Future of Chemicals Part IV
New Operating Models
Facing a Challenging Chemical Industry Landscape
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In the past few decades, the chemical industry landscape has changed dramatically: The few huge Western chemical companies that led in revenue and profits are no longer the industry’s powerhouses. Instead, after a period of startups, mergers and acquisitions, divestitures, and downsizings, what remains today is a multitude of companies of different sizes and specialties, each focusing on different segments of the chemical industry than before, and competing against rivals of different sizes and capabilities in disparate geographic regions.

To succeed in this new business landscape, chemical companies must rebalance their operating models. They need to become more agile, ready to reach out to numerous types of customers with multiple and varied products, and be able to successfully outpace a large and more diversified set of competitors. Relying on scale and cost cuts is not enough anymore to succeed in this much more challenging environment. Depending on the markets a company chooses to operate in, success is increasingly linked to the depth of a company’s relationships with its customers, the strength of its governance system, and its risk management capabilities.

The mix of design parameters to align a company’s operating model with its strategy and operations has never been more complex. Going forward, most chemical companies must expect to deploy a varied group of business models simultaneously. Managing multiple operating principles in parallel—principles that will likely be in constant flux—will be the major test that most chemical companies are likely to face. Effective handling of such complexity will require more than mere reliance on classical organizational design. In addition to lines, boxes, and hierarchies, companies will need to consciously leverage and mobilize the informal organization if they want to achieve a leading industry position.
A TRANSFORMED INDUSTRY

It’s been a trying period for Western chemical companies, not just during the past year but for a decade or more. The global recession and the severe slump in demand for chemicals may be the latest bit of bad news, but for quite some time, established chemical companies have been buffeted by these factors:

- Increasingly stiff competition from upstart Middle Eastern companies and Asian outfits that enjoy proximity to fast-growing markets and can leverage feedstock and factor advantages
- Shrinking margins as customers and suppliers consolidate, leaving specialty players squeezed in the middle
- Rapid commoditization of specialty chemicals
- Aging product portfolios and fewer breakthrough innovations
- Strong volatility of raw material prices

More than likely, the future holds further transformation for the chemical industry, an inevitable outgrowth of substantial restructuring through mergers, acquisitions, spin-offs, divestitures, and startups still under way.

Perhaps most troubling of all, chemical companies have had to put so much effort into adjusting the structure of their businesses for this radically changing environment that they have lacked sufficient time and resources to develop coherent operating models—which we define as the combination of organizational structure, processes and systems, management system, and people capabilities (see Exhibit 1). The misalignment of old, incoherent models with market developments will increasingly hamstring those companies that have yet to upgrade/reformulate/redefine their model as the industry’s new realities continue to unfold.

Exhibit 1
Operating Model Components

Source: Booz & Company
In the 1990s, the industry was dominated by huge life-sciences companies—Bayer, Hoechst, DuPont, and the like—whose vast product portfolios spanned oil, gas, pharmaceuticals, chemicals, and consumer products. These massive conglomerates were typically controlled by centralized organizations, marked by powerful managers in headquarters who oversaw the operations of the entire company but were somewhat detached from the business. The notion of shared services or strong business units was not yet in favor.

That model began to break down as many of the integrated majors saw better opportunities in specialty chemicals and shifted their emphasis downstream. The strategy worked: There was a large market and margins were generally better than for commodity-type products. In order to further boost profitability, companies aimed at spreading scale throughout the organization, mostly through shared or outsourced administrative services. The emphasis on scale began with transactional shared services like accounts receivable, accounts payable, and travel management, and subsequently extended into expert services, such as financial reporting, cost accounting, and procurement. In fact, many chemical companies became so enamored of scale that they ultimately downplayed critical skills, such as customer intimacy, to save money—even though many of these skills are particularly important in the specialty chemicals arena.

In our view, this unrelenting search for scale and cost cuts is more albatross than panacea, particularly in today’s cutthroat and fast-paced global chemical environment. For one thing, the real cost advantages from bundling activities into shared services are often less than they appear at first sight. And examined closely, scale in itself is just not enough anymore; it may even work against implementing the most advantageous operating models for an organization. In short, the cost of focusing too slavishly on scale in these times is frequently greater than the savings it generates.
The often-hidden high cost of scale can be broken down into three categories:

1) **Loss in customer intimacy**
Global business units with standard-
ized processes make it much more dif-
ficult for managers to respond to the
particular requirements and critical
success factors of individual regions.
R&D activities suffer similarly, as
they tend to be parked near corpo-
rate headquarters—usually in mature
Western markets, where growth
potential is limited—at a significant
distance from emerging regions where
future profitability lies. Outsourced
call centers may also be a drag on
customer relationships: In many cases
they compel customers to dial India
to resolve potential invoicing issues
rather than talk directly to their local
sales rep, exchanging personal
relationships for transactional ones
and endangering customer loyalty.

2) **Loss of accountability**
As shared services and corporate
functions—the by-products of scale—
proliferate, holding business units
responsible for the performance of
their departments has become much
more difficult. After all, with little
control over, for example, recruiting
or accounts payable, business units
cannot be blamed for a dried-up talent
pipeline or customers who defect to
the competition because their invoices
are continually inaccurate. Moreover,
when corporate functions develop
strategies for shared services that often
don’t even report to them, strategy
is separated from execution. As a
result, it is difficult to pinpoint who is
responsible for the quality of shared
services. And because the corporate
core is detached from day-to-day
operations in the shared services
and business units, it is often unable
to create a strategy that meets the
particular needs of the various busi-
nesses within the company. Corporate
executives may end up developing a
value-based training strategy for a
commoditizing business.

3) **Increased risk**
Seeking cost cuts, some companies
have eliminated or trimmed important
oversight functions, like risk manage-
ment and audits, because they are
viewed as overhead and not profit-
generating by themselves. This can be
a huge mistake. As evidence, a couple
of years ago, one of the German DAX
companies obsessed with cutting
expenses slashed corporate supervi-
sion of business unit activities only
to find that before long its business
units and subsidiaries began to offer
prospective clients kickbacks for
contracts. That led to a comprehen-
sive settlement in which the company
agreed to pay hefty fines, forgo World
Bank contract bids for two years, and
clean up its procurement practices.

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To mitigate these substantial costs of scale, chemical companies should address each of these shortfalls by taking the following steps:

1) Increase customer intimacy
Damage to customer relations, both internal and external, can jeopardize corporate performance significantly, particularly in a specialty environment where customer intimacy is critical. Shared services can play a role in the modern chemical organization, but they must be set up differently to improve rather than diminish links to customers. One possible approach: Replace globally bundled services with regional or even country-specific activities. That’s the strategy BASF has implemented by utilizing pan-European HR and F&A shared-service centers for transactional activities, reaching out more locally for specific services through dedicated business centers in each of its most important countries.

At the business unit level too, creating better and more permanent direct connections to end markets will be critical to support growth ambitions. There are many ways to achieve this—establishing regional sales coordination, assigning a lead business unit to handle the largest accounts, designating key account managers—but whichever way is chosen, it is essential that it carries the imprimatur of a decentralized organization. Without that, customer intimacy—necessary in fighting commoditization—will be weakened. However, with a decentralized sales organization, companies face another challenge: how to serve global customers with the same prices and same conditions of sale in different regions around the world. In order to keep these large customers satisfied, some global account management must still be available to balance the more local sales efforts.

2) Strengthen accountability
Adjusting the interface between shared services and business units is often sufficient to greatly improve accountability. Typically, strategic business unit managers have little impact on the effectiveness of global or regional shared-service centers. As a result, performance metrics for business unit heads must be modified, ensuring that these managers are measured only against factors they can influence; at the same time, business unit chiefs must be given as much control as possible over the types and quantities of shared services they use.

3) Maintain a focus on risk management
Risk management is the area where corporate is most needed. To avoid ethical and environmental lapses that damage the entire company, chemical companies should appoint a C-suite executive to establish and oversee common standards for business units,
as well as to identify and manage potentially dangerous activities that could threaten the corporate brand image, profits, or the board of directors. Increasingly, this C-suite executive will have to grapple with environmental issues and sustainability strategies involving new global greenhouse gas rules, customer green-product preferences, energy choices, and resource scarcity.

Scale is still important, but there must be a sound balance between it and other factors influencing operating model design, with the goal of bolstering customer intimacy, strengthening accountability, and managing risk.

Of course, the importance of scale in designing the operating model depends on the intended value chain positioning. For integrated majors, scale will continue to be a primary focus; however, additional design parameters like customer intimacy will grow in importance as companies gradually move downstream. For example, majors that want to become big players in performance chemicals might have to develop a higher degree of technical marketing and application know-how in order to effectively serve customers with unique and complicated product requirements. On the other hand, many specialty firms recognize that by pruning their product portfolio in order to reduce complexity—a classical “commodity-type” or scale move—they can dramatically improve delivery times and limit the amount of resources spent on developing an unusually high level of customer intimacy.

Thus, scale won’t become insignificant and global business units will not cease to exist, at least for some firms. But for certain players, a regional structure may be the better bet, and would not entail loss of their scale benefits. Modern chemical companies can build a thriving business on best-practice sharing at the business unit level and by creating centers of excellence that support asset optimization, for example, as well as by developing regional expertise services to handle activities such as raw material pricing and procurement. By placing these services above the business unit level, the substantial knowledge base and skills the company possesses are available to multiple BUs, allowing significant risk mitigation with effective scale as a by-product.
COMPLEXITY AND BEYOND

As the organization becomes more customer focused, complexity will increase. For example, key accounts may be the target of two different sales groups within an organization, and nimbly balancing the differences between a local business unit and a global key account organization can be challenging. As a result, choosing the appropriate operating model that efficiently addresses a company’s disparate operational needs is a pivotal task. Smaller, streamlined companies will be able to deftly focus their operating models on their limited niches, whereas larger companies with many different market sectors to consider could potentially suffer from having operating models that are too generic for specific segments.

Although this is a real concern, it does not mean that traditional chemical industry players must split into smaller, specialized companies to survive. Size does have advantages: increased scale (when scale is desirable), the ability to spread risk across a broad organization, greater resources to earmark for innovation and product customization, and a wider array of products for global customers, among other things. However, to compete with more nimble rivals, most chemical companies will have to become hydra-headed organizations. While tamping down complexity, they will be compelled to operate many business models simultaneously to manage global and regional as well as commodity and specialty businesses.

Success lies in working from market needs back to clearly define the specific operational criteria to achieve profitability and growth in each business sector or global market. It is important not to be lured into merely repeating prior approaches, which may not translate well in new or different markets. For example, a specialty chemical company that tries to sell commodity products using its specialty business model will learn quickly that its products are too expensive and not aptly targeted at the customers it must reach. In addition, constantly reviewing whether business imperatives have changed and whether operating models need to be adapted is critical.

Dow Corning illustrates well a company that has skillfully adopted a lucrative approach to running multiple business models. The company demonstrated the power of a customer-needs analysis with the launch a few years ago of Xiameter, a successful, low-overhead e-commerce site targeted at customers who sought a simple, inexpensive way to buy standard silicones. Meanwhile, Dow Corning customers with more complex product sales support requirements pay a premium for higher-value services and customized products.
At times, multiple business models may not be a viable option, and companies instead should consider divesting some operations. There are many reasons why divestiture could be the right answer: The unit doesn’t leverage the same capabilities as the rest of the business, profitability has declined, there is too much operational complexity, acquirers are willing to pay a premium for a business unit, internal synergies have faded, or the effort to run business models in parallel is simply not justified anymore.

Indeed, given the dynamic market we anticipate in the future, portfolio management will become an essential capability for chemical companies. Corporate managers will have to closely monitor the health of each of the company’s businesses as well as potential acquisitions, which will likely be smaller in deal size but occur more frequently than in the past. In fact, while integrating a business, companies will already need to have in mind the possibility that it will be divested at a later stage; as a result, businesses will often remain as independent as possible and be integrated only in those areas that are necessary for achieving cost or revenue synergies. Integrating newly acquired businesses in this way and carving out businesses that are ready for divestiture will thus become a core capability, especially for the larger chemical companies. In short, adding and subtracting businesses will resemble a “plug and play” exercise.

The need to manage multiple business models is only one example of ever-increasing complexity. Equally challenging is the effective management of the organization’s talent pool. As the global chemical footprint shifts toward emerging markets for future growth, workforce and capability planning will become vital to prevent a shortfall in critical know-how. Effective time to market will depend on having well-positioned research or application development centers, technical marketing know-how, and skilled local sales centers. Increasingly, the decision to outsource a part of the business will be driven more by whether the firm lacks in-house capabilities than by cost motives.

And as emerging markets are opened, cultural diversity will increase. Company values will have to be defined to ensure that newly recruited and veteran employees alike gather behind the same firm-wide mission or brand. Among these values, which have generally received scant attention in the past, flexibility will be paramount. This encompasses relationships with other cultures, values, and backgrounds as well as the openness to move between departments, functions, geographies, and even companies as business models and exchanges between global and local business units multiply.

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In a Nutshell: Changes to the Future Operating Model

Operating models are not one-size-fits-all. They vary depending on a company’s growth strategy, markets, and the nature of the competition. There are some general trends in developing new operating models that most companies should consider:

Revisiting scale

- Rebalance the need for scale advantages with the need for customer proximity, clear accountabilities, and strong risk management
- Weed out inefficiencies and lack of local control over shared services by considering regionally rather than globally bundled services and give business units sufficient control over the services they use
- Consider centers of excellence (e.g., for asset optimization) and regional expertise services (e.g., for procurement) rather than global business units in order to leverage scale advantages
- Establish strong risk management and sustainability departments to manage the increasing risk patterns in a globalizing world

Handling increased complexity

- Build capabilities in managing multiple business models in parallel if having those multiple businesses is key for success
- Strengthen portfolio management capabilities
- Build flexible structures to account for new forms of innovation
- Effectively manage the company’s talent pool, which will become increasingly critical for success in global and just-in-time economies
- Build a global and flexible company culture

Mobilizing the informal organization

- Actively leverage the informal organization to complement the formal one
- Provide communities with user-friendly tools and management attention

The face of innovation is going to change as well. Intense collaboration with end-market customers at the initial stages of product and service offering development will become an important source of innovation and in time replace the process-oriented innovation efforts so popular in the chemical industry over the past decade. To support a partnership with customers for new products and services, skill sets and talents of employees will have to be significantly improved and companies will have to seek out and attract workers with the potential talent to fit into such an innovation scheme. This new form of innovation will require significant organizational flexibility; it will have to be encouraged through ideation incubation programs embedded in the overall business that foster new product development and properly monitor corresponding capex projects prior to defining their natural home.
As business models multiply, organizational complexity is likely to increase and to breed new inefficiencies and operational waste. Redesigned practices and standards will help to combat some of these problems, but they will fail to provide the full response. Typically, common sense will be needed: Employees will have to form alliances with each other outside of traditional organizational boundaries, allowing the so-called informal organization (the relationships within the company not choreographed or circumscribed by the organization chart) to mitigate any unintended deficiencies in the formal operating model. For example, a maintenance person may inform the supply chain manager during a birthday party about an upcoming shutdown that would require building up inventory.

Informal organizations exist in every company, but out of neglect their potential often goes untapped. To overcome this, chemical companies should design the parameters of these ad hoc relationships, putting the
organization in a position to better leverage them. An operating model design simply cannot contain every line, box, job description, role, and responsibility in the organization; what’s left out will likely be addressed by the informal organization. Gaining better control over that aspect of the business is a huge challenge in an increasingly international, multicultural setting—but it is well worth the effort.

Paradoxically, the informal organization’s primary value lies in how well it complements the formal organization. Like their more formal counterparts, informal organizations consist of communities of employees, albeit originating through self-selection. This process of community development can be guided far more than it is currently. To do so, companies must examine their formal operating model to unveil its drawbacks—for example, the functionally structured organization may fail to support end-to-end customer processes particularly well. The informal organization can be mobilized to fill this shortcoming—that is, to allow and stimulate cross-functional communications and knowledge development. Such communities can be further strengthened with easily accessible and user-friendly IT environments, such as social networks like Facebook. Positive management attention can signal that informal initiatives that attempt to ameliorate corporate deficiencies are appreciated, are an integral part of an employee’s responsibilities, and ultimately can improve the course of a career.

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Chemical companies are facing a severe organizational challenge even as their industry continues to radically change. Operating models have failed to keep up with shifting competitive realities, which have buffeted the industry for more than a decade and promise to accelerate in the coming years. The basic organizational structures—business units, shared services, and corporate core—will remain relatively the same, but in order to succeed, chemical companies will be forced to turn away from an excessive focus on scale and cost cutting and instead target better relationships with customers, stronger accountability, and risk reduction in line with their position in the value chain.

The ever-increasing complexity of the market and appearance of focused competitors ideally positioned to win in well-defined market niches will require many chemical companies to run multiple business models in parallel. Implementing those numerous business models within the organization will be a challenge. In addition, shifting talent pools and cultural diversity will increasingly occupy the attention of corporate governance and management.

More than lines and boxes, process flows, performance metrics, responsibility assignment schemes, and job descriptions, new operating models will be far more nuanced. They will have to address the need for thriving chemical companies to establish a more complementary interplay between controlling the formal organization and guiding the informal one.

CONCLUSION

KEY HIGHLIGHTS

- The chemical industry landscape has been radically altered in the past few decades and this period of tumult will continue well into the future.
- Focusing on scale and cost cuts is not sufficient to succeed in this environment.
- New operating models are needed that make chemical companies more flexible and customer-centric as well as improve their governance and risk management.
- These operating models must be optimized to manage multiple operating approaches in multiple markets.

The chemical industry landscape has been radically altered in the past few decades and this period of tumult will continue well into the future. Focusing on scale and cost cuts is not sufficient to succeed in this environment. New operating models are needed that make chemical companies more flexible and customer-centric as well as improve their governance and risk management. These operating models must be optimized to manage multiple operating approaches in multiple markets.
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