

Topic:
Process
Engineering

What's Keeping the US Process and Power Industry so Healthy?

We speak to some of the leading names in the Process and Power software market...

iCAD is produced by Business Advantage, a B2B research, business development and marketing consulting practice operating in the global IT, Digital and Telecommunication sectors.

The US Process and Power industry, covering primarily the chemical, petroleum, utilities sectors, together with other key areas such as food and beverage and waste treatment plants, experienced fairly slow growth in the first years of the new Millennium. Now the picture has changed with significant and growing opportunities.

Intergraph Merger

Investor Group led by Hellman & Friedman and Texas Pacific Group agreed to pay stockholders \$44 in cash per share, valuing the group at \$1.3 billion. The deal was approved by stockholders on 20th November 06

In the first two quarters of 2006, Intergraph, one of the largest software developers in the US Process and Power industry, saw its business grow by 28%, according to Patrick Holcomb, its Executive VP of Global Business Development. On November 20 2006 Intergraph's stockholders approved its merger with Hellman & Friedman and the Texas Pacific Group, taking it back into private ownership once more.

The reasons that have been quoted for this move are; the ability to put long-term investment into its products free of the constraints of the short-term profit-orientation of the stockmarket, less onerous reporting procedures and the opportunity to work with a global investment firm. Intergraph clearly has a firm vision under their CEO R. Halsey Wise. The need for a longer-term vision in the field is underlined by Patrick Holcomb: "The business cycle in this industry is long term, requiring focus well beyond the next quarter" and one therefore, that is not necessarily best served by the short term reporting requirements of the stockmarket's focus on quarterly results.

Growth sectors

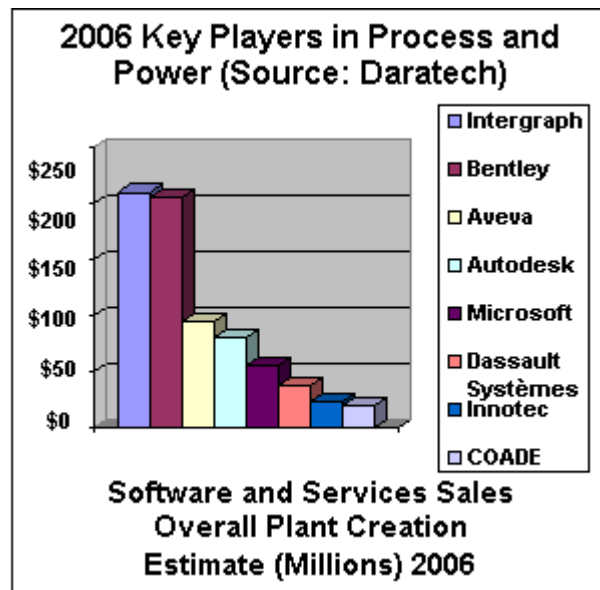
Bentley, the second biggest player after Intergraph has also seen business up by around 25% this year (Source: Bentley). Overall, the Process and Power software market has grown by 11% so far in 2006 (source: Daratech). Anne-Marie Walters, Global Marketing Director for Bentley Plant, points to the oil and gas industry in particular, sustained by a high oil price that makes exploitation of the hard-to-extract Canadian tar sands oil deposits viable. She says Bentley has seen huge growth in this market because Bentley is well placed to handle the combination of plant, geology and civil engineering expertise needed in this field through its broad portfolio of products.

It isn't just in the Canadian tar sands that oil and gas offer potential: there are as yet untapped and as yet closed oil fields off the coast of California, Oregon and Washington. (Source: Oil & Gas Journal, August 2006).

Dave Diehl, Vice President of Customer Experience, at COADE believes that part of the driving force is that "making plants more efficient is becoming more and more important in order to maintain profit margins" in the oil industry.

Nuclear is also poised for resurgence, partly because of its lack of carbon emissions and partly because of its potential for long-term replacement of fossil fuel sources.

Other utilities also offer opportunities for growth, as does plastic and rubber products manufacturing. Pharmaceuticals is a sector with mixed opportunities: on the one hand there is ever more legislation increasing product development costs, on the other hand, the growing number of older women create new opportunities for hormone replacement products.



Weaker sectors

The weakest sector is the debt-laden paper manufacturing area. Another weaker area is the coal product manufacturing sector, which is seen as particularly dirty, subject to green legislation, and suffers from personnel shortages. Waste treatment and disposal is also a difficult area, due to compliance and legislative issues.

Challenges to the industry

Possibly the biggest challenge to the industry is the lack of young engineers. Aveva's Dan Stevenson, VP of Business Development comments that "The Process & Power industry has a new trend; it needs to recruit a younger work-force throughout. The user-base became old since there was little renewal and as a result became stagnant. Now firms realise they need young, dynamic people to replace an ageing work-force, it isn't easy but it's probably the major trend at the moment; promoting the industry to younger engineers."

This is one of the factors limiting the growth of outsourcing, whose acceleration over the past few years is slowing. Another limiting factor is the sheer difficulty of co-ordinating disparate personnel across continents "The sector is very project driven with stringent deadlines", comments Bentley's Anne-Marie Walters. "This is not the normal situation for the traditional outsourcing vendors who offer cost effective services when business is very predictable. Another challenge is providing services to projects in remote, out of the way locations". There is also an underlying suggestion in the media that the US Government, mindful of Homeland Security, would prefer more resource concentrated at home.

Plant Designer's perspective

What are plant designers looking for from the software providers? The three key requests are: products that are more specific to their individual industries, products that support distributed workflows, and increased interoperability. All of the major players should be working on product improvements in this area.

One interesting development from the designer's perspective is Autodesk's recent announcement that they will develop products specifically targeted at Process & Power plant design. "We see tremendous opportunity to serve this segment by minimizing the obstacles that can make plant design overly complex and inefficient," said Mark Strassman, Vice President, Autodesk Platform Technology. "Our plant customers' work is complex, and their tools shouldn't be. Autodesk plant applications will give customers the best of our multi-disciplinary engineering expertise, in plant design applications that are easy to learn, use and deploy."

The overall picture

Overall, the Process and Power sector offers significant opportunities, but it is a sector going through change. Plant design end-users seek to increase their in-house engineering skills and are demanding more specialised products.

Software suppliers are demonstrating differing views about the best sources of long-term development funding, and with an imbalance in engineering resources available to each sector - partly caused by the economic dominance of the oil and gas industries - the resulting landscape is in a state of flux.

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