

Blog for Syrma Technology

<https://www.syrmatech.com/keeping-pace-with-industry-4-0/>

Keeping Pace with ‘Industry 4.0’



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Our upcoming appearance at [Electronica Fair Europe](#) in Munich has us thinking about the next generation of manufacturing automation—what the Germans originally coined a fourth industrial revolution, or “[Industry 4.0](#)”. Many of these advances in manufacturing revolve around the Industrial Internet of Things (IIoT). An offshoot of the IoT we already read about every day—home consumer products such as smart TVs, thermostats and the like—IIoT is defined as advanced, wireless networked automation designed to directly increase efficiency on the factory floor, including:

- Embedded sensors and controllers, remotely networked via Wi-Fi or RFID, which monitor and regulate function, optimize factory workflow or even anticipate changes in operating conditions, augmenting the skills of human assembly workers—while ensuring higher output with even better quality control.
- Applicable assembly-line robotics, operated via machine-learning algorithms, which deliver high precision with minimal human oversight.
- Data-driven manufacturing, incorporating Big Data and cloud-based applications to process, analyze and visualize data throughout design and production, including extended failure analysis—facilitating stronger decision-making by management.

- Real-time coordination with supply chains to assure materials are always available in necessary quantities—eliminating nagging shortages or surpluses which affect the bottom line.

Innovation Today, Profits Tomorrow

General Electric is a leading U.S. proponent of Industry 4.0, incorporating specialized IIoT applications into their next-generation [Brilliant Factory](#) program (not just “smart”, but *brilliant!*). By incorporating these leading edge manufacturing improvements, GE forecasts that a productivity increase of just *one percent* will translate into a savings of \$500 million in their global productivity. If other manufacturers around the world followed suit, GE predicts global GDP could rise between \$10-15 *trillion* over the next 15 years.

The Future Is Already Here

Industry 4.0 is an increasingly hot buzzword throughout the manufacturing world. At Syrma, we likewise realize that maintaining our world class contract manufacturing services means conceptualizing, designing and implementing Industry 4.0-inspired improvements to our production facilities. Manufacturers who fail to invest in the future—or insist decades-old methods will always remain “tried-and-true”—will simply fall behind the curve.

Meet Us at Electronica Fair Europe in Munich

While we look ahead to presenting our turnkey design and manufacturing solutions to potential new customers at Electronica Fair, we also look forward to roaming the show floor and visiting other exhibitors to share thoughts about emerging IIoT applications and keeping pace with Industry 4.0. For those of you who also plan to be in Munich between November 8-11th, we invite you to reserve a convenient time to [meet the Syrma team](#) at **Hall C4, Booth #241**.