

# Innovative solutions for process industry challenges

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Sticking to the core of the company's value proposition is what it took Aspen Technology (AspenTech) to become one of the world's leading suppliers of software that optimises process manufacturing. Even today, when market uncertainties are grappling companies, AspenTech continues to follow the same strategy, ie being at the forefront of innovation in the process industries.

**ACCORDING** to the United Nations Environment Program 2012 (UNEP) report, significant growth in chemical production is expected in developing countries in the period 2012-2020, but developed countries will witness modest growth. "This report clearly places Asia-Pacific growth (from 2012 to 2020) ahead of the pack at 46 per cent. Of this, China and India are slated to grow at 66 per cent and 59 per cent respectively," says Sunil Chaudhari, Country Manager - South Asia, AspenTech.

### Growth visible, but challenges persist

Although the long-term scenario presents healthy growth prospects, the current market uncertainty presents challenges before the chemical manufacturers. Hence, companies are looking to optimise their resources. Chaudhari observes, "In both better and worse

economic times, the chemical industry relies heavily on hydrocarbon-based feedstocks, and energy-efficiency and maximum throughput of existing assets become increasingly critical issues."

According to him, other key factors impacting the industry include:

- Increasingly competitive landscape due to globalisation
- Margin squeeze due to low-product pricing power
- Maintaining asset effectiveness at high plant utilisation rates
- Increasingly stringent governmental regulations
- Increased market volatility and eroding customer loyalty

In order to overcome these challenges, chemical manufacturers have to adopt an integrated solution set that can tackle inefficiencies end-to-end throughout engineering, planning & scheduling, and plant operations processes.

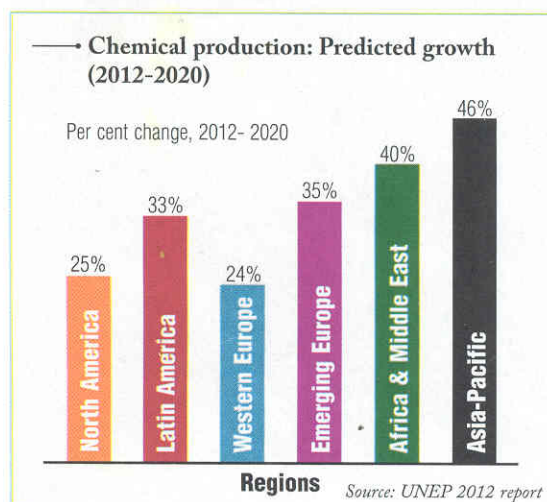
back to the profitability value proposition. For instance, he explains, *aspenONE* for chemicals maximises plant profitability by:

- Optimising feedstock selection and scheduling, given actual plant constraints
- Improving and accelerating process innovation, thereby reducing time-to-market for new products
- Optimising plant performance and reducing process variability, given the trade-offs between capacity, yield and energy
- Standardising manufacturing workflow around best practices for high quality and high yield
- Improving capital efficiency through maximum asset utilisation

### Reducing environmental risk

For better customer acceptance, AspenTech offers companies the flexibility to implement this solution incrementally based on areas that will bring immediate benefits with a roadmap for incremental value delivery. "*aspenONE* for Chemicals is a comprehensive and integrated solution set, offering a fully scalable and modular approach. It also leverages existing installations of AspenTech products, extending those solutions for increased benefits," says Chaudhari.

Understanding options within a global network of assets and being able to optimise these assets are key supply chain business drivers for chemical companies. The company's *aspenONE*



### Growth enablers

During slowdown, chemical companies often face an investment dilemma. While investment in IT & automation improves efficiency of the chemical companies, these companies have constraints with respect to capital availability. So how can software solution providers convince the customer about their solutions?

Chaudhari answers, we can convince the customer by going



*Supply Chain for Chemicals* enables manufacturers to increase operational efficiency through improved planning and scheduling of the production and distribution process. "The solution's easy-to-use interface leverages a Microsoft look & feel and provides fast access to information that can expedite profitable responses to unexpected market demands and opportunities, a necessity in an increasingly competitive marketplace," he adds.

### Getting equipped for tomorrow

To meet the ever-changing requirements of customers, automation companies are offering new solutions and adding new functionality to existing products. AspenTech has also launched a few solutions in recent times. While AspenTech announced the latest enhancements to the *aspenONE* process optimisation software suite in February this year, it launched *aspenONE V8* software in December 2012.

In order to expand its product offerings, AspenTech acquired the *PSVPlus* software product from Softbits Consultants Ltd in September 2012. "The *aspenONE* Engineering suite provides market leading process plant modelling

### Sunil Chaudhari

Country Manager - South Asia, AspenTech



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and optimisation capabilities. *PSVPlus* offers additional capabilities that will eventually enable AspenTech to provide a complete overpressure protection system optimisation capability. This will result in increased engineering efficiency, reduced capital and increased safety & reliability for AspenTech customers," observes Chaudhari.

The addition of *PSVPlus* will give its customers the ability to model pressure relief scenarios, which is a critical activity in the design and operation of every process plant. This makes it possible to generate inherently safer and more efficient designs.

### Getting your priority right

To stay competitive in the current economic scenario, AspenTech has identified three strategic priorities. According to Chaudhari, these are:

**Capitalising on key growth opportunities:** Most of our customers are still using a fraction of the functionality available to them and very few are utilising AspenTech across our engineering, supply chain, and manufacturing solutions.

**Continuing to invest in innovation:** In fiscal year 2012, we invested 16 per cent of our revenues in R&D in order to deliver the most valuable innovation to our process manufacturing customers worldwide. These innovations are delivered incrementally as part of the *aspenONE* process optimisation software suite every quarter.

**Growing market for software usage:** Moving forward, we expect to see continued solid demand in our core industry vertical segments – in energy, chemicals and engineering & construction. Similarly, companies in the non-core

segment such as pharmaceuticals, consumer packaged goods, power, metals & mining, pulp & paper, and biofuels industries use our process optimisation solutions to help them deliver improved financial and operating results in the face of varied process manufacturing challenges.

### Stick to core

Ask Chaudhari about the lessons he has learnt from the economic slowdown, and he aptly replies, "Stick to the core of your company's value proposition and the value will sell itself."

He explains, "From our roots at MIT to the groundbreaking release of *aspenONE V8*, AspenTech has always been at the forefront of innovation in the process industries. With integrated *aspenONE* solutions, process manufacturers can implement best practices for optimising their engineering, manufacturing, and supply chains. As a result, AspenTech customers are better able to achieve their operational excellence goals – increasing capacity, improving margins, reducing costs, and becoming more energy efficient."

Today, *aspenONE* solutions are used by virtually every leading company in the process manufacturing industry. Over 1,00,000 users at over 1,500 companies have come to rely on us to achieve superior financial and operating results. "Over 30 years of AspenTech leadership and experience is built into our market-leading *aspenONE* software, which represents best practices for process optimisation. It redefines ease-of-use in software for the process industries. It makes operational excellence achievable and – even in the face of today's market challenges – easier than you think," claims Chaudhari.

He has one message for chemical companies, "They should look for ways to maximise their profits and reduce inefficiencies". And by partnering with AspenTech, he believes that they can maximise and sustain operational performance and profitability with the agility to react quickly to market demands and opportunities. ■

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## EFFICIENCY TIPS

### Challenges in chemical industry

- Economic uncertainty affecting chemical industry
- Less investment by chemical companies in new technologies due to slowdown
- Increasingly competitive landscape due to globalisation

### AspenTech's solution

- Convincing the customer by offering the profitability value proposition
- Offering a gamut of solutions to customers across functions – engineering, supply chain and manufacturing
- Continue to invest in innovations
- Expanding market for its software solutions