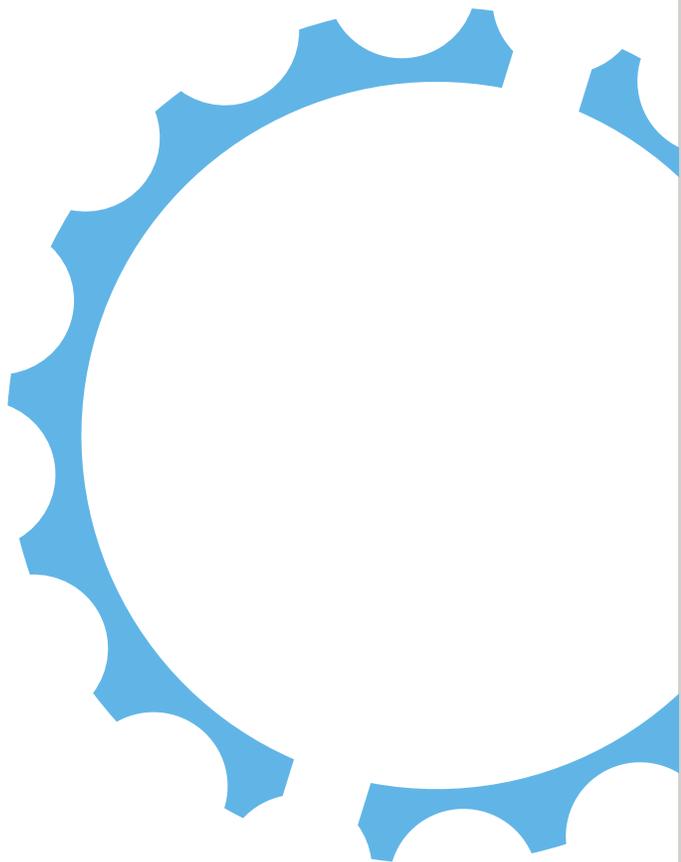


Creating the digital oil & gas organization

“How do we make our business digital?”

It's a question being asked by leaders at companies across all industries and sectors today – and oil and gas executives are no exception. That shouldn't come as a huge surprise, since oil and gas companies are known for their long legacy of innovation. Just as important, their customers, shareholders, and even their own employees are increasingly expecting digital innovation across all their touchpoints with these companies.

For oil and gas companies, this is a big deal – along the lines of the dawn of the assembly line in manufacturing – in terms of major advances in capabilities and outcomes. Tools like process automation, cognitive computing, blockchain, and more will usher in a massive wave of innovation in the industry. That's why leaders are moving ahead with equal parts excitement and caution – excitement because of the possibilities that come with having real “digital DNA” embedded in the organization, caution because they know the stakes of getting it wrong. After all, nobody remembers those early automobile manufacturers who just couldn't make sense of the assembly line.



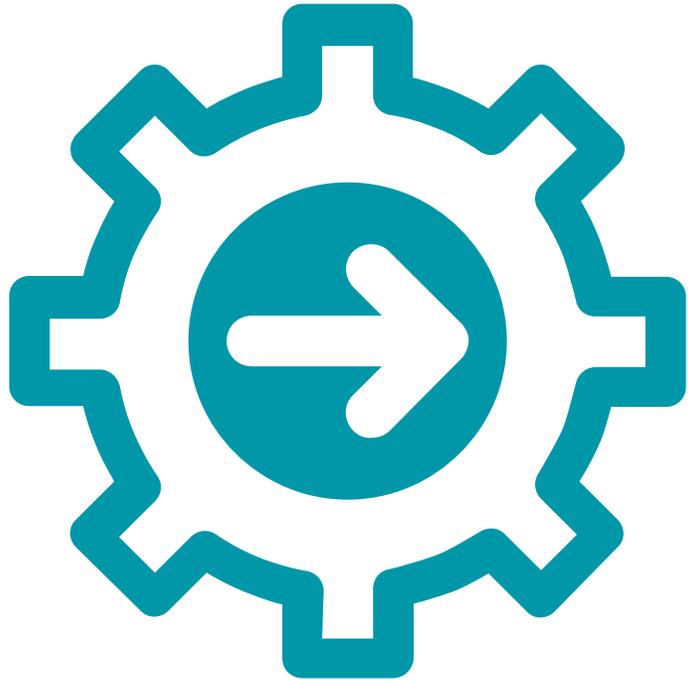
Why it matters today

Digital capabilities are only important to oil and gas companies if they help find and extract more oil, or can deliver it faster, more cheaply, or more safely. It's a simple rule – one with far-reaching implications. Anything else and digital transformation is probably not worth everyone's time.

That rule also helps explain why digital capabilities are important now, and not just at some time in the future. They're important because they are, finally, mature and proven – and they're already showing the ability to influence outcomes.

A number of leading oil and gas companies have been experimenting with digital capabilities, often through a series of focused point solutions, and they're seeing results that warrant a more expansive digital push.

Here's what we expect to happen. Some oil and gas companies are going to crack the code on digital innovation, which will put them well out front of the competition, either in terms of their ability to find and extract oil, to deliver it faster, cheaper, more safely – or some combination of all of the above. Others will attempt to mimic their successes as quickly as possible once they become widely visible. Will that be too late? It's difficult to say today. But based on the results of digital innovation in other industries, the benefits of getting there fast seem to be very clear.



Moving ahead

Determine whether to transform incrementally, or all at once

For many, the immediate challenge presented by digital isn't whether or not to start, but how to determine the right scope for their efforts

At the risk of oversimplifying, this comes down to the strategic decision to pursue full-blown digital transformation, or to invest in a series of focused prototypes in areas of the business that have a high likelihood of succeeding, expanding outward as you

go. In oil and gas, where many tend to strike a balance between their desire to gain the competitive edge with a more conservative instinct to learn from what others are doing first, some have predictably taken a “testing the waters” approach. But that’s not the story for everyone – a growing number of oil and gas leaders are deciding to lead with digital capabilities. Of course, there is no single right answer – it depends on the organization, its goals, and its digital maturity. Just make sure your decision is made confidently and definitively, rather than by default.

Tune up your transformation talent

Successful oil and gas companies have relied on a similar talent profile – one that permeates their businesses. Broadly speaking, their workforces are made up of people who are relatively risk-averse – because failure in this industry can have serious consequences. Meanwhile, those who succeed in the digital realm – those with “digital DNA” – bring different capabilities and sensibilities to their work. They’re accustomed to taking risks and know that perfection isn’t a prerequisite of success – they’re constantly developing, prototyping, adjusting, and evolving. Most oil and gas companies don’t have digital DNA. But they can develop it. It all starts with both finding the right talent and cultivating these capabilities in existing employees.

Increase the organization's tech fluency

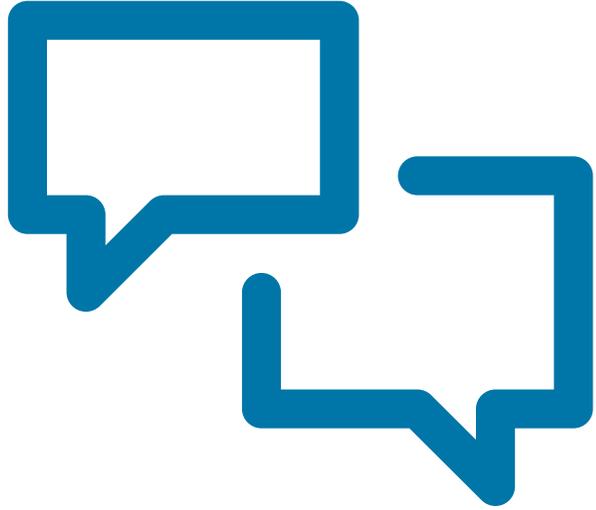
For oil and gas executives looking to dramatically expand their organization's digital capabilities, many find that the primary challenge isn't resistance to change – it is instead that their people don't truly know what's even possible. Many are simply not “tech-fluent.” That could be a dangerous disadvantage at a time when process automation, blockchain, cognitive computing capabilities, and much more are introducing disruptive new capabilities to the industry. In the end, while the strategy and ambitions for digital change will be established by leadership, it will only be achieved once it's embraced by employees at many levels throughout the business, not just those at the top. It's important to increase the organization's tech fluency in order to lay the groundwork for constant, sustainable change.



Prove value early

It's been said before, but it bears saying again: Starting with a proof of concept is a relatively safe, reliable means of setting a transformation in motion – and proving its potential within a matter of weeks.

If this is the strategy you pursue, you may choose to focus on parts of the business where the downside is minimal, and the likelihood of success is high. For example, some oil and gas executives have zeroed in on back office tasks such as accounts payable. Process automation makes it possible to offload repetitive tasks in that arena, freeing workers up to take on more value-added work. This is just one of dozens of examples of low-risk, low-cost, high impact testing grounds for digital capabilities in most oil and gas companies.



Let's talk

Whether you've already embarked on your digital journey, or are just beginning to plot the path forward, we can help. Not only is Deloitte at the forefront of digital transformation across industries, we have deep, specific, hands-on experience in oil and gas. We know how the business works, from upstream to midstream and downstream, and have helped many companies in the industry put digital capabilities to work in their organization.

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