

Supply Chain Best practice

Sector specific or transferable?



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There is a general perception that supply chain practices in the oil and gas sector are often immature, compared to the world class functions that exist within the automotive and consumer industries. Furthermore, another commonly held notion is that supply chain practices can, in fact, transfer from one sector to another quite easily. In this article, we consider how the idiosyncrasies of each sector mean that, in actuality, supply chain practices, priorities and solutions are often very different and therefore transferring best practice from one sector to another can be difficult. By focusing on aspects such as process, cost management, collaboration and culture, however, we reveal how lessons could in fact be learned and practices shared between businesses from diverse sector backgrounds.

Approaches to the supply chain: the problem of unsustainable systems within the oil and gas sector

During the last decade, good supply chain practices have been prominent in the consumer and automotive sectors, but lacking within the oil and gas industry. In the oil and gas industry there is a greater reliance on design and project management capabilities – which are major strengths in the

sector – yet the approach to the supply chain tends to be very transactional. Rather than operating within 'economies of scale', oil and gas engineers typically communicate directly with suppliers to buy materials and services. This lack of a joined up, strategic approach to supplier management usually results in different points of contact with suppliers, a duplication of workflow, no consolidated invoices and poor processes for contract negotiation.

Furthermore, very few supply chain innovations emerge within the oil and gas industry due to the emphasis on 'giving clients what they want'. Companies usually have a portfolio of products that they can call upon to customise with small tweaks, meaning there is little desire to conceive 'blue-sky' process solutions to improve efficiencies. It's true though; the sector has always been profitable and successful, despite companies working in this way. However, the systems in oil and gas will ultimately stop being profitable up to a certain point. When the market becomes saturated and businesses have to be more competitive, there will be a tipping point; and that's when people will realise that the transactional approach is not sustainable.

Within the automotive and consumer sectors, on the other hand, availability, continuity of supply,

understanding where your critical parts are, making sure you develop good supplier relationships and measuring your performance are all really important and necessary features of the supply chain process. Oil and gas businesses have to realise, therefore, that a more structured, measured and innovative approach will help them sustain growth in the long term. From a procurement perspective, for example, buying everything from a risk point of view, from a quality point of view, from a cost point of view, from a capacity point of view, from a development point of view, and so on, is incredibly important.

Priorities in the supply chain: the skilled approach to cost management, which is apparent in automotive and consumer industries, could be transferred into the oil and gas mindset

The automotive sector has changed dramatically during the last 15 years. Global companies such as Calsonic Kansei and Nissan, for example, with facilities in the North East, used to be more focused on productivity and managing volume. When production moved away from being 'localised' to have a global remit however, managing component costs through low cost country sourcing (LCC)

emerged as a primary supply chain objective in the sector.

Managing cost is also a primary objective for the supply chain within the consumer industry. When you have high volume, there are typically more opportunities to reduce cost. The supply chain has the luxury of being able to push suppliers hard and grow volume incrementally, by raising supplier productivity. There are also lots of costs or working capital 'measures' that are the same within the automotive and consumer industries. These include factors such as inventory, lead times, MOQs, payment terms and vendor financing, contract and master purchase agreements, order fill-rate and 'clean-sheets'.

Within oil and gas engineering, however, there is little scope for cost reduction. Products are often bespoke and there is usually reluctance, from a design perspective, to make any cost saving alterations. Suppliers are also nominated early on and there is rarely any major tender process where price can be negotiated. Similarly, when it comes to low cost country sourcing the cost of logistics, together with the inevitable long lead times, makes LCC unfeasible in most cases. At the end of the day, an engineering business won't compromise



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quality. Consumer and automotive businesses, on the other hand, have infrastructure on the ground to monitor and drive improvements. If you haven't got that, then LCC is a huge risk.

It's more about price validation and risk mitigation than it is about margin in the sub-sea oil and gas sector, compared to consumer and automotive. A lot of the cost is actually hidden because of the lack of tracking and measurement that takes place. It's arguable, though, that to create a foundation for sustainable growth, companies operating within the oil and gas sector should aim for greater efficiency and control when managing costs. There is an impending need for tactical supply chain processes within the sector that could be developed from the standard practises used by consumer and automotive companies.

Integration in the supply chain: global businesses require global collaboration, even in the oil and gas industry

Research has shown that strategically integrated supply chains that have greater alignment with business strategy and overall better visibility are more impactful and successful. However, trying to facilitate closer coordination and integration of the supply chain with the rest of the business can be difficult. The automotive and consumer sectors have been particularly good at this during the last decade, though, whereas the oil and gas sector is, perhaps, still lagging behind.

Within the automotive sector, integration is usually led by the OEM (original equipment manufacturer), who, in many cases will actually specify where parts are bought from. Integration then runs right through to both tier one and tier two suppliers. In automotive companies where parts are manufactured in-house, vertical integration is common. Similarly, in the consumer industry, especially large businesses with strong global footprints, there is a set global agenda that works to encourage integration between group supply management (GSM) and other divisions.

Global businesses will also typically have 'hundreds' of people working within GSM, with specific teams focused on different areas such as purchasing, supplier management and systems and processes. Interestingly, business maturity also helps integration work well, simply due to a natural period of process evolution. In some cases, introducing global teams and systems has had a negative impact at first, leading to poor alignment with local business units and manufacturing facilities. The solutions to this issue are fairly consistent however within the consumer sector. For example, establishing specific business units focused on making sure that communication between NPD and supply chain is clear. This ultimately enables the supply chain function to have foresight of the types



of materials it needs from suppliers and also helps locally based manufacturing faculties to feel less alienated from decision making.

In this context, a reciprocal relationship develops naturally between commercial and supply chain functions, whereby necessary market influenced processes essentially become automated, due to the robust systems as well as commutation channels that are in place. This is also very cost effective and ultimately, potential areas of conflict between different divisions are suppressed.

Conversely, within the oil and gas sector, global businesses typically don't have sophisticated supply chain teams that are fully integrated into other divisional areas of the business. What is common, however, is for oil and gas supply chain functions to drive all aspects of the supply chain, centrally, without the support of divisional or local teams. This significantly reduces visibility and makes the process incredibly complicated. Consequently, this can have an overall impact on quality, something that is vitally important within oil and gas engineering, because applications require a strong guarantee.

Recurrent issues caused by inadequate supply chain functions include misplaced deliveries where parts don't fit together properly, or the wrong parts are delivered. Errors such as these can regularly lead to a lot of rework taking place, which ultimately amounts to additional costs. This cost could be managed more effectively if oil and gas supply



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chain functions, especially within global businesses, try to mirror those present within the consumer and automotive sectors, where integration and alignment of the supply chain, with other divisional areas, is the norm.

Valuing the supply chain: supply chain prowess within the automotive and consumer sectors is due to cultural as well as operational factors

If a business values its supply chain, then those working within the supply chain function find themselves to be more active, with a raised level of importance and influence across the company. For this to occur, however, a specific cultural environment must already exist that, by its very nature, naturally subsumes the supply chain into its operating mentality.

There are three key factors underpinning a culture conducive to supply chain success. They are a companywide understanding of the importance of targets, process flexibility and people development. All of these cultural attributes are typically present within the consumer and automotive industries.

With regards to targets, the performance of supply chain functions within these sectors is monitored closely and practitioners are made accountable for any shortcomings in delivery, quality or cost, depending on which of these areas is considered a supply chain priority. Embracing flexibility, on the other hand, is really about embedding a culture of 'continuous improvement'. The automotive and consumer sectors share a common willingness to try something different if targets are not being met.

People development or 'talent management' are also major focuses within these sectors. For example, similar standards of 'detailed' annual appraisals exist across the two sectors. It's quite common, for example, for supply chain professionals who began their careers within the automotive sector to claim it was within that sector that they learnt the most about the different tools and techniques of supply chain management; thus providing them with a solid foundation to go on and work in a variety of different businesses. Unsurprisingly the situation within the oil and gas sector is very different.

The sector has experienced phenomenal growth during the last decade, yet the necessary processes to sustain growth have not evolved quickly enough and recurring issues are becoming more prominent as a result. Part of the problem is the transient nature of the oil and gas workforce, as well as its large contingent of contractors. Set goals and objectives, staff training and flexibility in processes, as well as aspects such as trust and professionalism, are often underdeveloped areas within oil and gas companies.

Within the context of this cultural environment, the supply chain is undervalued. At senior management level, there is usually a lack of operational understanding about the types of challenges faced by the supply chain, which makes it difficult to push through necessary solutions. Consequently, people working within oil and gas supply chain functions are often not exposed to the type of practices those within the consumer and automotive sectors are, impeding their personal development within the discipline.

There is a degree of recognition at some businesses within in the oil and gas sector that cultural change is needed. Some have even tried to introduce supply chain professionals from other sectors but those individual have often found the transition very difficult for the reasons outlined above. Similarly, those who leave the oil and gas sector to work in other industries, such as the consumer and automotive sectors, immediately struggle because of the very visible step-change in supply chain practices.

With oil and gas industry growth expected to continue over the next few years, it's vitally important for companies to act now to raise the importance of the supply chain function and promote the value it can bring to businesses and to the sector in general.

Parts of this article are based on an in-depth interview we conducted with Joanne Webber, senior supply manager at Stanley Black and Decker. Joanne has worked in a variety of senior 'global' supply chain roles within the consumer, automotive and oil and gas sectors, during the last 15 years.

During our conversation with Joanne Webber, she provided the following table to highlight how the supply chain function within each sector prioritises delivery, quality and cost. 1=most important; 3=least important.

	AUTOMOTIVE	CONSUMER	OIL & GAS
Cost	1	1	3
Quality	3	3	1
Delivery	2	2	2