




THE CORPORATE Entrepreneur



At oilfield services company Baker Hughes, CIO Clif Triplett is running IT like a business. The upshot? More business.

| By Alan S. Horowitz

Many companies struggle to align IT and the business. Not Baker Hughes Inc. At the company, a new and entrepreneurial IT leader has all but closed the gap between the two.

Baker Hughes, the world's third-largest oilfield services company, offers a service called BEACON, short for Baker Expert Advisory Center Operations Network. The service was developed by the Houston, Texas-based company's IT team, which since last year has been led by VP and CIO Clif Triplett. While BEACON is still managed by IT, in a unique business-IT partnership, the service is offered to external customers by the Baker Hughes operating units. "BEACON is an IT-enabled technology and a core part of our company's business," Triplett says. "It's about drilling and monitoring."

BEACON offers a service platform that lets Baker Hughes leverage its oilfield expertise across drilling sites worldwide. The company's global customers can procure the service for remote monitoring, data storage, data transmission and call center support.

Guillermo Arango, Director of BEACON Enterprise Services at Baker Hughes, likens the role of IT on a BEACON project to that of a shopping mall owner. A mall brings together shoppers and merchants, Arango explains, but while the merchants do the actual selling, the mall owner provides security, parking and attractive facilities to stimulate business. Like the mall owner, IT at Baker Hughes provides the company's operating units with a platform that includes telecom and data management infrastructure, knowledge management facilities and service centers. Continuing the analogy, Arango says the Baker Hughes business units — including reservoir evaluation, drilling,



◆ Clif Triplett, VP and CIO, Baker Hughes.

wireline logging, well completion and field management — provide the actual services, similar to the way retail merchants offer products in a shopping mall.

What's more, with its IT group and operating units working in tandem, Baker Hughes can provide customers with a desirable package of IT-powered services. "The primary mission of BEACON is to enable Baker Hughes to provide remote well and reservoir services to our customers, and BEACON does just that," Arango says.

Drilling for oil is expensive — and getting more expensive all the time. Finding

and retaining skilled workers is challenging and costly, especially in remote locations or politically unstable countries.

To control these and other costs, the oil industry is moving toward the remote control and monitoring of drilling and well operations. Using video and other telecommunications links, the oil industry's drills in far-off places can be directed up and down, left and right, slower and faster — all by operators sitting in the relative comfort of control rooms hundreds, even thousands of miles from the drill. Once an oil well has been drilled and is operational, its pumps can

also be monitored and optimized remotely, further reducing operating expenses.

The BEACON service at Baker Hughes provides remote monitoring, remote operations, secure file exchange, file storage, remote access and remote collaboration, all from centralized locations. At any one time, BEACON oversees some 200 well sites.

Triplett, the IT executive behind BEACON's success, joined Baker Hughes in early 2009 as the company's first-ever CIO. Previously, the company had been organized into eight independent operating units, each with its own IT department. Now,

IT ASSET MANAGEMENT FOR COMPETITIVE ADVANTAGE

For oilfield services supplier Baker Hughes Inc., managing IT assets is more than just a good idea — it's also a competitive advantage.

The Houston, Texas-based company is transforming its organization, some of its markets and other factors. In part, the company needed IT to become a core business partner, one that was able to support the business as well as boost its competitive standing. "We believe asset management will be a differentiator between us and some of the other companies in our peer group," says Graham Crisp, the company's Global IT Assets Director.

The IT asset-management program at Baker Hughes has several internal objectives as well. The company needed to reconcile known IT assets with owned IT assets; increase IT availability and asset usage; increase the reprovisioning of existing assets to reduce the need for new purchases; improve IT asset management; and dispose of selected IT assets in environmentally responsible ways.

Ultimately, Baker Hughes decided to rely primarily on CA Technologies asset-management solutions for the project. With these solutions, Baker Hughes was able to integrate IT functions. For example, when Baker Hughes needed to replace an aging help desk/call center application, it used CA Service Desk to integrate asset management and then to change its configuration and release into a help desk application. "We wanted one product that gave us flexibility across the organization," Crisp says. "We didn't want to bolt products together to give us that functionality."



"We believe asset management will be a differentiator."

—Graham Crisp | Global IT Assets Director | Baker Hughes

For a company the size of Baker Hughes, that's no small effort. The company has some 35,000 laptops and desktops scattered around the world. It has equipment being used in the deep sea and other remote sites, often for extended periods of time. What's more, the company's workforce is highly mobile. To make it even more challenging, the IT department, under the leadership of its new CIO, Clif Triplett, was for the first time centralizing all Baker Hughes IT assets under a single departmental umbrella.

Software inventories posed a challenge. Like many companies, Baker Hughes erred on the side of caution with its software licenses, thinking it was better to have too many software licenses than too few.

"But we found we were overlicensed and oversubscribed," Crisp says.

The result: In the first six months of the IT asset-management program, Baker Hughes identified more than 600 systems as underutilized; many of these systems could be redeployed. Internal buyers could reassign the systems to users who needed them.

This has yielded additional results. For example, in IT procurement, if an internal user in Nigeria wants the IT department to purchase a server, buyers can now evaluate the warranty status, usage and refresh schedule of internally owned machines. They can then determine whether Baker Hughes already owns equipment worth shipping to Nigeria; if so, they avoid purchasing new assets.

In addition, with the new asset-management system, Baker Hughes can forecast its replacement needs on a quarterly basis, and then make a bulk order. Rather than purchasing systems on a one-off basis, now the purchasing and shipping is done in bulk, which is a money saver. "From a deployment perspective, we can be cost-effective in how we deploy the machines," Crisp says.

Another benefit: IT now has greater confidence that it has the hardware and software it needs. This also improves IT's ability to negotiate with suppliers. "It put our licenses in perspective," Crisp explains. "Do we need 10 licenses or five? Do we have 10 licenses, but only five deployed?" Baker Hughes' IT asset-management program is lowering expenses, improving utilization and enhancing the company's competitive position. — A.S.H.

under Triplett, Baker Hughes has a single, centralized IT department that owns all of the company's IT assets. Its goal: to present customers with a unified image, rather than separate product entities. "I joined a company that is willing to try new things," Triplett says. "Baker Hughes is looking to IT to be a core member of the team."

IT at Baker Hughes under Triplett's leadership has developed a strong entrepreneurial spirit. Like most IT groups, Triplett's is expected to suggest cost-reducing projects. But they are also expected to provide new ways of generating revenue. "Sometimes the responsibility lies with IT, and sometimes with the company. But it's clearly within our bounds and expectations to bring forth revenue generation."

Those expectations also extend to Triplett's compensation and performance reviews, he explains. The CIO's job performance is measured, in part, by how many new services he delivers — and the amount of new revenue his department enables or generates. New services, new revenues — these benchmarks are very much the way any entrepreneur would expect to be measured. For these reasons, calling Triplett an entrepreneurial risk-taker is no stretch.

Industry watchers say this new approach fits well with the company's reputation for being analytical. "Baker Hughes takes a very thoughtful, very mathematical approach to business," says Stephen Ellis, an Equity Analyst at Morningstar. "It's a fierce numbers approach. The company looks for value [in its business operations] and approaches IT in a similar way."

Sharper Focus

That's important as Baker Hughes refocuses its business, industry analysts say. "Baker Hughes is moving from having a product- and service-line focus, to more of a geographically focused approach," says Stephen Gengaro, Managing Director at investment firm Jefferies & Co. With the acquisition of BJ services, another oilfield services provider, Baker Hughes now employs about 45,000 people in 90 countries, and has facilities in more than 70 of those countries.

BEACON's current service offerings are merely the first in a series of entrepreneurial offerings from Triplett's IT department at Baker Hughes. Triplett says his group is currently evaluating other concepts that will advance the service possibilities from Baker Hughes.

Baker Hughes at a Glance

- **BUSINESS:** Oilfield services
- **HEADQUARTERS:** Houston, Texas
- **CIO:** Clif Triplett
- **NUMBER OF IT EMPLOYEES:** 500 (out of a total of 36,000 employees)
- **NUMBER OF PCs AND LAPTOPS:** 28,000
- **REVENUE (2009):** \$9.7 billion
- **OPERATING INCOME AFTER TAXES (2009):** \$421 million
- **OPERATIONS:** 90 countries
- **HISTORY:** Result of 1987 merger of Baker International, founded in 1907, and Hughes Tool, formed in 1909.

DATA: Baker Hughes, 2010

To further encourage entrepreneurship, and to foster a variety of viewpoints and expertise, Triplett has hired several of his staff from outside the oil industry. One of his IT executives previously worked in food services. Another worked for a copier manufacturer. Still others came from the automobile and telecom industries.

Triplett himself has a diverse background. Prior to joining Baker Hughes, he worked in several other industries, including autos, tractors, electric utilities, telecom and aerospace. Triplett was also deeply involved with the move of a regulated utility into the market for the public sale of telecommunications services. In another position, he ran a global services business for a telecom company; there, he was responsible for both establishing a market identity and growing revenue. Triplett has also been co-chairman of the board for a startup in India.

Of course, as anyone with experience starting or running a business knows, entrepreneurship involves risk. And Triplett says he's "big on being willing to take risks." Major projects at Baker Hughes can cost as much as \$50 million to \$100 million; such offerings would require the sign-on from not only IT, but also Baker Hughes business departments. Although smaller risks, such as an investment of \$20,000 to \$50,000,

Triplett can likely do on his own. "It's very important to encourage employees and to reward them for exploring new options."

To keep "exploring new options," Triplett has ensured that innovation is pursued aggressively and systematically. He looks for innovation in three ways.

The first he calls "managed innovation." When someone has an idea, it is registered with the chief architect's office, which then publishes a notice to everyone in the IT department. Anyone interested in pursuing the idea is welcome to join the project's team. The department, in turn, works to support and exploit innovative ideas that come from such managed innovation. "We often get a spark of an idea that turns into a much bigger idea through this process," Triplett says.

The second innovation strategy is called "planned innovation." For example, when someone says, "I need to solve this problem," Triplett will convene a diverse group of people to brainstorm solutions. The team members will ideally represent IT, business groups and geographic divisions. "That usually develops into three or four fantastic ideas that we can build on," Triplett says.

Triplett's third approach to innovation is called an "innovation workout." Here, a chief technology officer or other executive from an outside company is invited to Baker Hughes to discuss a topic of mutual interest. "We'll talk about what we're doing in that area, and they'll talk about what they're doing," Triplett says. "We typically come up with six to 10 great ideas."

Such a systematic approach to innovation is essential to the entrepreneurial IT at Baker Hughes, says Triplett. He warns, "If a deliberate approach to innovation isn't part of your culture, you will be challenged to become entrepreneurial."

Also, Triplett says, the culture created by an entrepreneurial approach provides IT with substantive benefits. "We in IT used to be order takers, where we would sit and wait for someone to ask us to build something," he says. "Now, we are bringing the ideas to the table, and we are taking far more of a leadership role. Our aim is to work 'faster than the speed of business,' because we do not want the business to be waiting for IT."

He continues: "All of which is quite different than [it was] before. It's building a much stronger relationship with our business partners." ■

ALAN S. HOROWITZ is a San Mateo, Calif.-based freelance business and technology writer.