



Commodity management

As the prices of products and goods remain up in the air, many industry leaders are left scratching their head. Dilip Daswani reports.



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➤ MOST PRODUCERS OF CONSUMER GOODS

and other manufacturing organisations still acquire their commodities in exactly the same way as they procure non-commodity products.

But with prices rising, and every indication that they will continue to do so, commodities have become a much larger part of the average cost structure.

Thus rising prices are also accompanied by unprecedented levels of volatility in commodity values. As a result, corporate earnings are prone to significant fluctuations: fifty percent is not unknown — which puts management jobs on the line. It is no longer prudent to purchase commodities passively as just another link in the supply chain. Instead it requires active management to optimise commodity acquisition and protect earnings.

So what's different about commodities?

According to microeconomic theory, the market of a commodity is one of perfect competition. In other words, the price is 'given' or 'dictated' by the market, a direct opposite of monopoly price theory. The preconditions for perfect competition are the existence of many suppliers and buyers, the absence of preferences towards the product, and perfect market transparency.

From a marketing perspective, a commodity is a good where a differentiation strategy is not possible: one is exactly like another. For example, a barrel of West Texas Intermediate crude oil is no different whether it is being supplied by Party A or Party B.

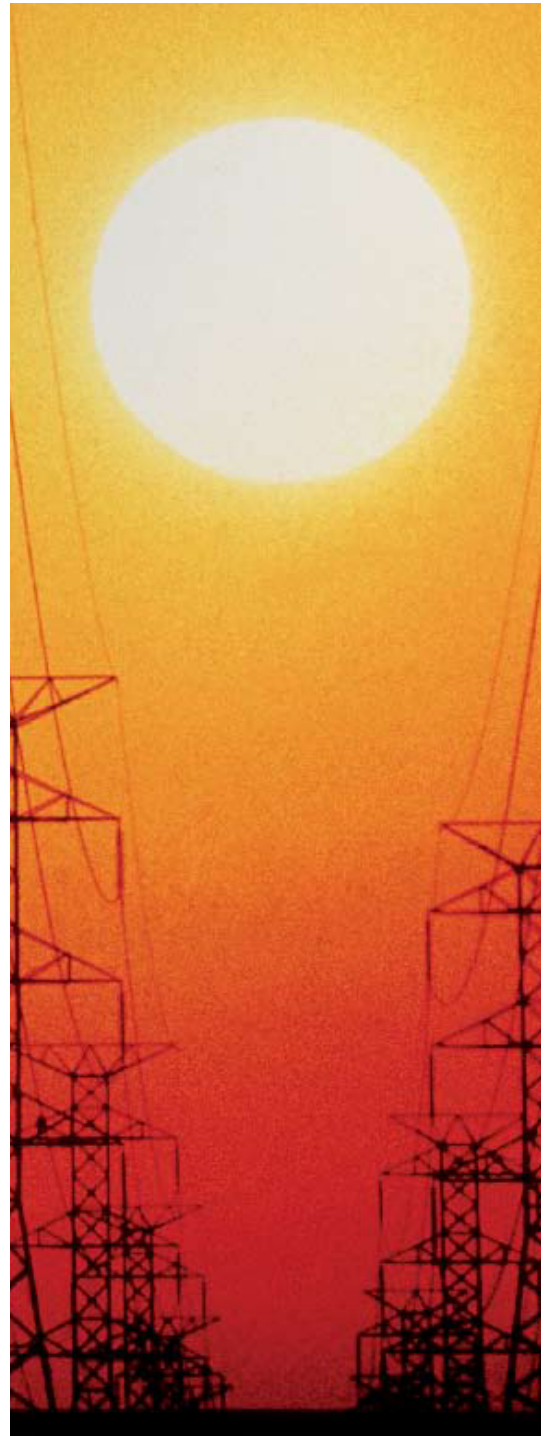
Therefore, in the words of Geoffrey A Moore, it cannot be in the 'core' of one's business. Since it is not a source of competitive advantage, it belongs to the 'context' instead. This is the sense in which we talk about everyday services, for example, car washing becoming a commodity.

Because of this, a more fluid and transparent market is possible only where the price can change from minute to minute.

Pricing of commodities

Real-time price fluctuation of commodities means that the commodity may frequently be purchased at an index price that will be issued at some point in the future by a publication, such as Platts.

This is done to protect both the seller and the buyer from price movements. Commodities are often bought for delivery in the future: it is relatively common for organisations to buy today for delivery in March of next year, for example. Of course, the price of the commodity



may change between the time of purchase and the time of delivery. If it goes up, then the buyer benefits. But the seller is out of money. However, by valuing the commodity against an index that will be published close to the date of delivery this problem is greatly reduced, and both parties get the going price when the commodity is actually delivered.

This raises a series of questions for the buyer. When should you buy at an index or choose a fixed price? What is your risk in each case? Should you buy more than is required for the current manufacturing cycle and store the surplus? Or should you buy just-in-time?

Currently, the typical procurement function within an organisation is not set up to answer these questions. It receives a projection of the raw materials required, including commodities, plus details of when and where they will be needed, based on demand forecasts for the finished product. Based on this projection, the procurement function purchases these commodities in a fashion that limits the cost of carry, i.e. just-in-time. This price is based either on an index, so that they pay the going rate at the time of delivery, or on a fixed price that correlates to market price at the time of purchase.

This approach works perfectly well when commodity prices are stable. Looking at a soda pop manufacturing company, as an example, the necessary raw materials include sugar and aluminium. Both these materials are commodities, because both are bought and sold in a transparent market where prices fluctuate from minute to minute. This particular company is stuck in the traditional procurement mindset and, therefore, looking at projections of final-product demand, places orders for both the sugar and the aluminium to be delivered just-in-time at a price that is based on an index at the time of delivery.

If the price of sugar and aluminium are fairly stable, then the cost of producing a can of soda pop will be approximately the same at the time the order for the commodity was placed and the time the soda pop is produced. The manufacturing organisation can continue to sell the soda pop at the same price in line with their demand projection and can expect to see consistent margins.

However, if the prices of sugar and aluminium are not stable then the organisation can get into a lot of trouble with this approach. If we assume that sugar prices increase by 30 percent between the time of order until time of delivery, and that as a result, the manufacturing organisation's cost for producing a can of soda pop has gone up by 10 percent, the organisation needs to increase the price of the final product in order to preserve margins.

However, this may reduce demand for two reasons. Firstly, consumers may decide to drink less soda pop in general because of the higher prices. Secondly, a competing soda pop vendor has managed the acquisition of the sugar using a market mindset and its cost has not gone up. As a result, consumers may defect to this vendor because, while preserving their margins, they are able to sell at a lower price.

This is complicated further because, of course, the orders for sugar and aluminium were placed based on the demand forecast which, in turn, is derived from the selling price of the soda pop.

Moving away from a procurement mindset and towards a market mindset

So what does it take to move your organisation away from a procurement mindset and towards a market mindset when it

comes to commodities?

Many believe the key is to change the way the procurement performance is measured. In order to do this the organisation needs to be structured in a way that is conducive to such measurement. Simply stated, a separate commodity management function needs to be established.

Once a separate commodity management function has been established, tools to facilitate a trading mindset as well as a means to measure performance are essential. Commodity material requirements should appear to the commodity management function as a short position that is sold at a time-of-delivery index value or as a current market fixed price – or some combination of the two, that is in effect a transfer price between the manufacturing and commodity management function.

This position would then be marked-to-market each day in order to show whether money is being made or lost. The job of the commodity management function is still to deliver the material when manufacturing needs it, but now it is given the flexibility over when to buy, whether to store, and whether to hedge using financial derivatives such as futures, options and swaps. The measure of success would include the mark-to-market P&L, as well as the ability to deliver on time.

Companies looking to move in this direction should be challenging their ERP vendors to provide the tools to enable such a shift. Companies such as SAP have recognised the need for their customers to change their commodity procurement function and have introduced tools to make this transformation possible. Particularly important is the tools' ability to facilitate the interconnection between 'physical' dealing and 'paper' dealing, which is crucial for the overall commodity management process.

From a risk management standpoint, it is equally important that the market mindset is accompanied by oversight of the commodity management function. Therefore, a separate risk management function must be established to ensure that the risk taken on by commodity management is appropriate. For proper oversight, organisations require both tools to measure risk metrics such as VaR, and the means to perform analysis of the profit and loss effects of market movements under normal and stress conditions.

Extending the market mindset beyond raw materials

Handling commodity raw materials with a market mindset is only a first step to full commodity management. The same concepts can be extended to deal with other commodity resources, most notably energy that drives a plant, and transportation fuel and freight. ■

