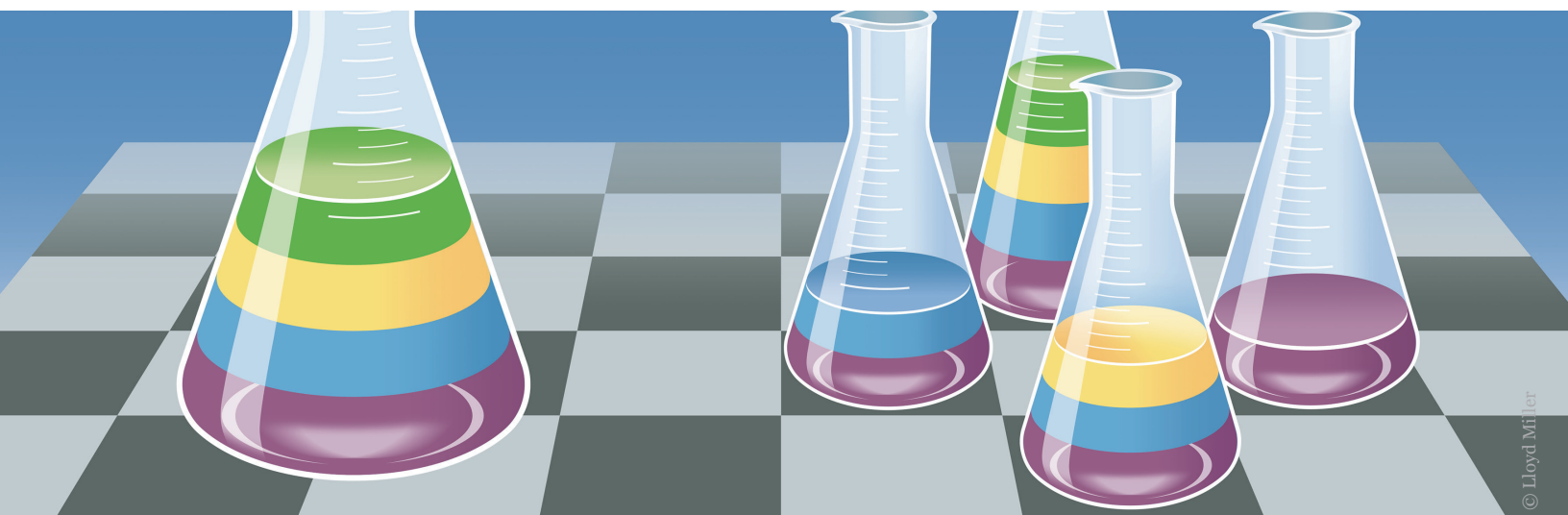


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# Commoditization in chemicals: Time for a marketing and sales response

**Most chemical companies are grappling with increasing commoditization. Rethinking the commercial operating model can help protect margins.**

Jochen Böringer and Theo Jan Simons

Chemical companies are facing a progressively harsher environment as growing segments of the industry are becoming increasingly commoditized. Companies have tried hard to reduce operating costs to help offset this trend, but they have paid less attention to marketing and sales, where expenses have continued to rise. Many companies' commercial operating models are ripe for a rethinking that could help maintain or improve margins. However, this is not a matter that the marketing-and-sales department can fix. It is a strategic issue where company leadership needs to intervene, but taking steps in this direction is proving difficult for many enterprises. Drawing on our

experience in the industry, we offer this article as a thought starter to help chemical company leaders get moving.

## **A changing market landscape**

Increasingly harsh conditions have encroached on much of the global chemical industry over the past two decades. Certainly, the sector has performed well in capital markets since 2000, and a portion of the industry has enjoyed high profits based on advantaged gas feedstock. For the majority of players, however, product ranges have become more comprehensively commoditized, squeezing margins (Exhibit 1).

Companies have mobilized to offset this trend, cutting costs by improving operational performance. But sales and marketing has been largely untouched, and our research shows commercial costs have instead increased.

An analysis of 50 leading global chemical companies found that over the 2004–14 period, the average sales, general, and administrative (SG&A) cost as a percent of revenues rose from 13.4 percent to 14.4 percent, a 10 percentage-point increase. We observed a similar pattern in the evolution of SG&A relative to gross profit.

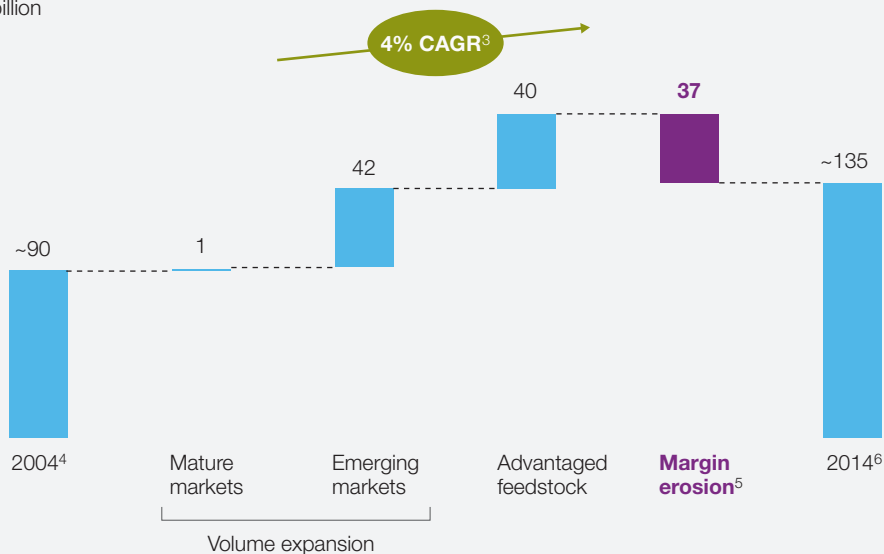
What has been happening? It appears that while their colleagues have been taking a lean approach to operations, the commercial departments have pushed on with

traditional marketing and sales approaches and even added to their expenses. The commoditization trend and new opportunities afforded by digital technologies make this a good time for chemical companies to take the offensive and rethink their marketing and sales operating models.

Let's review why there is more commoditization. Production technology for chemicals has become more broadly available, and there has been a rapid buildup of capacity, particularly in emerging markets. Hand in hand has come a different type of engagement with customers from that of a traditional chemical producer which would have originally developed a chemical to meet its customer's need: instead, products are simply sold on price.

## Exhibit 1 Erosion of margins has provided a significant offset to value creation from volume growth and advantaged feedstocks.

**Chemical-industry value pool<sup>1</sup>**  
EBITDA,<sup>2</sup> \$ billion



<sup>1</sup>Covering 90 products.

<sup>2</sup>Earnings before interest, taxes, depreciation, and amortization.

<sup>3</sup>Compound annual growth rate.

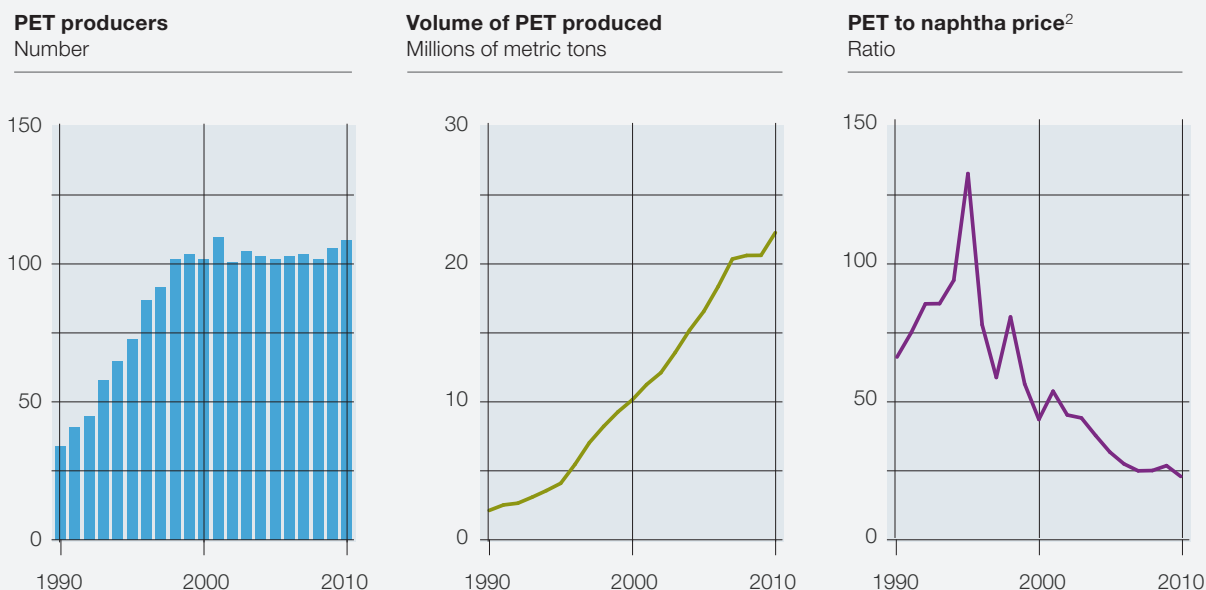
<sup>4</sup>Average of 2003–05.

<sup>5</sup>Primarily margin erosion through product commoditization (especially Asia); netted for >\$4 billion margin improvement in Western Europe.

<sup>6</sup>Average of 2013–15.

Source: ICIS Supply and Demand; IHS; McKinsey analysis

**Exhibit 2 The example of PET<sup>1</sup> shows how rapidly commoditization of a product can progress.**



<sup>1</sup>Polyethylene terephthalate.

<sup>2</sup>Using naphtha as a proxy for PET raw materials.

The number of chemical producers has also increased, despite consolidation in more mature Western markets. Proliferation of producers has tended to encourage capacity additions that have got ahead of market growth, depressing prices and margins. A good example is provided by the evolution of polyethylene terephthalate (PET), which evolved from a specialty chemical to a commodity in less than 15 years (Exhibit 2).

Similar dynamics are evident in other products that have historically shown consistent profitability, including epoxy resins, polycarbonate, purified terephthalic acid (PTA), methylene diphenyl diisocyanate (MDI), toluene diisocyanate (TDI), and titanium dioxide, as well as numerous specialty chemicals (Exhibit 3).

In addition, purchasing departments of customers worldwide have not idly stood by and have become much more professional in their approach. They have

succeeded at pushing for a commoditization of products to help them secure lower prices. Importantly, there is little sign of these trends abating.

### Still using yesterday's model

To understand the state of play of marketing and sales, let's take a look back. Based on their high-margin model of 20 or more years ago, the starting point for many chemical companies has been to make custom grades to lure customers and keep them. This was a logical commercial approach when comfortable margins could support it—even if the quantities were uneconomical and these special grades then complicated inventory management for the producer. Related to this, companies would offer free service support and generous commercial conditions such as free transportation or expedited shipping at no extra charge. But many chemical companies no longer have the margins to pay for this level of service. In the area of service support,

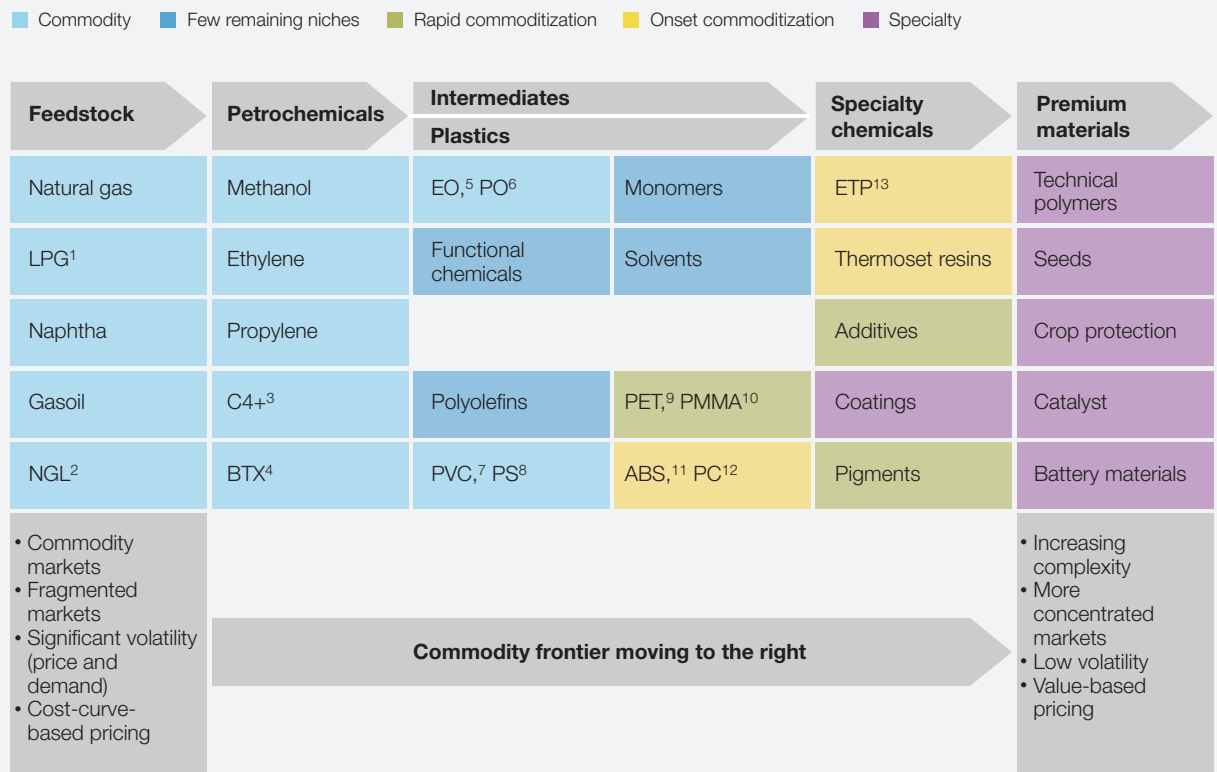
the reality is that many users have become familiar with the products they use and have little need for service support.

Still, many chemical companies have some psychological hurdles to overcome before they can change course. With their long traditions of innovation and technological sophistication, many companies find it hard to accept that their product lines are becoming commodities: we

have observed that using the word is a taboo in some places, and this state of denial makes it hard to take appropriate action.

Second, the commoditization trend that most chemical companies confront has usually occurred gradually. The process of commoditization is slow and steady, and while sellers can continue to hope for a return to the good times, the commoditization trend is unremitting,

### Exhibit 3 The commodity frontier continues to move to the right.



<sup>1</sup>Liquefied petroleum gas.

<sup>2</sup>Natural gas liquids.

<sup>3</sup>Butadiene, butylenes.

<sup>4</sup>Benzene, toluene, xylene.

<sup>5</sup>Ethylene oxide.

<sup>6</sup>Propylene oxide.

<sup>7</sup>Polyvinyl chloride.

<sup>8</sup>Polystyrene.

<sup>9</sup>Polyethylene terephthalate.

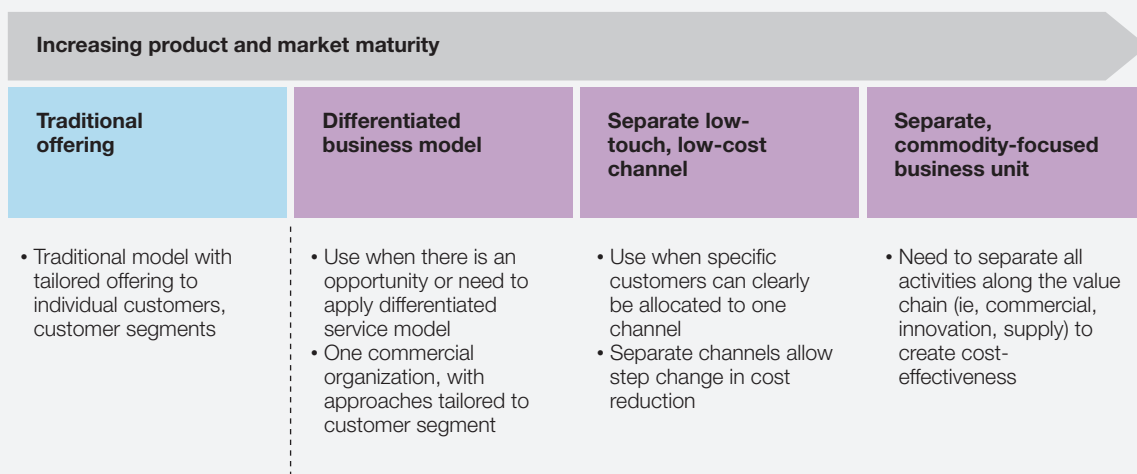
<sup>10</sup>Polymethyl methacrylate.

<sup>11</sup>Acrylonitrile butadiene styrene.

<sup>12</sup>Polycarbonate.

<sup>13</sup>Engineering thermoplastics.

**Exhibit 4 Different approaches are available to serve different commercial requirements.**



even in traditional specialty segments like pigments. Minor annual cost cutting and tinkering with the commercial structure is ineffective: staying ahead of the curve demands a new way of thinking.

### Rethinking commercial models to match market realities

The new market reality requires an overhaul of models for marketing and sales. Companies that are able to align their commercial business models with the market environment can capture a substantial payback. We have observed that the right commercial operating model can yield a 2 to 8 percent earnings before interest, taxes, depreciation, and amortization (EBITDA) improvement through a combination of commercial levers and related reduction of complexity and costs on the supply side in manufacturing, supply chain, and procurement.

Here are four commercial structures that we find match the requirements of most chemical companies' situations: the "heritage" approach, which can still create value when deployed appropriately, and three alternative structures (Exhibit 4).

### Traditional offering

Where margins remain substantial and new application development with customers presents clear value-creation potential, a "high touch" commercial model is still going to be a strength. This approach works well where customers believe the product offers unique, high-value properties and understand that the producer continues to provide technical support and product-development support based on the margins these prices generate. Where many companies go wrong, however, is in failing to limit this commercial model to customers that pay the premium prices that can support it—and they could gain from instead embracing one of the following three alternative approaches.

### A low-cost backbone with gradated overlays of service that differentiate by customer segment

Clearly, much of the industry's portfolio has moved well beyond this point, to where products are in the semicommodity category—in other words, where they have some commodity characteristics. The most important indications of potential commoditization are a wide range of producers, particularly ones from low-cost countries; decreasing technology barriers

to switching suppliers (such as dependence on suppliers for technical support); and increasing transparency about pricing.

Under this structure, companies build a commercial model that has a low-cost backbone providing essential services and then have the possibility of adding service elements that can be provided to customer segments that pay higher prices. Customers are segmented depending on their value to the supplier. The minimum offering provides standardized service, automated as much as possible to reduce costs. Sales are made only with standard delivery times and payment terms, minimum order sizes, and no product customization. This type of service is then differentiated for higher-value customers—for example, by offering on-demand personal technical support, product and batch customization, and key-account relationship management by the chemical supplier. Big data and advanced analytics will increasingly help to better understand what services customers really need and are willing to pay for.

#### Creating a low-touch, low-cost channel

For businesses where customers are no longer willing to pay for service, a different model is required. Faced with this type of challenge, a number of companies have innovated. One successful attempt has been Dow Corning's Xiameter, launched in 2002 as an Internet-enabled low-cost sales channel that completely unbundled customer service from the commercial process.

Customers are purchasing online, sticking to a limited number of grades, and in fixed volumes. The channel design is optimized for low cost, using digital technologies to enforce the required business rules.

We expect that this model will experience rapid adoption as digitally enabled, low-touch, low-cost channels increasingly provide a level of customer experience similar to traditional, high-cost models. Some producers are already moving to a “no touch” approach for a substantial portion of their sales, where ordering and warehouses are automated to the point that some sales require no human intervention.

#### Setting up a separate commodity business line or unit

When formerly specialty businesses face such intense competitive pressure that having the lowest-possible cost model becomes essential for survival, a completely different commercial model may become necessary. The model is built around a separate commodity-focused business unit. Setting up a separate business unit may be necessary because many chemical companies have trouble managing a no-frills approach alongside higher-touch approaches: most companies find that the higher-touch approaches bleed into the no-frills model, undermining its cost competitiveness. The separate unit should be established with a stand-alone organizational structure, often with a different set of production assets aligned with the low-cost model. Experience shows that through establishing separate business units, return-on-sales margin improvements of 5 to 10 percent are possible, combining productivity gains from the commercial area as well as from innovation and operations functions.



Commoditization, followed by lower margins, is set to continue. Companies that have hesitated to move should now start to take appropriate steps, including making use of new digital capabilities that enable the delivery of tailored customer experiences with an improved cost profile. The rewards for making these kinds of bold moves can be substantial: as noted, adopting the right commercial operating model and related cost and complexity reductions on the supply side can yield a 2 to 8 percent EBITDA improvement. What we have set out above does not pretend to be an exhaustive look at this important topic, but, instead, intends to help get chemical-company leaders started on identifying the right path in their marketing-and-sales strategy. ■

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