

Our Key Competence Areas are the fields in which KLU specializes. Find out about current discussions and research findings on Digital Transformation, Creating Value, and Sustainability for the benefit of transportation, global logistics, and supply chain management.



Dr. André Ludwig is Associate Professor of Computer Science in Logistics. He is the spokesperson for KLU's Key Competence Area Digital Transformation. Before joining KLU, he was Assistant Professor of the endowed chair of Logistics Information Systems at the University of Leipzig. André Ludwig has studied at the University of Leipzig, NTNU Trondheim, Curtin University of Technology Perth, and Swinburne University of Technology Melbourne. He received his Doctorate and Diploma degree in Management Information Systems from the University of Leipzig.

THE FUTURE OF RETAILING

NEW RESEARCH PROJECT ON SMART CITIES

AN INNOVATIVE PROJECT funded by the German Ministry of Education and Research and coordinated by KLU has just been launched. The project is designed to help the retail sector meet the needs of urban customers and their environments.

Retailers are currently facing a challenge: embrace omnichannel commerce or find themselves left behind. "Retailing is no longer a competition between online and offline shopping," explained Professor André Ludwig, the coordinator of the SURTRADE project (Smart Urban Retail Services – An integrated service system for omnichannel commerce for the city of the future). "There are no online-only customers – customers switch dynamically between channels, deciding spontaneously how they interact with retailers, where they get prices or product rating information, and how the products should be delivered. Logistics services will be one essential criterion determining customer decisions."

To stay competitive, retailers need to grow their online and offline businesses together, says Ludwig:

"We want our project to provide retailers with tools for integrating all the interaction points along the customer journey. The overall customer shopping experience, which could include elements such as new pop-up store concepts and in-store tools like augmented reality and smart mirrors, is key."

The ambitious omnichannel commerce project was launched in March and is set to run for three years. "What we are basically developing is a cloud platform that integrates the different 'touch points' between customers, retailers, and service providers," Ludwig explained. In addition to the cloud platform, the project will develop apps to support the different stakeholders. "We are planning to use showrooms in Hamburg and Leipzig to demonstrate what we've developed and get feedback," added Ludwig.

To achieve the project's goals, a number of specialized public- and private-sphere partners have been enlisted to deliver subprojects. "The University of Leipzig, for instance, is our partner for ar-

chitecture," Ludwig explained. "Shopping malls are becoming less attractive to shoppers and we need to think about how to change that." Other partners include the Handelshochschule in Leipzig, retailer Tchibo, IT specialist SALT solutions, and mobile applications company CHECKMOBILE.

"Apart from coordinating the project, KLU's role deals with the modeling and IT aspects. We adopted our service-oriented design approach from information systems. It allows us to describe retailing, logistics, and payment services in a way that facilitates their integration," said Ludwig. "We believe that in the future, the actual product-offering will no longer be the physical product, but instead the combination of the product and a number of related services, including logistics services. We are confident that with this project, we can develop new ways of describing and integrating services."

By Jeff Kavanagh

CONTACT:

Professor André Ludwig
andre.ludwig@the-klu.org
+49 40 328 707 224

TACKLING THE DIGITAL TRANSFORMATION

THREE-DAY STUDENT WORKSHOP EXPLORES DIGITALIZATION IN LOGISTICS

HAVE YOU EVER WONDERED how warehouse processes can be automated for higher throughput? Or what it takes to have your online deliveries arrive on time? Thanks to the KLU Boot Camp: Digitalization in Logistics in April 2017, 40 student participants now know about these topics.

The three-day, free workshop was targeted to bachelor's students from all over Europe. André Ludwig, Dimka Karastoyanova, and Asvin Goel are KLU professors who conduct research in the field of digital transformation. Their lectures kicked off the event and outlined different perspectives on digitalization. After they laid the theoretical foundation, it was the students' turn to take action.

Company representatives presented real-world cases involving Lufthansa Technik Logistik Services, Kühne+Nagel, and DPD Deutschland. In groups of four to five, the students put their minds to new warehouse technologies, delivery

solutions for the last mile, and an overall analysis of whether digitalization in logistics results in opportunities or risks. On the final day of the workshop, the students presented their ideas and received feedback from the practitioners.

KLU organized the boot camp for a very topical reason. "We are seeing some fundamental changes in the way businesses organize and execute their processes – caused mainly by digitalization," said Professor Dimka Karastoyanova. "With this workshop, we wanted to introduce students to real issues and enable them to discover new ways of thinking and problem solving."

An opportunity the participants definitely took advantage of. "It was great to have the industry perspective," said Marie Charline Klaputek, a student of business administration. "The practical insight I gained was a great addition to the theoretical knowledge I am learning at my public univer-

sity." Ole Kühl was quite surprised by the company representatives' executive positions. "They sent their CFO or head of digital innovation to discuss the cases with us," the recent graduate of European business remarked.

The professors and industry representatives were also impressed. "We've seen some new and very creative approaches in the past three days," Ludwig said to summarize the event. "And I think the companies that attended took one or two ideas home, too."

After seeing that the participants, lecturers, and guest speakers were all happy with the outcome of the workshop, organizers Maria Kern and Nicole Martinetti came to one conclusion: "There will be another KLU Boot Camp in 2018!"

By Kristina Brümmer