

# PRIORITY

**Name Of Client :** AspenTech

**Publication :** The Business Times (Weekend)

**Date :** 4-5 February 2012

**Page :** 1 of 2

THE BUSINESS *weekend* TIMES

FROM THE  
DESK OF

## Henry Lau

Senior vice-president and managing director  
Regional sales and services, Asia-Pacific  
AspenTech

**A**CCORDING to a report by the Deloitte Touche Tohmatsu (DTT) Chemical Group and Deloitte Research, the global process industry could face competitive dynamics very different from today by the year 2020. Already, chemical producers in Asia's emerging economies such as India and China are witnessing unprecedented demand for petrochemicals.

Technology will be a key driver in helping to balance demand and supply. By optimising business processes, process manufacturers can achieve significant improvements in performance.

### Getting our act together

The process industries consist of companies that typically manufacture finished products by applying a controlled chemical process either to a raw material that is fed continuously through the plant or to a specific batch of raw material.

The process industries include energy, chemicals, pharmaceuticals, consumer packaged goods, power, metals and mining, pulp and paper, and biofuels.

Process manufacturing is often complex because small changes in the feedstocks used, or to the chemical process applied, can have a significant impact on the efficiency and cost-effectiveness of manufacturing operations.

The manufacturers and their partners have extensive technical requirements and need a combination of software, services and domain expertise. The unique characteristics associated with process manufacturing create special demands for business applications that frequently exceed the capabilities of generic software applications or non-process manufacturing software packages. The process industries require sophisticated, integrated software applications capable of designing and optimising their complex, interconnected manufacturing and business process.

For 30 years, AspenTech has provided software that optimises process manufacturing. The company's roots were in a clean energy project at MIT during the oil shock of the late 1970s – the Advanced System for Process Engineering (ASPEN) Project. Today, we help companies in the chemical, petroleum, engineering and construction sectors achieve greater efficiency while reducing both their energy consumption and their carbon footprint.

### Dynamics at play

Over the last two decades, China and India have cemented their place as key players in the Asia-Pacific theatre. To keep up with China's demand for goods, companies



A key benefit of optimised operations is energy cost savings. Carbon emissions can also be lowered, resulting in a greener environment. This promotes a corporation's sense of social responsibility while showing fiscal prudence with better managed operations.

# The game changer

Optimization is transforming the way process manufacturers conduct their business, helping them to stay competitive and relevant to their customers

need to increase their efficiency and generate more for less. This underpins the case for process manufacturers to take on optimization as a business strategy to achieve world-class operations.

To manage costs, operations need to be well planned and optimised to maximise the company's investment. A key benefit of optimised operations is energy cost savings. Carbon emissions can also be lowered, resulting in a greener environment.

This promotes a corporation's sense of social responsibility while showing fiscal prudence with better managed operations.

Stemming from the need for a cutting-edge management approach, these companies use the best-in-class technology and teams of consultants to improve their systems and processes, as well as human capital acquisition.

While situated relatively further from energy sources, even Singapore enjoys a competitive edge as a refining hub. This can be attributed to a well-managed supply chain as well as the synergy that companies here draw from their industry peers.

The country can also draw on its strength as a business hub with a relatively open policy on immigration and emphasis on workforce development, which gives multinationals the freedom to assemble their teams with both local and foreign talent.

Singapore also scores with its safety-centric work

ethos and its reputation as a financial hub, providing easier access to capital for companies based here. It's likely that Singapore will play the role of a small but agile country in a sea of rising giants such as China and India in the strengthening Asia-Pacific region.

### Why are we bullish?

The future of software optimization is also tied to rapid developments in information technology. In the past decade, the world has seen significant advances in Internet capability and mobile applications. The ability of tools to run in the cloud and a range of IT advances are going to impact our industry in ways that have only just begun to take shape.

The sheer computing power at our fingertips now will allow us to visualise, analyse and solve problems to bring people together in ways that have never been possible before.

These are exciting times, as optimization is changing the game for process manufacturers worldwide, helping them stay competitive and relevant to their customers. As the future unfolds, process industry companies will be better equipped to respond to new challenges through optimization – designing and running more efficient plants, increasing operational performance, operating more agile supply chains, and reducing energy consumption and the carbon footprint.