## **Analyst Insight**

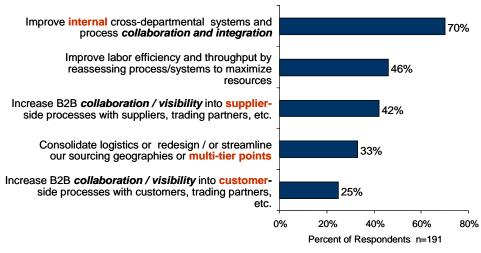


June 2011

# From Concept to Savings: One Large Oil Company Integrates it's Complex Supply Chain

According to Aberdeen's chief supply chain officer survey conducted in January 2011 which surveyed 191 companies, the top two pressures dominating current supply chain operations include increased complexity and globalization (52%), and rising supply chain costs (46%) including fuel and labor. Undoubtedly, the increase in the number of trading partners is changing the nature of the dynamics between all parties in the multi-tiered global supply chain. In response to these pressures (Figure 1) there is a growing shift in focus towards internal collaboration (cited by 70%) and external collaboration (42%) with suppliers and trading partners. This Analyst Insight will focus on some key process and technology differentiators displayed in improving supplier/partner/service product flow across an increasingly more complex, multi-tier, and cross-channel distribution network. We will showcase the advantages that one large oil and gas company was able to achieve by partnering with a solutions provider, ASCI, to build out an integrated platform. The purpose of this integrated platform is to provide visibility, collaboration, and event driven optimization across internal and external processes, systems, and groups.

### Figure 1: Top Strategic Actions - Focus Shifts to Internal / External Collaboration



Source: Aberdeen Group, May 2011

#### Analyst Insight

Aberdeen's Insights provide the analyst perspective of the research as drawn from an aggregated view of the research surveys, case study interviews, and expert analysis.



### **Background Information**

ASCI LLC is a subsidiary of ASCI Holdings. They are a hybrid software/service provider specializing in highly asset-intensive industries and with traction in Oil and Gas. Their solution offers many functional elements in an on-demand platform including additional components spanning critical supply chain processes pre and post deployment. They classify themselves as a full service Business Process Outsourcing (BPO) firm with the following focus areas: tactical procurement, material coordination/control, warehouse management, freight consolidation, yard operations, inventory management, investment recovery and field provisioning and service.

ASCI provides specialized supply chain and asset management systems developed for asset-intensive industry professionals. Yet, ASCI offers numerous functional elements spanning materials procurement, order/parts cataloging and inventory, logistics and transportation tracking and tendering, field based staging and onsite delivery complete with invoice presentation to ERP financials.

### Tracing Value Delivery from Concept to Savings: a Client Story

ASCI's roots and original formation is tightly linked to the collaboration and integration challenges faced by their first client partnership with a large oil and gas company. To gain an understanding of the value ASCI brings to an organization Aberdeen has conducted several interviews to document it's evolution from mere concept to full scale solution platform by tracing its role and the value delivered in this client company from 1999 until now.

## Case in Point: Large Oil Company selects ASCI to handle Materials and Supply Chain Integration Management and Technology Solutions, Saves Millions

This large oil and gas company has global operations and was faced with market pressure to reduce costs around its procurement and materials management organization. In the late 1990s the price per barrel of oil dropped to \$9.50 per barrel requiring a radical realignment of this company's large and complex maintenance, repair and operations organization. The materials and purchasing function was under a multi-year contract which was nearing its final year. Under pressure to outsource the materials functions and reduce staffing levels and baseline operating costs, the company began talking with external companies to outsource both manpower and its provisioning/scheduling function for field supply and equipment in a large, functionally remote/overseas, operation. The following sections cover the solution regarding 1) the scale of the problem faced, 2) a summary of solution components/features, and 3) comments from company management. These managers were familiar with ASCI as a company as it grew in scale and volume over the years.

The scale of operations provided for outsourced solutions is as follows:

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- Geographic range of solution field and plant locations spanned hundreds of miles. Supply lines from 800 to over 2,000 miles in a large, functionally remote/overseas, operation.
- Complexity hundreds of thousands of part numbers, thousands of suppliers, with tens of thousands of purchase orders and hundreds of millions of dollars of materials spend.

### Summary of solution components

Solutions needed to provide dedicated staff and operational management teams as well as a suite of web tools tightly integrated with client systems to cover a full range of requisitioning, purchasing, order status tracking and receiving functions. Legacy ERP systems were based on old technology. They were a barrier to productivity and collaboration across the supply chain, so web technology was adopted to bridge these gaps.

The financial goal was to reduce the baseline operating costs of the materials organization by over one-third. Within the first 18 months of initial deployment the documented savings in supply chain operating costs (people/systems and overhead) was in excess of 35%.

The following were the primary scope elements:

- Parts and Materials Cataloging with over 200,000 unique parts and indentured parent child exploding bill of materials tree - complete with specs and brand /supply history
- Parts and Supplies Ordering/Procurement- ordering and replenishment, pricing and buying, scheduling and delivering that involved several hundred active suppliers and initial transaction dollar volume exceeding \$2 million per week

The web tool solution included purchase order issuance and vendor acknowledgement, as well as a reverse auction tool used to rebid categories of materials on an orderly schedule. The reverse auction tool delivered significant cost savings on the purchase price of materials, thus adding to the operating cost savings.

- Supply Chain Integration and Scheduling to include multi-stage ordering, shipment and delivery, staging, kitting and field provisioning through delivery and repair. Project staging and kitting web tools were developed.
- Materials Support for Maintenance and Repair Operations job and project plan scheduling with tracking and visibility through acquisition, provision, staging and on-site completion. Jobs spanned multiple fields and production facilities. Jobs included both major turnarounds and minor preventative routines across a wide geographic area - approximately 50 to 100 jobs per week.
- Capital Projects Support requisitioning, purchasing and Vendor
  Drawing and Data Capture (VDDR) for technical assurance. This
  was a combination of staffing and tailored web tools in support of

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sizable, schedule-driven capital projects. Web tools included purchasing and requisitioning functions customized to the projects world, plus a staging and kitting application to offer full visibility of projects materials and locations to construction managers.

- Warehouse and Yard Operations Customer has several warehouse and yard operations with substantial amounts of direct, project and MRO inventory, inclusive of drilling materials and chemicals. These facilities had to be safely manned and competently operated to high standards of integrity and control. Activities included receiving, "putaway", storage and issuance, project staging, kitting and returns. Rotate-able items (repair and return) and surplus handling were also included.
- Transportation and Logistics Functions For example, daily operational
  management of transport carriers and web tools capable of
  providing in-transit visibility from vendor dock to final delivery of
  individual orders by catalog item number, work order or
  transaction number. This function also included off-site freight
  consolidation, receiving and inspection together with pre-receiving
  tools and bar coding technology.
- Supply Chain Visibility Tools Internal and external views to supplier orders outstanding from a web portal for order acknowledgement and order status tracking. Web tools allow for suppliers to keep order status current and visible to all stakeholders in real time, allowing for easier collaboration and communication. The tools also provide shipping functions so the supplier can drive shipping labels (including bar code readable) directly out of the tool. This function provides instant visibility of vendor shipments and streamlined receiving, as the label displays customer descriptions, transaction numbers and end-user destinations. Together with off-site freight consolidation and receiving, end-to-end order visibility was achieved.
- Supplier Performance Management Tools In addition to cost savings, improved performance and reliability of the customer supply chain was expected. A collaborative performance management portal was developed to allow suppliers access to all components of their balanced scorecard at both the summary and transactional level. This data was combined with a disciplined performance management process to drive substantial increases in delivery performance and accuracy.
- Value Delivery As the engagement matured, ASCI utilized a continuous improvement model to deliver additional value and the solution components listed above have been enhanced and rolled out to other client companies. All client dedicated staff have been involved in one or more continuous improvement initiatives. Value delivered through this process, and other internal processes, were captured within a "value analytics" framework. The end result: the

"The RFP became a successful contract in less than a year's time and the technology interfaces enabled the success to multiply to each touch point in our extended supply chains from supplier, to transport and dispatch companies, to staging and kitting operations and finally to provisioning and field repair. This impressive web frontend was a huge success and was tightly integrated to our legacy MRO, parts catalogues and field services work order management systems - and it was also tied to inventory and finance systems. With these tools in our procurement and provisioning operations we were able to outsource staff and function to ASCI. As to value we saw over a 35% reduction in cost within the initial year and even with a temporary gain-sharing payout to ASCI netted a 26% documented savings from our baseline costs."

> ~ Managing Onsite Executive, Large Oil and Gas Client

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financial value delivered on an annual basis to the client fully offset ASCI's invoiced cost as a contractor - and indeed have saved the company millions annually in out of pocket costs versus the prior solution.

The value components delivered were roughly in the categories shown in Table I.

**Table I: Savings Contributions** 

| Category               | % Savings |
|------------------------|-----------|
| Procurement Savings    | 47%       |
| Cost Avoidance         | 36%       |
| Logistics Optimization | 5%        |
| Investment Recovery    | 10%       |
| Inventory Reductions   | 3%        |
| Total                  | 100%      |

Source: June 2011

### Recap of Success: Start-up to Current Performance

Comments from members of Client Company Management are as follows:

- "When we approached the company founders at ASCI with this concept it was simply a discussion that grew into a RFP for a multiyear, multi-million dollar outsourcing contract. It was a partnership built on mutual trust, inspired by great vision, and built out of stateof-the art web focused technology and sheer hard work. Within 18 months of initial deployment we had net savings of millions of dollars in baseline costs plus cost of goods savings."
- "The RFP became a successful contract in less than a year's time and the technology interfaces enabled the success to multiply to each touch point in our extended supply chains from supplier, to transport and dispatch companies, to staging and kitting operations and finally to provisioning and field repair. This impressive web frontend was a huge success and was tightly integrated to our legacy MRO, parts catalogues and field services work order management systems - and it was also tied to inventory and finance systems. With these tools in our procurement and provisioning operations we were able to outsource staff and function to ASCI. As to value we saw over a 35% reduction in cost within the initial year and even with a temporary gain-sharing payout to ASCI netted a 26% documented savings from our baseline costs."
- "The field transition was smooth, and not only that we doubled in size in the third year of operation through acquisition. I was promoted upward to other roles in the organization largely because



of the ASCI project success and my advocacy for its formation and expansion. I continue to advocate to all who will listen and believe the ASCI solution and management is transformational and far ahead of it's time"

- "For me the reverse auction solution ASCI provides is an EBay type of success story that was a company game changer. I cannot fathom leveraging our materials costs without this great tool. Material savings alone self fund the costs and allow us to remain competitive, but at the same time, we are now able to track project and materials through to completion, lower inventories, document a high safety record and scorecard supplier performance."
- "The dashboards and performance metrics range from procurement, staging, inventory balancing/optimization, safety and internal and external performance of staff and suppliers. These tools and metrics are exemplary and the company management team uses our results and performance targets from this region as a benchmark for operations everywhere. ASCI has a great reputation in this region and is a technology model that the company hopes to emulate as it builds its ERP backbone solutions."

### Summary

Beyond the millions in baseline cost savings and the ongoing savings in materials costs and value delivery, the ASCI team has continued to refine and develop its services and capabilities and has deployed it with other clients. It has deployed robust inventory optimization tools and has integrated them into its offering, harvesting added savings for its clients. These capabilities, a dedicated and experienced staff, and a proven track record of delivering value are part of the company legacy since it's inception in 1999 - they are the foundation for its future.

### **Key Takeaways**

As is often is the case, we can gain great value by tracing the path to value that leading companies take to address their key business challenges. In 1999, and even more so today, companies are faced with complex internal (70%) and external systems and process complexities (42%) requiring high levels of integration and collaboration across their diverse supply chains (Figure I).

This Analyst Insight and case study demonstrate that leading companies are bridging need with innovation. Leading companies and innovative software/service companies are forming creative alliances and conjointly developing technology solutions to address the integration of their complex supply chains. As is the case with ASCI, these solutions are capable of delivering both short and long term benefits to their initial and ongoing client base and are at a demonstrated level of form and features to extend to numerous supply chain integration challenges across companies of all scales and industry segments.

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#### **Related Research**

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February 2010

<u>Integrated Transportation Management:</u> <u>Improve Responsiveness with Real-Time</u> <u>Control of Execution</u>; October 2009

No Excuses! Why Optimizing

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Labor Management: Instill Accuracy,
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