Visual BI Solutions Helps Canada's Largest Drilling Rig Contractor Transform Yesterday's Problems Into Today's Opportunities

Precision Drilling Corporation is the largest drilling rig contractor in Canada. The company operates one of the most technologically advanced drilling rig fleets in the energy industry, with industry-leading capabilities in directional and deep-well drilling. With more than 300 drilling rigs throughout the world, Precision is challenged with managing operations that span many different nationalities, cultures, and languages.

Precision Drilling's Director of Business Systems, Chris Ames, is charged with utilizing data in meeting those challenges.

Data, Data Everywhere…

Chris has the job of serving as an intermediary between business finance and field operations. In fulfilling that role he has focused upon generating efficiencies by utilizing data and the visualization of data. The process involves identifying exceptions, the follow-up to which can reveal problems or inefficiencies that must be corrected.

When he took on the task, Chris found that he certainly wasn't lacking in data. Precision Drilling's worldwide operations generated plenty of data on a daily basis. The problem, he found, was in making that data usable.

Chris's dilemma was somewhat reminiscent of the Ancient Mariner's, who found himself dying of thirst in the midst of a vast ocean of undrinkable water: "Water, water, everywhere, nor any drop to drink." Similarly, Chris found himself with access to a vast, overwhelming ocean of data. But like a rich underground reservoir of oil that lies beyond the reach of wildcatters' drills, Chris had no suitable tools for unlocking the riches contained in the company's vast reservoir of data.

But it wasn't for lack of trying.

Taming The Beast

"When we started down the path to business intelligence, we had a huge working model in Excel. But it was an absolute beast to run," Chris recalled. But even so, the "beast" offered a tantalizing glimmer of the potential that BI offered to the company - enough to compel a switch from an Excel-based tool to an SAP Business Objects foundation.

Chris knew that they needed some outside expertise in making the most of their investment in SAP, so they hired Hitachi.

Unfortunately, the project did not go well. After lots of time (a full year!) and frustration, a live release was finally ready. It underwhelmed. And in the end - after all that was invested in the project - it was declared unusable by Operations, and discarded.

It was a bitter blow to Precision Drilling's BI aspirations. But Chris's vision of what BI could mean for the company compelled him to keep his vision alive.

"Give Us Ten Rigs-Worth of Data"

Then Chris received a serendipitous phone call from Puneet Arora, Visual BI Solutions' Director of Sales. Chris relayed some the negative experiences his company had experienced in attempting to up their BI game. And he gave Puneet a thumbnail sketch of the vision he had for a user-friendly system.

"Just give us ten rigs-worth of data," Puneet said. "Let's see what we can do with it."

Chris was astounded by the results. "Within two days they had built a working proof-of-concept model with drill-down capability on Ipad," Chris said. "And within just a week we had a refined version to demo to senior management."

Management gave the go-ahead.

A Capable and Responsive Partner

In Visual BI Solutions, Chris discovered a partner that was everything their previous consultant was *not*.

"Visual BI's responsiveness and capabilities have amazed me," Chris said. "Here's an example: I went to them and asked for capabilities that are in Lumera, but that don't exist in Design Studio. I told them, 'I want to be able to look at a correlation graph, and circle and lasso the outliers. And I want to focus on those outliers; I want the graph to resize so that I can drill down on them.' Within two days I got a call: 'Chris, check this out.' And it was all there - everything I'd asked for.

"I can hover over a datapoint that is an outlier - this is using my Ipad or pc - and I've instantly got several key pieces of data, such as: who runs that rig; what did it do last month; what did it do this month. And I can drill into it further as needed."

It's _VISUAL_ BI…

The end product is a responsive, user-friendly tool that's VISUAL. That's what Chris was ultimately seeking - a departure from the endless, stupor-inducing numbers of the Excel charts.

And each visual report offers the capability of drilling deeper *visually*. Clicking on an outlier in a report pops-up another visual report that provides additional detail.

Depicting data points visually also helps to vastly streamline the problem resolution process. "You don't really even have to verbalize a question during the problem resolution process," Chris noted. "All we have to do - and we absolutely love this feature

- is hit a button, and send a snapshot of that visualization to the person that you need answers from. So I can ask 10 questions in a minute by sending out 10 screenshots."

Yesterday Doesn't Mean Last Month

The power of data analytics lies in understanding what's happening in your business on an up-to-date basis. As Chris noted, "My mandate really is to know: how did my business do yesterday. And I don't mean last month, or quarter-to-date, but *yesterday*. Am I on target? Am I meeting my standards?"

Clearly understanding what happened yesterday is the key to making business better today. The ability to identify exceptions and abnormalities that so recently occurred empowers decision-makers with the ability to make quick corrections, thereby limiting losses and maximizing profits.

A Vision Realized…

Today, Precision Drilling utilizes a company-wide SAP foundation, enhanced with Visual BI Solutions' SAP extensions. Chris Ames has achieved his goal of putting in place a BI solution that provides a true and indispensable aid in achieving enhanced levels of operational efficiency.

And remarkably, it was all accomplished in the teeth of the worst economic downturn to hit the energy industry in half a century. As Visual BI Solutions CEO Gopal Krishnamurthy notes, "It's a classic example of a customer using analytics to realize more business value - even in the face of a bad business environment."

It's also a classic example of the benefits that may abound from making just one simple decision: choosing the *right* consulting partner for your business.

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I Did Not Know That!

Business Intelligence offers benefits that represent two sides of the same coin. It's about confirming what you think you know, and revealing what you do not know. "Sometimes the information revealed confirms what we think is going on," Chris Ames said. "But quite frequently there'll be an 'I did not know that' moment, when the analytics reveal something that we just simply did not know."
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Behavior Modification

The benefits of analytics can extend far beyond simple number crunching. As Chris Ames noted, workforce behavior on oil drilling rigs can be a bit reminiscent of the "wild, wild West." But with operational information recorded and tracked, and accurately, quickly analyzed, the increased level of oversight that's enabled can serve as an effective incentive for 'toeing the line' behaviorally. The result can be a more productive, less wasteful workforce.
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