

# New Strategies for Profitability: Opportunities for Savings with INBOUND SUPPLY CHAIN MANAGEMENT

**O**il and gas companies today are getting less for each barrel of fuel they produce, and the margins on that barrel are getting thinner. New technologies have pushed proven reserves to new highs, depressing the long-term outlook for prices. At the same time increased environmental regulations worldwide have made both upstream and downstream operations more costly.

Not surprisingly, McKinsey and Company noted in a recent Energy Practice report that the industry has not kept pace with other industry market returns, and that a significant erosion of shareholder value has occurred. The financial community is looking for proof that oil and gas companies can contain costs and provide a healthy return on investment. Management is looking for an answer.

## **Making MRO Costs Matter**

The result: an industry that once didn't sweat the small details of operational cost is now putting them under a microscope.

One area getting the closest scrutiny is the purchase of Maintenance, Repair, and Operations (MRO) items and other non-production goods and services. According to analysts, MRO purchases in the oil and gas industry often account for 20-30% of

total revenues. MRO goods range from pipes, valves, fittings, pumps, and motors to business essentials such as computers, telecommunications equipment, and office equipment.

Despite the billions spent, MRO purchases are typically processed through time-consuming paper processes. They involve complicated searches from multiple sources, data re-entry, extended approval cycles, and intense effort by administrative and financial personnel.

### Curbing Maverick Buying through eProcurement

Many corporations are turning to on-line catalogs that enable requisitioners to make purchases directly. While using the Web can help reduce the cost of processing a purchasing transaction, a far larger reduction in costs can be gained by helping purchasers throughout the company to easily determine preferred items—those items for which Procurement has negotiated contracts.

Analysts estimate that as much as 30%

of all spending on non-production items are executed as “maverick buys,” that is, goods bought off contract. For oil and gas companies, this can translate into billions of dollars in lost savings, since negotiated contracts can give price breaks of 10-20%.

Complicating the problem still further is the difficulty in aggregating enterprise-wide spending to better negotiate the best terms with suppliers. This is especially difficult for “non-strategic” MRO goods

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and services, which are not tracked on computer systems with the rigor that strategic production materials are. The difficulty is also in part due to the physical size, disparate locations,



### Shell Oil Company, Texaco Inc., and Saudi Aramco Joint Venture Leverages Combined Purchasing Power with Aspect eOperate

The merging of the Shell's, Texaco's, and Star Enterprises' (a joint venture of Texaco Inc and Saudi Aramco) U.S. refining and marketing operations into two joint venture (JV) companies, Equilon Enterprises LLC and Motiva Enterprises LLC, has resulted in the first nationwide U.S. downstream oil operation. Combined, this joint venture represents over \$40 billion in annual revenue with billions in annual purchasing power. A primary rationale for these global companies merging their operations was to reduce their combined cost structure, creating the industry leader in profitability.

Synergies and saving opportunities in the area of the inbound supply chain were one of the top goals of this joint venture. The

and cultural differences within the global oil and gas organization.

### Aspect eBusiness Solutions for the Oil & Gas Industry

Aspect eOperate™ and eSource™ coupled with Aspect eContent™ are Aspect's answer to the problem of managing the Inbound Supply Chain in oil and gas companies. eOperate guides requisitioners to a preferred catalog of MRO materials and equipment spares, curbing maverick buying. Once items are selected, eOperate feeds accurate information directly from Aspect catalogs into an SAP® B2B or Ariba™ procurement system.

Aspect eSource focuses on rationalizing the number of suppliers and increasing the use of strategic vendors while consolidating the purchases from each. Using eSource, oil and gas producers have a window on spending patterns within each business unit, commodity, material, and supplier. Managers can analyze enterprise-wide spending, enabling

joint venture is using SAP as their enterprise business transaction framework and has selected Aspect eOperate to provide a complementary solution for strategic decision support for their combined plant operations. The JV selected the Aspect solution to consolidate and leverage all MRO-related buying across the expanded enterprise. Aspect provides a vehicle to rationalize the supplier base, identify duplicate items, and eliminate maverick buying. With Aspect eOperate, the JV is attempting to create a common unified enterprise-wide catalog of all MRO items.

Aspect eOperate is seamlessly integrated with SAP R/3 Materials Management and Plant Maintenance modules. All SAP users can access the Aspect Catalog, select preferred items, create requisitions, and place orders. This ordering process is totally automated.

Procurement to consolidate and allocate the spend across a much smaller number of strategic suppliers. This is a powerful first step in optimizing the Inbound Supply Chain.

Aspect eContent provides a second key ingredient for Inbound Supply Chain Management by assembling the world's most comprehensive set of content products. Spanning more than seven million standard MRO items, Aspect eContent can be uniquely published for each enterprise to reflect the company's strategic parts and suppliers.

**Reducing Plant Downtime**

Aspect eOperate manages supplier catalogs as well as internal replacement part inventories so that operations personnel can easily check critical parts availability, reducing plant downtime. And by building reusable repair kits on an MRO procurement system, maintenance personnel are able to work from automatically updated pick lists, eliminating the need to research or regenerate parts.

**Defusing the M&A "Time Bomb"**

Mergers and acquisitions have gained new momentum in the oil and gas industry as companies look to control costs and secure greater economies of scale, better operational efficiencies, and greater market depth. One such joint venture—between Shell, Texaco, and Star Enterprises—was carried out in part to achieve the savings on combined MRO spend (see sidebar).

While mergers can result in economies of scale and savings, more often than not, these synergies are not realized. In fact, a recent study by Mercer Management Consulting indicates that only 25% of the larger 1990's mergers achieved the promised merger savings.

Many call the post-merger integration effort a "one-year time bomb." The Mercer report concluded that post-merger management is the most critical factor to success in realizing the promised savings of mergers.

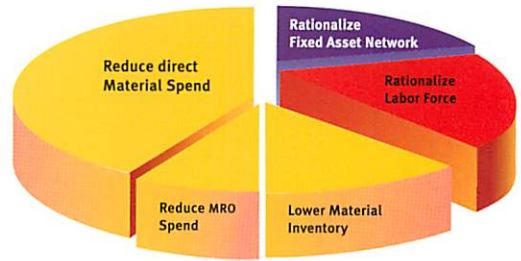
Mergers bring with them a tangle of multiple legacy systems and numbering schemes—with the same part, supplier, or commodity often appearing as different entries in different systems.

One response to this problem has been the broad-scale implementation of enterprise resource planning (ERP) systems.

**"Post-merger management is the most critical factor to success in realizing the promised savings."**

*Mercer Management Consulting*

However, as these systems come on line, oil and gas companies are finding an information gap. ERP systems cannot unravel the multiple part and commodity code schemes mentioned, nor can they handle non-stocked items with ease.



- Aspect Directly Addresses
- Aspect Partially Addresses
- Aspect Minimally Addresses

*Aspect solutions affect most of the promised synergies of mergers and acquisitions.*

Another result of multiple parts information scattered across the enterprise is more pronounced and visible distrust of system data. Operational silos tend to develop in this milieu, with inventory, stores, and information being hoarded rather than shared.

**Delivering Promised Merger Savings**

Aspect's Inbound Supply Chain solutions solve this problem by first cleansing and consolidating multiple data sources, and then publishing the clean data in a centralized eCatalog. The catalog has a powerful cross-referencing engine that untangles the different numbering conventions and integrates to both the material master, such as SAP R/3 item master, as well as catalogs of non-stocked items. eOperate ensures that the merged corporation has the same view of all goods and services, while eSource



*Time to benefit is fast with Aspect solutions, delivering savings in weeks, not months or years.*

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*Global Leader in Inbound Supply Chain Management*

helps companies immediately leverage their new, combined spend with vendors.

Aspect's Inbound Supply Chain Management solutions can be implemented relatively quickly, in under 200 days, helping the merged corporation immediately leverage spend.

### Upgrading Plants More Efficiently through Inbound Supply Chain Management

Another area of collaboration has been in technology for plant upgrades. The SYNSAT consortium, which numbers Shell and Exxon among its members, has made great strides in proving that collaboration works. The joint technology effort is aimed at reducing the cost of upgrading existing production facilities to accommodate the upcoming requirements for reformulated fuels. Their goal is to reduce the typical \$500+ million capital expenditure for such conversion to less than \$100 million by using a new conversion process.

As oil and gas companies partner to implement conversions, it becomes more critical that project teams are tied into overall corporate procurement strategies

for preferred parts and materials.

Aspect eDesign helps streamline the Inbound Supply Chain by putting both technical information as well as supplier and material preference at the fingertips of project team engineers to "design in" the use of many of the proven parts and designs.

### Aspect Partners with Oil & Gas Industry Leaders

Aspect Development has pioneered the practice of Inbound Supply Chain Management, and is proud of its partnerships with customers in the oil and gas industry such as the Shell Joint Venture and Ashland Oil. Working together, we're helping oil and gas companies manage their inbound supply costs, become even more efficient, and deliver real shareholder value—even in the face of challenging markets. For more information, contact Aspect at 1-800-734-7279, or visit [www.aspectdv.com](http://www.aspectdv.com)

