I had the opportunity to discuss asset management with Stuart Harris, vice president and general manager of Emerson Process Management’s Asset Optimization business. Harris said he believes many plants that have Computerized Maintenance Management Systems (CMMS) and asset management systems today can better use them to improve plant results. Harris described how the next frontier for asset management is providing insights and using predictive diagnostics to support management decision-making. He posed this question, “Plants have thousands of assets, and how does management determine where to focus resources?”

Real-time analytics and reporting connect asset performance and business performance by enabling users to zero in on the 10 of 10,000 assets that require immediate attention.

Harris noted companies have been investing in the underlying systems for asset management, but these are islands of information used in a narrow way for day-to-day operations by a number of groups including maintenance and reliability, maintenance planning, production, and operations. The systems are used for specific functions including startup, commissioning, troubleshooting, work planning, and scheduling basic preventive maintenance that has improved day-to-day operations and optimized work processes. “These systems have been providing value in their domains. So if I talk about our own predictive diagnostics, yes we are giving the information to customers in a predictive way, but they may just respond to these predictive diagnostics one after the other,” Harris said.

While plants have benefitted significantly from predictive technologies, maintenance management systems, and documentation of work processes, managers have lacked the ability to easily and immediately access the ever-increasing volume of data in ways that enable strategies for additional improvements to reliability and overall plant performance. These separate systems contain a great deal of information that can be leveraged to achieve the next level of productivity and efficiency. This requires new software tools that integrate information and analyze it over time. Harris described the analysis of patterns, “For example, if you look at alerts over a time period such as the last year or five years and identify patterns of recurring alerts, you can start to make informed decisions. This could indicate that units should be operated differently, production processes have changed, equipment specifications should be changed, and the information can be used to engineer out faults.” The goal is to be proactive rather than reactive.

When asked if there are companies that understand the value of this type of analysis, Harris said some users sense there is value in better analysis and are trying to accomplish this manually. He described a user that has a person spend eight hours a week pulling data out of their CMMS and other systems to build spreadsheets to try to get insights. They are finding value using this limited set of static information and are looking to move to an automated real-time system to achieve more results.

Harris described how a key element to better analysis is linking systems together and using software tools to look at asset information over time to yield bigger results. Real-time analytics and reporting connect asset performance and business performance by enabling users to zero in on the 10 of 10,000 assets that require immediate attention. “This information provides insights and an understanding to make higher quality decisions about where staff is spending time and where resources are being used.” Based on this, people can identify better ways to operate the facility, manage, and utilize the assets to drive better business outcomes.

It is clear the next big level of benefit is to use information to take a more holistic view of operations to improve business performance. This new focus is about the effectiveness of maintenance—directing efforts, energy, and resources to those areas that truly drive the greatest business performance.

ABOUT THE INTERVIEWEE
Stuart Harris is vice president and general manager of Asset Optimization at Emerson Process Management. Harris joined Emerson in 1986 and has 24 years experience in the process industries.