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Could your company use an extra \$4 million right now?

Use analytics to maintain a competitive edge in a stormy economy

By Ritu Jain

Globally extended supply chains. Shrinking product life cycles. Ever-changing customer demands. And to top it off, global recession and associated credit crunch. Some fear it has the makings of a perfect storm.

So what can manufacturers do to survive?

Most have already adopted cost-reduction measures. But cost cutting is only effective to a point. Experienced executives know that in the long run, any drastic reductions in cost – especially taken by measures such as layoffs, plant closures, etc. – often backfire. Tom Davenport, a world-renowned business strategy analyst, notes that “Cutting costs for short-term impact without understanding what drives value or profit could threaten long-term competitiveness.”

Even companies that have taken a holistic approach to managing corporate performance struggle to align day-to-day decision making with overall corporate objectives. The reasons for this disconnection are twofold. First, today’s supply chains are complex, multitiered, multienterprise and global, making it extremely difficult for organizations to consolidate all the relevant data required for decision making. Second, traditional tools and technologies often are limited in their data processing and analytic capabilities to provide the kind of cross-value chain insights needed to make timely, informed decisions.

So what is the answer? What will be the key differentiator between winning companies that survive today’s difficult economy and find new opportunities for tomorrow and also-ran companies that will buckle under the pressure?

According to Davenport, the winners will be companies that “compete on analytics.” Companies that deploy **industrial-strength analytics** across their enterprise and drive business based on their ability to collect, analyze and act on data. Davenport asserts that leading companies make analytics a part of their overarching strategy, thus dominating their respective fields by leveraging their data to gain every last bit of value from operations.

Other industry research validates Davenport’s study. A recent McKinsey study calls **science-based management** an emerging trend. In a recent survey, The Aberdeen Group found that best-in-class companies are much more likely to use analytics to assess their supply chain performance, evaluate their suppliers and manage their overall operations.

And those best-in-class companies are reaping benefits, sometimes to the tune of millions of dollars. Consider:

A large manufacturer of wireless consumer products was able to save US\$4 million by using advanced analytics to detect product quality issues early. The company was set to ship 2.5 million units of wireless devices in a phased distribution. By using warranty analytics, the company detected an issue with the product six weeks earlier than the shipment date. Engineers used the information to fix the problem on current units as well as already-shipped units by providing correct information to the call centers staff. Early detection helped limit repairs to only 70,000 units and affected only about 25,000 customers, with a repair cost of about \$1 million. Had the company shipped all the units and used the standard service center logs for detecting the product issue, more than 600,000 units going to more than 500,000 customers would have to be serviced, racking up repair costs of more than \$5 million. By employing analytics, the company saved \$4 million in repair costs and untold millions in brand equity.

Global leaders are applying analytics across their supply chain to accurately forecast demand, reduce stock-outs, optimize inventories, improve customer service and mitigate supply chain risk, which affects both top-line and bottom-line growth.

One of Asia's largest beverage manufacturers took advantage of its gold mine of data by applying advanced analytics to predict and optimize operations. The company struggled to produce and distribute the right quantity and mix of beverages to meet consumer demand. Its various production plants were creating their own forecasts using different tools and processes. Their reliance on historical data resulted in high inventory levels, stock-outs and overstocks for different products at different locations, and high distribution and redistribution costs. Using analytics, the company combined their demand and replenishment data for 100 percent of their products to create accurate companywide forecasts for their entire product line across all locations. Replanning their production and distribution resulted in a 50 percent improvement in production turns and a reduction in inventory-carrying costs and distribution costs by replenishing accurately the first time. The result was reduced inventory, improved production turns, reduced stock-outs and ultimately increased margins.

Do you have the right analytics in your toolkit?

Companies have tremendous amounts of data in their transactional and operational systems. But as Davenport says, "they need to take better advantage of it." While analytics can help decision makers identify opportunities and pre-empt risk, the key is to have the right analytics.

There is a tremendous difference between the type of BI analytics that provide querying and reporting versus the predictive analytics that help companies answer critical questions like "Why is this happening," "What will happen next if these trends continue" and "What is the best that can happen?" The two companies discussed above didn't achieve their success with plain vanilla BI.

The companies that realize this difference and implement predictive analytics will reap countless benefits from data-driven insights by reducing uncertainty in their supply chains, predicting demand with precision and optimizing their production processes to maximize performance. The

result will be superior customer service, improved operational performance and overall competitive edge in the marketplace.

Ritu Jain is a global marketing manager for SAS' manufacturing and supply chain practice.

Suggested Readings:

["Competing on Analytics" by Thomas H. Davenport, Harvard Business Review](#)

[Eight business technology trends to watch, DECEMBER 2007 • James M. Manyika, Roger P. Roberts, and Kara L. Sprague, The Mckinsey Quarterly](#)

[Eight Levels of Analytics, SAS.com](#)