

Improving Technology Investment Planning with Metering

Debbie Garcia, PetroIST Supervisor, Ft. Worth, Texas

Dan Shearer, Manager, Technology Enhancement, Houston, Texas

Burlington Resources

Please read the Forward-Looking Statements and the GAAP to Non-GAAP Terms (slides 1 and 2).

Change is an ongoing necessity in the oil industry today. “Continuous Process Improvement” and other methodologies have been studied by nearly every company. However, managing change to reduce costs while dramatically growing the business requires a combination of planning skills, technical skills, people skills, and responsiveness rarely found in today’s action oriented businesses.

Burlington Resources, one of the largest independent oil and gas exploration companies in the USA, has completed a multi-year evolution that greatly reduced software and exploration costs, while increasing software usage and geoscience analysis. After just two years of measuring software usage and pro-actively managing software assets, the annual IT savings were five million dollars. Additionally, the overall business impact of creating a more disciplined value-oriented culture has resulted in annual business savings of twenty times the IT savings.

Burlington Resources grew primarily through decades of acquiring other companies and then improving the production from their properties. However, with each acquisition, the software inventory of geological and geophysical applications grew larger (four companies contributed the most software: Southland Royalty, Louisiana Land & Exploration, POCO, and Canadian Hunter).

In 2002, management demanded that software costs be lowered. However, they also said that we needed to increase our software usage and improve the quality and quantity of our geoscience analysis. When we met with the geoscientists, each thought that their situation was unique and that their software needs were unique. When we tried to take an application off of the system, we were told, “I can’t do my job without ...” We had to find a solution that everyone could live with, without affecting productivity.

A lot of questions were asked (slide 10). The discussions around those questions resulted in specific actions (slide 11). Key to these actions was identifying exactly how applications were being used, how they should be used, and which were only for special circumstances. Defining an acceptable level of license denials was critical to reducing our software costs.

These actions resulted in a 36% annual savings in software maintenance from 2002 to 2003 (slide 14).

However, management wanted even more savings. The difficulties in meeting this expectation were compounded by the significant growth in software usage (slide 16). The only way to achieve these savings was for IT to partner with operations and work together. A Technology Enhancement Team (TET) was formed that reported to the Vice President of Exploration and the Chief Geologist. This team’s role was to determine the software and training mix that provided the maximum value to the company. The TET worked to maximize the value created by using the software, while IT negotiated better global contracts and monitored the license usage in each location, moving licenses where they were needed and dropping maintenance where they weren’t. Individual geologists and geophysicists were trained to understand what additional analysis they should be doing, to be more efficient in their work, and to release licenses they weren’t currently using. Governance was added to the IT approval process to ensure that the impact of adding and supporting new applications was fully understood.

These actions resulted in an additional 22% annual savings in software maintenance from 2003 to 2005 (slide 21).

During this time from 2002 to 2005, management was so impressed with our savings that they asked which of our methodologies could be applied to operations to add reserves, increase the productivity from each well drilled, reduce finding costs, and reduce the number of dry holes. They gave us a goal of saving ten times the amount saved in software costs.

After discussing what needed to be done (slide 23), we identified where operations needed to spend their budget dollars to get more value. It was surprising how little needed to be spent to achieve a significant improvement. Although there were challenges, the teams and individual geoscientists took advantage of the opportunities they now had to get training and mentoring, get project assistance, share analysis techniques, and improve their workflows, allowing the quality and quantity of geoscience work to greatly increase. Support for the applications also improved as the support teams were able to focus on the CORE applications and spend less time supporting one-off applications. A key step in this process was the metering of the teams where we measured each of them (in eleven categories) relative to the industry, BR's "average" team, BR's expectations for the team, and the team's perception of where and how much they could improve. This enabled us to determine for each team where to focus our efforts. During 2003 and 2004 there was a snowball effect throughout the organization where enthusiasm and dedication to excellence was rampant.

These actions resulted in annual savings of twenty times the IT software savings from (slide 28). The processes and methodologies started in IT, but far more value was realized by the company when they spread throughout the exploration teams (slide 29). The next opportunities for improvement at Burlington Resources include strategic workflows and management level functions.