Real robots, virtual robots and the case for connecting people with machines

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Over the past decade we have seen major advances in manufacturing IT. On one hand most machines and controllers now allow remote connectivity, diagnostics and even parameter adjustments. On the other, mobile and cloud technologies are enabling our workers to capture field data, communicate in real time and work together to resolve issues. Inexplicably however, for the most part the worlds of machines and humans remain un-connected. In this presentation we make the case that there is huge value in linking our human and machine assets in a seamless network. A network that promotes automated detection of issues through remote sensing and intelligent analysis (significantly reducing plant management workload), awareness and alerting of relevant human resources to issues (increasing response speed, reducing downtime), and visualization of critical patterns and trends hidden in the data (surgical pinpointing of problem areas and data-driven process improvement). We then describe a practical and effective platform approach that you can employ today to bring superior performance to your organization.

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Mechatronics; a way to cure the skilled trades’ shortage

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Part of the difficulty in closing that gap is dispelling the negative stereotypes of the manufacturing industry, as well as reintroducing today’s youth to the art of building things. Mechatronics Training is a very important offering for the State of Alabama and a special recruitment tool and technique that reflects the evolution of the manufacturing industry. You need to attract young talent who wouldn’t otherwise have the financial means or chance to afford a training school opportunity, but apprenticeships can be easily tailored to meet your company’s needs. The Alabama Robotics Technology Park (RTP) represents a leap into the future for Alabama’s workforce training efforts. The project is lead by Alabama’s workforce training agency AIDT (Alabama Industrial Development Training), which is part of the Department of Commerce. Alabama’s new Robotics Technology Park is collaboration between AIDT, and some of the world’s leading robotics, automation and welding companies. The RTP is considered one of the world’s most innovative and futuristic training centers. At the facility, workers from manufacturers such as Toyota, Honda and Navistar and some of our newest companies Remington and Polaris train and will train on the latest equipment from the partner vendors. We offer at “NO COST” to the Alabama companies the same training that the vendors offer at their home sites and sometimes we have more available robots than they have at the corporate office to train on. With the partnerships we have with these vendors it allows RTP to offer not only the same training but some classes are tailored to the companies specific needs at the plants. This helps new companies train employees and existing technicians and engineers and thiskeeps their skills they have at a higher level than your average technician. This is an offering coined by Mercedes Benz called a Mechatronics Technician. AIDT was the first in the USA to tackle this type of training and have produced some awesome technicians. This training is an example that should be copied all over the world.

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