



Press release

BENTELER Automotive and Fraunhofer IEM invest EU funding in "Big Data" solutions

- BENTELER and the Fraunhofer IEM collaborate in the EU research project BOOST 4.0 for the topic of Big Data in the industrial environment.
- At the BENTELER Automotive site in Paderborn, the partners within BOOST 4.0 are implementing a project for data analysis and evaluation in maintenance.
- The company guarantees the reliability of its machines in the future, thus ensuring the highest quality for its customers.
- Big data solutions contribute to long-term value creation and secure BENTELER's position as a technology leader.

Paderborn, March 13 2018. BENTELER is implementing the EU project BOOST 4.0 at the company's plant An der Talle, Paderborn. This project is one of ten pan-European pilot projects for Big Data. To implement this project, BENTELER will receive funding from the European Commission to foster the topic of Big Data with a focus on predictive maintenance. BENTELER's partner in this project is the Fraunhofer Institute for mechatronics design methods (Fraunhofer IEM). In addition, the cross-company network "it's OWL" ("Intelligent Technical Systems" OstWestfalenLippe) will contribute its experience in technology transfer for this project. BENTELER is an active and long-standing member of this cluster.

Funding permits evaluation of large data volumes

Big Data is a term used to describe very large data volumes, which are too complex to evaluate them through manual or conventional methods. Data volumes of this magnitude are, for instance, generated in production. BENTELER and the Fraunhofer Institute use methods of machine learning and models for handling Big Data. Thanks to the funding, these can now be pushed further and implemented in the Automotive site Talle, Paderborn, and at other BENTELER locations. Specifically, this pilot project is used in industrial data analysis related to maintenance.

Preventing downtimes through "Predictive Maintenance"

The aim of the project is to prevent future operating downtimes. "For this purpose, the Fraunhofer IEM is developing a model for anticipating required maintenance work - referred to as Predictive Maintenance," explains Daniel Wienhusen, director Industry 4.0 of BENTELER Automotive. "Understanding the relevant data enables us to assess the state of



health of the corresponding machine. On this basis, the teams can detect imminent disruptions and take preventive measures early."

A way to unearth the data treasure

Martin Weidlich, Executive Vice President Region Western, adds: "We want to use technical production data constructively, because it contains important information for making production processes more efficient. These Big Data solutions link large data volumes and evaluate them. In the long-term, this will contribute added value - and secure our position as a leader in technology."

Photos and captions:

Team_Picture_Boost.jpg: Teamwork: BENTELER and Fraunhofer IEM are implementing the EU project BOOST 4.0 on Big Data in Industry.

Picture_Pred_Maintenance.jpg: Through predictive maintenance, impending faults can be detected early and preventive measures taken in good time.

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About BOOST 4.0

BOOST 4.0 and the associated pilot projects were launched in early 2018. BOOST 4.0 is designed to span three years; the project involves cooperation of 50 companies from 16 countries. The European Commission is funding this project with approximately 20 million euros. The participating companies are investing another approximately 100 million euros. The ten European pilot projects are the hub of project BOOST 4.0 and its 50 partners. They promote pan-European exchange of industrial Big Data by designing models and tools for industrial data analysis and utilization. Through these methods, the BOOST 4.0 initiative is creating a technological foundation for the successful implementation of Big Data and Industry 4.0 strategies throughout Europe. Moreover, it is currently one of the largest European initiatives on the topic of Big Data in industry.





About BENTELER

BENTELER is a leading global company that develops, produces and sells products, systems and services for the automotive, energy and engineering sectors. We are a familyowned firm now in the fourth generation. Our 30,000 employees at 153 locations in 40 countries are passionate about excellence in manufacturing and distribution - in close proximity and collaboration with our customers. Sales in 2016 amounted to 7,423 Million Euros.

The three Business Divisions BENTELER Automotive, BENTELER Steel/Tube and BENTELER Distribution are organized under the strategic management holding company BENTELER International AG in Salzburg, Austria. With our technological expertise and strong focus on successful implementation, we develop solutions that make the difference – for customers, employees and society. And we make them happen.

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About BENTELER Automotive

BENTELER Automotive is the strategic development partner for automotive manufacturers with a high level of innovation skills and problem-solving expertise. With about 24,000 employees and 72 plants in 25 countries, we develop tailored solutions for our customers: Our products include automotive system solutions and modules for chassis, body, engine and exhaust systems as well as systems for electric vehicles.

About the Fraunhofer IEM

The Fraunhofer Institute for Mechatronic Systems Design IEM is an expert for intelligent mechatronics in the context of industry 4.0. Scientists from the fields of mechanical engineering, software engineering and electrical engineering collaborate interdisciplinary at the Paderborn site. Focusing on "Advanced Systems Engineering", Fraunhofer IEM explores innovative methods and tools for the development of intelligent products, production systems and services. Underlying core competencies are intelligence in mechatronic systems, Systems Engineering and Virtual Prototyping.