

Sage Clarity Industry 4.0 Next-Gen Manufacturing Intelligence

The manufacturing industry has now entered into its fourth phase of revolution, Industry 4.0, where advanced technologies such as IoT, machine learning, Artificial Intelligence (AI), and cognitive technology are orchestrated to build highly interconnected and analytics-driven 'smart factories.' However, many manufacturers are still struggling to stay on the cutting edge. "Sage Clarity came into existence to support the agenda of industry 4.0 with technologies and solutions that will enable manufacturers to make faster inroads into next-generation manufacturing," begins John Oskin, CEO, Sage Clarity. Sage Clarity's best-of-breed applications enable manufacturers to tackle the challenges and realize optimized and high performance 'smart factories'.

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With the rise of industry 4.0 comes the need for business intelligence and manufacturing intelligence. Sage Clarity pioneered the concept termed 'The Shallow Dive,' which is the ability to quickly examine relevant data in a manufacturing organization. The Shallow Dive is injected into One View™, a dashboard that extracts essential information from the pool of data and provides it to the right people at the

right time. One View™ brings real-time visibility of various supply chain metrics like inventory, customer service, quality, OEE, and manufacturing performance into mini-metrics apps to improve operations at different levels. These different metrics apps are connected to each other to fuse the silos of information in most organizations. One View also incorporates a 'what if' analysis model that empowers manufacturers to predict the status of metrics and determine the chances of achieving the target based on the projections. With One View, Sage Clarity is assisting companies to move away from static reports and migrate to real-time KPIs and simplify their metrics and dashboards to become more agile.

Sage Clarity leverages machine learning, AI, and IoT to enhance the capability of another product, ABLE™, which performs root cause analysis of the process state and flow on production lines. ABLE automatically determines the root cause for the breakdown in complex production lines, freeing people from deriving and delivering those insights to concerned departments. The built-in decision logic engines in ABLE assimilate those data into a root cause that doesn't burden the process control systems. In one instance, one of the company's clients that implemented ABLE was able to reduce the integration cost by 50 percent and improve the quality of the collected information by 20 percent.

Building on Toyota's pioneering production monitoring technology, Andon, Sage Clarity has introduced its sophisticated Industry 4.0 version, which automatically detects production line problems and alerts appropriate stakeholders. The Next Gen Andon™ system makes use of mobile devices, and



John Oskin

overhead plant floor displays to alert the concerned wing to address a particular production line issue while supporting knowledge workers with follow up reporting and corrective action work flow. Integrating Sage Clarity's Next Gen Andon system with MES, ERP, OEE and other plant floor systems merges issues into a common repository for review and response.

To help organizations be lock-stepped with the progress of industry 4.0, Sage Clarity is advancing its machine learning and AI capabilities. Focused on predictive analytics using AI, the company is developing alerts to predict downtime on a production line. The technology called 'Predict-ABLE™,' notifies a worker in advance about expected issues or downtime on a particular production line, on a specific day. Those predictions can be propagated through email, mobile devices or large overhead scoreboard TVs displaying the information for workers to take actions proactively. "We aim to help manufacturing firms line up the resources to address issues before they occur," concludes Oskin. **CR**