

A tall oil rig stands in a green field under a blue sky with light clouds. The rig is a complex metal structure with a red platform at the top. In the background, there are power lines and other industrial structures.

# **A New Reality for Oil & Gas: Complex Market Dynamics Create an Urgent Need to Transform Through Digital Technologies**


**#DigitalTransformation**

  
**CISCO**

Price declines of more than 50% since June 2014 have upended the oil and gas (O&G) sector. To help O&G firms survive and thrive, Cisco Consulting Services undertook a **comprehensive global study**, including:

- Survey of 50 industry professionals across 14 countries.
- **Interviews** with industry experts:
  - Graham Hill, Executive VP, Global Business Development & Strategy, KBR, Inc.
  - Chris Niven, Research Director, IDC Energy Insights
  - Kathy Bostjancic, Director, U.S. Macro Investor Services, Oxford Economics
- **Economic modeling** of the costs and benefits of applying IoE-enabled technology.


What did the study reveal?




Amid this turbulence, forward-looking firms see an opportunity to gain competitive advantage. How can they do it?

By transforming through digital technologies powered by the Internet of Everything (IoE) – the networked connection of people, process, data, and things.



The background of the slide is a photograph of an oil field at sunset. The sky is a mix of orange, yellow, and blue, with the sun low on the horizon. In the foreground and middle ground, several oil pumps (jackrabbits) are silhouetted against the bright sky. The ground is dark and appears to be a desert landscape with some tracks or paths.

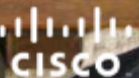
Through digital transformation, firms can reduce costs and improve efficiencies in a dramatic way. To transform, they need to adopt IoE throughout the value chain. This includes convergence of the information technology (IT) and operational technology (OT) areas of the business.

A photograph of three people in a construction or industrial setting. Two individuals, a man and a woman, are wearing orange safety vests and red hard hats. They are looking at a laptop on a wooden table. A third person, a man in a dark suit and white hard hat, is leaning over the table, looking at a set of blueprints. The background shows industrial structures and a bright, sunny environment.


“For the first time, pressure is being brought to bear on organizations across the globe to reengineer the way they do things, and that requires a lot of thought. It requires the bringing together of technology and people.”

*Graham Hill, EVP, Global Business Development & Strategy, KBR, Inc.*


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A large offshore oil rig is shown at sunset. The sun is low on the horizon, casting a golden glow over the water and the rig's complex structure. The rig consists of multiple levels of steel platforms, ladders, and pipes, extending into the sea. The sky is a mix of orange, yellow, and grey, indicating the end of the day. The water is dark with some ripples, reflecting the light from the sun.

To operate as efficiently as possible, oil and gas companies need to address the “data deluge”. O&G leaders named “**data analytics** for faster, better decision-making” as the number 1 driver for IoE investment.



O&G firms stand to gain business advantages.  
But only if they automate key business processes.  
More than half of respondents believe the IoE could  
automate from **25% to nearly 50%** of manual processes.



An offshore oil rig is silhouetted against a sunset sky. The rig's structure, including a tall derrick and various platforms, is visible. The sun is low on the horizon, creating a bright orange and yellow glow that reflects on the dark blue water. The rig is illuminated with some lights, and a crane is visible on the left side.

O&G companies must transform the way they do business. In particular, they need to align and converge IT and OT. 59% of respondents do not believe that their firms' IT and OT strategies are closely aligned.





O&G companies can capture their share of **\$600 billion of Value at Stake** between 2016 and 2025 by transforming business processes through IoE. For a \$50 billion firm, IoE can drive a **bottom-line improvement 11% annually**. If adopted by the industry as a whole, global GDP could increase by **\$816 billion by 2025**.

# How can you get started?

- Build your digital foundation across data, people, and processes
- Develop and attract the workforce of the future
- Align and integrate IT and OT to improve business efficiency from the boardroom to the well
- Ensure end-to-end cybersecurity
- Innovate for growth

In partnership with other leading industry suppliers, we're helping oil and gas companies transform through digital technologies.

- ESSAR Group strengthened business performance through consistent access to real-time data.
- Explorer Pipeline unified a distributed workforce and improved productivity.
- Marathon Petroleum keeps people safe by reducing exposure to hazards through real time monitoring and threat detection.



*Digital transformation* requires  
companies to think of the Internet  
as the *Internet of Everything*.

*We're ready. Are you?*

Call us 1-866-428-9594



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Download the whitepaper to learn how O&G firms can capture their share of the Value at Stake