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#### Business in 2008 and 2009

During 2008, the automation and process control market grew faster than during any of the previous five years. Double-digit growth in the oil and gas, refining and petrochemical, and power generation segments of the market fueled this surge. Industry suppliers such as Emerson Process Management and other companies grew on top of the strong market.

Looking to 2009, we can expect the market to hold a degree of uncertainty. During the first six months, most companies' ongoing capital projects should move to completion if they are already funded. During the third and fourth quarters, we will see the demand for and prices of end products moderate, and companies may find funding for capital investments increasingly harder to obtain.

One thing we know from years of operating in dynamic markets is that the best time to strengthen competitive position is during a weaker market. Companies do that by investing strategically to gain both a competitive advantage during tighter times and to position themselves for growth when the tide changes. For our customers, this means fine-tuning operations, focusing on asset optimization and making cost-effective investments in targeted new technologies. This will position them to capitalize on the opportunities that this economic climate presents. As a result, they can become more competitive by responding to market changes, whatever they may be, and be ready to grow when the market does.

#### Critical Issues

Companies should view the expected moderation and market uncertainty over the next several months as an opportunity to creatively approach their operations with a renewed commitment to optimizing production and improving reliability.

Uncertainty in the marketplace can present multiple uncontrollable factors like fluctuating demand and price for end products and changing costs of feedstock. Market leaders can ride out the turbulence by focusing on improving certainty in their processes. Better-controlled plant operations provide the foundation on which companies can draw the ability to respond quickly and appropriately to market swings.

Tightening budgets and fluctuating market prices spur companies that want to stay competitive to adopt a "lean and mean" philosophy. The best approach is to spend limited money in the most creative ways possible to produce the best value as a return on investment. New technology can help market leaders optimize their existing assets.

#### Trends

Companies able to gain a comprehensive view of their processes

and asset health through innovative technologies can bring an increased level of certainty and reliability to their operations. This will enable them to drive business decisions for success, even during an uncertain market.

Wireless sensing in field networks is no longer an optional consideration. Today, wireless makes more sense than ever. Companies that have already invested in wireless technology have seen up to a 90 percent savings on their installed cost over traditional wired networks. With the adoption of the WirelessHART standard and the expanded range of devices available, 20 percent of all measurements in the field will be wireless during the next five years. In fact, the ARC estimates \$1.12 billion will be spent on wireless by 2012.

Wireless vibration, temperature, pressure and corrosion monitors can deliver critical data about pumps, compressors, turbines and other key plant assets and processes. Self-organizing wireless mesh networks operate securely and reliably, even in plant areas congested with equipment, to deliver information that may have been previously impractical or economically unfeasible to collect.

This data can help companies better manage processes, optimize production and protect assets. Integrated into business and process applications, the information enables personnel to work more efficiently and make dozens of incremental changes in the process to dramatically improve plant productivity. Armed with asset diagnostics data, staff can further bring certainty to operations by using predictive maintenance software to create customized reports showing problematic assets, trend alerts from the plant level down to individual assets and easily identify the highest priority assets that need attention.

#### Additional Thoughts

Companies that see economic uncertainty as an opportunity to reap the benefits of wireless sensing networks and asset optimization applications should leverage suppliers' expertise as they do so. Suppliers can not only identify the most cost-effective ways to introduce these new technologies into plant operations, but they can also help optimize the investment by integrating this new data into enterprise applications and work processes.

The trend toward collaboration between companies that use this new technology and supply it will continue to shape the development and application of these valuable tools in 2009 and beyond for operational excellence.

The depth and length of the economic slowdown is uncertain. Market leaders who grasp the underlying opportunities to bring certainty to their operations will not only stay competitive during these times, they will also emerge stronger at the end of this cycle.