

executive corner | Tips and Strategies for Managers

Berra: IT, engineering coming together



Editor's note: Engineering and IT have a great future together, according to Emerson Process Management's President John Berra. At the Emerson Process User Group meeting held in October, Berra sat down with InTech Editor Gregory Hale and talked about some of the important topics in the industry in the second part of a two-part discussion.

InTech: As we all know, this industry is not quick to change. What is the biggest pushback to using wireless?

Berra: Customer resistance, if there is such a thing. I will take you through the sequence. Typically, when we talk to customers, the payback, the potential benefit, is seized immediately. The next thing is 'Does it work? Is it reliable?' And after you go through that set of discussions, the next question that comes is about security. The questions are 'Can someone hack in? Or can someone jam?' We have worked really hard to address those issues as well. We can show from an installed base and years of testing that it is reliable, robust, and secure. Then you look at early adopters, and then you have proof that it works, and then the people that are more skeptical will look to that proof and it kind of creates a momentum. It is exactly what happened with fieldbus, and it is exactly what happened with DCS. All of the changes that have happened in the industry end up going through that sequence.

InTech: Do they trust the technology initially?

Berra: If it is the first thing they have ever done, there is a certain skepticism even after they place the purchase order. When they get down to using it, their actual experiences are quite good, and they are amazed it does what people say it will do.

InTech: Right now wireless is mainly used for monitoring. Will it be used for critical control?

Berra: I believe it will. I see nothing in the technology that will prevent it. And the technology will only get better and better. Battery technology will improve. There is a lot of interesting work going on in power scavenging, ways of creating the power to run a wireless device without a battery or which could embellish the power of the battery. I lived through a similar situation in the fieldbus days: Would anyone put control in the field; move control functionality out into the field instrument and have that take place over a shared pair of wires. I think the evolution for wireless is similar. It will do control at some point. I think it has to earn its spurs in the monitoring world for awhile.

InTech: Is the wireless HART standard enough to move the industry toward wireless technology, or does the ISA standard also have to be out in the market?

Berra: The wireless HART standard is a big help. Anytime you have a body that has a lot of the best minds coming together and working on an approach and issue a standard, it gives customers a measure of confidence. Any sort of standard is a help. The wireless HART standard is very focused. It is focused on the process industry, and it is focused on the sensor level or the transmitter level and as such serves a terrific purpose. The ISA 100 standard has a broader purpose. As you think about the top-to-bottom aspect of wireless, how much of that is truly unique to the process industry, and how much of it is shared with the general IT work going on across the whole world? Also, where does the process industry unique needs have to have a purpose build or specific standard that addresses those needs?

InTech: Where is that unique line? Is it right above the wireless HART standard?

Berra: There is probably a little bit of a gray area. If it is above the sensor level, then it is not very much above it until more traditional IT technologies take over.

InTech: Who is making the wireless system solution buying decision?

Berra: In wireless, typically, the automation guys are involved in the decision, but do they have to bring the IT department? If the project is below a certain dollar size that may be as far as it goes, but as you go up the ladder, then you enter in the financial officers and other management kinds of approvals. Typically, an IT person has to bless what is put in because it does need to fit into the network structure of the plant, and the automation guy is looking for the specific benefits they are trying to get. It is a two-fold thing. With our partnership with Cisco, that is how we get this done because we have to address both of those departments.

InTech: Is the plant floor talking up through the enterprise? Is that happening right now?

Berra: It is happening, but probably not as fast as anybody wants it to happen because it is not as easy as it sounds. But it is happening. I think the end-to-end dream has not yet been completely realized with a CEO sitting at one big dashboard and everything out to the very ends of all the plants is completely understood and integrated.