Visible Data Means Operations Excellence

Coca-Cola Uses Proficy Software to Streamline Refreshment Production

By Jim Montague, Executive Editor

Seeing is believing and bringing operational information into the light makes it usable by everyone in an enterprise—allowing them all to make faster, more productive decisions.

Coca-Cola gained new insights to help further optimize production, while also taking advantage of cloud-based data gathering, analysis and protection. These experiences were described by Ioan Batran, automation engineering director at Coca-Cola Refreshments (CCR), in their presentation, "Operational Excellence: Improve Data Visibility Across the Enterprise" at the GE User Summit in Orlando, Florida.

Refreshing Soda Pop Production

Though it’s been using Proficy software for many years, Batran reported that Coca-Cola revamped its application at 70 manufacturing facilities. "We focused on reducing complexity in our supply chain, pushed back against inefficient customization, did a lot of root cause analysis and concentrated on useful action," said Batran. "In our line information systems (LIS), we sought to better track line assets, increase efficiency, reduce equipment losses and downtime, and improve our decisions. Our LIS basically tells us if we’re meeting our promises."

Batran added that all levels at Coca-Cola’s production facilities need data from their LIS, so simplifying their software and standardizing their control architectures makes them easier to deploy and support. This 70-plant renovation began by updating the LIS server at each facility with Proficy Historian, iFIX HMI SCADA and dashboard software. These solutions allow each LIS to deliver real-time and historical data, and then push reported KPIs to an SQL enterprise database via Sync Agent software and Microsoft Azure to Coca-Cola’s cloud-based server.

"Now we can compare the performance of plants, lines and even individual machines," explained Batran. "LIS management routines and practices measure and manage our manufacturing processes to maintain and improve performance," said Batran. "We’re also implementing paperless guidance, so we can further un-cloud our crystal ball and focus our decisions more precisely on what we need to do."

These improvements allow the LIS to generate tactical reviews that let users respond to specific operational events and produce strategic reviews that let them address continuous improvement efforts by identifying trends, patterns and root causes. "The reviews help us implement better management routines, which need to be backed up by appropriate levels of change management," added Batran. "You also have to secure leadership support and stakeholder buy-in."

Views available on Coca-Cola’s LIS-based system include plant overviews, production line layouts, historical machine status, short-interval control reports, enterprise-level displays and others. These displays can be presented on PCs, tablet PCs and smartphones. "The enterprise LIS even lets us see selected KPIs on multiple lines, so we can compare the performance of different machines," added Batran. "Next steps include implementing more paperless capabilities and autopilot management routines, as well as improving overall management routines, coaching and auditing."