

Calling All Oil and Gas CIOs

Come Forth, It's Your Time to Shine

By Bret Wiener



A little more than a year ago in June 2014, oil prices were up to \$115 a barrel and the industry was intoxicated with belief in a limitless energy future. But by the end of 2014, oil was at a stomach-churning \$59 per barrel and budgets were being slashed across the board. The good news, IT can be the hero in every oil company's great "comeback" story. The answer is surprisingly simple. *Don't try to do yourself that which you can buy*

Today, we live in a world chastened by a global oil and gas "glut," stone cold prices and fears that only the strongest in the energy industry will survive.

When the industry is in boom times, it's easy to scurry around, drive blind, and still make money. But the fact is, even in good times, the industry wasn't as lean as it could have been. According to the API, over the last five years, average earnings for the oil and gas industry have been below the rest of the U.S. manufacturing industry, averaging 7 cents for every dollar of sales compared to nearly 9 cents for manufacturing. That situation recently got worse. Much worse.

In 2015, oil and gas lost 3.5 cents for every dollar in sales.

With such a bleak big picture, IT departments are feeling the economic pressure more keenly than others. The challenges seem insurmountable. Forget the shrinking

budgets, you've also got HR issues. Your division is competing with SaaS startups and tech behemoths in Silicon Valley for the best talent. You've got a shortage in qualified mid-career personnel due to the Great Crew Change and a looming potential shortage of new "super stars" due to plummeting oil prices. You're being asked to do more with less, and still come out victorious.

Now is the time to use the industry downturn to integrate data and tools of the trade to work better and smarter, and without costing bushels of cash.

Doing More With Less

Your company wants 100% accurate data in real time on well down time, detailed financial data, and per region/per well analytics. Your company wants to be able to conduct on-the-fly well reviews, pinpoint invoice errors within minutes and hours (not months), and manage overspend on a per-asset, per-division level. Simply put, your company wants clean data.

Your higher level analysts could be working on a solution, but instead they are spending their time running around trying to collect data from individual databases and applications. That's because the oil and gas industry traditionally has maintained too many information "silos": separate software for different regions, departments, and individual functions within those departments.

So, you end up resource-short when it comes to finding the solution, and to some degree short on expertise. After all, your company's core business is oil and gas production, not software development.

Luckily, off the shelf solutions exist and your IT department is here to save the day.

Let's look at just one area where IT can help increase the frequency of well profitability reviews.

The usual course of business entails production data starting on handwritten slips of paper. These written reports make their way through multiple, error-prone spreadsheets or manual databases, with the data finally landing into multiple, now most likely inaccurate, target systems. Similarly, the cost, revenue and maintenance data is also stored in other systems. What's more is that these systems are not synched or integrated at the corporate level. Personnel spend hours updating each system only to have the engineers still have to go back and collect all the data to perform a well review that can take even more hours due to the data clean up required.

Today, executives are waiting thirty days or longer to look at the most basic of summary well reviews—allowing unprofitable wells to run for months without proper assessment. All this can be solved with clean data, visually intuitive dashboards, and real-time access to accurate figures on all levels - accountants, engineers, C-level, and operators.

Empower Your Employees

With the right IT solution, you can create ownership through effective information distribution. Eliminate data silos and cost management gaps. Enable and empower each member of the business—from the field hand to the CEO - and squeeze value out of every asset and process.

The key is that all data must be bi-directionally synched in real-time with all core systems: rig scheduling systems, ERP systems, land systems, production accounting, well management, field data, AFE systems, economic forecasting, etc. Today's off-the-shelf dashboards enable clean data to be pushed downstream, enabling informed decisions within minutes, not months. One production engineer was able to catch a modest \$40,000 in duplicate invoices in just one month, simply by having access to a dashboard that allowed him to quickly drill down to the invoice level to figure out what had already been paid for. If each engineer had only one such occurrence throughout the year, this IT capability alone could save almost \$1 million per year.

In another example of twenty-first century IT triumphing over legacy systems, many customers have experienced an increase in production by having data from underperforming wells available to pumpers before starting their routes resulting in increased productivity because they are able to focus on the right wells at the right time.

Obvious, and doable. In fact, some companies have reported that they've been able to reduce their downtime by 50% and reduce their major LOE categories by 5-10% just by implementing a new IT dashboard.

It's not 1990. It's time for the data to be fast. It's time for the data to be right. It's time for the data to be synchronized. And for the task of pristine data, who more qualified a champion than IT?

Arriving Victorious

Just because we've lived with these issues for decades, doesn't mean we have to live with the status quo. We all know the problems. They're all over the headlines. Budget Cuts Coming Fast and Furious, March 2015, Oil and Gas Investor. Oil Layoffs Hit 100,000 and Counting, April 2015, Wall Street Journal. Oil Prices Could Sink to \$15 a Barrel, August 2015, CNN Money.

We also all know oil companies aren't going anywhere. The end of days is not here. It's simply time to rethink, regroup, and build a leaner, more efficient operation based on simple ideas:

Don't reinvent the wheel. Buy existing, proven technology that works. Make your data visible, and give every stakeholder in your operation the power to make informed decisions.

In a world of changing oil prices, it's easy to throw up your hands and throw in the towel. But heroes don't give up so easily. Heroes take action now. Powerful off-the-shelf dashboard solutions that aggregate your data in real-time can be implemented in less than two months. Make the call today to conquer inefficiency, and give your company that shot-in-the-arm it's been looking for.

[1 Putting Earnings in Perspective - American Petroleum Institute, 2015](#)

ABOUT THE AUTHOR



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Bret Wiener is Chief Technology Officer at Seven Lakes Technologies and has 20+ years of experience as a technology executive with a history of success orchestrating the start-up and growth of new ventures in diverse industries and models. Bret has an extraordinary aptitude for learning, building, delivering, optimizing and maintaining complex business systems and processes.

Bret is passionate about technology and its diverse applications to make step change improvements across industries. He completed his BA in computer science from the University of California – Santa Barbara.