

POINTCROSS: ELIMINATING THE ENERGY INDUSTRY'S BLIND SPOT IN CAPITAL PROJECTS

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Wall Street does not like surprises and uncertainty. It is merciless on CEOs and CFOs who do not have good visibility into their business operations, and control over them. Upstream capital projects are growing sources of surprises, and PointCross has developed a technology solution that gives CEOs and senior management instant visibility and control into projects.

SYMPTOMS

Shell EP is an example of the symptoms seen at upstream energy firms.

On September 19, 2001¹, Walter van de Vijver, CEO Shell Exploration & Production, indicated that Shell EP had "reduced its forecast production growth from an average of 5% year-on-year until 2005 to 3%". He added that the "forecast has been lowered from our earlier targets" because, amongst many reasons, "some projects are taking longer to realize than first predicted".

While Shell EP is committed to "capital investment in the upstream business in the range of \$7 Billion to \$8 Billion a year", he stated that Shell would focus on a "performance improvement program" that would include "improved delivery of projects".

Shell shares this dilemma with all the petroleum companies in the world. With declining production and increasing global demand for oil and gas, energy firms must maintain, if not increase, capital spending over the next decade.

GROWING DEMAND, DECLINING SUPPLY

At the last Petroleum Leadership and Outlook Conference sponsored by the Society of Petroleum Engineers, James Wicklund, managing director of investment research at Dain Rauscher Wessels, said that there was an "infrastructure crisis."

There is just not enough exploration and production infrastructure to meet the current needs of many energy-based industries. For example, the E&P industry would have to increase their spending by 30 percent to between \$5 trillion and \$6 trillion just to meet a goal of 400,000 megawatts of power by 2010.

In the year 2000, the top 200 Oil Companies in the United States spent about \$60 Billion in the upstream business (OGJ 2000).² PointCross estimates that petroleum companies outside the United States spent \$120 Billion to \$200 Billion.

Very simply stated, the demand for investments in exploration and production infrastructure is increasing, while capital efficiency and productivity of energy projects is declining. The industry's "brain drain" - an outflow of experience - will no doubt magnify this problem several-fold over the next few years.

CAPITAL PROJECTS: THE BLIND SPOT

Today, chief executives and senior management in the industry continue to rely on "broken" or outdated project processes and delayed reports that are prone to inaccuracies, and full of surprises and risks. Simply put, the energy industry has a huge blind spot in capital projects.

Most firms have poor real-time visibility into their portfolio of capital projects across multiple companies, partners and vendors. Projects are usually parceled out as sub-projects to multiple vendors, and there has been no method to constantly synchronize the sub-projects with the project owner's objectives.

More often than not, projects are on the edge of chaos, with project personnel constantly attempting to establish this synchronicity through documents, phone calls, faxes, and emails.

These activities increase the interaction cost of projects - the cost of people finding data and information, and constantly involved with meetings and other unproductive tasks, simply to make decisions - before a penny of product or service is created. According to McKinsey & Company³, interaction costs can be as high as 70% of labor costs in the energy industry; it accounts for a full third of the US economy!

Additionally, the industry is seeing a slow and steady net decline in “experience” that will turn into a streaming outflow as baby boomers retire and exit the oil patch.

To eliminate glaring weaknesses in capital projects and deal with the loss of people and “experience”, the energy industry is once again turning to technology for solutions.

THE TECHNOLOGY SOLUTION

The industry has begun using PointCross' software technology solution to monitor and control projects. This solution, Orchestra™, creates an “electronic fabric” that synchronizes all sub-projects with overall program objectives, enabling real-time decision making, even at the edges of the project enterprise.

Orchestra transforms a loose amalgamation of dispersed companies into a tightly knit, unified network of companies that acts and behaves like one entity, driven by project owner requirements. Orchestra gives instantaneous visibility into projects, across all participating companies. Additionally, it captures normal work efforts and interactions thereby consolidating the project knowledge and experience gained in a project.

20/20 VISIBILITY

Early adopters at major oil companies indicate that, with Orchestra, they gain real-time macro- as well as micro-visibility, and effective control into the strategic as well as tactical aspects of a project.

At the strategic level, CEOs and CFOs can have real-time visibility and control of projects executed by multiple companies. This solution can also assure management of the compliance, tracking, and auditing processes for government and company, health, safety and environmental, financial and other regulations and expectations.

At the tactical, execution level the implications of using Orchestra include:

1. *Accelerated revenues by reducing project cycle times*: This is the most critical of all benefits because delays can cost a \$1 Billion dollar production project about \$10 Million a day. With this technology, we estimate that the same project can accelerate revenues by about 100 days⁴!
2. *Reduced costs*: The project can save more than \$50 Million from the same billion-dollar project and the “productive work” of project employees. Bottom line, it adds “productive” people resources to the project team, without increasing costs.
3. *Reusable Knowledge Assets*: Retrievable knowledge assets are continuously created out of normal work interactions to jump-start new projects or future project phases, saving further time. Today, prior experience and knowledge is not retrievable, so every project starts out with a clean slate. This capability is especially useful in this industry, where the workforce and knowledge resources are declining, and where turnover of project personnel is common.

References:

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3. Patrick Butler, Ted W. Hall, Alistair M. Hanna, Lenny Mendonca, Byron Auguste, James Manyika, and Anupam Sahay; The McKinsey Quarterly, 1997 Number 1, pp. 4–23.
4. Pradeep Anand, “Transforming the Energy Project Business”, September/October, 2001, pp. 38-39.

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