

How Big Data and Business Intelligence Can Help Manufacturers Improve Efficiencies and Profitability

By Johani Marais, Channel Manager Africa, [Epicor Software Corporation](#)

In a new Chief Information Officer (CIO) survey conducted by Epicor in the Middle East, India and Africa, an overwhelming 90% of respondents agreed that speed, reinvention, agility and innovation are critical to the success of any organization serious about optimizing performance and gaining competitive advantage.

The most effective way for manufacturers to achieve these objectives is through the analysis of data so that they can understand the intricacies of process from start to finish. This helps to identify weaknesses, optimise production and solve problems before they negatively affect the business. The crux of lean manufacturing lies in the ability to do more with less and the only way to achieve this is through the use of data.

The term “Big Data” has received a lot of attention the past several years, but many are still confused as to what it is exactly. Simply put, big data is a compilation of data gathered from both traditional (structured data) and digital (unstructured data) sources from within and outside of an organization. Think of all the data that resides in a company’s business systems, add to the mix the plethora of data coming from the web and social networks -- sources of information that have to be sifted through and analyzed before any meaningful action can take place.

Let’s take a look at the sheer volume of data sets generated during manufacturing processes, so vast and complex that it is impossible to analyse using ordinary data processing tools. Collating and extracting critical information relating to any and all aspects of this process ensures that you have full visibility of operations. The availability of precise real-time data means that manufacturers no longer need to make crucial decisions based on gut feel or past experience; they get a dynamic view of the intricacies of their business from end-to-end. This is driving a revolution in the way that leading manufacturers complex data to gain competitive advantage and streamlines processes.

To facilitate reporting capabilities, and summarize expenses for accurate quoting and allocation of resources, a large East African distributor realized that its decentralised system was not consolidating data to ensure accurate planning and project management. Headquarters required accurate data that reflected the work they were doing but they were unable to supply it in real time. Often they were only able to identify problem areas when they were discovered at the end of the financial year. This had a direct negative effect on their bottom line. This highlighted the need for a consolidated system that would help them to mine data with a view to improving efficiencies and ultimately gaining competitive advantage.

Improved visibility into the manufacturing process makes it possible to track trends, identify problem areas such as wastage, facilitates precise quoting, accurate procurement and better planning, all of which have a direct impact your customers ensuring that you meet their needs promptly and more efficiently.



Big data can bring with it complexity but the right tools can help you to organise, prioritise and extract critical information. This makes justifying the expense of implementing a solution simple, as the benefits it offers directly impacts the bottom line.

Using data to improve business intelligence is crucial for quick decision making based on real facts. Leveraging technology and data makes it possible to organise data based on facts and focus areas so that you can make the most of resources and maximise profitability.

New Era Solutions, an Epicor value added reseller in South Africa for over 10 years, specializes in integrated and customizable IT solutions in partnership with global specialists in ERP, warehouse management systems (WMS), customer relationship management (CRM) and mobility, offering a single-source solution where customers benefit from one seamless working relationship that has all the right connections. www.newerasol.co.za