The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.

— Bill Gates, Co-Founder, Microsoft Corporation

Questions to consider

- Do you know if your control system may be hurting production rather than helping it?
- Did you know that poorly tuned control loops may endanger your plant and personnel?
- Did you know that control loops need to be regularly tuned for your control system to actually provide value to you?

If your answers are no, consider the ABB Reliability Pack.

ABB Reliability Pack

combines control loop performance monitoring and loop tuning accelerator services into one package that provides 24/7 monitoring of Key Performance Indicators (KPIs) to tell you if control loop performance is degrading, and help you get it back on track so your control system can help you maximize production.

Loop Performance Monitoring Service

powered by ServicePort™, identifies, classifies and prioritizes control loop improvement opportunities. Using non-stop data collection and analysis to transform raw data into actionable information, the ABB Loop Performance Monitoring Service quickly pinpoints troublesome control loops, improving tuning and leading to reduced process variability, increased availability and higher product quality.

Loop Tuning Accelerator Service

uses control data already gathered, analyzed and stored to quickly identify issues, so that corrective tuning can take place to ensure full utilization of the control system and highest availability of the production process. It gives process engineers the ability to create accurate models to predict events, reducing or eliminating potentially disruptive process bump tests in control loop tuning.

Loop Performance Workbench Tools

are used to view data, identify tuning parameters and simulate tuning setup on PID control loops. The suite of ABB Loop Performance Workbench tools provide data collection, loop setup and calibration; data analysis, standard reports, tuning and simulation, and identification. The suite includes Data Logger, Loop Analyzer, LoopTune, and Signal Analyzer, all built upon extensive service experience.

ABB ServicePort

is a secure, remote-enabled service delivery platform that allows users to view, scan and track Key Performance Indicators (KPIs) to ensure maximum performance of equipment and processes, resulting in higher operational efficiency. ServicePort distills expertise ABB built over decades of equipment and process support into bundles of automatic services which are delivered efficiently on a global basis.
Reliability and other Advanced Services case studies

Chemicals: Wacker Chemie, Germany
Wacker wanted to improve operational efficiency of their control system to make more product. To identify the potential for doing this, ABB provided a control system performance analysis using the Loop Performance Monitoring Service powered by ServicePort. The company used findings from this service to optimize the control system to improve quality, cost control and, most importantly, throughput.

Mining: Swedish Mining Company
To keep its extensive ABB 800xA control system fully optimized for maximum productivity, Boliden employs the 800xA Performance, Cyber Security Monitoring, Hoist Performance Monitoring and Loop Performance Monitoring Services, all powered by ServicePort. These services are monitored remotely, where ABB experts can help Boliden address issues that may be identified to ensure operational efficiency.

Oil & Gas: Middle Eastern Gas Plant
The production volumes of this large natural gas processing facility demanded top performance from control systems. The plant wanted a single monitoring method to identify existing and potential process issues. ABB provided Loop Performance and Harmony Performance Services powered by ServicePort and quickly identified control issues that had been missed or were out of range, and helped to correct them.

Oil & Gas: South American Oil & Gas Firm
This company wanted to optimize operational efficiency. ABB provided 800xA Performance, Loop Performance Monitoring, and Cyber Security Monitoring Services all powered by ServicePort. These services identify, categorize and prioritize issues to improve control system performance and control accuracy and reliability. Two refineries installed three ServicePorts each to take advantage of these benefits.

Power Generation: Swedish Power
This company, which produces heating for about 300,000 people, offices and factories, as well as electricity equal to what 100,000 households would consume, has nine ABB 800xA control systems that must be monitored and optimized to keep the power flowing. The solution was the remote-enabled 800xA Performance, Cyber Security Monitoring and Loop Performance Monitoring Services powered by ServicePort.

Pulp & Paper: Southeast Asian Paper Mill
With ABB Performance Services powered by ServicePort, the mill measurably improved equipment and process performance: the LV Drives Performance Service identified issues that that improved drives performance; the Loop Performance Monitoring Service helped to improve fiber stability, refiner stability, and paper machine runnability; and the QCS Performance Service helped to improve product quality.

Other Performance Services powered by ServicePort

- Cyber Security Monitoring Service
- Harmony Performance Service
- Hoist Performance Monitoring Service
- LV Drives Performance Service
- QCS Performance Monitoring Service
- QCS Transition Performance Service
- System 800xA Performance Service