

strategy&

***Chemicals
industry***

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**Growth strategies
for an uncertain
environment**



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Executive summary



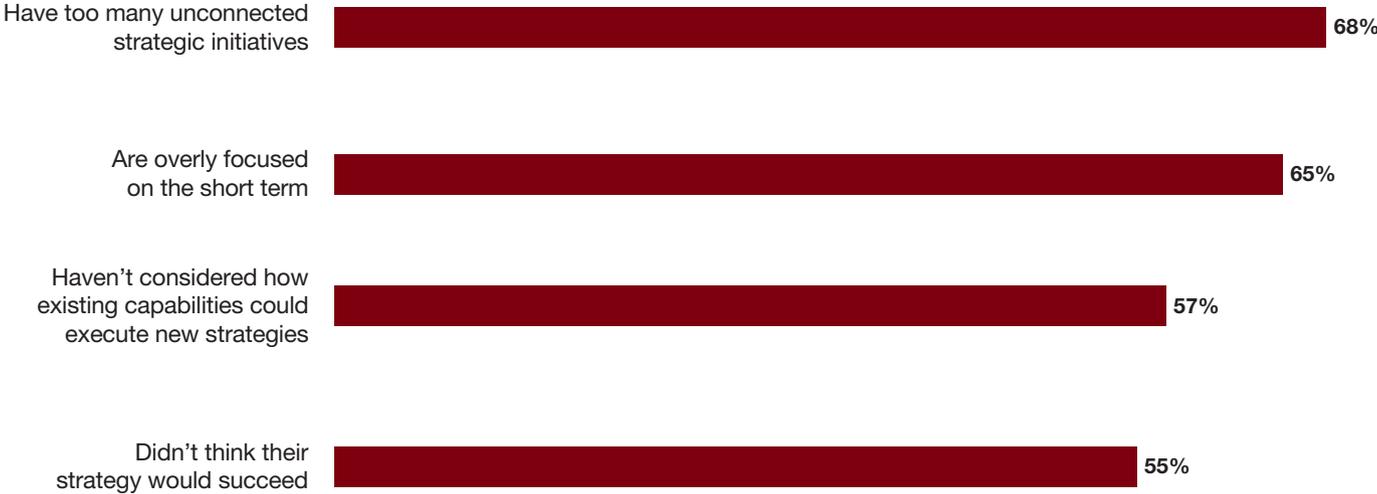
An intriguing if disjointed conclusion for the chemicals industry emerged from [PwC's 2016 Global CEO Survey](#). In the survey, 72 percent of chemicals company CEOs said there were more opportunities for growth than was the case three years earlier. Their optimism is well founded. Changes in technology, regulations, and consumer preferences in developed and emerging markets are opening new prospects for sales and profits. In the chemicals industry, digitization is beginning to allow companies to offer a wider range of new solutions that ultimately could change the industry ecosystem and relationships between chemicals companies and their customers. Digitization also helps companies achieve new levels of efficiency and effectiveness.

But this optimism should be tempered: In our ongoing surveys with senior executives from around the globe, 68 percent reported having too many unconnected strategic initiatives; 65 percent said they were overly focused on the short term; 55 percent said they didn't think their strategy would succeed; and 57 percent said they didn't even consider how their existing capabilities could execute new strategies (*see Exhibit 1, next page*).

This discouraging picture is particularly troubling in an industry where product commoditization is speeding up, putting more pressure on margins; competition is rising quickly from emerging markets; digitization is compelling spending on innovation and R&D while cost efficiency is a priority; and the changing mix of feedstock toward light feeds and new natural raw materials is forcing companies to manage more complex and regional supply chains. Given these difficult conditions, instead of chasing growth in a random fashion with fractured strategies, chemicals companies must ask two fundamental questions: "How should we create value in a way that others cannot?" and "What few capabilities will allow us to do so better than anyone else?" Taken together, these questions lead to an even larger one: "Who do we want to be in the future?"

Exhibit 1

Many senior executives report their companies lack a coherent strategy



Source: PwC Strategy& surveys with senior executives from around the world in many industries

These questions place a company's distinctive capabilities at the center of everything it does. At their best, these capabilities are bespoke combinations of processes, tools and systems, technologies, knowledge, skills, and organizational structures that competitors cannot easily copy; therefore, these capabilities should provide a sustainable advantage for the company that has them.

Moreover, these capabilities compel coherence, which in this context means alignment between a strong value proposition and a system of distinctive capabilities. All of our research confirms that companies with coherent strategies generate stronger financial results. In a [Strategy& global survey](#) of more than 4,400 senior executives, respondents from coherent organizations were three times as likely to say that their companies grew faster than the market, compared with respondents from incoherent companies. And they were 2.5 times as likely to say that their companies were more profitable than the industry average.

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Coherent companies follow five acts

In researching successful companies, we have found that coherent companies follow five acts of unconventional leadership.

1. Commit to an identity

One of the most important decisions you can make is to define your company's identity — that is, the value proposition that you offer customers, the capabilities that enable you to deliver that value proposition, and the line of products and services central to your business. The value proposition may be hard to pinpoint at first, because it may be tempting to think too broadly; for example, you may want to simply say that you produce a category of specialty chemicals with a particular source or customer base. But that isn't distinctive enough to stand out in the marketplace.

A truly distinctive value proposition looks more like what Japanese chemicals company Toray Industries has undertaken. For nearly four decades, Toray has focused primarily on the development of carbon fiber, now a highly desirable organic and renewable material known for its stiffness, strength, low weight, chemical resistance, and tolerance for high temperatures. Toray's value proposition is based on offering customers specialized, high-quality products and product support for applications in a variety of industry sectors, including aerospace, sporting goods, and clothing. The company has built a set of differentiating capabilities that allow it to deliver on that value promise, including agile mass manufacturing to produce specialized products for specific customer needs and products in bulk for high-volume, less-differentiated businesses, such as textiles; rapid design-to-market production for customized applications; and a deep carbon-fiber knowledge base it can draw upon to advise and direct customers. Toray has used these capabilities to penetrate an increasing number of industries, and more recently has acquired U.S.-based Zoltek Companies, further expanding its North American presence and making a stronger play in markets for wind-turbine blades and auto parts.

To commit to an identity, begin by assessing the market. Learn the major trends and the important ways in which value is going to be created during the next five to 10 years. And, crucially, understand which capabilities will be required to excel at each of those value propositions. In parallel, identify your existing strengths and the capabilities that you could realistically build or acquire. On the basis of this assessment, you should be able to determine the value proposition that could give your company a right to win in the chosen market. This analytic process will help you define your new, more focused identity and will also have important consequences for your existing products and services. If some of those products and services don't fit — for example, if your distinctive capabilities are all oriented toward petrochemicals but you have a line of consumer-oriented products as well — you may have to consider divesting the ones that do not fit, thus eliminating a drain on time, attention, and resources.

Make no mistake: Committing to an identity does not mean resisting change when the market moves in a completely different direction. Winning companies continuously evolve their capabilities to better address shifting customer needs. But they do so in a well-thought-out way rather than reactively chasing market trends without having the capabilities to back up their decisions.

A capabilities-driven strategy in chemicals need not favor only narrow mixes of products with a single customer base. Many capabilities can apply to a diverse group of products. For example, a strong position in a set of similar chemical formulations can be parlayed into a winning marketplace presence in different customer segments; in fact, a single formulation may be used in personal care and process chemicals. Also, large companies may be able to develop more than one way to play depending on their underlying capabilities systems, because they have sufficient scale to uncover varied areas of potential profitability. In this case, however, it is critical for integrated corporations or companies with a diverse portfolio to define how the company's way to play is adding value to its businesses and what key capabilities it provides that help the individual businesses better compete in their respective markets. Chemicals giant BASF stands out as a good illustration. The company's capabilities in science-based R&D, management of "Verbund," sustainability, and digitization are spread across its diverse portfolio of businesses because corporate-wide investments add more value and can be significantly more efficient.

2. Translate the strategic into the everyday

This second act requires you to blueprint, build, and scale up the distinctive capabilities that are at the heart of your identity. The process

A capabilities-driven strategy in chemicals need not favor only narrow portfolios.

of deliberately building these capabilities requires precision about how these capabilities create value, both individually and as a system. The blueprint that you start with defines why the capability is valuable, how it is different from what you have today, and what is required to make it work (in terms of processes, systems, skills, etc.). It also includes a business case. Leadership throughout the company will then be accountable for building these capabilities and refining them. This will involve bringing together R&D, operations, sales, marketing, procurement, and IT to collectively focus on improving and innovating the way you deliver value to your customers. In some cases, a merger or an acquisition may be an appropriate option for building a capability because the organization does not have the skills, culture, or structure to develop the capability organically.

Consider Switzerland-based Lonza Group. Throughout its long history, the company has focused on, in its own words, “satisfying both fundamental and emerging needs of humans.” In recent decades, that has positioned Lonza as a company whose most critical capabilities combine biotech expertise with chemical know-how. Building on these capabilities, Lonza develops products for a wide range of areas, including disease prevention and treatment, clean water, nutrition, food synthesis, and advanced materials. This provides a broad swath of market sectors to target — as varied as biologics, cosmetics, shampoos, agriculture, and paints. To develop distinctive innovation capabilities that span chemistry and life sciences, and that could consistently create winning products in all these realms, Lonza has invested heavily in developing the skills, practices, and systems that support these capabilities across the organization

3. Put your culture to work

Your company’s culture — its informal relationships and ways of thinking and acting — can be an inherently positive force. Coherent companies identify traits and behaviors that exemplify the type of organization they want to be and that are required to excel at their value proposition and capabilities system. They promote these behaviors regularly. They make sure that the traits and behaviors are reinforced in practices and incentives. People within the company who naturally understand the type of behavior that is required are used as “multipliers” to help others do the same thing. Cultivate those leaders within your company, no matter what their level in the hierarchy, because they will be essential to your cultural progress.

For instance, Ineos, a low-cost provider of basic chemicals and polymers, has an entrepreneurial culture in which local sales and operations people may make major decisions on their own to support

a lean, localized business model that can turn a profit on discounted products and services. The company identifies staff throughout the organization who feel comfortable in autonomous environments and trains them in decision-making skills as well as the value of local decision making to the organization. These staff members, in turn, spread this knowledge in their regions, helping scale the company's emphasis on managing independently throughout the organization.

4. Cut costs to grow stronger

Building distinctive capabilities is an expensive endeavor. But you can free up the required capital by aggressively reducing expenses in noncritical areas. This way you can make sure the majority of your expense budget is invested in differentiating capabilities.

To be sure, reducing cost in noncritical areas is often difficult, especially for companies that have already cut back their expenses and staff in multiple rounds of cost cutting. But when you do it the right way — by redirecting costs from basic capabilities to differentiating capabilities — it is much easier to make the case for change to the organization and gain the hearts and minds of the people involved. In this process, companies need to challenge not only *how* they do things, but also *what* they do and *where* they do it. Nothing should be funded simply because it appeared in last year's budget. Treat every cost as an investment, as a way to reinforce what truly matters to your company's identity. Some activities will be distinctive and deserve more investment. Others will be standardized: You need them just to compete in the chemicals industry, but they don't deserve much in the way of direct resources. And even if you've already gone through multiple rounds of cost cutting, consider taking another look, focusing especially on possible additional savings from digitization. Recent technology breakthroughs — many of them still unfolding — can drive new opportunities for process automation that reduce costs, improve quality, and accelerate production.

An apt example of a cost-conscious company is Germany's Evonik Industries, which aggressively cut spending a few years ago by wringing costs out of inefficient and unprofitable operations. By doing this, Evonik could reinvest in capabilities that were at the heart of its success, such as the development and commercialization of manufacturing processes and product offerings, and working with customers to launch new products and applications. For instance, Evonik used some of its savings to significantly expand its R&D footprint with new innovation centers near its customers. This strategic reallocation of resources enabled Evonik to increase its competitive advantage in its core businesses, such as cosmetic ingredients, additives for food and animal feed, biotechnology, and medical devices.

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5. Shape your future

As you move toward a position as an industry leader, further raise the quality of your capabilities to sustain your momentum. Consider how Monsanto has continually focused on innovation management. The company first developed chemical applications for crop protection, then invested in crop technologies and GMO technology, and now is emphasizing the application of digital solutions to agricultural challenges. This innovation-based transformation journey has helped the company become a front-runner in creating sophisticated systems that provide farmers with solutions addressing their specific needs.

Monsanto relied heavily on acquisitions in order to advance its capabilities. For example, in 2012, Monsanto acquired Precision Planting, which had a capability in software and hardware development and in using analytics for more accurate crop planting. In 2013, it acquired Climate Corporation, a company with data-modeling capabilities used for weather forecasting. In 2014, Monsanto strengthened its data science capabilities with the acquisition of 640 Labs, and reinforced its financial acumen with the purchase of John Deere Financial.

Most promising value propositions

Your choice of value proposition depends in part on the superior capabilities you already have or can develop. And it is also contingent on how the market is going to evolve and how value is going to be created for customers in the future.

Below are what we believe are the most likely value propositions — or ways to play — for chemicals industry companies:

Traders and transactional suppliers

These traders for large-scale petrochemicals and basic chemicals and polymers execute orders to buy and sell commodity contracts. They create value by using their deep understanding of market trends and supply and demand conditions to consistently offer a broad portfolio of standard products at an acceptable price range within a specific market situation. In order to excel at their value proposition, these players need substantial market insight and quick responsiveness to customer needs; excellent procurement capabilities that leverage scale; strong working capital management and access to hedging instruments; lean back offices and access to trading platforms; and leading-edge risk management and balancing of feedstock diversity and availability. Companies such as Exxon Mobil, Helm AG, and Shell Chemicals will likely fit well in this category.

Reliable low-cost suppliers

These players add value by offering highly standardized products (in petrochemicals and basic chemicals and polymers) and technical support at low cost and with guaranteed supply availability. Aligning delivery models and customer requirements with lean and agile supply chains will differentiate these suppliers. Future adopters will likely include Ineos and Sabic.

Customized product and service suppliers

These companies are providers of tailored products and technical services that add value by customizing products and service levels to the specific needs of their client base. Differentiating capabilities include well-managed personalized service levels matched to product life cycles and customer priorities, and a cost-conscious agile supply chain able to balance customization with standardization, taking into account both market trends and customer preferences. This will probably be the most complicated way to play, because it typically faces challenges from ongoing commoditization of specialty products and services. Companies in this category will likely include AkzoNobel, DSM, and Solvay.

Solutions innovators

These players introduce new and creative bundled materials and service solutions by fitting together disparate customer-focused technologies. They add value through materials and product innovation growing out of continuous optimizing of products and services that may be new to customers or that represent an advance from what they are already using. Their capabilities set includes co-creating new product concepts and applications with customers and substantiating scientific value and product claims, while maintaining value-based pricing and fast commercialization. Pure-play examples will likely include Chr. Hansen and Croda.

Ecosystem integrators

These companies add value by cooperating with ecosystem partners — often technology or equipment manufacturers, software providers, and distributors — to better address customer needs. This is a new way to play for chemicals companies, mainly suitable for downstream-oriented markets such as agrochemicals or chemicals used in water management and purification. Essential capabilities include the identification and integration of relevant capabilities from ecosystem partners, development of innovative and customized ideas for embedding chemical products into customer solutions, and insight into the use of disparate chemicals technologies to enhance customer systems, operations, and processes. Pure players in this part of the industry will likely include Syngenta or Monsanto in agrochemicals.

Conclusion

As the marketplace shifts and creates unprecedented opportunities, chemicals companies will have to revisit who they want to be in the future and sharpen the way they create value for their customers. In this environment, companies will have to dispassionately assess their capabilities and the best way they can differentiate from competitors. Companies that do this analysis in a clear-eyed and direct fashion and then begin the process of molding their strategies to their differentiating capabilities will find that market disruptions can be a catalyst for sustainable and profitable growth.

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We do that by working alongside you to solve your toughest problems and helping you capture your greatest opportunities.

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