Enabling The Next Generation Operator

Bernard Cubizolles, PhD. GE Intelligent Platforms

The industrial landscape is changing. Difficult economic conditions, the fast adoption of new technologies, and the ever increasing need to comply with more and more strict regulations represent a challenge for manufacturing and infrastructure operations. All companies at various roles feel the need for more visibility and efficiency monitoring at real time rates. Operators today have multiple hats and roles, causing a need for higher efficiency and mobility for operating and controlling assets across the plant or geographic areas. What they need is real time monitoring and control on new generation tablets and smart phones, with new intelligent applications to help bring the right knowledge to operator action.

Real Time Operational Intelligence represents a paradigm shift to the way infrastructure and manufacturing operations work from the plant floor, through the operational center to executive dashboards. Using new technologies in visualization, mobility, analytics, and collaboration will increase the efficiency of the operator/supervisor by bringing knowledge to action anytime, anywhere.

Mobile Clients and Location Awareness

With the increasing popularity of smartphones, tablets, and other mobile devices, industrial users expect these technologies to deliver the information they need, when they need it. Operators no longer need to be stuck in the control room. A user interface that travels with the user leads to a large boost in personnel productivity and efficiency. The information being pushed to users reduces the need for large amounts of workforce training and nurturing. New and inexperienced personnel can be effective immediately. Technologies such as the patented Geo-Intelligence technology can be of tremendous value, assuming that location awareness is based on role and user privileges and related actions. The right information delivered at the right location, in real time, ensures that decisions are taken with the appropriate context resulting in operational excellence.

Leveraging the flexibility of some of today’s advanced SCADA solutions, operators can go from their mobile displays to SCADA screens with a single click, enabling them to not only see the KPI and health indicators, but also access the control capabilities of their SCADA.

Intelligent Alarm Management - Reduce the Noise

Alarm management is one of the top challenges brought up by industrial users. More than 75 percent of all alarms are considered to be noise according to some. An aging workforce and loss of domain expertise compound this problem. Intelligent alarm notification allows for an important reduction of information overload on the operator, therefore increasing his or her productivity and efficiency through informed actions. It provides a more intelligent and accurate representation of the

operational health and allows for informed actions to be taken at the right time, rather than when it is too late and more expensive to make adjustments. Enter a new era in alarm detection, delivery, and notification with the use of advanced analytics in the operations environment.

Security as a Primary Concern

Infrastructure and manufacturing sites represent a potential target for hackers and persons with malicious intent. Intelligent Agent data capture technology allows companies to secure their application and the related information with state of the art design for extended diagnostic and secure trending. Its primary role is to secure data transfer and to provide exception based diagnostics at the asset end point through the use of new secure agent technology.

Real Time Operational Intelligence – A Paradigm Shift

Real Time Operational Intelligence bridges the mobility gap between all other systems. Mobility, security, and analytics are key market trends. Real Time Operational Intelligence solutions make these an integrated and powerful combination – which will change the paradigm for how both infrastructure and manufacturing based users use their plant data and realize huge gains in productivity.

Source URL (retrieved on *04/01/2015 - 1:30pm*):
http://www.impomag.com/articles/2012/11/enabling-next-generation-operator