

information technology

MANUFACTURING SOFTWARE

Software Promises New Method for Calculating Batch Profitability

PVelocity (Toronto), a maker of profitability analysis software for batch manufacturers, says its application software could potentially save chemical manufacturers "vast amounts of money" and speed up the return on investments (ROI) on costly ERP systems. The software analyzes "profit velocity," pVelocity's term for the relationship between price, profit, and volume. The software links production and pricing data from a manufacturer's ERP system and its plant floor controls, allowing users to calculate product production time against dollars earned per manufacturing hour, says Ron Shulman, president of pVelocity.

A company's pricing decisions, expertise, and other pricing and sales information are usually "fragmented across functions, regions, and business units," Shulman says. This forces managers to base pricing decisions on incomplete or inaccurate information, Shulman says. Manufacturers trying to determine whether to sell a particular product at a particular price can use the software to better determine "true profitability in relation to available capacity, and not just the static margin of the product," he says. This method

of analysis sometimes entails lowering prices to increase volume and market share, he says. "PVelocity's pricing strategy is the antithesis of the across-the-board price hike or freeze that most companies pursue," he adds.

The software allows users to create profitability benchmarks by helping them to determine from which customers they derive the most profit, pVelocity says.

The software also allows users to simulate various production scenarios. Users can enter variable and fixed costs, volumes, selling prices, and production speeds related to products or customers, and then analyze "what if" scenarios to determine the profitability of a product and/or customer. PVelocity says this function enables users to rethink their pricing strategies, capital allocation priorities, and asset utilization.

PVelocity says that it has been selling the software since 1999, and it signed Ondeo Nalco as a customer in 2001. Rhodia is also a pVelocity customer, but is still in the test phase. PVelocity says it is in discussions with several other chemical firms, and it expects to sign up more customers next year.

Analysts say the chemical industry could benefit greatly from the profit velocity analysis strategy. "Many manufacturers should really view what they are doing as selling time on their production lines," says Steve Banker, analyst at ARC Advisory Group (Dedham, MA). "Many chemical firms have clear bottlenecks in their production process, and this is the perfect solution to help these companies compete," Banker says.

Nalco says it uses pVelocity's software at all its North American plants. "When our plants are running near capacity, it helps us determine which lines to continue, and how to adjust pricing," says Dan Harker, senior v.p./global supply chain and e-commerce at Nalco. "Plant managers began to better understand how the business

works, and how profit and loss statements are put together," Harker says. PVelocity's software enabled Nalco to increase its revenue by approximately \$9 million by identifying outsourced production capacity that could be brought back in-house, Harker says.

Rhodia is running the software at two unspecified North American plants, and will wait until it can calculate the return on investment (ROI) before installing pVelocity

at other sites, says Christophe Clemente, v.p. and finance director/home, personal care, and industrial ingredients at Rhodia. "We should be able to calculate ROI by the spring," Clemente says. So far, the company is pleased with the result, he says. The software enables you to classify customers by segments and detect where in your production model problems exist, Clemente says.

Rhodia says the simulation

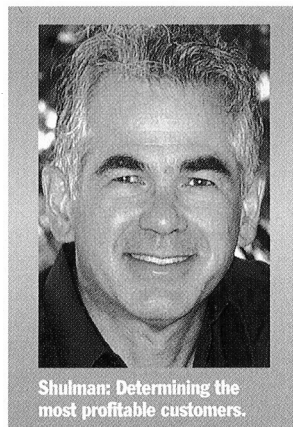
tool included in the software will be particularly useful. "It will enable us to change the raw material price, and the system makes the connection between the particular customer and the production process," Clemente says.

PVelocity says users can obtain an ROI in less than a year, but analysts warn that the highest returns will only be realized if users change the way they manage their sales organizations, and learn to better coordinate sales and production operations.

The cost of pVelocity's software is about \$100,000/plant, which is relatively low compared to the price of other IT investments, says Michael Monheit, CEO of consulting firm DoubleChain (Conshohocken, PA). DoubleChain works with pVelocity on software implementation consulting.

Meanwhile, vendors including ABB, Aspen Technology, and Honeywell each have software that they say links ERP systems and plant floor controls. But industry sources say there are only two vendors—Maxager Technology (San Rafael, CA) and pVelocity—that make software that connects plant and back-office data using the profit velocity analytics model. Maxager also targets the chemical industry as a market for its profit velocity software, it says.

—NANCY SEEWALD



Shulman: Determining the most profitable customers.

■ Sinopec Taps AspenTech Software

Sinopec Beijing Yanshan Petrochemical says it is implementing Aspen Technology's (Cambridge, MA) advanced process control software at its Beijing polypropylene plant. The software, Aspen Apollo, provides real-time predictions of product properties, reductions in off-specification material during transition and steady-state production, and increased plant capacity without capital investment in debottlenecking, AspenTech says.

■ Daelim Chooses Pavilion

Daelim Industrial (Seoul) says it has installed Pavilion Technologies' (Austin, TX) Property Predictor, at its Yosu, Korea polyethylene plant. The software links with a user's distributed control systems to speed up the detection of process problems in the plant, Pavilion says. Daelim says the software will reduce product sampling time and increase its ability to make process improvements based on current operating conditions.