

In the past few months, it has become unmistakably clear that the chemical industry is not just facing another cyclical downturn. The combination of a global financial meltdown; a sharp decline in demand (especially in durable goods); and deep, structural change across the industry will pose such a threat to chemical manufacturers that top management cannot afford to respond with anything less than full-out survival strategies. In the next year or two it is quite possible that many chemical companies in operation today will disappear. To remain standing, chemical executives must take strong and decisive action immediately.

The Most Challenging Year in Recent Memory

Without question, 2008 was difficult. Prices for raw materials skyrocketed and remained volatile throughout the year. No one in the industry forecast that oil prices would reach nearly \$150 per barrel, sending material costs soaring. Economic conditions around the world, which initially seemed weak but essentially stable, suddenly worsened dramatically. Auto sales, for example, fell 30 to 40 percent in the U.S. alone. Mixed, often conflicting economic signals throughout 2008 made it hard for chemical companies to lock in medium- and long-term commitments. As the reality of a global recession became all but certain, it became increasingly difficult to pass along price increases, particularly to clients with contracts that were fixed for six to 12 months. The rate of innovation in the chemical industry continued to slow. Meanwhile, customers facing their own profit pressures grew more inclined to consider substitutions. With increasing fragmentation and lower industry utilization rates, the industry continued to move toward commoditization, making it difficult to sustain product differentiation and premium pricing.

Against this backdrop, chemical industry executives reached for well-worn tools. Most companies attempted to raise prices, but were able to recoup only a portion of the increase in raw material costs. Meanwhile, lower demand cut into revenue, making it impossible to regain full profits through pricing. Companies turned to traditional across-the-board cost cutting, increased efficiency, and improved productivity throughout their businesses, including operations, sales and marketing, and overhead. In addition, they tried to adjust their portfolios: Some created joint ventures with national oil companies to gain access to less costly feedstock or reduce exposure to the low-margin, commoditized parts of their business. Others looked to form mergers with compatible competitors and rationalize marginal capacity. However, it became increasingly difficult for chemical firms to spin out parts of their businesses because financial buyers,

primarily the private equity firms that had been eager buyers in the recent past, were hit with their own credit problems.

As bad as the beginning of the year was, four profound problems began to surface late in 2008 that will transform the industry in ways that would not have been imaginable as recently as the end of 2007.

First, the global financial crisis ended the era of easy credit for acquisitions, increased the cost of borrowing for highly leveraged companies, and, as noted above, cut off private equity deals. The days of easily shedding assets to a receptive private equity market are over.

Second, the deepening global economic slump moved beyond the financial sector. Demand declines have hit the chemical industry, especially those sectors with exposure to durable and capital goods, such as autos, construction materials, discretionary consumer products, and other industrial goods and services. At this point, it is not clear when the market will hit bottom, and it is even difficult to guess which customers will exist in the near future: General Motors? Chrysler, Ford, or some alternative configuration?

Third, new low-cost supply will be available from Asia and the Middle East in the next one to three years. This will have a pronounced impact on trade flows and industry margins for years to come.

Fourth and finally, two fundamental changes in China will have a major effect on the industry's basic structure. On the demand side, this important end market is seeing slower growth: After years of 15 to 20 percent annual growth, China's economy is likely to slow to a rate of increase of about 5 or 6 percent. This decline will change formerly expected trade flows, and industrial capacity in the United States and western Europe may not be dismantled as quickly as predicted. On the supply side, China's industrial success has meant that it no longer enjoys the substantial cost advantage it did in the past, especially in its heavily developed coastal regions. As the cost of doing business in China increases, manufacturers are turning to new low-cost centers, such as Vietnam. Companies that missed the initial opportunity to invest in China cannot achieve significant cost savings by doing so now.

Surviving the Downturn – Maybe

As a result of all that has happened and the forces that continue to drive grim changes in the industry, the mission of chemical companies' chief executives and top leadership teams has also changed dramatically. They are not managing any ordinary downturn, but fighting to survive.

First, leaders must avoid half measures and incremental improvement initiatives. Unfortunately, in times of crisis, most managers rely on their instincts and make incremental improvements: They defer spending, idle surplus capacity, impose hiring freezes, and perhaps make across-the-board head-count reductions and budget cuts. These are all proven tactics that work for a short period of time, under normal circumstances, to improve short-term profitability. Often, however, managers agonize that their plans go too far or that the cuts will be too deep and radical, and thus they take half measures. Under normal circumstances, these fears are not unfounded – deep cuts bring the risk of permanently damaging the business or missing out on the next wave of growth. In the current environment, however, what leaders should be concerned about is whether their measures are radical enough to avoid looming disaster. The current dislocation is different from anything that most managers today have previously experienced. It will require companies to fundamentally rethink the future industry structure and develop a careful strategy to navigate an unpredictable path.

The second part of the new mission for chemical companies is to move swiftly to conserve enough precious cash to survive the next 12 to 18 months. We typically find that chemical companies' inventory, accounts receivable, and accounts payable are 15 to 25 percent above the industry's best practices. We see many companies with poor supply chain practices holding too much inventory, and we observed that phenomenon even when input prices were sky-high. Others overlook the cash that could be generated from receivables and extend customers terms of 90 to 120 days for payment, while making their own payables in 30 days and thereby failing to realize the same benefits.

Finally and most importantly, the future industry structure will look very different from the predictions of conventional models and thinking. A fundamental shift is occurring in consumer and industrial buying behaviors as companies decrease their leverage. This downturn will result in structural rather than cyclical changes and thus will require, to a greater degree than previous downturns did, a serious element of strategy. Companies must apply their best thinking to the future structure of the industry and their rightful place in it. Only a few companies in the industry will thoroughly understand and analyze all the critical factors – and it is crucial to make sure you are one of them.

No matter how thoroughly they plan, however, each company cannot possibly prepare for every potential scenario and combination of hazardous events that can occur. At some point, every leader must craft and execute an aggressive plan to be the perpetrator, rather than the victim, of structural change. In an industry as volatile and commodity-dependent as chemicals, the trick is to develop investments now that will be relatively robust in all circumstances – but not vague. The way to accomplish this is to pick your areas of potentially

greatest strength: Where do you have capabilities, assets, and market position that no competitor can match, and where do you have opportunities to build that kind of distinctive position? Focus your attention there, and sell or slow your investment in the rest of your portfolio. Those companies that develop a well-structured strategy, grounded in the future state of the chemical industry, will have numerous opportunities to accelerate past the competition. Unfortunately, most companies fail to react quickly – and thus fail. The best example in modern times is the U.S. domestic airline industry. The legacy carriers, confronted by Southwest Airlines Company's superior operating model, refused to take the bold measures necessary to survive. Instead, they all attempted to compete with hybrid low-cost carriers, such as the UAL Corporation's Ted and Delta Air Lines Inc.'s Song. Those businesses, however, were not properly structured as stand-alone enterprises. The parent companies' higher cost structures and lower operating efficiencies soon bled over, exposing the gaps and resulting in failures, bankruptcies, and the consolidation of most of the major carriers. The long-term fate of the airline industry is still not certain.

A Time to Be Bold

The current meltdown offers chemical companies an opportunity to determine their future and take decisive action. To get started, industry leaders must carefully think through the various ways in which the industry is likely to be reconfigured. Who will be the winners and who the losers? Why? To make this assessment, you must understand how your customers and their buying behavior are changing, and assess how these shifts will affect the shape of the chemical industry. The industry's future is likely to differ greatly from its recent history. If your predictions don't indicate upheaval, that should be a warning sign that your own thinking has not evolved enough to meet the requirements of the coming year. One thing we know for certain: We will not return to business as usual.

Next, you will need to make a critical decision: Is your company likely to survive in this new market structure? If it is, then develop a bold strategy that will adapt your company for the end game rather than the current state. Will you be a buyer of cheap assets? Which ones? Where? Will you uncover the structurally advantaged assets or business models that will allow you to leverage this downturn for greater opportunities and future growth?

Perhaps, however, you've concluded that your company, or parts of it, are not likely to survive. In that case, what approach will best preserve shareholder value? The instinctive response by management is to hold on, incrementally cut costs, and try to ride out the storm in the hope that the cycle will soon bring an upturn and restore profitability.

However, examples from other industries show that such a strategy and lack of decisive action have been disastrous when there was a structural dislocation in the market. In the early 1990s, the advent of hypermarkets and independent convenience store retailers put the gasoline retail sites of the oil majors at a severe disadvantage. The oil majors made numerous failed attempts to hang on and incrementally improve their operations – experimenting and changing formats two or three times, rebranding, advertising, or expanding and rebuilding the sites. Now, almost 20 years later, all the majors have realized that their model cannot compete, and they are attempting to sell their retail stations. Unfortunately, they waited until the assets were distressed and then dumped thousands of sites, taking significant write-downs to get those sites off their books. In the process, they lost tens of billions of dollars.

Leaders who realize they cannot ride out this crisis are confronted with two likely scenarios for disadvantaged businesses. The first is to attempt to sell off parts of the business for cash. Unfortunately, in this capital-constrained environment, such deals will likely be difficult to achieve. The second option is for chemical companies to consolidate or merge portions of their operations in various equity or joint venture arrangements. Such transactions are essential to help the industry rationalize and manage disadvantaged capacity. Bold action is required now to preserve the remaining intrinsic value of these assets and avoid the fate of Bear Stearns Companies and others that recently attempted to fix their operations, only to fail and destroy all the shareholder value.

The economy is not going to improve soon. The weak must act quickly to save as much value as they can. We realize that our view of the chemical industry's short-term future is grim, but we also see a silver lining for some forward-thinking companies. In a shakeout of this magnitude, companies that are advantaged, with a successful business model or a strong cash, asset, or customer position, will be situated to grow significantly when the economy rebounds. Preparing for this moment of opportunity is of paramount importance for your business's position for years to come.

Dennis Cassidy, Jr.
Principal
dennis.cassidy@booz.com

Dr. Joachim Rotering
Partner
joachim.rotering@booz.com

Eric Spiegel
Senior Partner
eric.spiegel@booz.com

Richard Verity
Partner
richard.verity@booz.com