Over the years, many innovations have come and gone in the oil and gas industry. From rod pumping technology to the latest smart wells, technology introduced in the past decade has had a significant impact. Companies are finding oil and gas reserves in the most remote parts of the world, viewing the subsurface in virtual reality, and drilling wells under conditions unimaginable just 10 years ago.

Innovation (even in oil and gas) is frequently the result of shared best practices between diverse industries. One methodology used by industries such as retail and telecommunications is the balanced scorecard (BSC). This tool is popular because it allows users to tie financial and nonfinancial metrics together on one dashboard. Additionally, it can juxtapose seemingly unrelated variables together. Based on the successes of the BSC in other industries, oil companies should leverage these best practices to monitor their progress in mature fields.

Mature fields are the cash cow of most oil and gas producing companies. However, mature fields are a run-rate business with notoriously slim margins, and they need to be monitored closely. Using a BSC would allow management to monitor these returns against other critical nonfinancial imperatives.

Production companies need to effectively align their goals and business objectives at every level of the organization and adapt these objectives to tangible and achievable goals specific to an employee’s supporting role.

In addition, the industry needs to ensure that field activities ultimately lead to achieving the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals.

On a more granular level, asset managers worry about declining production and reaching production targets. As difficult as these challenges are, corporate goals also must be addressed. These “big picture” objectives are all too frequently left in the boardroom or on analysts’ desks and are rarely percolated down to the individual pumper who is ultimately responsible for achieving them on a field level.

Can these be better managed by a BSC?

A bit of history
The idea of BSCs was originated by Robert Kaplan and David Norton as performance-measurement frameworks. Their goal was to add strategic nonfinancial performance measures to traditional financial metrics and give managers and executives a more balanced view of organizational performance. The methodology was adopted by mainstream industry in the early 1990s as software applications to measure metrics became more abundant. However, the roots of this approach started in the early 1950s in work done by both General Electric and French engineers, who created Tableau de Bord, a dashboard of performance measures.

Increasingly, BSCs are being used by corporations. According to Bain and Co., by 2004 approximately 57% of global companies were using some form of BSCs. Recent success stories indicate that corporations are seeing the benefits of using this type of analysis to track and achieve their goals.

The oil and gas industry is more traditional; it tends to be conservative in its management and adoption of new methodologies. Going forward, the industry would benefit from using this “balanced view” to ensure the efforts in mature field management are supporting the overarching goals of the corporation.

Success and failure
For each individual industry, there exist different variables in the scorecards such as financial, customer feedback, internal processes and learning, and growth. The following case study provides one example of how a corporation customized its scorecard to meet the overall goals of the company. It is important to note that business scorecards are the result of the individual company’s culture and financial needs of monitoring.

Shat-R-Shield is a 40-year-old manufacturer specializing in plastic-coated shatter-resistant lamps to ensure that overhead lighting fixtures in factories and assembly plants
do not shatter during production. Ten years ago, the company introduced the discipline of strategic planning into the business as it realized the importance of having the entire organization work toward a common goal. Over the next few years it incorporated components of various strategic models. Management set targets for the company and selected initiatives to meet corporate goals. However, using such elements such as Vision, Mission, SWOT analysis, and Customer Value propositions, the team soon began to realize it wanted to take it one step further.

In 2005, the management team attended some training in which members were introduced to the concept of a key performance indicator (KPI) BSC, and they decided to try the approach. The team was successful for the first time since it was measuring objectives across the entire corporation, but there were too many objectives. They used this as a learning exercise since for the first time Shat-R-Shield was measuring performance.

The next challenge managers faced was to find measures for the internal processes and learning and growth perspectives of their operational KPI scorecard. Though they went through the basic steps to provide the foundation, they found it a bit crude. In 2008, the team obtained training for the CEO and others, which allowed them to redo their scorecard and move it into the next iteration for the corporation. Results:

- The company took the operational KPI scorecard to a more integrated balanced scorecard with these focus areas:
  - Optimized business systems;
  - Improved process management; and
  - Improved product development;
- It implemented training for the organization to “outsource the explaining” for the framework of the BSC; and
- It reduced 20 strategic objectives to eight manageable ones.

The BSC approach achieved significant results within the organization, both in terms of targets reached and in terms of effecting a change in mindset throughout the company. The organization started over with the scorecard in 2010, and by the end of the year, Shat-R-Shield had netted more income than in the previous history of the company. In addition to forming integrated teams to execute these initiatives, Shat-R-Shield is currently training to cascade its strategic organization-wide scorecard throughout the company to ensure clarity and alignment. This is the foundation to achieve the five-year growth strategy that it currently has in place.

**Practical application to mature fields**

This example lends itself to tying all the facets together in a mature field. Sometimes a simple KPI-based scorecard cannot cascade through the organization, so enabling the cascading can impact the bottom line of the company. When there is an ability to tie all the elements together, companies can begin to realize the needed results within the low-margin mature field.

Numerous oil and gas companies have implemented this concept with varying results to transform a passive process into a more concise daily plan. Several groups are responsible for different aspects of mature fields. Having a BSC that will provide the necessary metrics and also communicate the corporate goals for the mature field will add significant value and foster the communication throughout the organization.

As simplistic as this may seem, being able to use this methodology in a mature field when operators are dealing with thousands of low-margin wells can add significant value when a quick response is needed. If the scorecard is made graphical, users will have a tool that will provide the necessary vehicle to communicate the overall corporate goals as well as individual field planning, deliverability, and well production.