

Field experiment in the Server



Two combined harvesters cut and harvest a swath as wide as 12 m in the field of the Landwirtschaftliche Genossenschaft APH Hinsdorf, a farm cooperative near Köthen. Before the grain tank of the harvester gets filled and it stops its work, a software informs about the next transfer vehicle. A tractor that will take the grains to the silo drives past. The driver knows with certainty, thanks to information received by GPS, where he has to go and avoids by so doing unnecessary empty running. Everyone can see on the on-board tablets of the harvesting machines: Who drives when and to where, how full is the tank container, how wet are the grains, how big is the yield per hectare? The sensors of the combined harvesters and the tractors deliver all data to the server of the telecom service through mobile telephony. There they will be gathered, edited and implemented on graphics – all in real time.

As one can see, harvesting is going to have a beautiful new look in the so-called fourth industrial revolution. It has indeed been witnessed on the fields near Köthen, even though this was in form of a young shoot for a starting. In the rising age of „Industry 4.0“, field work is also taking place on data servers. In a pilot project with the Deutsche Telekom, the agricultural engineering manufacturer Claas from Westphalia tested the orchestration of the entire field logistics last summer. The makers were surprised themselves by the outcome: „Our efficient operation allowed us to save time up to roughly 15 percent. Of course, that is ready cash, because one operating hour of a combined harvester costs a farmer roughly 1,000 euro“, says Thomas Schiemann, Head of Business division Industry 4.0 at the Bonn-based company. Following the results of the pilot project in Saxony-Anhalt, many requests have arrived from all over the world.

„The project in Saxony-Anhalt was a real success for us“, recognizes Schiemann. „We have thereby written a bit of industry history, because we have set up the first ever functioning 4.0 project in Saxony-Anhalt.“ It goes far beyond the already existing communication between machines and puts information at the disposal of many other players like customers. Meanwhile, there are numerous 4.0 projects everywhere.

According to a survey carried out by the German Engineering Association (VDMA), IT and Automation accounts for 30 per cent of production costs in machinery construction. For one out of five companies, the amount is even up to half of the costs. Currently, under the slogan „Industry 4.0“, all branches of industry are feverishly looking for ways to make their development, production and logistics processes better as well as to reduce their costs. The future is seen in complex software and communication solutions. With their assistance, manufacturing companies want to connect themselves better with suppliers, customers and competitors according to corresponding projects. They also want that products and machines „talk“ to each other and control the production process by themselves, not forgetting to save the history and course of the whole process.

The Telekom company is willing to get involved in „Industry 4.0“ at the very front. „We have god networks, cloud-computing, a secure IT-plattform – we want to make use of this competition advantage“, says Thomas Schiemann. The effective harvesting is only an initial, practical and vivid practice-based project. A beginning: at the end of the fourth industrial revolution, self-propelled and „thinking“ vehicles with production processes shall be visible at the field, for instance. This step has not been reached so far at the field near Köthen. In this harvest, the machine manufacturer Claas wants to continue the field experiment with APH Hinsdorf from Saxony-Anhalt. This company is Germany’s biggest agricultural business with a total of 10,800 hectare farming surfaces. There, they are also looking into the future.

Contact:

Deutsche Telekom AG
Group Services Corporate Communications
Friedrich-Ebert-Allee 140
53113 Bonn
Tel. +49 228 181 94 380
E-mail: skoenig@telekom.de
www.telekom.com

CLAAS KG mbH
Münsterstr. 33
33428 Harsewinkel
Switchboard: +49 52 47 12 0
E-mail: info@claas.de
www.claas.de

18.03.2014

[← previous article](#)

[next article >](#)

Add page

