

Common Ground: Relationships, Review and Results

Operators, drillers and service companies all look to cut costs and improve returns. Can the industry find ways to realize \$7- to \$10 billion in savings?

The oil and gas industry is recognized as one of the most, if not *the* most, capital-intensive businesses in the world. Operators and their suppliers have become world-class cost managers. Controlling costs is a big part of today's business landscape. Business fundamentals continue to be encouraging although the industry is often buffeted by volatile market drivers. Nonetheless, profits are surging. Bottom lines are strong. Gas supply is uncertain, yet oil demand in a post-recession world is stronger than expected.

Independent operators know they cannot control the prices of their largely undervalued publicly traded stocks. They have learned the hard lessons of the 80s and 90s and developed processes and procedures to effectively manage large capital-intensive projects. With cost control procedures in place, they are now focused on return on capital investment, a ratio which investors do understand. Operators are continually on the watch for new strategies and techniques.

The complex issues faced by independent operators, their service and equipment suppliers and drilling contractors were the subjects of research commissioned by BearingPoint, Inc. and *Oil and Gas Investor* magazine.

BearingPoint is a firm specializing in management consulting and business systems integration, with a strong interest in energy companies and their business processes. Research was conducted during June and July 2003 by The Marketing Experience, Inc. to ensure full confidentiality of the participants and for unbiased, third-party results.

Three elite oil and gas groups were invited to participate: executives from independent oil and gas companies, drilling contractors and service and supply companies. The North American operator segment represents more than \$70 billion in annual capital and exploration expenditures.

Not surprisingly, all participants interviewed are highly concerned with minimizing costs in capital-intensive projects. They feel the pressure to continually identify operational improvements within their companies.

Executives are ever critical of their company's ability to complete large projects at or below budget, and each group reported that they are always seeking ways to improve control and minimize costs. Throughout the research study, they mentioned at least four complimentary opportunities for improvements: collaboration, standardization, consolidation and competitive bid versus preferred provider.

One breakthrough result identified by the participants was operational improvement cost savings that total at least \$7- to \$10 billion. This unique opportunity can be realized and awaits operators and service providers. Yet, the study identified the strong need to find a common ground.

"The 10%-15% annualized savings on \$70 billion in capital expenditures is realistic, based on our experience working with clients on these issues within the industry," says Tom Elsenbrook, BearingPoint, Senior Vice President Oil and Gas Industry, Houston.

After establishing that fundamental common ground, differences did emerge.

Costs, Budgets and Control

Of four selected factors that influence successful returns in capital-intensive projects—safety, quality, on-time completion, and ending at or below budget—independents rank safety as their number-one concern and ending at or below budget as fourth in importance. Safety again is recognized as the highest concern for both the service and equipment executives and the drilling contractors.

While all factors rank extremely high, quality ranked last with service and supply respondents. Drilling contractors tended to give equal ratings to the remaining three factors.

Executives are critical of their companies' ability to complete large capital-intensive projects successfully. When respondents rate themselves on how well they feel their companies have controlled costs in the last year, service and equipment, oil and gas executives rate their companies' slightly higher than do drilling contractors. This is not

surprising since oil and gas executives rate ending at or below budget secondary to safety, quality and on-time completion. In this instance, service and supply respondents ranked themselves slightly higher than the oil and gas company respondents ranked themselves, an indication of a difference that appears elsewhere in the results.

Cost review is another ongoing business effort. All three groups believe that they are successful in minimizing costs within their group.

Who Contributes What: Information Sharing

The oil and gas companies are as critical of themselves as they are of their suppliers. Within their complex relationships, many oil and gas respondents feel that their suppliers make nominal contributions to minimizing costs. There is always one more way to look for additional cost savings. This is consistent with other attitudes revealed in the research project. But, oil and gas executives offered no opinions on whether they think that suppliers continue to search for ways to reduce costs after they have won the contracts.

The drilling contractors and the service and equipment executives have similar feelings about oil and gas companies with whom they work. They think that while cost is a concern and ending on budget is secondary to other factors to the oil and gas companies, these customers continue to search for ways to reduce costs after the contract is awarded.

Collaboration: Relationships and Review

There is almost unanimous agreement that collaboration leads to cost reductions in large projects. Only one respondent, across all groups, did not think that sharing relevant, accurate and current information leads to cost reduction opportunities.

All groups specifically mention the need for better communication in these large projects. This communication includes more early and complete involvement of internal personnel and suppliers and customers. This also includes a relationship where idea sharing is encouraged and oil and gas companies “allow contractors to challenge the operator norms (standards and specifications).”

Service respondents think that collaboration leads to cost reduction. This means, to one service respondent, “very early alignment in the conceptual design phase.” While information sharing and collaboration are generally recognized as positive drivers in controlling costs, there is less confidence that there have been highly successful collaborations among the companies involved in a project. Although they

can cite examples of cost reductions that they attribute to collaborations, they question whether large cost reductions have been achieved. There is a desire to have more sharing of information and more relationship building, which can result in longer-term agreements and partnering.

The drilling contractors rated their companies’ ability to collect and use relevant, accurate and current information to realize cost reductions slightly higher than the service and equipment executives did.

Operators agree that drilling contractors share relevant, accurate and current information with their oil and gas customers and rate their efforts highly. They also mention a need for “better planning and more complete engineering before commencing a project” and “building a team approach with defined roles and accountability from the onset of the project” as ways to improve collaboration.

Like the oil and gas respondents, the drilling contractors and the service suppliers feel there are tangible opportunities to reduce costs in large projects through collaboration. Through verbatim opinions, the service sector spoke of “utilizing more cooperative relationships with suppliers” and “improving communications with suppliers and project teams.” Respondents mention the use of “periodic project team meetings” where “all contributors to the overall goal [are] present and their input [is] sought” as a way to reach greater collaboration.

All groups cite the need for better communication, including more up-front analysis, planning and knowledge sharing. The service sector feels that collaboration between their companies and their oil and gas customers contributes to cost reduction. No respondent rated this factor low. Only one respondent of the service sector rates his company as sharing information “very well.” All other respondents report that their companies have room to improve.

One respondent said, “We always strive to end at or below budget, but there has to be reasonable contracts in place. This is where information sharing can come in and set the benchmark for a realistic budget.”

A Fundamental of Cost Control: The Importance of Standardization

All groups recognize standardization as a fundamental cost-control technique. However, both drilling contractors and service and equipment respondents give significantly higher importance to standardization than do operators. In the aggregate, no group indicates that the full cost-control potential of standardization has been achieved.

Oil and gas company respondents believe that

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standardization of equipment and processes reduces project costs. More than 75% of the oil and gas executives think that costs can be reduced in larger projects by standardizing equipment and processes. A majority of the respondents rated the importance of standardization either “high” or “very high.” Oil and gas respondents indicate they believe suppliers are less effective using standardization for project cost reduction.

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– Peter Buettgen, BearingPoint

Of those who expressed an opinion, there is a unanimous view among the service sector executives who believe that standardization of equipment and processes reduces project costs. One respondent commented that there should be a “standardization of equipment and systems that are proven performers.”

The service sector respondents feel that standardization for controlling project costs is much more important than do the oil and gas respondents.

In the opinion of the service sector executives, their oil and gas customers are less effective using standardization for project cost reduction. The drilling contractors say their customers either are very effective or are very ineffective – no one falls in the middle.

The Effects of Consolidation

One of the stated goals of consolidation is cost savings. This group has not been convinced that through consolidation, savings have been achieved with respect to large capital-intensive projects. However, the service and supply executives are more likely to believe the goal has been achieved.

The respondents were evenly divided when asked whether the consolidation of the oil and gas industry over the last several years has significantly reduced costs associated with large capital-intensive projects. Oil and gas respondents indicate consolidation has little to minimal effect on project cost reductions.

Drilling contractor respondents do not think that consolidation of the oil and gas industry over the last several years has reduced costs associated with large capital-intensive projects.

On the other hand, service and supply executives at a ratio of two to one believe that consolidation of the oil and gas industry over the last several years has significantly reduced costs associated with the larger capital-intensive projects.

However, in a dissenting view, one respondent commented, “Consolidation has increased costs due to delays.”

Competitive Bids versus Preferred Provider Relationships

Oil and gas company executives strongly believe that the competitive bid process controls costs and results in lower costs in capital-intensive projects. The drilling contractors disagree with this conclusion. The service and supply companies also strongly feel that the competitive bid process controls costs, but they overwhelmingly favor establishing preferred provider relationships to significantly lower the costs of larger projects.

Peter Buettgen, BearingPoint Oil and Gas Managing Director in the supply chain practice, suggests, “Our experience has shown that there are significant benefits from establishing preferred provider relationships for a portfolio of projects, for independent operating companies, service and equipment companies and drilling contractors.”

Quantifying Room for Improvement

Effective collaboration methods between oil and gas companies and service companies will occur by utilizing available tools and information, setting appropriate standards

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and implementing optimal process designs. Respondents recognize that there is a need for improvement with opportunities for significant project margin in the areas of cycle time and cost reduction.

A majority of oil and gas company respondents, 84%, believe the industry could reduce cycle time 6%-15%, and 77% believe that costs could be reduced 6%-15%.

Eighty percent of the drilling contractors believe cycle time can be reduced 10%-20% and costs reduced 11%-25%.

Seventy-one percent of the service and supply respondents believe cycle time can be reduced 11-20%, and 86% estimate that costs can be reduced 6%-15%.

However, oil and gas companies expect single-digit cycle time and cost reductions over the next three years. Drilling contractors expect greater gains. Service and supply respondents expect steady improvement. Therefore, the opportunity presents itself a challenge to realize \$7- to \$10 billion in savings.

Final Value: Results

Finally, participants were asked to list actions oil and gas companies should take to improve their capital and project management.

Verbatim comments tend to be business process oriented, rather than structural or technology-oriented:

planning, communication, focus, detail, and training. Structural comments tend to focus on contracts.

In the forward-looking verbatim statements, oil and gas company executives generally cite planning and control as the initiatives they will implement for more effective capital projects. Drilling contractors tend to focus on personnel issues (training and the like) with a nod to standardization. Service and supply executives bring in the technology factor and generally provide more technical verbatim statements.

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All survey participants echoed the need for real-time collaboration and communication. With many dollars riding on the ability to create “better communications between management and the project management (on-site) team,” making day-to-day or minute-to-minute decisions, cost savings may be achieved. With technologies changing, the information that must be captured, interpreted and shared among the workers of any project is increasingly complex.

If employees do not connect and communicate, the result is lost time, lost oil and gas resources, decreased productivity and ultimately a threat to the enterprise value. Part of the success of any project is devising a comprehensive communication strategy that includes effective outreach to everyone involved in the project.

The ideal knowledge-sharing solution does not exist, according to the research. By creating a web that all participants in the project can access, delays from worker indecision can be kept to a minimum. For example, while researching the solution to an obstacle, the worker can instead pull in all the knowledge of all the participants to solve the issue. The best body of information usually is from colleagues who have experienced similar situations.

Each survey group says it is constantly reviewing and searching for cost-reduction opportunities. Each group also believes that there are opportunities to be achieved both when evaluating their own practices as well as searching for ways to communicate each party's expectations and goals.

Much of the research supports the need for the participants of any project to be highly organized.

Aligning management who develop and share an overall vision for completing a successful project should include representation from people inside and out of the company. Suppliers should be included in the ground level planning so that a list of the project needs can be drawn up. This opinion was expressed in the following verbatim com-

ments: “early and complete involvement of suppliers and contractors” and “building of team approach with defined role and accountability from the onset of the project.”

This is an area where an organization can engage the services of a consultant or a third party to plan and facilitate an executable program. By establishing goals and defining obstacles, managers can then identify people who will be responsible for the steps of the project to mitigate risks and unlock opportunities.

“We agree that there are major opportunities identified here. Our experience with oil and gas companies is that the identified \$7- to \$10 billion in cost savings is very achievable through planning, standardization and collaboration with their suppliers to achieve those savings and more,” says Tom Elsenbrook, BearingPoint.

BearingPoint is able to bring together all the factors needed for successfully addressing the capital-intensive challenges of the oil and gas industry. BearingPoint has sourced more than \$10 billion in annualized energy-related spend opportunities (i.e. engineering services, directional drilling, tubular inspection, etc.) and \$26 billion in non-energy specific commodities (i.e IT, telecom, office equipment, etc.). See the Q&A that follows for more detail.

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Without a plan it is difficult to measure progress, and there is more potential for scheduling problems and cost overruns. Setting up a detailed work plan and defining steps to be taken are critical for ensuring the efficient allocation of resources.

A periodic review of commitment allocations leads to accountability. One executive describes the process: “daily supervision and discussion of costs incurred, but at best a timely review of expenses and performance by groups and individuals.” Another said, “the result could be...[that] all decisions made by the project team can be traced through to a final value.” Finally, many found immense value to be gained when the project review team evaluated the project through an “idea exchange on what worked and didn't work.”

If you have comments or questions about the research or article please email Elizabeth Justen, President of The Marketing Experience, at themarketingexperience@att.net.

Q & A with BearingPoint's Tom Elsenbrook and Peter Buettgen

What key strategies do you suggest to build shareholders' confidence given volatile prices, supply chain, and demand?

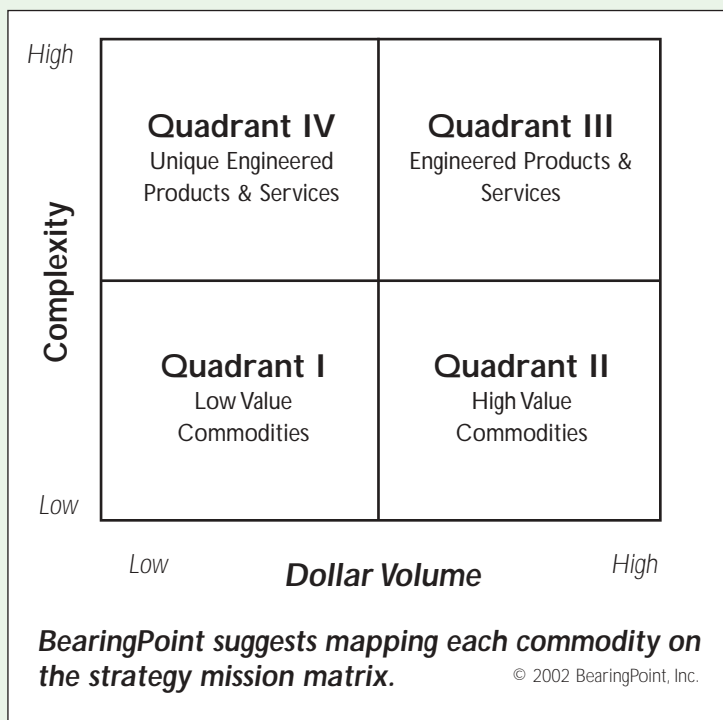
Boards of Directors, on behalf of the shareholders, are placing increasing pressure on CEOs and their teams to drive disproportionate growth and improved operating efficiencies and resultant earnings against their market space and key competitors. Operators are increasingly required to make major capital decisions quickly in an environment of heightened uncertainty to meet these demands. Strategic imperative number one is to ensure that business and operating model requirements are clearly defined and structured to meet the need for obtaining predictable, reliable and accurate information, as well as for rapid decision-making on strategic investments that independent operators are faced with today: low and high-value commodities and engineered products and services.

BearingPoint assists organizations in using this information to mitigate risk and increase rewards, especially in the face of volatile oil prices, supply chains, and demand – not to mention geological and engineering challenges.

Organizations' secondary imperative, then, is to ensure that information systems are in alignment with these newly designed or refined business process improvements. We work closely with our customers to turn key strategies such as these into practical success. We have a successful oil and gas industry track record implementing information systems, improving return on capital, providing support and direction for portfolio and asset management, and raising capital project performance.

What results can BearingPoint attribute to collaboration and sourcing as a part of capital projects?

To better understand where collaboration and sourcing would be beneficial to capital projects, it is important to understand the characteristics of the services and products and the supply environment. BearingPoint has developed a strategy mission matrix to facilitate this segmentation and to quickly identify collaboration/savings opportunities. As referenced in the quadrant chart below, the collaboration benefit for operators lies in products that are complex and have a high dollar volume (Quadrant III), while the savings opportunities predominantly reside in both Quadrants II and III.



There is marginal opportunity for savings and collaboration with Quadrant I, non-critical low-value commodities (such as lubricants, office supplies and electrical MROs), and Quadrant IV, unique engineered products and services, which have customized production requirements and are often requested on an as-needed or supply-assurance basis.

Thus, the real collaboration opportunity lies in Quadrant III, purchasing strategic engineered products and services. These items can include engineering services, drilling services and stimulation services.

BearingPoint has identified—as a leading practice—collaboration on engineered products and services by the three groups, creating a mutually beneficial arrangement. This allows operators to maximize cost reduction, and permits the drilling and service providers to better manage their workforce and logistical requirements.

BearingPoint has found great potential for savings in both Quadrant II, high-value commodities that includes items such as cementing, rentals and tubulars, and Quadrant III. Different supplier relationship strategies may be required for the different quadrants. Additionally, we have found that expanding the focus beyond the immediate project and establishing the appropriate relationship with the suppliers will increase the savings potential.

Can you share a few examples of how BearingPoint helped oil and gas clients realize cost savings?

In a recent project, we helped an independent oil and gas operator reduce costs for drilling goods and services by 15%–25% by establishing preferred provider relationships for the various drilling and operating services. A sole service provider was not established for each service, but a service matrix was used to select various suppliers for more complex services (i.e. cementing services for offshore deepwater wells) and a primary supplier for less complex services (i.e. wireline services in West Texas). By bidding the portfolio of projects, this allowed the independent operator to aggregate their spend and increase their savings while still providing flexibility to the local operations.

Often times, bidding is more productive or is required. For one client, partner requirements mandated that the international oil country tubular goods (OCTG) spending follow a bid process. The team was able to aggregate the individual bids that would normally be tendered in a piecemeal fashion and consolidate them into a single tender. This resulted in an incremental savings of approximately 15%-20% over the traditional piecemeal approach by becoming a more attractive client to the international mills, and by allowing the international mills to consolidate orders, reduce shipping costs and increase planning.

BearingPoint Sample Energy Commodity Experience			
<u>Commodity</u>	<u>Savings</u>	<u>Commodity</u>	<u>Savings</u>
Engineering Services	8-10%	Helicopter Services	8-18%
Wellhead Equipment	8-12%	Oilfield Operating Rentals	8-12%
Cementing Services	12-15%	Welding Equipment/Supplies	9-18%
Fracturing Services	10-18%	Drilling Services	12-20%
Stimulation Services	8-15%	Safety Supplies	7-15%
Open-hole Wireline Services	12-15%	Oilfield Freight	10-17%
Case-hole Wireline Services	12-15%	Oilfield Tubulars	10-15%
Directional Drilling	10-18%	Tubular Inspection	12-22%
Construction Services	4-10%	Electrical Supplies	12-17%
Pipe, Valves, and Fittings	16-24%	MRO / Consumables	10-18%

Thomas Elsenbrook

Mr. Elsenbrook is a Senior Vice President in BearingPoint's oil and gas industry practice. Tom has more than 25 years experience advising Global 1000 companies within the areas of technology integration, mergers and acquisitions, supply chain and demand, and customer relationship management. If you have specific questions regarding the survey results or perspectives within the industry, contact Tom Elsenbrook at 713.259.7128 or via email at telsenbrook@bearingpoint.net.

Peter Buettgen

Mr. Buettgen is a Managing Director responsible for BearingPoint's oil and gas supply chain practice. Peter has over 15 years experience advising oil and gas clients on industry issues. Contact Peter Buettgen at 713.259.7172 or via email at pbuettgen@bearingpoint.net, to discuss how to achieve additional cost or collaboration savings within your supply chain.

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