schedule management integration.
- Provides more effective and efficient portfolio and program management.
- Supports each phase of a capital project life cycle via stage gate and document workflow to speed up project execution.
- Can be an effective solution for cost control, and resource and schedule management.
- Helps enable collaboration between various functions—risk issues, MoC schedule, resource and reporting.
- Facilitates real-time access to project data for advanced reporting.
- Is a hosted (SaaS) or installed solution.
- Supports integration into existing Microsoft products.

Figure 3. The Capital Project Services Office framework



The technical architecture

The CPSO Toolkit provides an integrated data architecture that:

- Supports the deployment of decision -support centers that helps enable project data visualization.
- Is a common data model for analysis and scenario development.
- Leverages Accenture's process models, industry templates and Microsoft technologies such as Microsoft SQL Server 2012, Project Server 2013, SharePoint Server 2013, Microsoft Lync and Office 365.

- Can be integrated with Windows 8 mobile applications, and can be delivered on the Microsoft Azure cloud platform.
- Offers a technology platform that helps enable seamless execution of project controls.
- Integrates an ecosystem of multiple applications and solutions.
- Supports integration with a client's existing Microsoft suite.
- Supports key processes such as change management.
- Integrates cost and scheduling tools for better control.

The CPSO Toolkit provides an integrated project control application suite and technology platform (hosted or installed) that helps:

- Integrated project controls associated with cost and schedule management.
- Insight-based portfolio and project reporting and reference KPIs.
- Improved data integrity.
- Integrated cost/schedule analysis.

Figure 4. The Capital Project Services Office Toolkit: System architecture

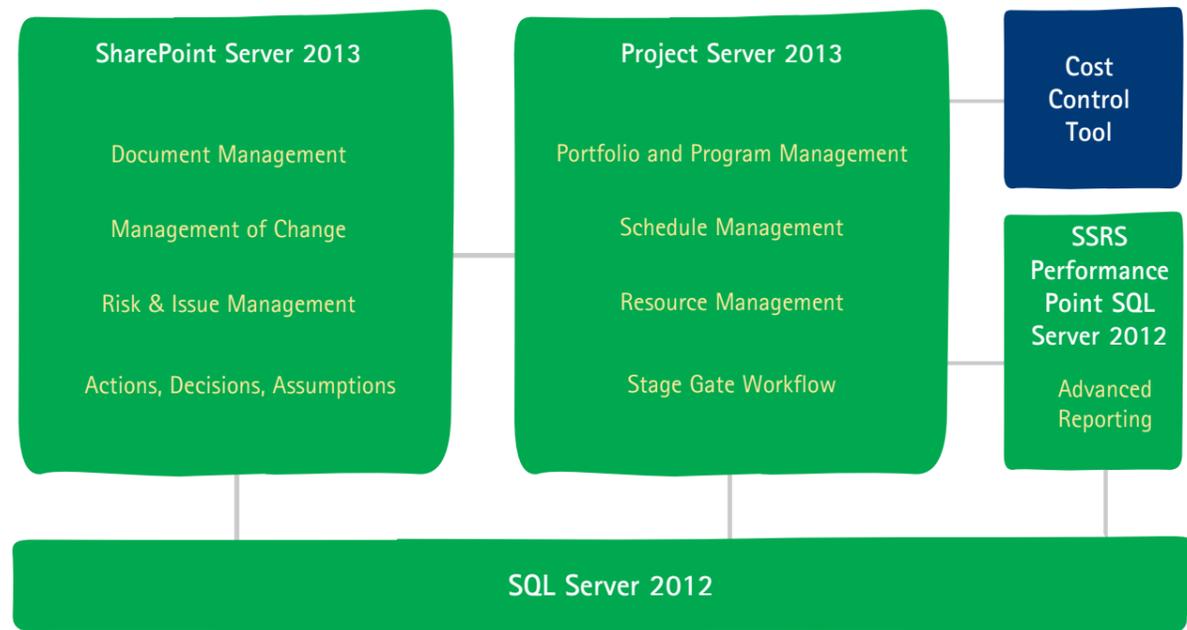
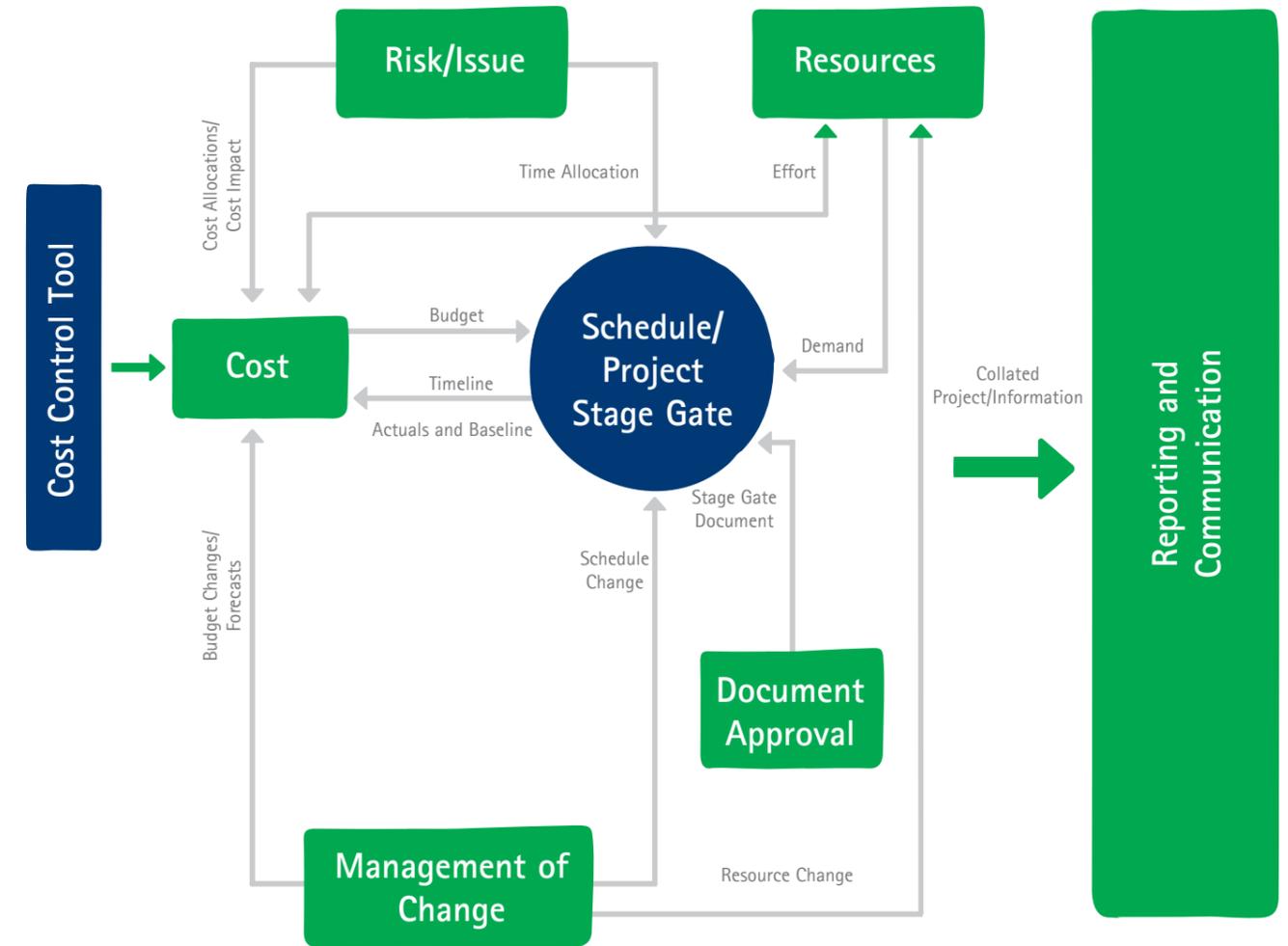


Figure 5. The CPSO Toolkit helps enable high-level business processes



Built on Microsoft technologies, the CPSO Toolkit can be customized to client needs and implementation time frames. It can be sold and priced as a hosted service by Accenture (SaaS) using Microsoft Azure cloud platform or as hosted by the client, supporting client configurations,

or as an installed solution within a client's environment (in a cloud)—the last takes a little longer to implement. It can also be delivered as complete solution or in parts and then integrated, and it can be integrated with other PPM and enterprise resource planning (ERP) systems.

The way forward

Across resources industries, leading players create a capital project services office to serve as the go-to organization for strong governance and use of robust and common methodologies and integrated systems. This office seeks to help maximize transparency and enable real-time collaboration across the project ecosystem. Accenture's CPSO Toolkit provides an integrated project and portfolio management capability that can enhance the service office by providing a Microsoft project server-based solution, which facilitates data visibility to improve decision making. By providing resources leaders with a cost-effective, easily deployable, integrated solution to meet their project and portfolio management needs as they embark on more ambitious and complex capital projects, Accenture's CPSO Toolkit helps them address as well as leverage industry disruptions to their advantage and achieve high performance.

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About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 293,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.

About Avanade

Avanade helps customers realize results in a digital world through business technology solutions and managed services that combine insight, innovation and expertise focused on Microsoft® technologies. Avanade combines the collective business, technical and industry expertise of its worldwide network of experts with the rigor of an industrialized delivery model to provide high quality solutions using proven and emerging technologies with flexible deployment models—on premises, cloud-based or outsourced. Avanade, which is majority owned by Accenture, was founded in 2000 by Accenture LLP and Microsoft Corporation and has 21,000 professionals in more than 20 countries.

Additional information can be found at www.avanade.com.

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