WHAT IS ANALYTICS?

BY JOHN CLARK

nalytics is a branch of the mathematical discipline of data analysis. It involves the study of historical data to uncover meaningful trends and patterns to help users understand the effect of certain decisions or actions, or to evaluate the performance of certain machines or processes.

The key strength of analytics is the use of data visualization to display trends, effects, and results.

As the old saying goes, "A picture is worth a thousand words":

of analysis or insight. The possibilities and functionality are literally endless.

Mining the Data

The packaging industry has a long history of collecting plant information. In many plants, little has been done with all this data beyond comparing a plant's actual production to its estimated production values, along with varying degrees of financial and operational reviews.

But what about the relationships that are not readily apparent? How will the trends

exciting ways to help you see your business in a brighter light.

Processing and Organizing the Data

In a well-designed analytics tool, the data structure is specifically designed to facilitate the reporting layer of logic. The required harvesting of the data elements from your ERP, automation of the extract, and transformation of the data, when required to "smooth out" multiple plant data sources, can be done without any staff intervention. All this is done to ensure that the rendered display of data is clear, concise, and accurate.

Presenting the Data

Analytic tools can take mounds of information and present it in a graphic format that allows you to review, analyze, and manipulate the data to find understandable trends and tendencies.

Data fields can be added to allow you to group machinery in different categories so you can analyze plant performance in ways never before possible. This process can help you see what customers, machines, and orders are contributing to your success, and help you build on this knowledge.

On the financial side of the ledger, you will be able to run reports and show graphically how your clients rank, and you can develop trends to show payment slippage and other worrisome concerns before they become major issues.

Analytics and big data are not in your future—they are in your *now*. The advantage and insight that can be gained by using analytics cannot be overstated.



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In the example above, inside one concise graphic layout you can see the month-to-month (MTM) or year-to-year (YTY) change in an individual plant's volume, trends in machine utilization, changes in efficiency and downtime reported, as well as a host of other data points.

The graphic above is actually worth multiple thousands of words, because the graphic and display elements are dynamic. You can click on any element to go to another level you are not tracking affect your business?

Herein lie the beauty and strength of data analytics. Analytics uses *all* your transactional and historical data to help you understand your business.

Using preconstructed modules for customers, sales staff, and production, your data comes to life in ways you previously could collect, but not present in a meaningful fashion. Now data points that previously were not relatable can be used in new and