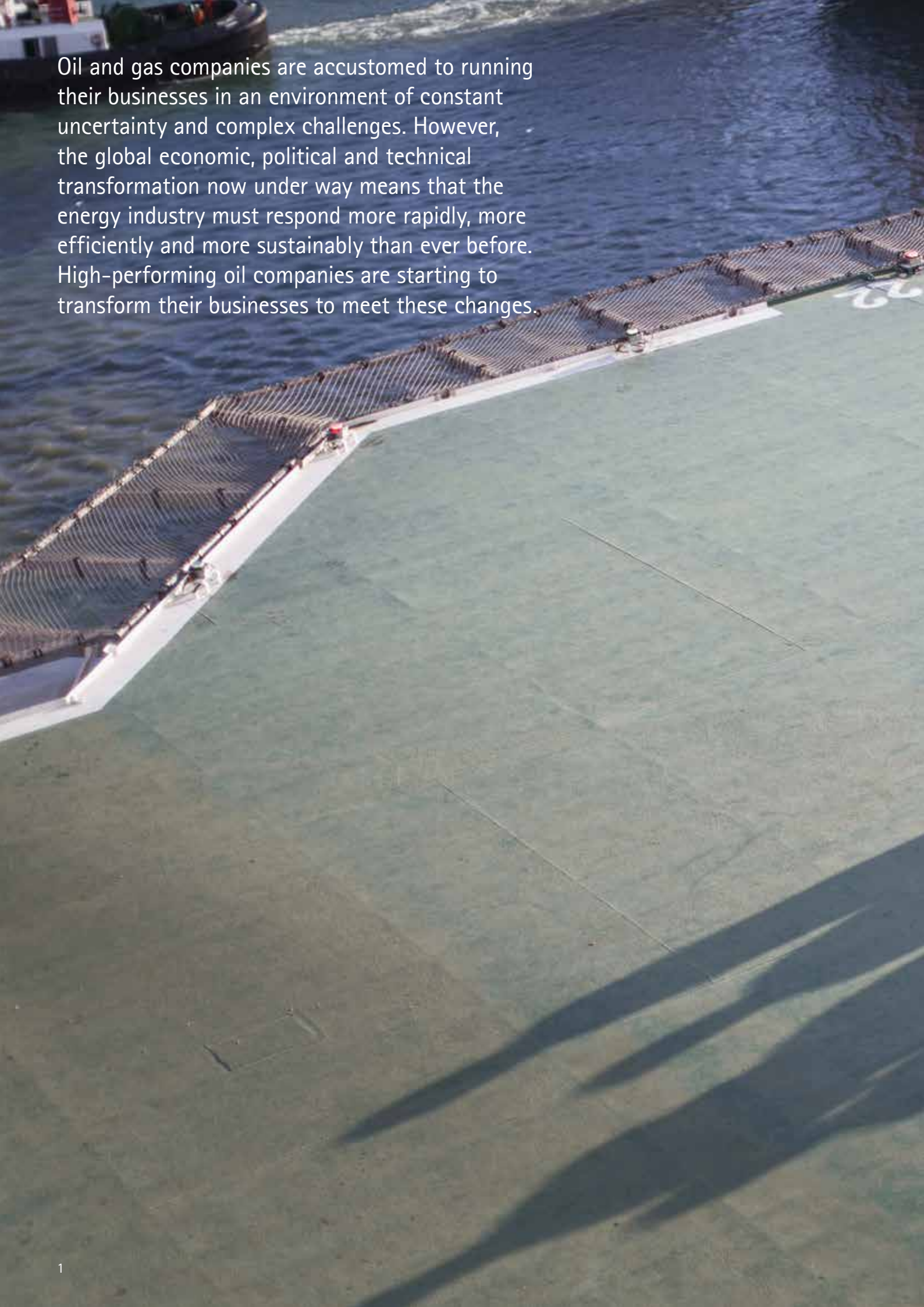


Achieving high performance with business process management for the energy industry

A large, stylized yellow chevron graphic pointing to the right, positioned behind the text "High performance. Delivered."

High performance. Delivered.

Oil and gas companies are accustomed to running their businesses in an environment of constant uncertainty and complex challenges. However, the global economic, political and technical transformation now under way means that the energy industry must respond more rapidly, more efficiently and more sustainably than ever before. High-performing oil companies are starting to transform their businesses to meet these changes.





Oil companies have set strategic goals to meet global energy needs. They are transforming their global portfolios to reflect changing demand patterns, manage stakeholder expectations, meet regulatory changes and adapt to demanding consumers. What has been more difficult to transform is how oil companies actually run their operations.

Part of the difficulty is that many oil industry operations are mature, using processes that have either been working well for decades, or are very new, and so unproven. Changing business processes can be disruptive as well as costly and time consuming. For business process management (BPM) to succeed, it typically involves the skilled implementation of a model or methodology that is well communicated and measured against real business benefits.

The need for best-in-class BPM is arguably becoming more urgent as the operating environment for the oil industry becomes more uncertain. As the operational environment becomes risky, many oil companies are seeking to identify areas of their business where they can exert more control and where the changes they make will result in a greater degree of certainty.

What does this certainty look like? In upstream, where oil companies are operating joint ventures and managing complex capital projects involving multiple partners, service companies and contractors, it can be the difference between a project delivered on time and on budget, or not. The successful delivery of large projects requires the faultless execution of many business processes across a number of disciplines—often principally concerned

with mitigating risk and meeting regulations. Capital projects that adopt an integrated approach to BPM tend to meet their cost and scheduling objectives and, once operational, do not run into challenges. In downstream, in both mature and emerging economies, oil companies are under immense pressure to operate refineries and terminals safely and efficiently under substantial margin pressure. For them, business process excellence can be an important determinant whether or not a plant makes margin.

In other words, across upstream, downstream and capital projects, good BPM can often be a prerequisite for high performance.

## Why business process management matters to the energy industry

The challenges the energy industry is facing that are driving the need for BPM include: expansion through mergers, acquisitions and asset investments; environment, health and safety risks; knowledge management issues; and the adoption of digital technology. All of these factors are combined with the need to seek to achieve and maintain financial high performance.

The intense focus on safety and reliability means that all oil and gas operations must be managed consistently, with effective business controls, risk management and assurance in place to meet regulatory requirements and ensure operator competency.

In this environment, oil and gas businesses need to be ready to react rapidly to events, see snapshots of their business on any given day in terms of safety, reliability and efficiency and, ultimately, make sure there are "no surprises" in how they are operating their assets. These objectives are why companies throughout the industry are focusing more attention and resources on BPM.

For both upstream and downstream energy businesses, significant investments in new assets mean that many organizations are faced with the challenge of defining new business process and operating models—sometimes for the first time. This is an accelerating trend. With the growth in natural gas demand and advances in technology driving the increased commercialization of natural gas reserves (particularly through liquefied natural gas [LNG]), many oil companies are starting to focus on their natural gas business as much, if not more, than they do on oil.

Having taken the opportunity to develop and produce natural gas, these companies are keen to verify that its value is not lost through operating the asset. This pursuit can present significant process challenges. Many LNG capital projects are often large in scale and cost and based in remote locations. Because some are using newly developed technologies, often for the first time, difficulties can arise from running complex operations with unique processes that have not been executed before. Additionally, many gas operations (shale gas, for instance) raise specific process challenges. Unlike the customized operations needed to run conventional gas assets, these "unconventional" operations demand

repeatable and predictable processes to reliably provide a rapid and efficient flow of assets from exploration to production.

At a high level, an integrated approach embracing processes, people and technology is key to achieving operational excellence and improving overall performance. For companies that are seeking to expand through mergers and acquisitions, BPM supports joint business operations that can quickly leverage synergies and adopt leading practices. And where expansion is via new capital projects, BPM supports the implementation of new processes in a timely manner. Financial high performance hinges on process excellence, which impacts both capital and revenue expenditure, and process knowledge has a key role to play in effective knowledge management. Finally, by enabling the fluent articulation of business process support requirements, BPM also supports the effective usage of digital technology and enterprise-wide innovation.

## What is business process management?

Bringing together companies' legal and organizational structures, people, systems and facilities, business processes play a key role in aligning the organization and driving business performance in line with strategic objectives. Business process management is a management discipline that helps to promote the efficiency and effectiveness of these processes, employing methods, policies, metrics,

management practices and software tools to manage and optimize an organization's activities across the business process life cycle. By providing an integrated approach to process management—from design and implementation, to execution and control—BPM helps confirm that key business processes can be managed with as much rigor as other critical business assets.

## What BPM services does Accenture offer?

While many companies can provide assistance with specific elements of BPM, Accenture's combination of skills, approaches, assets and tools gives us an unrivaled ability to generate value quickly, deliver measurable results and create durable BPM solutions.

Our BPM offerings range from process strategy and governance, through to technology aspects such as repositories and BPM automation:

### BPM strategy

BPM strategy is based on business strategy, current and desired BPM capabilities, and high-impact processes and value levers.

### Process governance

Process governance organizes the "process of process management" by focusing on optimizing and aligning business processes with company objectives.

### Process modeling and repositories

Process modeling and repositories are designed and implemented as the backbone for overall BPM.

### BPM automation

BPM automation supports the full-process automation life cycle, from understanding the benefits of the approach, through vendor/platform selection to storing, automating, testing, monitoring and maintaining key processes.

### BPM managed services

BPM managed services provide the migration, maintenance and support of BPM repositories operated in client- or Accenture-hosted environments.

### Process performance monitoring

Process performance monitoring uses real-time process monitoring and process analytics to understand process behaviors and reduce operational risks.

We deliver value by:

#### 1. Accelerating results

Our demonstrated accelerators and assets, together with our deep industry and functional knowledge, aim to help energy companies transition seamlessly to enhanced processes and generate value quickly from their BPM investments.

#### 2. Delivering potential benefits

We work with clients to test and safeguard day-to-day operations, while monitoring process performance and

compliance, using our key performance indicator (KPI) framework and industry-specific dashboards. Our tested framework of improvement initiatives targets specific processes and helps companies put in place the organization and behaviors required to increase performance and anchor sustainable ways of working (see Figure 1).

#### 3. Helping achieve lasting solutions

We do not just help to put increased business processes in place. We also provide the organization and infrastructure to help support durable BPM solutions that companies can manage themselves, with the help of our BPM specialists, or through outsourcing.

At every stage of delivering change, we understand how to use BPM to add pace and drive certainty to help achieve high performance. Across Accenture we have more than 500 BPM core practitioners and more than 4,600 Accenture professionals who work in BPM disciplines, giving us a deep understanding of process excellence and true robust capabilities at every stage of each assignment.

Figure 1. Operational excellence outcomes.



## What sets our BPM services for energy companies apart?

Our BPM services for energy companies are grounded in Accenture's 30 years of experience in the energy business, working with more than 200 leading oil and gas organizations in more than 20 countries around the world.

With a presence in all key energy geographies worldwide (see Figure 2), we are on hand to serve our clients' global needs, wherever they need us to be, bringing them Accenture's leading global assets, experience and practices through our seamless network of Energy Hubs. Among these resources is Accenture's Energy Innovation Hub, based in the Accenture Delivery Center in Bangalore, which acts as a focal point for providing services to the energy industry, as well as exploring

new ideas and approaches that help energy companies become high-performance businesses.

Our experience gives us hands-on insights into the operational, opportunity development and project execution issues facing energy companies and provides the basis for the proprietary BPM assets we have developed for the industry. These assets include Accenture's Capability Assessment Model (CAM).

Figure 2. Accenture has a presence in many key energy geographies.



Accenture's Capability Assessment Model (CAM) is just one of the tools our Energy BPM program provides. CAM provides an effective indicator of the robustness with which an energy company's processes are defined and executed relative to leading operators. Business processes are assessed across three key dimensions: people, process and technology. Accenture's CAM gives a qualitative description of

various practices under each process hierarchy level and describes the different levels of maturity required of the business processes, ranging from basic to advanced, and from leading to emerging. Each practice or process is evaluated based on the value, efficiency and consistency it delivers.

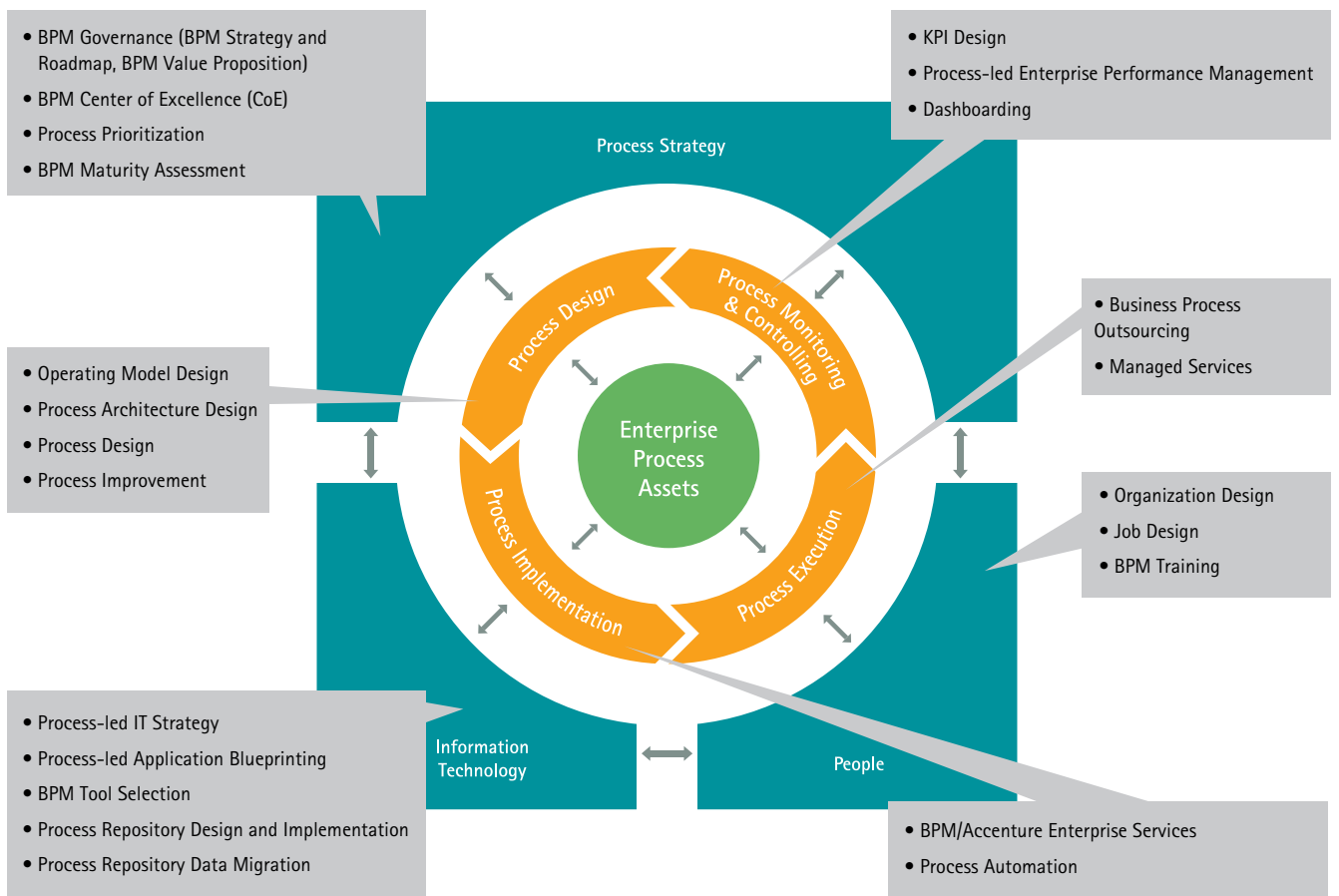
## Accenture's Energy Business Process Management Program

Accenture's Energy Business Process Management (BPM) program provides a one-stop resource for delivering process insight across the entire energy value chain. A core component of this program is our Energy Industry Process Model. This model encompasses a unique knowledge database that contains more than 2,000 business processes (depicted as flowcharts and organized in a four-level process decomposition), 200 capability assessments, 150 role descriptions

and more than 500 IT applications. Process management tools and methodologies include BPM diagnostic tools and process prioritization and improvement methods.

Accenture's Energy BPM program has been used in projects around the globe—spanning supermajors, national and international oil and gas companies. The customer experience covers key projects leveraging BPM assets, tools, methodologies or teams servicing our clients across the BPM life cycle (see Figure 3).

Figure 3. Accenture's energy business process management life cycle.



## How is BPM embedded in our energy industry services?

Whatever issues our clients face—operating safely, growing internationally, divesting subsidiaries, or reducing costs—our aim is to help them to achieve better business results with high-performance processes. That is why our Energy BPM program is so integral to the industry-specific services we provide to companies' upstream, downstream and capital projects operations:

### Accenture's production optimization capabilities

Accenture works with upstream companies to create a vision and strategy for integrated operations programs. By defining scope, objectives and metrics aligned with business strategy, we develop solutions that help production optimization and support operations excellence efforts, building the high-level business case and identifying potential pilots.

To manage the complexity of upstream operations, we believe in implementing process excellence as the backbone for operational excellence. Our Energy BPM program is at the core of our process excellence services, enabling high performance across all business processes. Our global team of upstream operations-experienced practitioners use the BPM database, tools and methods to help companies accelerate the adoption of new working practices, and identify and close gaps in process performance to deliver lasting process advantage.

### Accenture's capabilities for downstream operations

Accenture provides a broad set of services focused on plant and refinery optimization, including helping companies to identify and overcome maintenance, reliability and safety challenges. We combine our deep industry strengths and research-based knowledge with leading-edge technology and BPM capabilities to help energy companies manage the complex and interrelated

decisions spanning downstream operations. These range from refining, product supply and trading, through logistics and distribution, wholesale and retail marketing.

Our downstream operations-experienced practitioners use our Energy BPM program to support comprehensive evaluations of clients' business process models and supporting applications portfolios. From making sure that business processes align with strategic objectives and identifying where extra investment is needed to enabling seamless transitions to enhanced processes, we focus on driving maximum value from clients' IT infrastructures.

## Accenture Energy Industry Group in focus

Accenture's Energy Industry Group invests extensively in Accenture's business process initiative. This initiative focuses on leading industry processes and a comprehensive model for the energy industry across all segments, including industry-specific business processes, process flowcharts, key performance indicator (KPI) frameworks and capability assessment models. The logical operating model has been developed not only for oil and gas, but also biofuels, oilfield services, oil sands and capital projects.

Key facts about Accenture's Energy Industry Group include:

- Accenture's Energy Industry Group works with 48 of the 65 energy companies in the *Fortune* Global 500.

- Accenture has offices, a business presence, or delivery centers in many energy-relevant geographies including Aberdeen, Abu Dhabi, Bangalore, Beijing, Calgary, Doha, Houston, Jakarta, Kuwait City, Lagos, London, Luanda, Moscow, Perth, Rio de Janeiro, Seoul, and Stavanger.
- The Accenture Delivery Centers in India provide a comprehensive range of technology capabilities and business process outsourcing (BPO) solutions, and provide the cornerstone of the Accenture Global Delivery Network.
- A key element in our India network is Accenture's Energy Innovation Hub, based in our delivery center in Bangalore. As well as being a focus for industry, technology and functional services, it also develops new ideas, approaches and industry thought leadership.
- Our network of Energy Hubs, located in energy-centric locations around the world, serves as a holistic unit to respond to client requirements, package local thought leadership and test Accenture's industry assets.
- Our energy industry alliance network encompasses more than 150 market leaders and innovators—including Cisco, Microsoft, Oracle, OSIsoft, SAP and others—that help us provide our clients with specialized skills and deliver tailored, cost-effective solutions more quickly than other companies.



### Accenture's assets to support capital projects

Accenture assists clients with managing their capital projects to get to first oil or gas on time and within budget by enhancing the processes, readiness requirements and decision making throughout the capital project life cycle. We help clients understand the project control, operational and back-office systems needed to support these maturing business capabilities, along with the lead times, structures and operating models required to

implement and sustain them. We support operational readiness and assurance activities by using our BPM capability to confirm process completeness, clarity of roles and responsibilities, and key performance metrics.

Specific solutions include Accenture's "time-to-first-gas" business capability road map, a robust business readiness and assurance offering for the energy industry. Supported by a business capability and application road map, the time-to-first-gas approach helps companies to understand and build the business

capabilities required to operate the new value chain, from the reservoir through to customer delivery. This application road map can be customized to the specific schedule of any major capital project by aligning with known milestones and business requirements. It also supports implementation planning and estimation of effort by informing application development time frames, integration programs and system complexity.



## International oil and gas exploration and production company – process prioritization

With a highly complex business process landscape (including 165 Level-3 processes), this international oil and gas exploration and production company urgently needed to identify (and focus investment on) the key processes supporting its critical value drivers. Accenture helped to identify the company's 16 priority processes, followed by using Accenture's Capability Assessment Model (CAM) tool to develop greater understanding of those processes. Following recommendations from 35 key stakeholders within the business, 10 of the company's original 165 processes were singled out for enhancement.

The next step was to find out more about those 10 processes. Which ones possessed the most strategic value? What was the relative cost of operating each one? Ultra-precise mapping was less important than thinking relationally—making comparisons between processes, before mapping them onto a final Process Management Matrix depicting the strategic importance, level of standardization and relative cost of each. As well as understanding where to focus its improvement efforts, the company also achieved greater clarity of governance across its global organization by determining how localized and strategic its processes really were, as well as who should assume ownership of each one.

## Global oil and gas producer – content migration to streamlined BPM platform

A post-merger priority for this global oil and gas company was to optimize and integrate both legacy and newly inherited business processes. Migration of content data to a flexible and streamlined BPM platform raised a number of challenges. Limited understanding of migration scope demanded an easily scalable engagement, making optimum use of available BPM resources. High levels of onshore manual entry threatened to elevate costs, repetitive high-volume transactions posed a risk that could undermine the BPM initiative's core agenda and the company lacked end-to-end visibility into the initiative.

Accenture selected and implemented BPM platforms to support the company's comprehensive platform selection process. This effort included identifying specific requirements for the new platform, narrowing down the field of potential vendors and platforms to the best possible options, and ultimately selecting the Architecture of Integrated Information Systems (ARIS) platform, a tool for the design and management of business process modeling from IDS Scheer, a Software AG company. We also worked with the company to help them achieve several of its longer-term BPM goals, including helping to create a global BPM Center of Excellence to

act as a single internal source of high-quality BPM services. As a result of its work with Accenture, the company has taken a major step forward by gaining control over its most important processes—improving transparency and verifying compliance with rules and regulations. These improvements have reduced the company's risk, as well as the amount of time and effort it must spend confirming process compliance.

## The journey to high performance

Experience shows that the gulf between winners and losers in any industry widens during periods of uncertainty. Accenture's ongoing research program confirms that high-performance businesses use times of change and uncertainty to move ahead of competitors.

In an environment that is less certain, more complex and faster paced than ever before, BPM is delivering tested benefits to energy companies

worldwide, helping them to focus on the day-to-day complications of running oil and gas assets safely and efficiently, and equipping them to continuously monitor and adapt strategy and execution to account for future certainties.

Working with Accenture, energy companies can build the robust BPM capabilities they need to improve process transparency, instill greater organizational agility and efficiency and, ultimately, foster high performance for years to come.



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## About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 259,000 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\$27.9 billion for the fiscal year ended Aug. 31, 2012. Its home page is [www.accenture.com](http://www.accenture.com).