No room for blind growth

As global megatrends reshape demand, the theme of 1989 movie *Field of Dreams* – "If you build it, they will come" – will no longer ring true for chemicals companies

JOHN RICHARDSON, PERTH

The theme of Kevin Costner's 1989 movie *Field of Dreams* was: "If you build it, they will come." And for many years it also seems to have served as an extremely profitable motto for chemicals companies.

Even today, many companies still assume that growth will be more or less constant. Their planning processes simply focus on the practical details of plant construction. Even if the timing is slightly early, they remain confident that demand will always eventually catch up with new supply.

These companies instead see the main risk as being the potential loss of market share to more aggressive competitors. Their senior executives have grown up in a world where bigger is always better. So they worry that others may move ahead of them if they fail to invest in new capacity.

Thus in the US, for instance, the American Chemistry Council estimates that some $25bn (€20bn) is being invested in about 30 expanded or new US production facilities because of the shale-gas advantage.

China is similarly expanding at a breakneck speed. Latest estimates from South Korean bank Woori suggest at least 10m tonnes/year of new coal-to-olefins capacity is in the planning stage.

These two strategies are mutually exclusive, not complementary. China's investments are based on its desire to expand its self-sufficiency in ethylene to 64% by 2015 from 48% in 2010.

Yet the US expansions will be targeting Asia with increased polymer exports based on cheap ethane and propane feedstocks. It seems unlikely that both strategies can be successful.

KEY FACTS

The impact of demographics

- 272m Westerners are now over 55 years old (29% of the population). They benefit from an extra decade or more of life expectancy compared to previous generations. But as Japan's example shows, this also means we must expect lower rates of GDP growth. Members of this New Old 55+ generation simply have to save more and spend less to finance their extended retirements.
- China is following the same track. Its one-child policy means that 32% of the population will be in the New Old generation by 2030, a very similar proportion to the 36% expected for the Western population.

NEW DEMAND DRIVERS

This highlights the risks faced by the global industry as we transition to the New Normal.

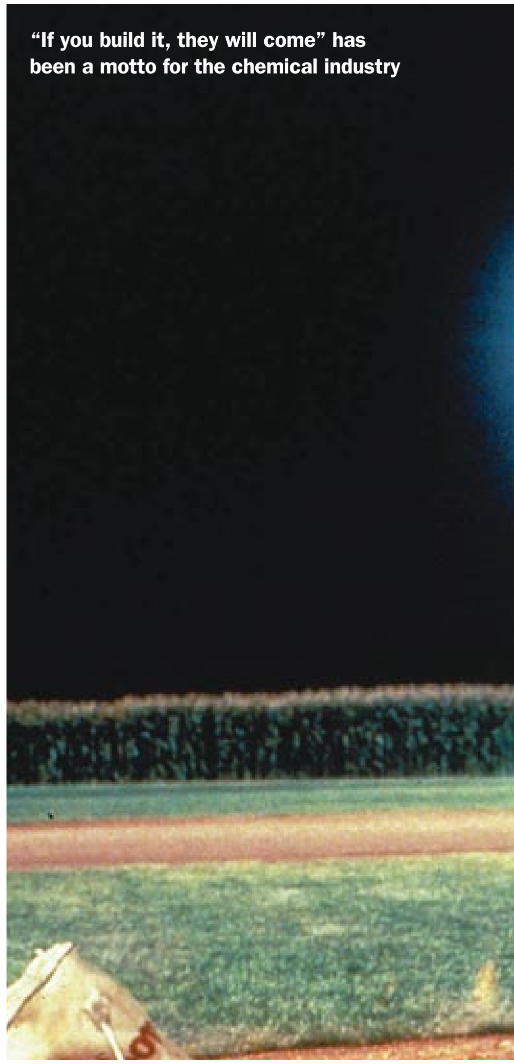
"You cannot just sit back and expect things to happen the way they have happened in the past, especially in emerging markets," said a senior Hong Kong-based executive with a global polyethylene (PE) producer.

"The key to success is to stay on top of developments in the economy, society and politics and constantly think how these are changing and how you need to reposition your business," he added.

"It is important for your business leaders to be engaged with senior politicians."

Using the example of China, the executive said that senior business leaders need to understand the full implications of the 12th Five-Year-Plan (2011–2015) as Beijing attempts to move from an export-led to a domestic-focused economy.

Companies such as BASF and Bayer Material Science (BMS) are perhaps potential role models for some of the changes in approach that are now required. For several years, they have been developing new processes and products to serve what they predict will be the major demand drivers over the next 30 years or more.



"If you build it, they will come" has been a motto for the chemical industry

"The key to success is to stay on top of developments... and constantly think how... to reposition your business"

SENIOR EXECUTIVE
Global polyethylene producer, Hong Kong

These new demand drivers are the megatrends: ensuring there is enough food and water to sustain global growth; the impact of changing demographics, such as ageing populations in the West and the impact of China's one-child policy; and the need to reduce carbon footprints.

Some companies would argue that this is only essential for the likes of BASF and BMS because they are "innovation" companies and so must constantly develop new products for new markets. It is also certainly true that they benefit from the somewhat more

Rex Features

THE NEW NORMAL

Chapter 12 of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Chemical Demand Patterns, Again* is now available free to download at **icis.com/NewNormaleBook.** It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia, who both blog for ICIS at **icis.com/blog**

patient and longer-term approach of European investors.

But the megatrends are reshaping the global economy. As the box shows, they therefore have huge implications for all chemical companies, as we discuss in our e-book, *Bloom, Gloom and the New Normal*.

THE FAULTS WITH "ONE SIZE FITS ALL"

Today's slow-paced US economy shows no sign of returning to the levels of growth seen during the 1982-2007 Supercycle. But China's leadership will not risk social unrest by shutting newly-built petrochemical complexes to take advantage of lower-cost US imports.

Instead, companies need to take a new direction if they want to capture future growth prospects. They need to become demand-focused, and should seek to take advantage of the major opportunities that this approach can create.

Helping customers to 'do more with less' is perhaps the new motto for success, given the challenges of the megatrends.

Taking water as an example, respondents to the World Economic Forum's Global Risks Survey 2012 consider a water supply crisis to be the most likely and most severe societal risk for the next 10 years.

Governments are increasingly acknowledging that unsustainable water usage constrains economic growth.

In China, the World Bank estimates that water-related inefficiencies may already be curtailing the country's gross domestic product growth by over 2%.

The need to avoid such a crisis will create major new opportunities. For example, 3% of all agricultural water use is related to cotton production. Traditional cultivation processes such as field flooding are obvious targets for reducing water use.

This challenge has led to the development of a program organised by the Better Cotton Initiative (involving companies such as Levi Strauss), to provide technical know-how to Indian farmers.

Over three years, this has enabled a 32% drop in the use of water and pesticides. Farmers' profits are 20% higher as a result, thus also helping to stimulate economic development.

The key is to use drip irrigation systems, essentially plastic veins that can direct water to each plant's root system.

These not only spread water and fertilizers more evenly than traditional pumping. They also reduce the need for pesticides as less water is available to encourage weed growth around the plants. This example highlights the new approach that is required. The previous supply-driven business model led to a focus on driving costs out of the business. Local presence was downplayed in favor of a 'one-size-fits-all' approach, based on a centralized regional hub.

A more demand-driven approach will instead require closer relationships with customers in their own backyard.

"You need lots of good people on the ground who can detect micro changes at the level of your customers that can become major economic and social trends," adds the senior executive with the PE producer.

More up-front investment is therefore required in people and technical support. Increased effectiveness, rather than greater efficiency, will be the key to success. Nobody suggests the transition that is now underway will be easy. But the alternative, of continuing to wait for policy makers to deliver a return to the SuperCycle, is looking increasingly forlorn.

The winners in the New Normal will be those companies that refocus today on the new economic and social trends that are already starting to drive future growth. ■