DECISIONS

FACE COMPLEXITY

MAKING SOUND BUSINESS DECISIONS

With every passing year, the amount and variety of information available to make business decisions continues its exponential growth. As a result, business leaders have an opportunity to exploit the possibilities inherent in this rich, but complex, stream of information. Alternatively, they can continue with the status quo, using only their good business sense and intuition and thereby risk being left in the dust by competitors. Top-tier companies have learned to harness the available data with powerful decision support tools to make fast, robust trade-offs across many competing priorities and business constraints.

Just like in other industry sectors, manufacturers have a vast amount of data. Pick just any popular three-letter acronym like ERP, MMS, TMS, WMS, HRM or POS, and there will be a huge storehouse of data sitting in a database, ready to help executives make decisions.

In spite of the data's existence, however, often companies still lack the information they need to make good decisions.

WHAT'S IMPORTANT?

Some things don't change: Business owners and executives need to know what's important and focus on it. Good decision-makers understand the key drivers of their business whether it is the price of raw materials, yields or efficiencies in manufac-

turing or the gross margin on sales.

These decision makers have developed metrics that can be used either as a direct measure of business success or at least leading indicators of that success, and they focus their energy on these few metrics. For example, in many top manufacturing plants, operating asset utilization (OAU) is a key metric that drives decision-making on the plant floor.

OAU compares the actual productivity of the plant to the highest productivity ever achieved at that plant and is corrected for times when there is no demand on the plant.

Data to calculate OAU is collected and made available visually to all production supervision after each shift or after each batch. It is discussed at shift turnover and at daily and weekly operations meetings. Together with one or two other metrics, such as safety and cost, OAU has become the driver for decision-making, whether to replace a piece of equipment, improve the maintenance process or upgrade the training of the plant operations staff. What's important here is that the metrics are generated quickly, made available to all key stakeholders and reviewed by top management.

The OAU example is a good illustration of focusing on a few important metrics by having them available quickly and in a visual form to all of the key stakeholders. This is usually accomplished by using a dedicated tracking tool to enter the amount of lost production as well as the reasons that caused it.

Understanding Data

When the information needed is contained in the ERP or other information technology systems, companies need to focus on understanding the data that is available and have the ability to retrieve it quickly in a useful format.

Unfortunately, some decision-makers don't realize what data is stored within their own IT systems. In other situations where there is an awareness of the data available, there is either a lack of expertise required to extract the data into a useable form or an inability to turn that

mountain of data into useful information to support decisions in a timely manner. In a sense, their IT systems have become "black holes" where data goes in, but nothing useful comes out.

This situation is even more unfortunate because there are a number of well-established business intelligence tools on the market that allow companies to extract and format information in summary or transactional levels of detail. The challenge is to secure the required resources to create the "cubes" of data and reports needed. This effort, however, pays off with timely metrics that helps owners and executives run their businesses and spot emerging trends quickly.

Decision-Support and Decision-Making Tools

Once companies know where to find the information in their IT labyrinth, but there is still too much data to wade through it all, it is time to use decision-support tools to streamline the process.

One of the most powerful ways to make sense out of all of the numbers is to use a visual analysis tool.

In addition to tools provided by the big software providers like Microsoft, Oracle and IBM, there are a number of niche tools that are catching the business world by storm. These include Tableau, Information Builders, and QlikTech. The easiest way to illustrate the power of these types of tools is through an example.

A leading building materials manufacturer had grown by acquisition and managed its transportation in a very decentralized manner. Each of the sites contracted individually with their own set of carriers, using their own set of criteria for selecting and then awarding business to the carriers.

Understanding the cost-saving opportunities that could result from a more centralized approach to carrier contracting and management required first understanding what was currently going on across all their sites. This was accomplished by developing a database from the client's freight payment records. There were more than 63,000 individual

shipment records to analyze in a way that told a story that the business executives could quickly understand.

The first step was to look at the transportation spend by carrier. The company quickly saw that the number of carriers being employed was out of control. Many of these carriers had only a single load all year, but were still in the system.

The company used charts to map out its records, and this visual presentation tool also showed the significant differences in pricing policies across the company's carrier base by plotting cost vs. distance for all of the shipments. This analysis led to the identification of a group of "outliers" that needed further analysis. Using a simple stacked bar chart, it was very apparent that one carrier was the main player in this group. Once this carrier was identified, the company was able to see that their cost was always greater than the average cost for shipments with distances greater than 200 miles and by as much as 66 percent for shipments with distances greater than 1,000 miles. Because of these pictures, it was easy for executives to see where quick cost savings could be found.

Seeing Is Believing

Using a tool that makes it easy to use the built-in "intelligence of our eyeballs," companies can take the action steps they need to reduce their supply chain costs dramatically. As technology continues to penetrate more and more aspects of our lives, it makes more and more data available for us to turn into useful information. But it's only useful information when it is in a form that is understandable and can be communicated easily to others. The old adage, "a picture is worth a thousand words" has never been truer than it is today in the highly complex globalized business world. **mt**

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