# Venture further into the Global IoT

With a reorientation towards a stronger focus on providing solutions, the Kathrein Group is looking ahead into the future

Jürgen Walter, Senior Vice President, Solutions Business Unit, and Thomas Brunner, Head of Business Line Kathrein IoT Solutions, Kathrein Group, in an interview with "RFID im Blick"

Highly sophisticated hardware and software is the key to value-adding future-proof IoT solutions. The Kathrein Group recognised that this is a successful model and already achieved this synergy two years ago. The reason is obvious: future-oriented companies always endeavour to implement smart complete solutions and to holistically realise processes. Kathrein now orientates its solution business totally towards its customers. Today, the business field of Kathrein RFID is a part of the "Solutions Business Unit" and bears the name "Kathrein IoT Solutions". Jürgen Walter, as Senior Vice President, is responsible for the "Solutions Business Unit". Thomas Brunner, as Head of Business Line, manages the "Kathrein IoT Solutions". When interviewed by "RFID im Blick", both managers describe the strategy that lies behind the reorientation and how IoT applications are driven globally, as well as how customers all around the world can benefit from this spirit of change.
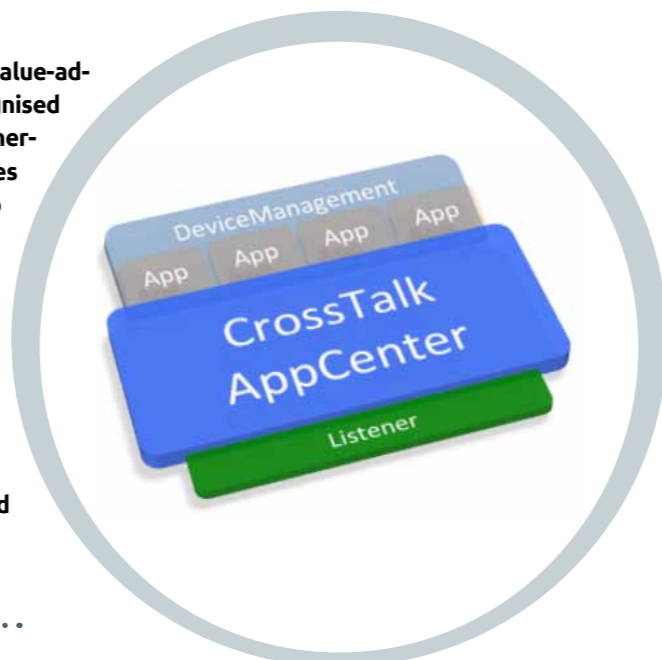
The modular noFilis CrossTalk software suite for IoT integration and track & trace visualisation including plug & play integration for AutoID devices and backend systems and visual track & trace business scenarios out of the box

"For many years, the Kathrein Group has been one of the global market leaders in antennas for mobile communication, car antennas, and also in the broadcast environment with their big potential solution competence. With our reorientation towards providing solutions and strengthening the proximity to our customers and their applications, this potential is realisable. We have identified high growth prospects in the IoT solutions business area in particular."

Jürgen Walter, Senior Vice President and Head of the Solutions Business Unit, Kathrein Group
Since November 2015, Jürgen Walter has been managing the "Solutions" business unit that consists of the business areas IoT, gigabit networks, building digitalisation, terrestrial and satellite reception systems, and the service activities of the Kathrein Group. Jürgen Walter has many years of experience in the IT and telecommunications industry: starting in 2012, he was working for the Japanese Fujitsu Group, where recently, as CEO of the Fujitsu Technology Solutions GmbH, he was responsible for their business activities in central Europe. Beforehand, he was working in various key positions in the telecommunications branch of Siemens AG and Nokia Siemens Network where he most recently, as a member of the executive board, was managing the business area "Business Solutions". Jürgen Walter graduated in electrical engineering from Technical University of Munich.

"In the scope of the reorientation towards the solutions business, we are required to improve the existing RFID hardware so that, despite innovative features such as direction detection and even higher security levels, integration becomes steadily easier. There, we profit from the software know-how that came with noFilis."

Thomas Brunner, Head of Business Line
Kathrein IoT Solutions, Kathrein Group
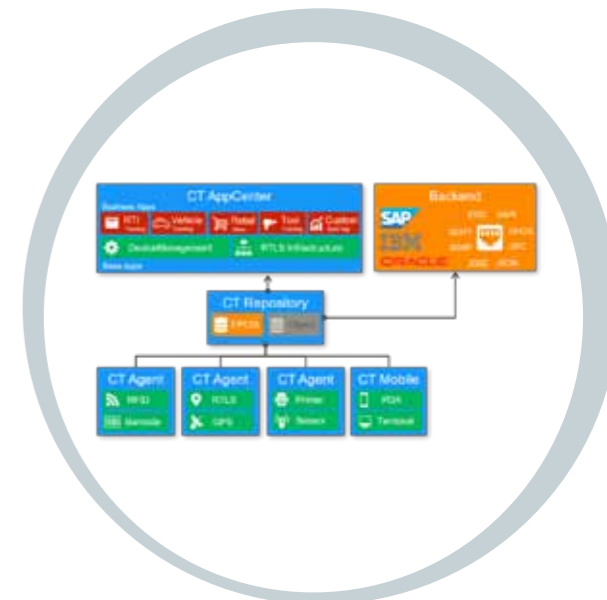
The three major components of multi-technology-supporting CrossTalk Product Suite: the Cross-Talk AutoID Edgeware for the integration of stationary AutoID read points, CrossTalk Mobile for mobile scenarios and the CrossTalk Application Center for real-time Tracking & Tracing and RTLS applications

High frequency solution in the IoT

"Today, having core competence in high frequency technology constitutes the basis for innovative products and antenna solutions, and thus the market leadership of Kathrein in many areas," Jürgen Walter emphasises and explains: "Our product business is now complemented by a solution business that is aiming to realise a perfect interaction of permanently improved hardware, software ideally attuned to it, and holistic services designed for customer benefits." Together with a broadly-based partner eco system, Kathrein is now able to integrate scalable IoT solutions in almost every country. "Whether an individual customer in Brazil is looking for a solution, or a globally-active enterprise such as Audi wishes to gradually roll out an application into numerous factories spread around the globe – in cooperation with a network of partners, turn key projects covering everything from the first concept to the support come from a single source," says the business unit manager.
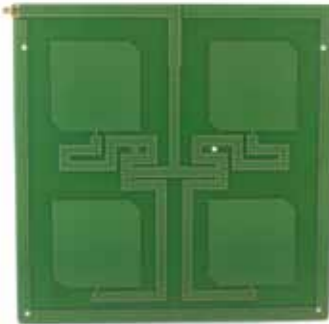
Four solution segments with a single goal

The business unit "Solutions" is divided into four business areas and offers, in addition to IoT solutions, solutions for gigabit networks, for the network coverage inside of buildings, and for the optimisation of mobile communication antenna sites that are broad-based on Kathrein's broad service portfolio. "For many years, the Kathrein Group has been one of the global market leaders in antennas for mobile communication, car antennas, and also in the broadcast environment with their big potential solution competence," Jürgen Walter outlines. "In the light of convergence of technologies and application fields, our reorientation towards providing solutions and strengthening the

Best Product LogiMAT 2015 – ARU-CSB reader system with integrated switch beam antenna.

proximity to our customers and their applications brings our high solution competence to the fore."

Make synergies usable in-house

All four segments of the business unit "Solutions" draw on the same development organisation. "The resources are allocated with regards to the respective projects. Through the concept of having one development department for four different areas, we make it possible that individual projects benefit each other," Jürgen Walter explains and Thomas Brunner adds: "In periodical in-house workshops, we bring together hard- and software developers from different development areas. The exchange of know-how is the foundation for future innovative solutions integrated at our customers to enhance process efficiency."

Mergers and acquisitions for the next step

The "new" entrepreneurial approach of Kathrein becomes clearly visible when taking a look at the business line "IoT Solutions". Merged with the long-standing partner noFilis, today Kathrein obtains in-house software and integration know-how, thus allowing them to offer customers turnkey IoT complete solutions, as Thomas Brunner emphasises: "From a developmental point of view, Kathrein has been one of the leading companies on the market since UHF RFID was first introduced. Numerous innovations in hardware are to be found in innumerable applications in companies worldwide. To the development department, it became apparent early on that highly-sophisticated RFID technology alone will not be sufficient. Therefore, Kathrein was one of the first companies to integrate industrial computer technology into UHF readers. This is the only way to identify and process a large number of fast-moving transponders. In combination with the 'CrossTalk 3.0' soft-

Smart-Shelf antennas/-modules enable intelligent solutions for eKanban, shelf applications, workplace monitoring, point of sales, and retail.

ware, captured data is filtered, sorted, and processed into events in order to make the ERP world able to directly make use of it." For Thomas Brunner, the network capability of the hardware is the decisive factor in realising IoT solutions. "In the case of a lack of TCP/IP functionality, real IoT solutions are almost impossible. Network technology is the global standard for IoT."

cus will shift from hardware to solutions. In the end, the customer is not interested in the technology used but rather in the achievable process optimisation. Thus, it is the responsibility of solution providers to choose the suitable hardware and to adjust the software to it. The customer gets an elegant, streamlined, and high-performance complete solution with a single interface – the one interface to their ERP environment. Kathrein IoT solutions operate without technological blinkers. If barcode is the technology that fits the application the best, we use it. Real-time location systems experience a strong upsurge. In this area, major development steps have been made in the market," Jürgen Walter states. However, changing customer requirements will not lead to Kathrein cutting back their own hardware development. "Quite the contrary: we are required to improve the existing RFID hardware so that, despite innovative features such as direction detection and even higher security levels, integration becomes steadily easier. There, we benefit from the software know-how that came with Nofilis," Thomas Brunner explains.

Positioned for the future

"Companies benefit from our solutions because they get innovative hardware, software, and services from one source. With the acquisition of noFilis as a part of the globally-active Kathrein Group, companies gain assurance that there will be support over the next years for solutions they purchase today. Global positioning of the Kathrein Group reliably assures sustainability," says Jürgen Walter.

IoT market has huge growth potential

Jürgen Walter and Thomas Brunner both agree: the IoT market will show strong growth within the next years. "The fo-

IoT for industry, logistics, fashion, and much more

"High-performance cross-application platforms like 'CrossTalk 3.0' will assert themselves more and more in the IoT solutions field. Due to its modular design, complex features are easily configured. This broadens the application spectrum as the software can be used together with different identification hardware such as RFID or RTLS by specialised integrators of the Kathrein partner network," Thomas Brunner explains and elaborates: "On the platform, applications for fashion retail as well as for container tracking in the oil and gas industry could be realised – the possibilities are almost limitless."

Audi revolutionises value-added chain with IoT solutions by Kathrein

Beginning with a first installation at the Hungarian factory in Györ, car manufacturer Audi integrated a cross-process RFID application for the tracking and tracing of finalised vehicles. The vehicles are identified by an UHF transponder that is integrated into the bumper. noFilis was involved with the integration. Currently, the application is in operation at four Audi factories and at twelve supplier factories. "By now, more than 1,800 RFID reader points with Kathrein hardware are installed worldwide. An annual 1.8 million vehicles are tracked and traced via RFID. The benefits that come from RFID use begin with the labelling of the bumper at the suppliers and might end at the local retailers that could offer consumers added value. Even though the latter still remains a vision, the application already demonstrates that increases in performance are realisable with tailored IoT solutions," Thomas Brunner explains.

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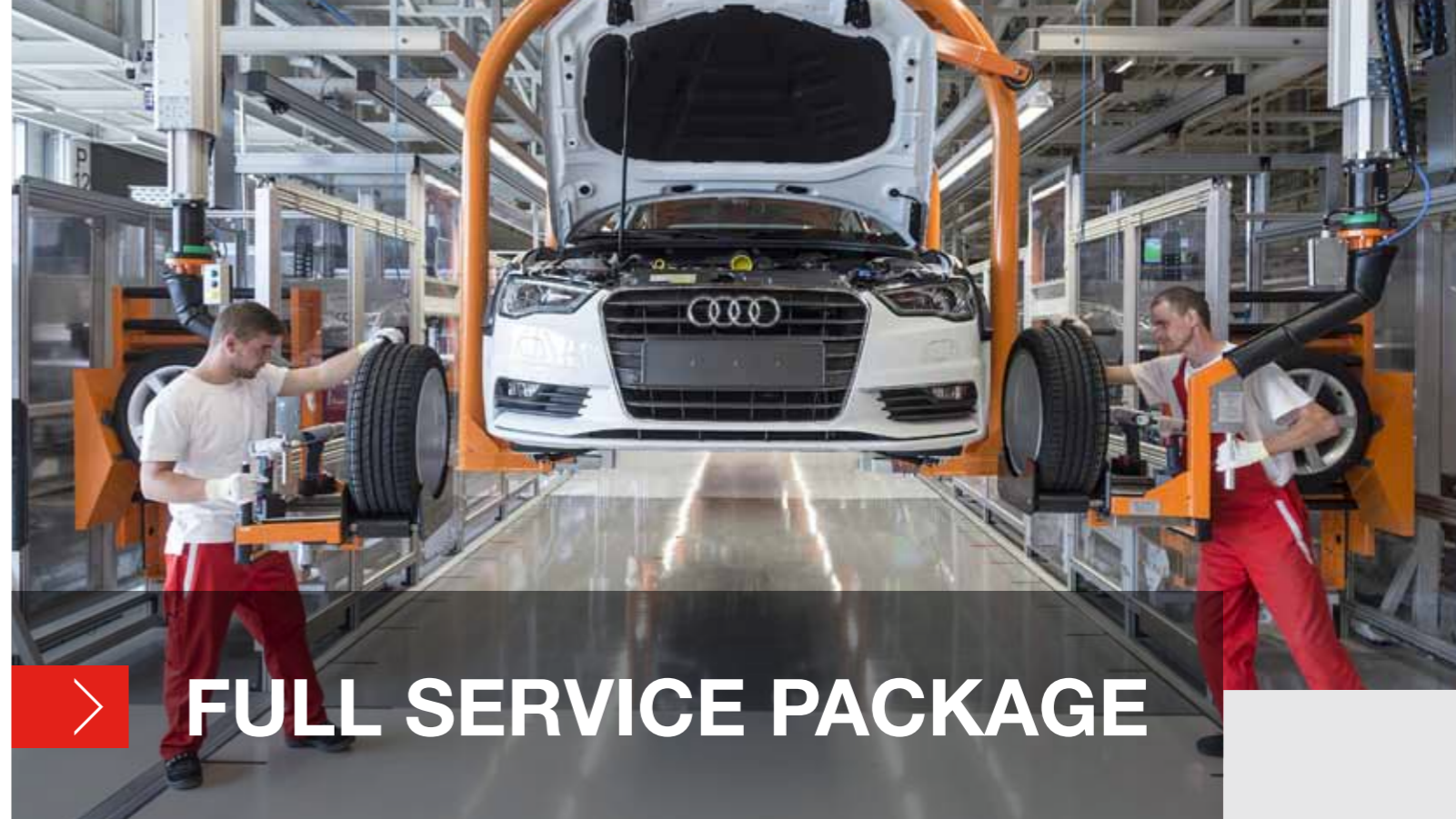
Intelligent devices for Real Time production visibility

ARU-CSB reader system with integrated switch beam antenna:

The ARU-CSB RFID system allows to detect fully automatically moving goods with the integrated 3 high selective read zones. For the first time it is possible to link raw RFID read data with positioning information which is directly provided from the system by using the high performing circular switch beam technology.

AutoID solutions:

noFilis CrossTalk is the most advanced software suite for IoT integration and Track & Trace visualization. CrossTalk DeviceManagement delivers plug & play integration for AutoID devices and backend systems on the market. The AppCenter provides many visual track & trace business scenarios out of the box. With the modular approach, its highly configurable and customizable apps allow CrossTalk to be used in any scenario.

KATHREIN RFID **More information:** www.kathrein-rfid.de

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