

Introduction

What would happen if Christmas trees were not available until Easter? How would you feel if you tried to buy a coffee at your favourite high street café only to be told they had run out of coffee beans? Making sure the key components that a business or service relies on are available when needed is the responsibility of the purchasing role.

Purchasing and supply – also known as procurement – may appear to be a ‘hidden’ function in many organisations. In fact, procurement is a highly strategic role, whether the organisation is manufacturing or service-orientated, in the public or private sector, for profit or not. Procurement is complex. It covers the full supply chain from contracts (negotiating), procurement (purchasing) and logistics (storage/distribution). All businesses need inputs in order to be able to operate. These might be physical inputs, such as raw materials, like engine components for a car manufacturer. They may also be service-based, such as specialist engineering consultancy when trialling new technology or distribution services for a high street retailer. It is vital that inputs not only meet the required quality and reliability standards, but also that they are competitively priced.

Effective purchasing

Purchasing and supply focuses on sourcing, pricing and buying the right things, at the right price and at the right time in order to deliver a service or product. Effective purchasing can help an organisation to reduce costs, maintain quality and manage the levels of risk to its supply chain. The scale or importance of the item is relative to the level of risk to the business. Missing coffee beans will affect the day’s profits; getting the wrong size of engine for a car could close down the production line.



OPITO and CIPS



For the oil and gas industry with its high levels of risk, the Chartered Institute of Purchasing & Supply (CIPS) is providing training to improve the efficiency and effectiveness of purchasing and supply. OPITO, the focal point for skills, learning and development in the oil and gas industry, undertook a labour market survey of the industry which identified a sector-wide skills shortage. Oil & Gas UK then undertook a supply chain survey. This showed that there is both a current shortage and a likely future need for purchasing and supply chain specialists for the oil and gas industry.

CIPS and OPITO are therefore working together to promote career opportunities and develop specialised training to meet this need. This case study explores the role of purchasing and supply in the oil and gas industry.

The purchasing and supply role

Every business, from an NHS hospital to the biggest brands in the world such as Coca-Cola or McDonalds, needs supplies. Purchasing may involve the day-to-day necessities like photocopier paper, soap and towels for wash rooms or service support for IT equipment. However, the purchasing role also covers high-tech or large scale equipment for major projects such as the building of an aircraft carrier or the Olympic stadium, as well as the skills required to operate it.

Purchasing and supply roles therefore require high levels of skill. CIPS is the professional body which aims to promote the highest standards of excellence in purchasing and supply management across all industries.



It provides these through its professional qualifications programme, focused training and education and by rigorous assessment procedures.

Adding value to the business

Those involved in purchasing and supply are in a position to consider every stage of a business' processes, from raw materials to waste management. This 'helicopter view' can help a procurement manager to spot ways of making efficiencies or opportunities to improve the quality of products or services bought. They can see not just internal impacts, but also what is happening in the external environment and the marketplace. This can help to generate new ideas to add value to the business, identify how it can increase competitive advantage or improve sustainability.

An example of how vital the role is occurred when BP needed to manage the supply chain of emergency goods following the Deepwater Horizon oil spill in the Gulf of Mexico in 2010. The supply chain team had to source everything from mealworms to feed wounded birds, to booms to prevent the oil spreading further, to dispersant materials to remove the oil. The challenges included finding sufficiently large quantities available quickly as well as trying to keep budgets under control.

Supporting innovation



Procurement managers are also involved in researching suppliers in new markets and developing new and innovative procurement methods to improve effectiveness. They also agree and manage service level agreements (SLAs). An SLA is a contract that specifies standards, timings and payments for the supply along with penalties for missing targets. It sets out the responsibilities and expectations for both the business (the buyer) and its suppliers. A key element

of the SLA is ensuring that the price quoted by suppliers will not be subject to change, thus affecting the purchasing budget.

Longer term purchaser and supplier relationships can provide stability and add value to both parties. The purchaser may be able to get the best possible terms and prices or a supplier may 'go the extra mile' for the business in an urgent situation. This type of collaboration builds trust between buyer and supplier, which might enable a just-in-time relationship, where both parties hold minimum stock and so reduce costs.

Purchasing and supply in oil and gas

The oil and gas industry is divided into the 'upstream' and 'downstream' operations. Upstream involves exploring for oil and gas and extracting it safely. The downstream part of the industry is concerned with refining, distribution and sales.



The supply chain

The oil and gas industry has very long supply chains. Many companies may be involved in supplying the materials, components and services at different stages and across the various processes involved in extracting, refining and distributing oil and gas. Procurement becomes even more important in this type of global operation. A company such as BP sources services and supplies from many different countries. These include mechanical and electrical parts, to professional services such as project management or legal expertise for drawing up contracts.

Reliability is a crucial factor in supply, both of quality and timing. If supplies are of poor quality, delivered late or cost more than was agreed, this will affect productivity and profitability. If production is delayed or faulty products need to be scrapped, this can reduce profits. Poor quality inputs could also affect the safety of the process – a major consideration in the oil and gas industry.

For example, to help improve safety and quality of supply, BP is introducing safety performance indicators into contracts of suppliers involved in high-risk activities. Suppliers who do not meet these standards may be removed from contracts. As part of this safety focus, BP is also planning to reduce use of agency staff in procurement roles and boost its in-house expertise in supply chain management.

'Make or buy'

An important decision for many businesses is whether to carry out a particular part of its process itself ('make') or buy in the components or expertise it needs. This decision might depend on, for example, whether the skills and capacity are available in-house; whether there is a need for high security of supply; or whether it is simply cheaper to outsource.

For example, an oil company could choose to rent or own an oil platform. If it rents, its costs are limited to the rental period, with repairs and maintenance the responsibility of the owner. Buying outright might cost more initially but the company has the benefit of the asset. However, it also has the issues and costs of maintenance and ultimately, disposal. Purchasing managers work with operational managers to consider these issues and find the most cost-effective and efficient solution for the business.



Sustainable procurement



Other key factors to consider when choosing a supplier include their ability to respond quickly to changing customer needs and how well they can help towards meeting a business' sustainability goals.

CIPS offers a structured online audit process to help purchasing managers map their organisations' purchasing systems against best practice. This enables them to assess how energy efficient and sustainable their purchasing processes are.

Benefits of sustainable sourcing

Sustainable procurement is a high profile matter for businesses today. It can help to save money, reduce waste, improve competitiveness and build a business' reputation. As part of their sustainability programmes, many oil companies have invested in local transportation networks or built schools. They provide jobs and by sourcing supplies locally help to develop the local economy. The global oil industry has a responsibility to the countries in which it operates to manage its operations in as sustainable way as possible. A purchasing manager might want to consider whether the supplier behaves responsibly, for example, adhering to ethical standards or sourcing raw materials in an ethical way.

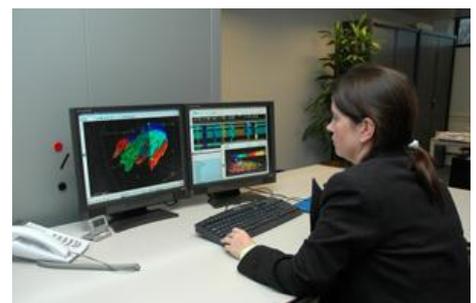
For example, Shell is working with its existing suppliers to implement the Shell Supplier Principles. These set out the minimum standards which Shell suppliers need to meet. These include using energy and natural resources as efficiently as possible to minimise impact on the environment and covering health and safety issues.

Efficiency

Other aspects of sustainable business include managing waste effectively and reducing the company's carbon footprint. This can be improved by choosing suppliers who also take their responsibilities towards environmental impact seriously. For example, Marks & Spencer made £70 million of efficiency savings during 2010/11. Alongside reductions in waste and packaging and increased energy efficiency, the company is working with suppliers to reduce carbon emissions in the supply chain by improving efficiency of deliveries.

Roles and skills

Although engineering and technical roles are crucial in the oil and gas industry, oil companies also require lawyers, accountants, geologists, electricians, plumbers, crane drivers, mechanics, divers and designers. Roles in purchasing and supply cover all levels, from operational such as buyers and store managers, to strategic such as in supply chain analysis or strategic sourcing, so there are opportunities for everyone. Entry levels vary. Many people join oil and gas companies after having worked in other industries. Some young people join the industry straight from school; others after a college or university course. For example, Hannah has a degree in mathematics and economics.



'I wanted a career that would offer variety and challenge. As a purchasing manager I have both. My job has given me a detailed knowledge of different parts of the oil and gas industry, plus a significant amount of responsibility.'

Procurement in action

Graeme is a group procurement and supply chain manager with over 25 years experience in the industry. With an engineering background, he did not originally consider purchasing and supply as a career but got a taste for the challenges of the procurement role when he spent six months in the job as part of his degree.

'The procurement process in oil and gas is complex, with a key reliance on safety. In addition, some of the materials we use in this industry are highly specialised, which can mean long lead times for purchase. However, the engineers or companies needing the materials expect very quick responses, so management and forecasting to anticipate their needs is highly important.'

People involved in purchasing need business knowledge and the ability to analyse markets. CIPS provides six levels of qualifications for the procurement and supply profession across the world. All UK qualifications are Ofqual (the Office of Qualifications and Examinations Regulator) accredited and appear on the Register of Regulated Qualifications. Students may start a CIPS qualification with no entry requirements.

Steve is head of global procurement and supply chain management at Prosafe, a leading owner and operator of oil and gas rigs.

'Procurement is a highly strategic role. The oil and gas industry supports the whole world economy, from the fuel in vehicles to plastic paperclips. My company provides oil companies with accommodation vessels which are like floating hotels. Deliveries might reach a platform only once a week, so every last detail from wi-fi access and toilet paper to all the operational and engineering requirements has to be in place, at the right time, in the right quantity and quality. Young people may not be aware of how interesting it is to work in purchasing and supply chain roles - there is no "standard day". I love it and I believe the job I do makes a difference.'



Muhib is a procurement specialist at BP. He sources both equipment and services and deals with contracts that range in value from £1 million to £60 million. His role includes careful assessment of the effectiveness of each supplier to ensure BP is getting value for money. This is a large responsibility and it may involve deciding whether or not to change supplier. This is a major decision as it carries potential risk to the company and the continuation of its operations.

'Purchasing and supply is a powerful and highly responsible role, dealing with high value contracts. The real satisfaction I get is from seeing what I do make a huge difference. I really enjoy my job and see my long term future career in this industry.'

Conclusion

Well-managed procurement ensures that supplies of the required quality are available at the right time, place and cost. Supply chain managers help to:

- reduce costs and improve profitability – bulk buying can provide economies of scale
- reduce waste by selecting inputs that generate less waste (and also lower costs)
- manage demand, for example, through just-in-time supply
- improve cash flow by securing favourable prices and payment terms
- improve efficiency by making sure suppliers hit deadlines
- improve the competitiveness of the business by seeking out innovative products and services to add value.

In the oil and gas industry, where safety is a central concern, effective management of purchasing and supply is a vital role. Its procurement managers need to have good people skills, sound common sense, commercial and business skills and the ability to communicate appropriately at all levels.

OPITO and CIPS are working together to ensure that the industry has the relevant training and qualifications programmes to meet the long-term needs of the oil and gas industry.

