



New Industry Opportunities

How the Combination of Artificial Intelligence and IoT makes the Smart Factory a Reality

Augsburg / Munich, December 1, 2020 – Part 4 of the digital press conference series “Join us for a coffee...” took a look into the future of manufacturing and showed how industrial companies can increase efficiency, product quality and revenue by linking artificial intelligence and the Internet of Things – this time with the expertise of KUKA, Device Insight and Sentian.

When it comes to combining artificial intelligence and IoT, industry has so far clearly focused on predictive maintenance. “A mistake,” says Dr. Christian Liedtke, Head of Strategic Alliances at KUKA, with conviction. As the expert made clear at the beginning of the virtual discussion round: “If companies focus exclusively on predictive maintenance, they can only achieve better availability of a single machine, which shouldn’t fail anyway.” What end users are really interested in is generating more revenue. “To achieve this, however, all those involved in the process must work better together and individual processes must interlock seamlessly.”

Smart Production with Artificial Intelligence of Things

One approach enabling such a holistic optimization of production is the combination of artificial intelligence and the Internet of Things to form an “Artificial Intelligence of Things” (AIoT), as created by KUKA subsidiary Device Insight and AI specialist Sentian. Here, the aim is to continuously reduce deviations from the optimum within a manufacturing process and to automate improvements. As initial applications of AIoT show, it is precisely the fine adjustments of industrial production that can exploit enormous potential to increase the quality of goods produced and overall yield. According to McKinsey, this will enable an increase in efficiency of up to 30 percent. The key is therefore to synchronize AI and IoT technologies.

“If you think of AI as the brain of Industry 4.0, the Internet of Things functions like the nervous system in the body of a factory,” says Martin Dimmler, Business Development and Solutions Lead Cloud & AI at Device Insight. “Only when both systems work together, i.e., when well-prepared data is applied in large quantities to state-of-the-art machine learning methods, can the full potential of AIoT be exploited.”

“In 10 to 15 years, artificial intelligence will be in every production process.”

This is why IoT pioneer Device Insight has joined forces with the Swedish AI specialist Sentian. Together, they are now able to accompany companies on the way to intelligent production – away from individual solutions and selective improvements, such as those possible with predictive maintenance, and towards a holistically optimized smart factory.

“In 10 to 15 years, artificial intelligence will be in every production process”, says Martin Rugfelt, CEO of Sentian. “In fact, AI is already important for many industrial companies. It can reduce energy consumption in the chemical industry, cut waste in the pharmaceutical industry, handle variation in paper production or optimize production lines in discrete manufacturing. For example, JUMO, a German manufacturer of automation and sensor technology, has been able to increase the proportion of its sensors in the highest quality class by 8 percent.”

Whitepaper “Beyond Predictive Maintenance – Intelligent Automation with AIoT”: [Download](#)

Film “Beyond Predictive Maintenance – Intelligent Automation with AIoT”: [View here](#)

About KUKA:

KUKA is an internationally active automation group with sales of around EUR 3.2 billion and about 14,000 employees based in Augsburg, Germany. As one of the world’s leading suppliers of intelligent automation solutions, KUKA offers customers everything from a single source: from robots and cells to fully automated systems and their networking in markets such as automotive, electronics, general industry, consumer goods, e-commerce/retail, and healthcare.

About Device Insight:

Founded in 2003 in Munich, Device Insight GmbH is an IoT specialist, accompanying companies in their digitization in the fields of Internet of Things, Industry 4.0 and artificial intelligence. Based on a flexible IoT framework, Device Insight combines ready-to-use IoT building blocks and individual applications for customized IoT services. System integration based on common cloud providers and development are combined to create tailored solutions that are both fast and scalable. Device Insight supports global networking of machines, vehicles, plants and devices and provides applications in the fields of data acquisition, condition monitoring, predictive maintenance, machine learning, industrial analytics and AIoT (Artificial Intelligence of Things). Device Insight is active in more than 15 countries, working together with large enterprises and mid-size customers from various sectors, including machinery and plant engineering, HVAC, commercial vehicles, vending, transport, energy as well as the Connected Home environment. Services range from business case analysis and implementation to secure IT operations. The company has been awarded “Internet of Things (I4.0) Leader Germany” on numerous occasions by the ISG Provider Lens study. Since 2019, Device Insight has been a subsidiary of automation specialist KUKA AG.

About Sentian:

Sentian.ai is an industrial AI company that provides solutions and services for both manufacturing and process industries. Sentian.ai has an extensive research program in the field of applied AI and is therefore able to deliver trend-setting products that give its customers a competitive advantage. Sentian.ai offers three products: ICON (Intelligent Control Optimization), which optimizes existing control and automation solutions with AI, Predictive Maintenance for large-scale implementations in distributed environments as well as in manufacturing, from Cloud to Edge, and its world-leading nonlinear approach to production planning, supply chain optimization and workforce management. Sentian.ai has received several awards for its leading AI technology and solutions.

Further Information:

KUKA AG

Zugspitzstraße 140
86165 Augsburg

Contact:

Ulrike Götz
Spokesperson Technology
Tel.: +49 821 797 3795
fachpresse@kuka.com
www.kuka.com

Device Insight GmbH

Willy-Brandt-Platz 6
D-81829 München

Contact:

Alexandra Luchtai
Senior Marketing & PR Manager
Tel.: +49 89 4545 448 27
marketing@device-insight.com
www.device-insight.com

Sentian.ai

The Ground
Bredgatan 4
SE 211-30 Malmö
Sweden

Contact:

Martin Rugfelt
CEO
Tel.: +46 734 20 30 44
martin.rugfelt@sentian.ai
www.sentian.ai