



# MANUFACTURING

## TECHNOLOGY INSIGHTS

September - 25 - 2017

MANUFACTURINGTECHNOLOGYINSIGHTS.COM

## TOP 10 Manufacturing Intelligence Solution Providers - 2017

Understanding the ongoing processes at the plant level is crucial in a manufacturing organization. When there is visibility into shop-floor operations, the performance of the company's assets across the enterprise becomes effective, resulting in reduced manufacturing costs and satisfied customers. Evidently, manufacturing intelligence solutions have come to fore in improving the efficiency and productivity in the realm of manufacturing.

Amongst the plenty of advances on the horizon, manufacturing intelligence is touted as the biggest driver of the trending Industry 4.0. Technologies like cloud, mobility, and big data are contributing significantly to strengthen the solutions and bring machine intelligence and its capabilities within reach of enterprises. Mobile technologies, in particular, are eliminating the need for on-site displays by allowing shop-floor visibility from any mobile device instead of solely depending on on-site dashboards and displays. This enables users in any job role to access real-time information or receive alerts from any device and any location, improving the response time for adverse

events and facilitating decision-making. SaaS capabilities are also swiftly emerging with promising capabilities like automatic software updates, universal remote-access, and built-in disaster recovery.

Manufacturers are partnering with solution providers to streamline their reporting system, automate operations, reduce implementation time, generate numerous reports, and efficiently solve issues. The expectation continues to soar for enhancements like deployment of current data, improved data handling capabilities, multiple servers support, and customized query handling.

To help CIOs navigate this flourishing landscape, Manufacturing Technology Insights' distinguished panel of selectors, comprising CEOs, CIOs, VCs, industry analysts along with the editorial board, has reviewed several companies that exhibit a proven expertise in assisting manufacturing organizations with their manufacturing intelligence solutions.

We present to you Manufacturing Technology Insights' Top 10 Manufacturing Intelligence Solution Providers - 2017.

### ADVIZOR Solutions

recognized by  magazine as

TOP 10  
MANUFACTURING INTELLIGENCE  
SOLUTION PROVIDERS - 2017

*An annual listing of 10 companies that are at the forefront  
of providing manufacturing intelligence solutions  
and impacting the marketplace*

**Company:**  
ADVIZOR Solutions

**Description:**  
Provides business intelligence and data solutions through in-memory analytics

**Key Person:**  
Doug Cogswell  
CEO

**Website:**  
[advizorsolutions.com](http://advizorsolutions.com)

# ADVIZOR Solutions

## Synthesizing Analytics-Ready Data

**D**oug Cogswell, CEO, ADVIZOR Solutions, has good news for manufacturers and shop floor businesses. While analytics provides a huge incentive to businesses, mid-market manufacturers lack the resources to leverage it. Further, the data generated in manufacturing facilities is not analytics-ready but meant for daily workflow. Business intelligence expert, ADVIZOR bails manufacturers out of their predicament by enabling visibility into processes to combat the high cycle times and enable a realistic view of machine performance, which ultimately impacts revenue. ADVIZOR has pioneered accessing and blending disparate data sets to tailor them for analytics and uncover the “stories hidden” in them to obtain human understanding.



**ADVIZOR has enriched Bell Labs’ technology further to provide the Visual Discovery software—a user-friendly tool for interactive data visualization—that operates on diverse environments**



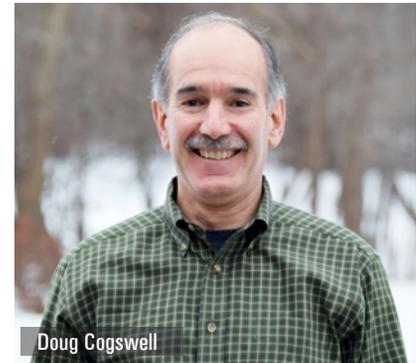
ADVIZOR’s value proposition for analytics is spearheaded by a Bell Labs-sourced technology for in-memory analytics, which enables two major functions—storing data in memory and visualization. The technology efficiently integrates tables of data from multiple databases to display the client details and customer-to-order relationships, where each order has multiple items. “ADVIZOR has enriched Bell Labs’ technology further to provide the Visual Discovery software (VDS)—a user-friendly tool for interactive

data visualization—that operates on diverse on-premise environments like the Windows, iPads, and cloud,” says Cogswell. VDS prioritizes optimizing cycle time to increase the economic value for customers.

To deploy VDS, ADVIZOR thoroughly assesses clients’ key objectives and pain points concerning cycle times, pricing margins or even customer retention. Later, a tool to integrate data from multiple systems and formats such as MySQL and PostgreSQL is employed, following which VDS is loaded on to the memory and factory core system. “The ERP system has details of customers’ orders—the parts, pricing and the in-out times of machines—while machines provide operational information between the in and out times,” explains Cogswell. All the data is blended, and metrics are created to improve the delivery efficiency of each order and displayed as heat maps.

VDS simplifies analyzing orders, operations, and revenue for each customer. Order analysis checks cycle times and examines conditions hindering order flow. Operations analysis checks the machine utilization factor and oversees the blending of machine data packets with ERP data to aid the understanding of order patterns. Operations analysis also improves the margins and profitability for manufacturers by preventing the underpricing of parts or customers. Revenue analysis examines accounts payables, receivables and all financial models attached to ERP systems. Not surprisingly, the proposition has boosted delivery efficiency by 30 percent for ADVIZOR’s customers.

Cogswell shares the experience of working with a metal surface plating company that lacked visibility into the exact buckets-per-minute moved by the



Doug Cogswell

machines, for whom ADVIZOR created a heat map visual of dollars per bucket-minute. The heat map featured rectangles representing customers, sized by the number of orders from each customer and colored by dollars per bucket-minute (DPB). Higher DPB colors rectangles green, and lower values, red. Clicking on rectangles displays underlying order data, which the management can utilize to identify the steps and initiate corrective measures. Regression algorithms support dynamic linking of data to heat maps through charts and tables.

Heat maps helped SWD—a metal finishing, dip spin coatings facility—optimally use the data from its dip spin line facility, which improved collaboration between teams and personnel manifold. Costs and operation timelines were significantly optimized, which boosted the order delivery efficiency and hence customer satisfaction. The successful collaboration continues with ADVIZOR’s engagement in building dashboard-enabled visualization capabilities for SWD’s upgraded dip spin facility.

With in-memory analytics being the new buzzword in business, ADVIZOR is poised to engage with customers worldwide. “It would be about deriving insights from data that was never designed for analytics,” concludes Cogswell.