Exposed to megatrends

This year's ICIS/J&M Management Consulting research amongst ICIS readers reveals that chemical supply chains are not yet fully prepared for global megatrends

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A major proportion of the supply chains in the chemical industry are not yet fully prepared for the important emerging megatrends of raw material scarcity, rising energy costs and demographic change.

According to a joint readership survey by ICIS and J&M Management Consulting, only 11% of the survey's 958 respondents currently consider far-ranging global developments for the operation and design of their supply chains. The online survey (see panel) was augmented by 10 face-to-face interviews with CEOs/CFOs of chemical industry companies, carried out by J&M.

Since 2008, the chemical industry has had to cope with heightened uncertainty, increased volatility and faster economic cycles. As one CEO succinctly puts it: "This is the new normal – this will stay just as it is for the next several years."

Chemical demand plummeted in 2008 and 2009 because of panic order cuts from end-user customers. Capacity was massively shut down, thus laying the foundation for shortages during the years ahead.

The strong performance enjoyed by the chemical sector through 2010 and most of 2011 – as demand held up, stocks were rebuilt and prices remained firm on constrained supply – evaporated toward the end of 2011, as demand softened, and most noticeably in China, while market confidence waned.

As one CEO noted in the interviews: "If we had known in 2008–2009 how long this downturn was going to last, and had been realistic, we would have addressed some of the fundamental cost issues in a totally different way. We also wouldn't have taken our foot off the cost containment pedal at all when things turned up slightly. Human nature was to emotionally look for the old status quo and comfort levels."

POSITIVE VIEWS FOR 2012

In general, survey respondents were cautiously positive regarding the 2012 outlook for the chemical industry, with 60% of all respondents expecting revenue growth of on average 3.2% for the whole industry.

Some 63% of chemical companies anticipate that volumes will increase by 2.6% on average, i.e. price increases are also expected. The larger the chemical company, the more positive it saw the market.

For example, 70% of large chemical companies, with revenues of more than $5bn (€4bn), expect growing markets and volumes.

By sector, fine chemicals were most positive, with an expectation of 6% overall volume and 5% revenue growth. Some 81% of fine chemical respondents expected growing markets.

Respondents generally expected overall chemical industry's earnings and cash flow to increase by 1.1% on average, i.e. costs are expected to increase to a larger extent than prices can be raised.

INTERVIEWS **DIRK WIEDENHAUPT** MANNHEIM

CEO LEARNINGS FALL INTO TWO BROAD AREAS

Insights of a more operational nature

- "The basic operational aspects of running in a tight market should become the status quo forever. But this is a really tough behavior change, and I don't estimate the energy required to keep on top of this and keep it front of mind."
- "Raw material price hikes from 2008-09 are here to stay. We adapted internal processes to better handle this, e.g. we more closely steer the sales force now on acceptable minimum prices. We also more closely measure and track inventory."
- "We should have jumped on to variable cost reduction and efficiency with as much zeal as we approached fixed cost reduction. We were slow into approaching this, plus have an unflinching view on figuring out what was truly fixed and required by customers and what we could ruthlessly move to variable."
- "We must get faster and faster on decision making and responding to short term demands and markets."
- "Most companies have installed global systems – use them – it's much easier to leverage price info and inventory information. Use these to sweat the company out quarter on quarter."
- "There was a massive increase in prices in the middle of 2010 – the raw material curves are flatter now, and there is less risk of major rises coming at us. We have more dynamic pricing on shorter horizon to link to raw materials costs and lower total inventory value chains."
- "Raw material cost is major driver and our ability to pass that on to customers through dynamic pricing is a crucial operational foundation."
- "There are new dynamics at play, purchasers are buying less and focused on working capital. There is a lot less stock around the system, which drives higher volatility. Operating outages are starting to drive prices as well, and we are starting to see end-of-month effect on sales."
- "Be closer connected to end customers regarding information (early warning signs for demand drops, avoid overreaction if end customer demand does not change) and understand value propositions and business models of our customers."

Insights of a strategic nature

- "Keep an eye on the longer term strategic horizon – keep bigger picture in mind while at the same time being flexible and adaptable to sweat the operation day-to-day."
- "For entry markets, instead of creating a five-year plan and sticking to it through thick and thin – be prepared to adjust it more regularly. In mature markets, be much tougher on cost cutting and restructuring – don't wait for the next upswing or hockey-stick turn. Act decisively quickly. Strip out unnecessary complexity – take 40-50% of stock-keeping units out of mature markets."
- "Economies of scale continue to be key, governance and sustainability are your license to operate – this is a major strategic issue now, invest in regions for regional/local markets themselves."
- "Our reaction is to play size more and more. Monster/gigantic scale operations are even leaner and more efficient. Play a longer consolidation game and see who else blinks first on affordability. There is a danger that weak players will not leave the market but are bought by sovereign wealth funds, or other new entrants buying tired assets." ■

Or, in the words of one CEO: "The ability to rapidly pass costs on through pricing will remain key, if not critical."

For their own companies, participants' expectations were much higher in all respects, especially with regard to earnings and cash flow. When asked, participants responded that they saw on average 4.8% per year revenue and 4.4% volume increases, with earnings going up by 3.6% and cash flow 3%.

This positive tenor of replies was clearly reflected in the fact that 92% of respondents thought that the chemical industry is an attractive place to work, and 90% would encourage others to pursue a long-term career in the chemical industry.

As one CEO put it: "The chemical industry is still one of the major sectors [to offer] real employment, the opportunity to lead and take responsibility at an early stage, to work internationally, to be intellectually challenged and be at the forefront of being able to solve some of society's current major and future issues."

But another interviewee was more critical: "The attractiveness of the sector has to be balanced with the plain fact that we still have an extremely poor PR image. When will the ugly duckling get its act together and become the future swan?"

STRATEGY FOR GROWTH

Growth through innovation has become far more important since the 2010 ICIS/J&M survey, when 29% ranked it highly; for the 2012 survey this figure was 37%.

ABOUT THE SURVEY

ICIS and J&M Management Consulting have conducted annual online surveys among readers and executives in the chemical industry since 2008 on the key issues in the chemicals industry.

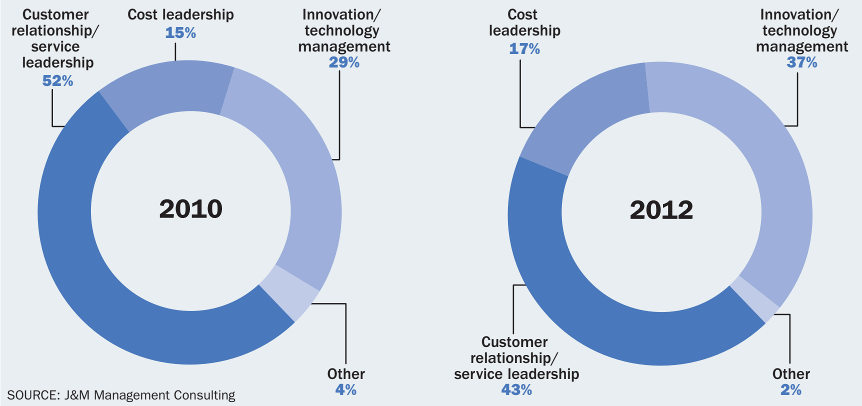
Senior managers and industry leaders made up 30% of respondents (typically at CEO, chairman, executive vice president and vice president/president level) with another 27% in general manager, director/management leadership roles.

The majority of respondents (70%) had in excess of 10 years' experience in the industry. Most companies (41%) are headquartered in Europe and North America (21%). Forty-five percent of respondents came from companies with global revenues above $500m.

Sector coverage was 22% commodity/bulk chemicals, 26% specialty chemicals, 5% fine chemicals and 19% chemical distributors, and 24% others.

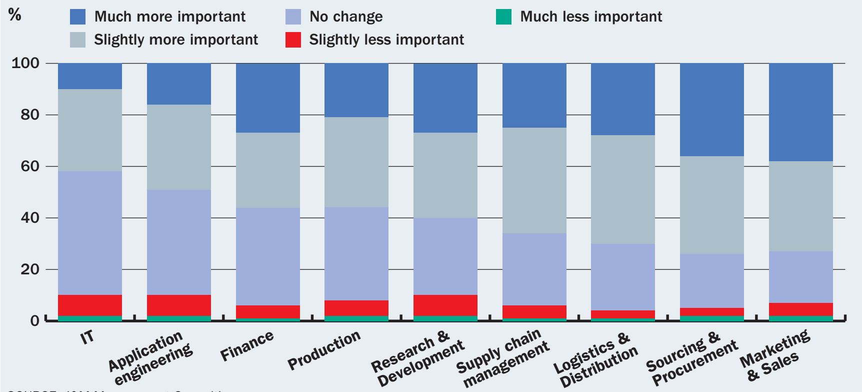
ICIS and J&M thank all those who took part in the survey and interviews.

GROWTH THROUGH INNOVATION/TECHNOLOGY MANAGEMENT HAS BECOME FAR MORE IMPORTANT FROM 2010 TO 2012



SOURCE: J&M Management Consulting

MARKETING & SALES ARE MUCH MORE IMPORTANT TO THE BUSINESS



SOURCE: J&M Management Consulting

Achieving growth through customer relationship/service leadership appeared as the preferred strategy with 44% of respondents selecting it. However, this was 8% lower than in the 2010 survey (see top chart above).

Increased differentiation between basic product service and differentiated service as well as segmenting clients' supply chain needs were seen as important customer-focused activities for companies' strategy by three quarters of the respondents. Some 60% also saw the adoption of lean order principles as well as increased automation/low touch orders as being important.

Around 84% considered "increasing share of customer-specific products" important, while 80% of respondents rated "optimizing sales calls/customer touchpoints" and "optimizing delivery frequency" as important customer-facing activities to their company's present operations.

In J&M's experience, more and more chemical companies are starting to look at the real value-add and pricing side of the equation as well as continuing to drive cost improvements. It's not an "either or" situation anymore; they need to address both with the same vigor.

Not surprisingly, the majority of participants said they plan to invest in Asia (56%) and China (48%) where the biggest market growth is anticipated, with on average 5.2%/year for Asia and 4.7%/year for China.

Even though China is taking moves to curb growth and inflation, interviews indicated that it was a common belief that China will remain the major growth engine for the immediate future.

Second in line for growth was the Middle East for commodity/bulk chemicals with on average 3.7%/year expected growth and for fine chemicals, with 4.3%/year, whereas specialty chemical companies favor Latin America where they visualize 4.2%/year growth on average.

Again, the larger the company, the larger the anticipated growth; for example, those with more than $5bn turnover expected on average 8.8%/year in Asia, 8.3%/year in China, 4.7%/year in the Middle East and 5.4%/year in Latin America. In general, western Europe was seen as the lowest growth region with only on average 0.8%/year; consequently, plans to invest there were at lowest levels.

Three-quarters of respondents anticipated that Marketing & Sales will gain increasing importance for the business (see lower chart above). For Asian companies and fine chemical companies 83% ranked Marketing & Sales » highest. Also, 81% of smaller companies (less than $500m revenue) saw Marketing & Sales as a topic that is going to gain most in importance. Overall, the importance of Marketing & Sales had increased by 11% from the 2010 ICIS/J&M survey to the 2012 survey.

Megatrends were a major topic for the chemical industry (see top chart, right). Some 91% of the respondents clearly saw the relevance of megatrends for their business. Raw material scarcity was especially seen as having a "negative" effect on the chemical value chain. Close to 28% had the opinion that the effect was even "very negative."

Global rising energy costs were considered to be at least "negative" (with 35% viewing this as "very negative"). Demographic change (43%) was also seen to have a "negative" impact on the industry.

> **"More than half of the respondents have already optimized their costs"**
>
> **ANDREAS MÜLLER**
> CEO of J&M

Respondents expected more "positive" effects from technological changes (74%), urbanization (68%) and globalization (64%). Megatrends were not just idle dreams for the future for the respondents as they expected them to materialize significantly in the coming 1–2 years.

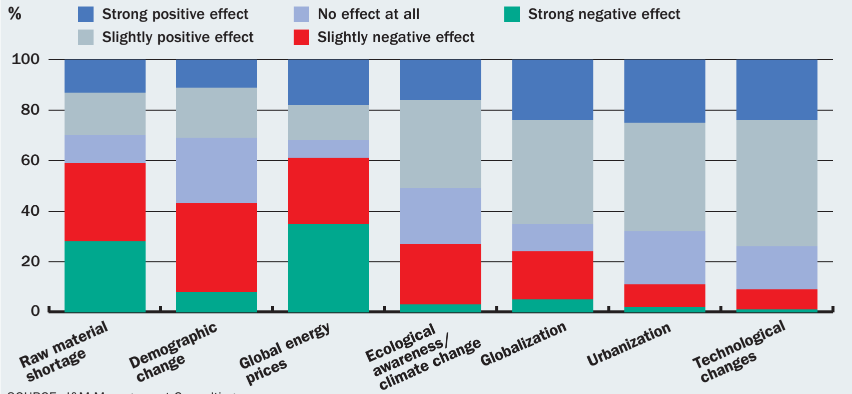
Despite the fact that megatrends were seen as important and that 84% of the respondents agreed to the statement "our company has to optimize the supply chain continuously," only 11% of companies' supply chain design and set-up reflects major megatrends according to the survey. Rather design and set-up is focused on solutions to address short-term business needs (see middle chart, right).

For 67% of the respondents, the most significant challenges to the supply chain were cost pressures and efficiency, followed by security of supply (50%) and volatile customer behavior and flexibility (41%). Some 43% of respondents mentioned they want a cost-effective supply chain, while 37% strive for customer-oriented supply chains.

"Areas of optimization are fortunately not limited to cost efficiency but comprise flexibility and integration as well," said Andreas Müller, CEO of J&M.

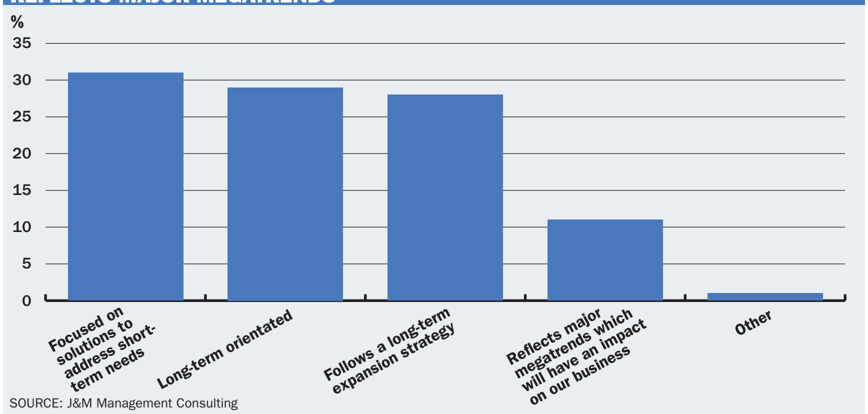
"More than half of the respondents have already optimized their costs or plan to do so in the short-term. In addition to the supply chain challenges mentioned above, further activity will take place around securing supply, improving demand forecasting/management, increasing availability and reducing delivery times," added Müller (see bottom chart, right). ■

TECHNOLOGICAL CHANGES HAVE A STRONG POSITIVE EFFECT AND RAW MATERIAL SHORTAGES A STRONG NEGATIVE EFFECT



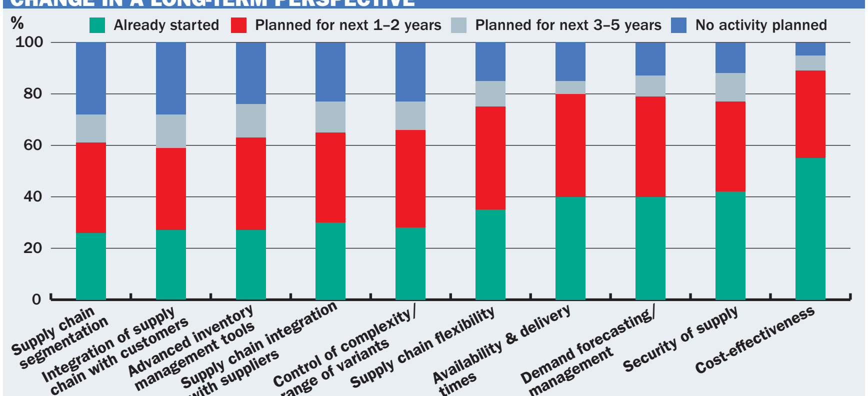
SOURCE: J&M Management Consulting

ASKED ABOUT COMPANY SUPPLY CHAIN DESIGN AND SET-UP, ONLY 11% SAY THIS REFLECTS MAJOR MEGATRENDS



SOURCE: J&M Management Consulting

COST-EFFECTIVENESS IS STILL AN IMPORTANT TOPIC TODAY BUT THIS WILL CHANGE IN A LONG-TERM PERSPECTIVE



SOURCE: J&M Management Consulting

ABOUT J&M MANAGEMENT CONSULTING

J&M Management Consulting's 320 consultants combine management consulting, IT competence and chemicals industry experience to design and effectively implement pragmatic solutions with clients that deliver tangible results. J&M is independently recognized as the "Hidden Champion" and "Best of Consulting" in supply chain consulting. Dirk Wiedenhaupt is a consultant at J&M, based in Germany. For more details, go to www.jnm.com