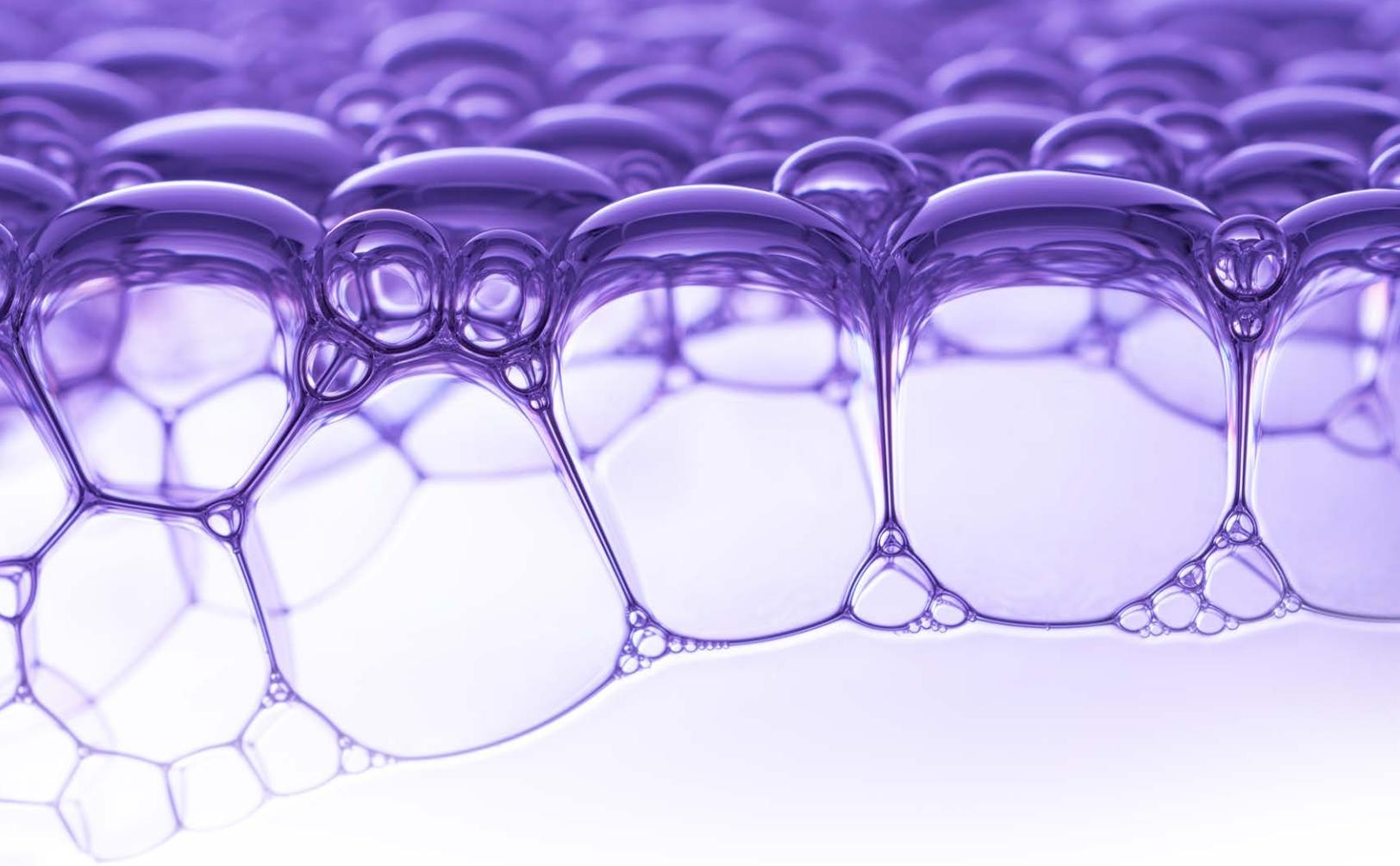




# High performers in chemicals cut costs—but **not** strategic investments and innovation





**How well do leading chemicals companies manage their journey of transformation? To answer that question, we've been monitoring high performance in the chemical industry for almost a decade.**

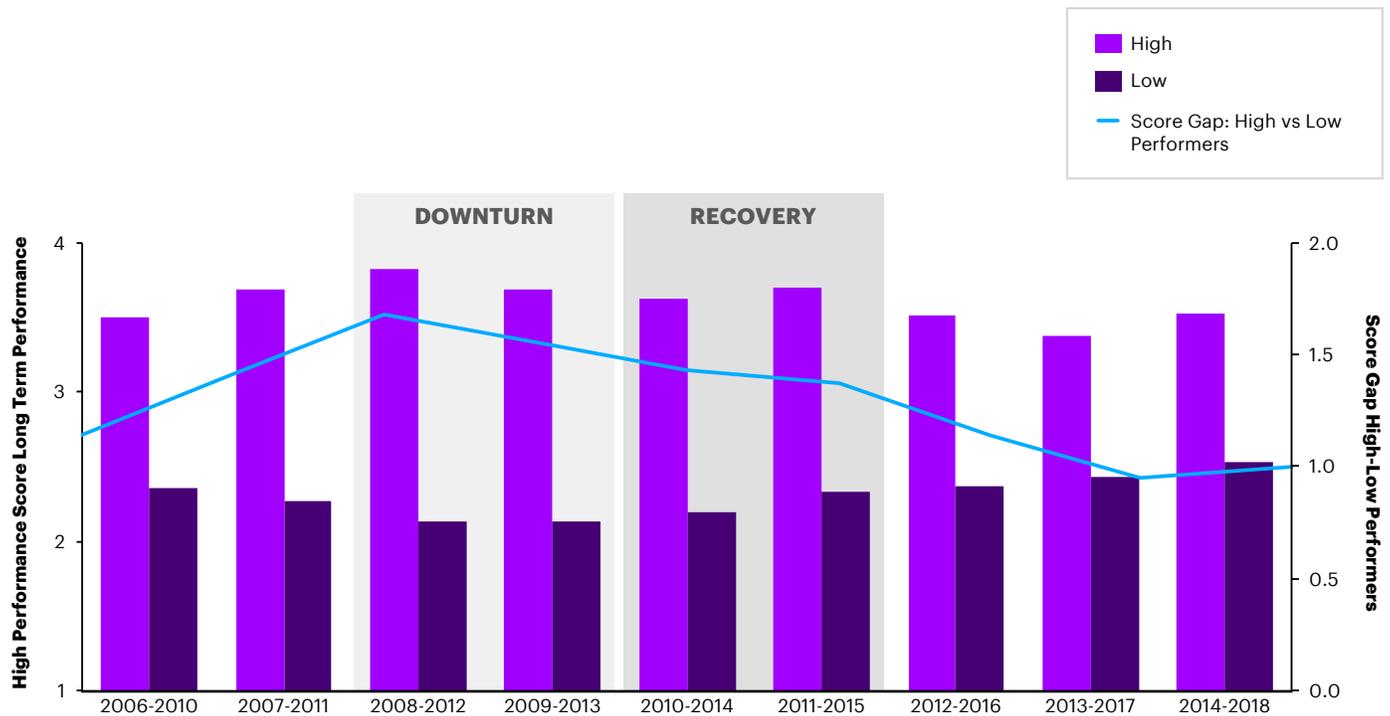
Our High Performance Business (HPB) analysis focuses on 100 global chemical companies and tracks a total of 20 KPIs covering aspects including long-term historical performance, current performance and operational excellence as well as growth and innovation. Rather than measuring the final performance numbers in absolute terms, our research aims to reveal insights into how companies perform relatively versus their industry/peer average<sup>1</sup>.

# A downturn highlights companies' strengths and weaknesses

As chemicals companies face up to the uncertainty of the next downturn, our analysis underlines how critical high performance is to their success in difficult times. The raw numbers from the last downturn in 2008/2009 clearly showed that all companies were hit by the massive decline in demand. But high performers were hit less hard—because they maneuvered better through the downturn than other companies.

The result? As Figure 1 shows, the performance gap between high performers and the rest expanded significantly during the downturn. Having reached its widest point around 2008-2012, the gap narrowed again with the recovering economy, showing its first signs of an increase—albeit only slight—in 2018.

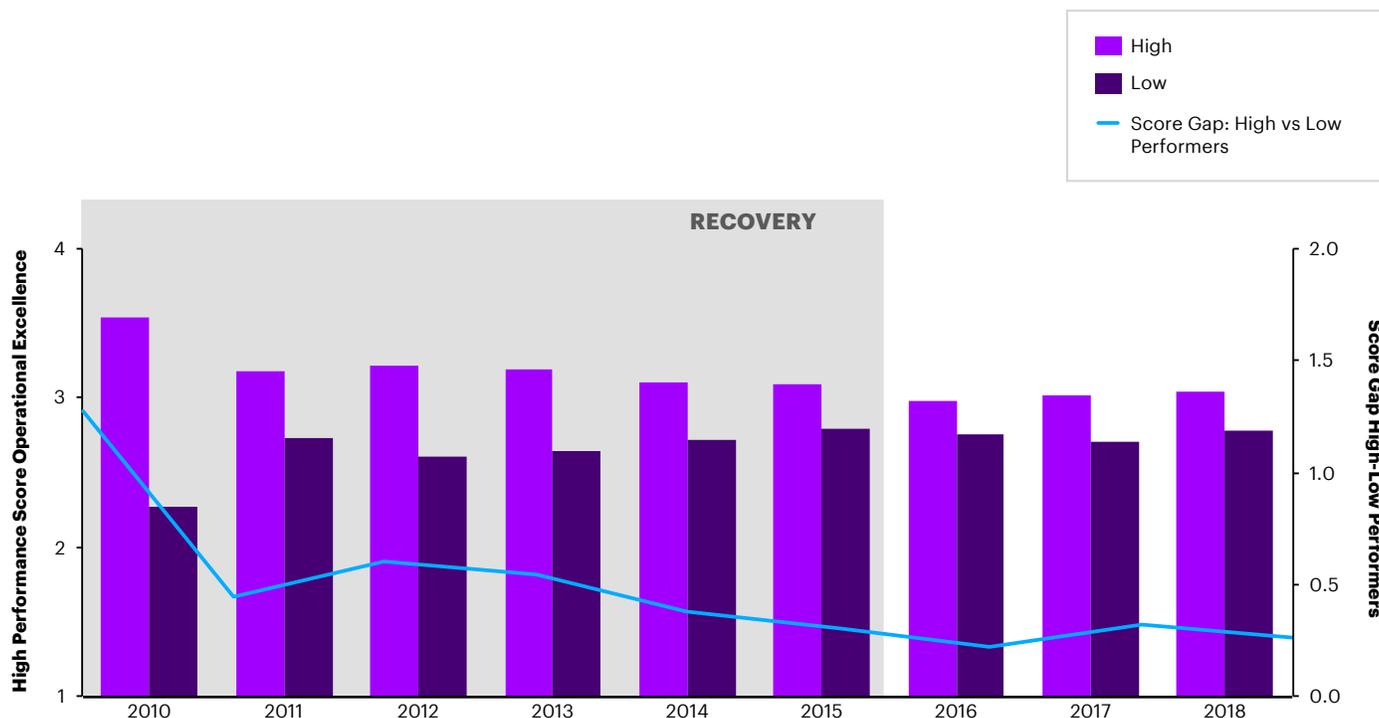
**FIGURE 1: High Performance analysis on long-term performance covering five year time frames - gap between high and low performers (analysis of 68 companies with full nine year HPB data)**



Source: Accenture Research Analysis, based on CapitalIQ data

In the decade since the 2008/2009 downturn, all chemicals companies have been applying a greater focus on operational excellence. As Figure 2 shows, the result is that the gap for this measure has decreased significantly – indicating that traditional measures for operational excellence have been utilized and maximized to a large extent.

**FIGURE 2: High Performance analysis on operational excellence - gap between high and low performers (analysis of 68 companies with full nine year HPB data)**



Source: Accenture Research Analysis, based on CapitalIQ data

Overall, we can differentiate five major groups depending on their average position in the past decade and their ranking in the current financial year. They are: low performers, falling stars, stable mid performers, rising stars, and consistent high performers.

# What really differentiates high performers?

A closer look provides a clearer picture of what makes high performers different. In the last downturn, the high performers differentiated themselves significantly by making immediate and tough cuts in costs and production – but **not** cutting strategic long-term investments or innovation. This meant that when the economy recovered, they were on track with new capacities and new products and were able to serve the demand as it increased. The curves in Figure 3 indicate the resulting widening gap between high and low performers in terms of growth and innovation.

There are many examples of this approach succeeding in the marketplace. Starting from Nov 2008<sup>2</sup>, BASF temporarily shut down 80 plants worldwide and also reduced production at about 100 plants. However, it also made a clear statement about maintaining high levels of investment in research & development (R&D) during the economic slowdown by increasing its R&D spend in 2009, above the level in 2008.

While sales decreased by

**MORE THAN 18%**

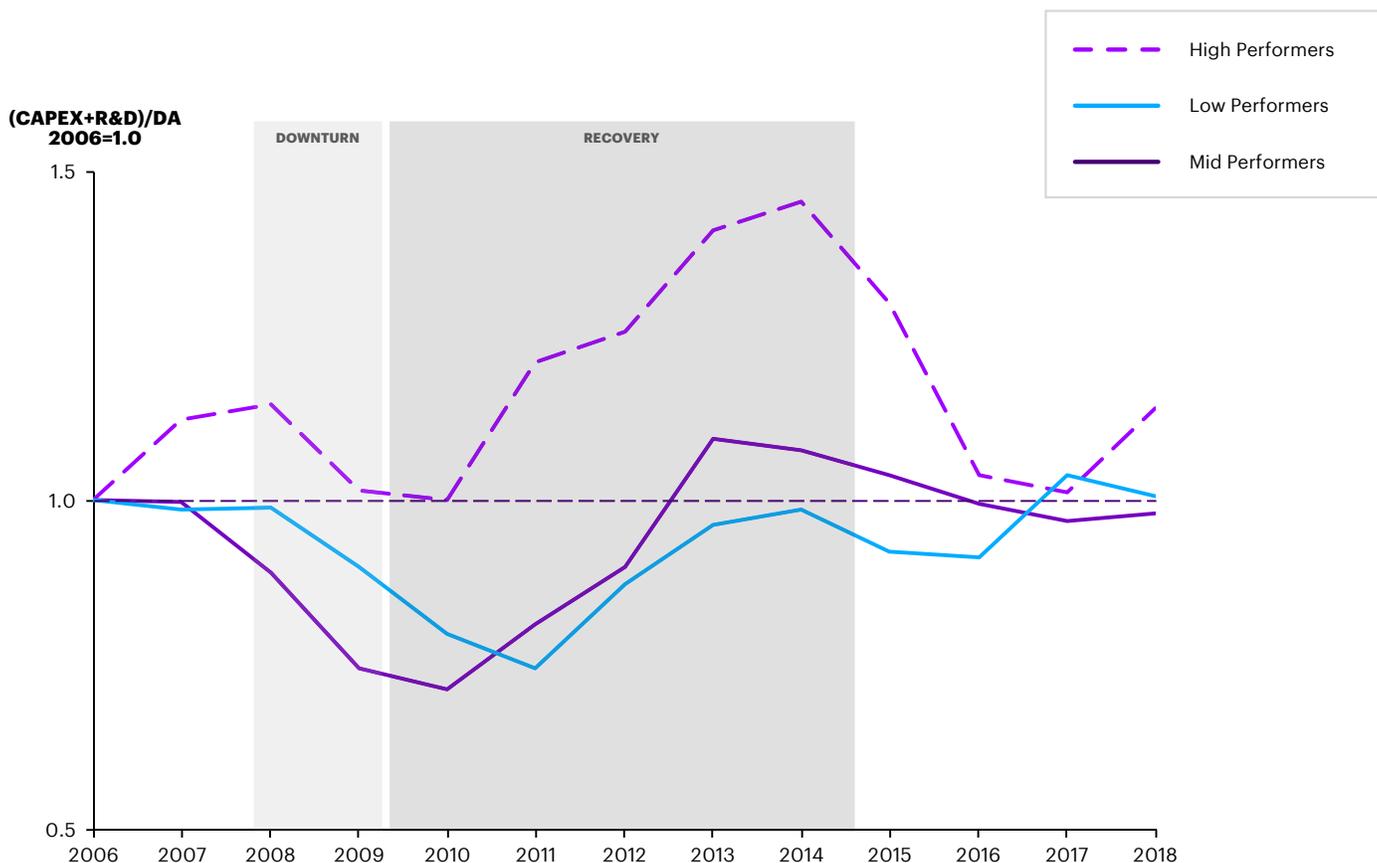
and cash for investment in plants stagnated, cash for investment activities rose by over 18%—with outcomes including the acquisition of Ciba<sup>3</sup>.

Meanwhile, for Eastman the net cash used for investment activities remained stable in 2009 compared to 2008<sup>4</sup>. And Kraton decreased its selling, general and administrative (S&GA) expenditure in 2009 by about 20%, while almost doubling net cash flows used in investment activities. Examples included the investment in their Belpre plant to improve operational effectiveness and efficiency<sup>5</sup>.

# Higher spend on capital expenditure (CAPEX) and R&D

A further analysis of the figures—as shown in Figure 3—confirms that on average over the past decade, high performers have continuously spent more on CAPEX and R&D than they depreciated (DA):  $(CAPEX+R\&D)/DA > 1$ . This reflects their higher focus on innovation and/or growing their existing product portfolio and/or optimizing the portfolio for future growth. They have taken this approach consistently throughout the economic recovery.

**FIGURE 3: Change in investment and research spend vs depreciation & amortization, Index 2006 = 100**



Source: Accenture Research Analysis, based on CapitalIQ data

A comparison of two five-year periods from 2006-10 and 2014-18 provides further interesting insights (see Figure 4). In this table, higher changes in scores reflect how performance changed compared to the peer average. Hence all-time high performers have a higher spread against their peer groups in three out of the four dimensions.

As previously mentioned, operational excellence has been a core focus throughout the industry, and this explains why the gap between high and low is relatively small. However, it's interesting to note that the high performers are the only group that improved above the peer average in terms of focusing on growth and innovation (as measured by CAPEX ratios and patent quality KPIs). Rising stars realized their potential for operational excellence, hence improving both current and long-term performance. At the same time, they refocused on investment and innovation, returning to the levels seen before the downturn.

**FIGURE 4: Comparing the HBP analysis in 2019 versus 2011**

Change of High-Performance Scores in the past 9 years	5y Long Term Performance 2014-2018 vs 2006-2010	Current Performance 2018 vs 2010	Operational Excellence 2018 vs 2010	5y Growth & Innovation 2014-2018 vs 2006-2010	Count of companies
High Performers	(0.0)	0.1	(0.5)	0.3	12
Rising Stars	1.0	0.7	0.5	(0.1)	7
Mid Performers	(0.2)	(0.2)	(0.1)	(0.1)	26
Falling Stars	(1.2)	(0.4)	(0.7)	(0.7)	7
Low Performer	(0.1)	(0.0)	0.2	0.0	16

Source: Accenture Research Analysis, based on CapitalIQ data



# Answering today's key question

All of these insights are highly relevant today, as the looming downturn hits companies at the point where they're in the middle of large-scale transformation and facing a highly volatile environment. Major industry disruptions like the advent of the circular economy, digitalization, industry recalibration and a changing workforce are combining with uncertainties around trade tensions and shifts in feedstock and energy prices.

Against this background, the key question facing chemicals companies today is: "Are the past actions and steps that helped high performers to navigate successfully through the last downturn sufficient to manage today's economic challenges?"

A look at our High Performance analysis points to the answer. A decade ago, it was operational excellence, resiliency and strategic acquisitions that were the key differentiators. All are definitely still valid today. What is new, however, are the new tools companies are leveraging to foster these differentiators.

For example, operational excellence is now supported by the adoption of new technologies that support higher cost efficiency and cross-industry collaboration for new innovation. A greater consumer-driven focus and positioning in the rising marketplace of circular economy and 3D printing are pushing resiliency. Meanwhile, strategic acquisitions that fit with the business operations and the company's strategy are every bit as important today as a decade ago.

## Leveraging new tools to manage the actions proven in the last downturn

**By capitalizing on technology innovations and the new opportunities presented by new markets, we can now see high performers and rising stars are excelling in managing the triangle of market focus, performance anatomy and distinctive capabilities.**

New technologies are the key levers, helping companies to be faster than their peers, perform better, or simply tap into new opportunities for growth.

Here's how companies are succeeding at all three points of the triangle:

1

### Market focus and positioning: Leverage the megatrends

- Leaders **understand the megatrends** that are reshaping the world and the chemical industry
- They are **more inspiring**: for example, they reimagine offerings (see DuPont's latest move toward plant-based food<sup>6</sup> - further strengthened the meatless business by its 26bn USD acquisition of IFF<sup>7</sup>)
- They invest in **new businesses, materials and services** as well as peripheral companies (such as software, electronic equipment) to **expand their ecosystem** and **capabilities**<sup>8</sup> like for example Arkema creating its 3D printing platform offering not only access to a broad variety of materials but offers expertise along the value chain by partnering with printing equipment manufacturers, software companies and end-users)
- They prioritize **customer closeness and personalized customer experiences** (such as Sherwin Williams continuously extending its virtual reality application for its customers<sup>9</sup>)

2

### Performance anatomy: Embrace digital across the organization

- High performing companies work **more intelligently** – meaning they adopt new technologies to be agile, faster and smarter, using analytics to be cost efficient and drive more value from data (examples include Ecolab's "Commercial Digital Solutions"<sup>10</sup>)
- They are **more collaborative**: they break down silos to co-create smart products, drive innovation, share knowledge and extend ecosystem partnerships to speed up innovation (for example, BASF has launched a **dedicated digital team** to enable a more strategic and collaborative approach to digitalization, and the collaboration with Nuritas™ resulted in the first artificial intelligence-designed sport nutrition ingredient, PeptAlde<sup>11</sup>)

3

### Distinctive capabilities: Navigate through chemical industry disruptions

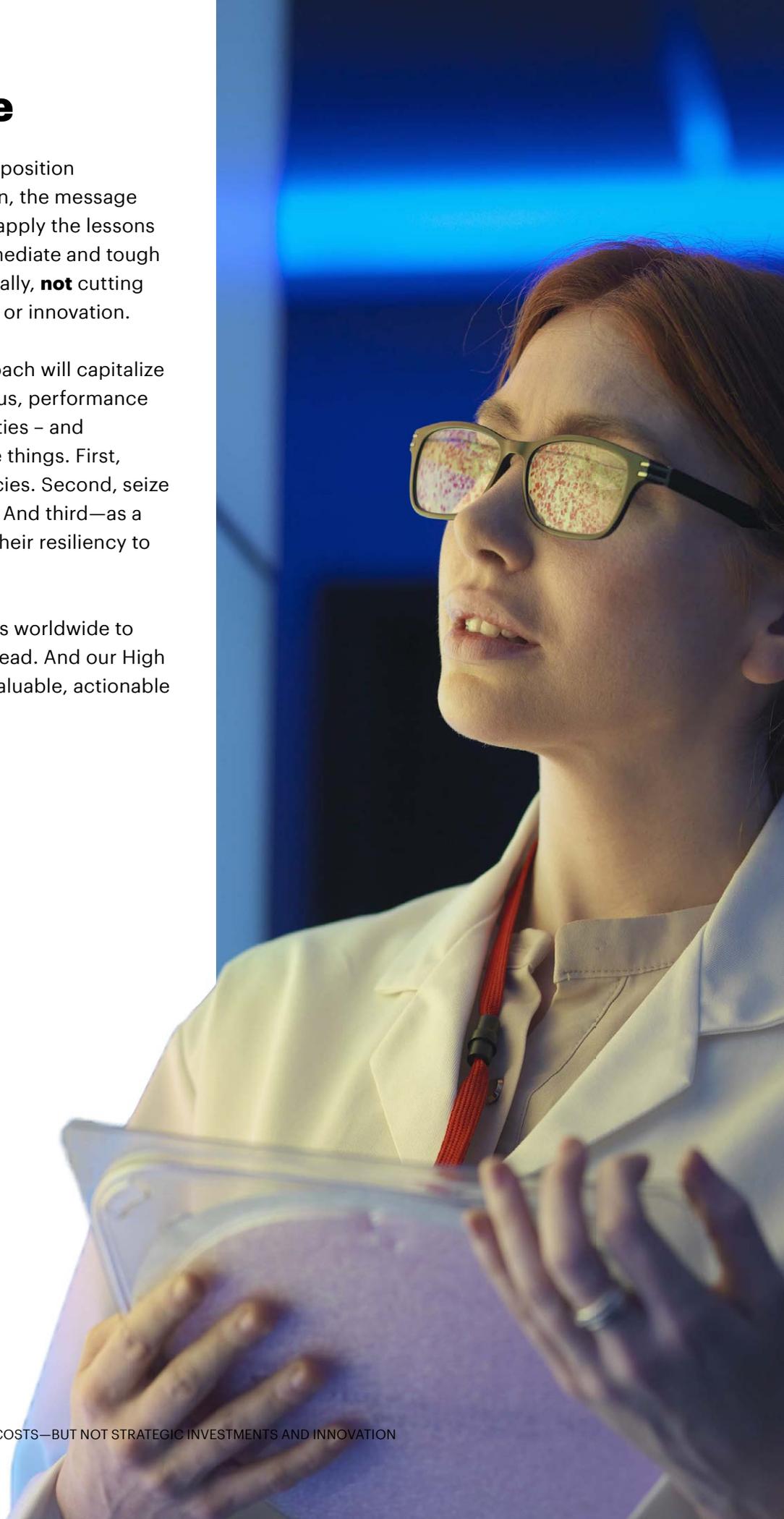
- High performers **develop strategies to counter today's key industry disruptions**:
  - They become **more circular**, generating value by controlling the molecule lifecycle and enabling downstream circularity through new business models (examples include Eastman's revival of its filed technology for plastics recycling from the 1990s – leveraging its expertise for the CE wave<sup>12</sup>)
  - They are **more consumer-driven**, looking beyond their immediate customers to those actually consuming the products (think Asia Paints extending beyond colors to the interior design business<sup>13</sup>)
  - They **test the next wave of technologies** such as distributed ledger technology (DLT) or artificial intelligence in areas like R&D, supply chain management, recruitment, maintenance or marketing and sales (examples include testing DLT for purchasing raw materials from each other and placing orders across a blockchain)

# Time to prepare

As chemicals companies look to position themselves for the next downturn, the message is clear. The best approach is to apply the lessons from 2009 by implementing immediate and tough cost/production cuts—but, crucially, **not** cutting **strategic** long-term investments or innovation.

Companies that adopt this approach will capitalize on the key triangle of market focus, performance anatomy and distinctive capabilities – and empower themselves to do three things. First, strengthen their core competencies. Second, seize new opportunities in the market. And third—as a result of the first two—increase their resiliency to manage the next cycle.

It's time for chemicals businesses worldwide to prepare for challenging times ahead. And our High Performance analysis provides valuable, actionable insights into how to do it.



# About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 505,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives.

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