Where is your workforce?
Three strategies to manage the energy workforce of the future

By David S. Andrews, Curtis Forsyth and Elena Kushelevich
A startling truth: The typical energy workforce is composed of up to 80 percent third-party contractors.

While a liquid workforce of contractors may be essential for their specialized skills or willingness to work in remote areas, this heavy dependency on contract labor comes at a steep cost—well beyond the negotiated hourly wage, to include duplicate management and administration costs along with increased operational risk.

With today's digital and technology advances, there's an opportunity to take a fresh approach to the energy workforce of the future—one that provides a 360-degree view into the extended labor force, applies a zero-based approach to understand the scope of work to be done, incorporates digital technologies to intelligently automate work and augment workers, and delivers even greater productivity and cost savings.

**Understanding a zero-based approach**

A zero-based approach is an annual process that acts as a mechanism to support a bottom-up budget process with standardization, expense visibility and clear ownership of dollars spent. Success comes from reinvesting savings from non-value added line items in activities that will drive competitive advantage and revenue growth.
Include the missing piece

From a narrow view...
Hiring contractors has been a longtime energy industry practice. It’s understandable given the difficulty of attracting skilled workers to areas that have challenging staffing needs such as production facilities and remote locations, or to fill highly specialized roles on an ad-hoc basis. But on the flip side, it can be a reactive response to short-term needs, such as staffing a major new capital project or replacing the deep skills of departing workers.

In fact, this dependency has significant implications: Contractors are the bulk of the workforce yet energy companies typically have limited management oversight or visibility into these workers. Think of it as the missing piece of the workforce. Even more concerning, contractors are limited to ownership by the Procurement function, making the majority of the workforce a pure cost center instead of a resource that needs development in these rapidly shifting times.

To a holistic view...
A better approach is to bring the full workforce—employees and contractors—into a common enterprise-wide workforce planning process, owned by business operations and supported by both the HR and Procurement functions. This can be accomplished by reviewing enterprise systems and conducting data analysis to gain greater visibility into who the contractors are, what they are doing for the company and where they are located at any given point in time.

This baseline information gives energy companies a better view into the work being completed in each area of the business, as well as clarity into who is doing it—employees or contractors—and whether it is aligned with the organization’s philosophy of how the contractor workforce should be used. It can also provide insight into overlapping workloads and identify potential abuses in overtime pay or double-billing.
With this knowledge, energy companies can move toward adopting a contractor strategy and management framework with singular accountability within business operations. This framework could specify, for example, which employees have authority to onboard contractors; it could also outline the work that various types of contractors should be performing and embed regular reviews to ensure that work continues to be assigned correctly. Best of all, this contractor management framework provides the basis for a more sustainable workforce planning process, using a zero-based approach.

Shake up the status quo

The challenging times reverberating through the energy industry call for new measures with the workforce planning process. Energy companies have long taken a status-quo approach to budgeting, assuming that the costs to run the business will be similar to the previous year with slight adjustments based on industry conditions. Meanwhile, other sectors are adopting a zero-based approach—in a process that is repeated every year. Consumer goods companies such as Coca-Cola, Mondelez International, Inc. and Campbell Soup Co. are actively using the method and it is also being applied in the pharmaceutical industry where research and development spending is a major expense:

Applying a zero-based approach in the energy industry breaks the cycle of budget-driven planning by determining what work is essential to run the business and what can be eliminated. It’s a clean-slate method that brings rigor to the contractor workforce planning process by asking vital questions: Does this work need to continue being done to maintain core operations? What additional work is necessary and why?

It is important to note that applying a zero-based approach to workforce planning is both a culture and process change so energy companies must help their executives understand why it is critical and train them on how to conduct it properly. From a strategic perspective, the zero-based approach supports the contractor management framework. Once energy companies
understand at a granular level the work being performed across the company, they can make decisions on which tasks to keep in-house for employees to perform, as well as where best to use contractors for either additional capacity or specific capabilities. Companies can also rationalize the number of contractors required to do particular segments of work and justify the requested budget. Sustained cost reduction is important as Accenture Strategy research found that only 36 percent of energy executives strongly agree that they maintain the benefits from their cost reduction programs.

Perhaps most important of all, using a zero-based approach can uncover work that could be done *differently*, which is where digital technologies come into play.

### Put digital tools to work

Along with asking whether work needs to be done, energy companies must ask how it should be done. In some cases, the answer can be through more innovative application of emerging technology. According to an Accenture survey, 80 percent of executives are automating plant worker and field force worker tasks to a moderate or great extent.

Applying digital technologies in the form of wearables, drones or augmented reality can significantly reduce the amount of labor required to complete critical tasks. These advanced technologies have gone from futuristic to ubiquitous with organizations making significantly more investments in Artificial Intelligence (AI)-related technologies compared to two years ago—78 percent more in machine learning and 77 percent more in deep learning as well as embedded AI solutions.

Digital can also improve the productivity of work that is being directed to contractors. As just one example, a three-month refinery plant turnaround process can cost more than $100 million and the vast majority of the work is done via a contracted workforce. Installing Wi-Fi and defined geofences
in the refinery and requiring contractors to wear devices that monitor their time and tasks gives energy companies real-time data to make better decisions and drive behavior changes that boost contractor productivity and reduce costs.

Technology can also augment workers for greater efficiency and safety. Energy companies are beginning to use drones to inspect pipelines or tall structures for leaks, thus saving invaluable time and cost over human teams doing the same work. Likewise, maintenance workers could use tablet computers coupled with smartglasses to review plant conditions and solve issues in conjunction with experts at headquarters. These experts can provide over-the-shoulder guidance on how to conduct critical repairs at multiple locations per day in order to keep operations running smoothly. Finally, equipment operators can receive training and practice their skills in virtual environments to make sure they are better qualified to handle machinery in real-world conditions.

In each case, digital technologies pave the way for greater workforce productivity and efficiency and reduced cost along with a safer working environment.

**Refreshed talent strategy for major improvements**

Today’s volatile industry conditions call for strategically managing costs and boosting productivity across the entire operation, including contractors and other members of the liquid workforce that extend beyond enterprise boundaries. Leading energy companies that create visibility across their entire workforce, apply a zero-based approach and leverage digital technologies as a way to get work done more efficiently will be well ahead of competitors and able to respond more quickly to changing market conditions.
Creating the 360-degree view

**Talent:** Move responsibility for contractor management from Procurement to business operations with a single point of accountability. Establish a contractor framework with rules for ongoing task management and integrate it into workforce planning and strategy.

**Lean:** Adopt an annual zero-based approach, analyze work streams from the bottom-up and look for ways to eliminate non-value added work and duplication.

**Digital:** Discover ways to insert digital technologies into employee and contractor work processes to automate workflow, extend skills and augment the workforce for across-the-board jumps in productivity.
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Notes

1 “Choke point: Capital projects,” Accenture Upstream Oil & Gas Industry Value Lab, August 2013
3 Accenture Strategy Ability to Compete research, 2016
4 Accenture Technology Vision, 2016
5 Ibid

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