Internet is a new challenge for the drilling industry

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SINCE THAT SEMINAL DAY in August, 1859 when **Edwin Drake**, relying on the abilities of his driller, **Billy Smith**, brought in that first producing well in Titusville, Pa, our drilling industry has historically driven and embraced technological advances.

The rotary drill replaced the cable tool. Directional drilling techniques allow wells to be drilled to suit specific formation characteristics. Drilling and completion equipment and technologies were developed for very deep water.

These advances all had their initial doubters and many who declined to adopt these new methods and tools gradually disappeared from the scene just as did the old, outdated methods.

There is a technology before us now that seems to have more than the usual share of doubters and which promises to have at least as great an impact on our business as any previous innovation.

What is it? It's called "the Internet!"

IT'S NOT ABOUT COMPUTERS

This computer-based network technology promises to revolutionize our business by enhancing communication capabilities in many ways. It is about communicating, not "computers."

It's not about "e-commerce" or "B2B." It's about communicating information to those who need it, when they need it!

The ability to amass critical information on any facet of your operations in a database and connect people with that information in real time is the key to its immeasurable value.

Those companies that can manage their information and knowledge most effectively and provide this real time access to its employees will reap the benefits of intelligent decisions, promptly made.

The bottom line will display the effects in short order!

A MODEL FOR DRILLING

The airline industry, through the work of **Boeing** and its information management and processing subsidiaries, has built a perfect working model for the drilling industry's move into the information age.

Working with strict standards set by the Air Transport Association (ATA) for classifying and displaying maintenance and repair information for the world's aircraft fleet, they have put in place a system for delivering such standardized data to maintenance technicians at any time, any place in the world. It has totally replaced the old paper manuals with instantly accessible information using the Internet as the delivery vehicle.

Boeing's Vice President of Maintenance, Engineering and Publications, **Richard Higgins**, has said that time savings of 20-40% have consistently been achieved in aircraft maintenance procedures through the use of new information dissemination technology versus the traditional "paper manual" format.

Schneider National, the country's largest trucking company with some 40,000 trailers and 15,000 drivers, until last year outfitted its 26 maintenance centers with cumbersome, and often out-of-date, 600-page service books to guide them in their truck repairs.

In 2000, Schneider placed a computer terminal in each of the centers, all connected via an intranet, so that mechanics could access up-to-date diagrams and data for repairing problems in any number of vehicle models.

Their mechanics can now, according to company estimates, fix 20% more rigs in the same time as before.

DRILLING APPLICATION

Studies conducted within our industry over the last 2 years have confirmed similar savings. An informal study by a major integrated US oil company indicated savings in technicians' time could be 10-18% in a typical repair procedure on a large offshore drilling platform by using such technology to access required repair information.

Similar findings were reflected in an informal analysis performed by a European oil company on a North Sea platform. Furthermore, a formal study conducted by a leading oil field engineering consultant in the Canadian and US oil patches revealed savings of up to 20%.

In the case of a drilling rig, these data would include equipment manuals and specifications, operational guidelines, repair procedures, maintenance records, drill pipe records, safety, regulatory and emergency procedures, rig blueprints, CAD drawings, subsea installations data, service company equipment specifications and records, etc. The system could also be linked to inventory and procurement systems.

And this is only one facet of the benefits of Internet technology. The flow of critical operating information via this same system can be directed in real time to those anywhere within your organization who depend on such data to make operating decisions.

The ability to access such information will revolutionize your way of operating, allowing you to link your constantly expanding store of operating knowledge to your decision makers in real time. Then up-to-the-minute intelligence can be converted into prompt, intelligent decision making.

For example, Enron has recast its entire modus operandi based on Internet applications with obvious bottom line benefits.

BP Amoco, recently announced that any vendor not using the Internet to conduct business in the near future will not be able to do business with BP Amoco.

The Internet is clearly here to stay. Those who choose to drag their feet in utilizing it to the fullest run the risk of becoming obsolete!

The aircraft industry had the benefit of the ATA's sponsorship and guidance in devising and implementing strict standards for organizing and delivering the pertinent information.

We should work through our own industry organization, the IADC, to promote the creation of a consortium of leading drilling contractors to formulate standards for the gathering, presentation and delivery of mission-critical information. Such a cooperative effort will accelerate the process and greatly reduce the cost to each participant.

Let us not delay to take advantage of this great opportunity!