automotive engineering iav

Data Logistics

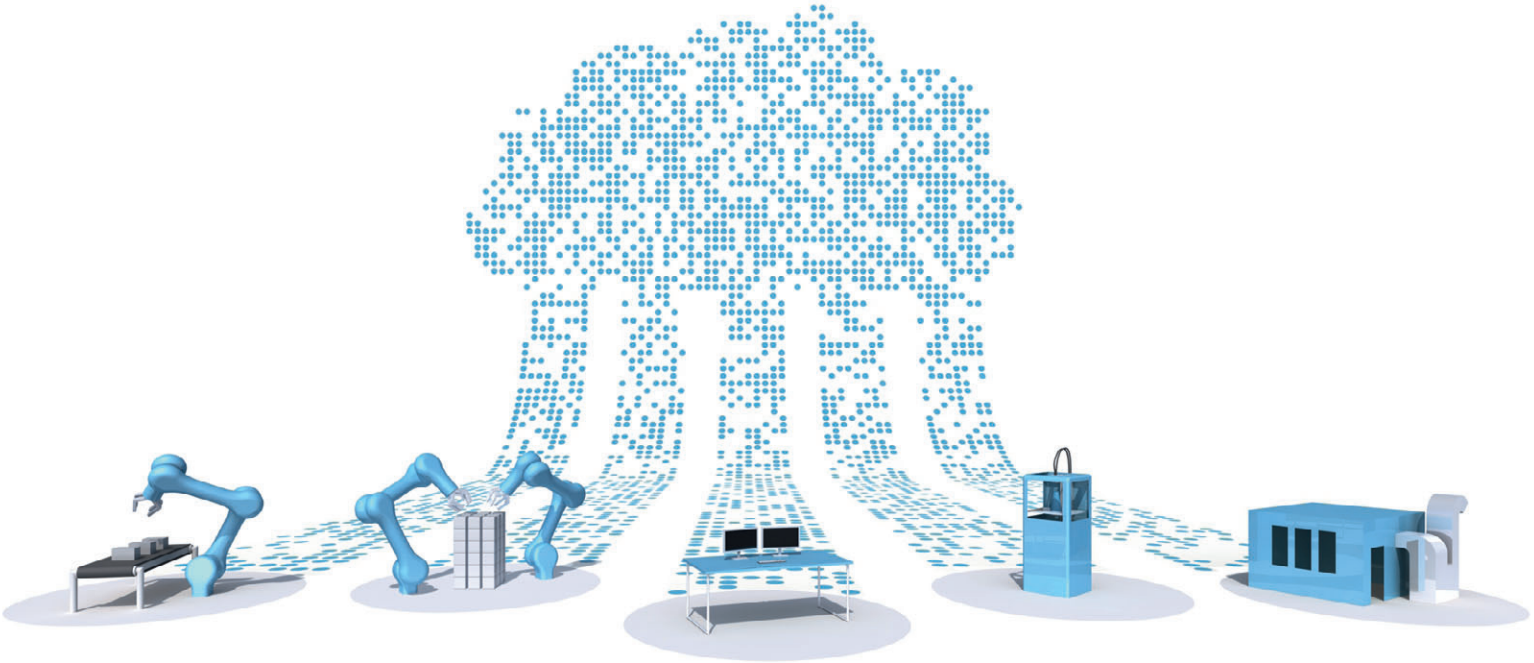
Indispensable basis for big data applications

Industry is producing more and more data. Yet the proverbial "data lakes" have so far tended to remain the exception. Instead, what we often encounter in practice are "data ponds", i.e. small, separate sets of data in businesses that are not very useful for analyses.

A case for data logistics: this identifies the scattered data records, converts various formats and consolidates the data at a central point, e.g. on a company server or in the cloud. This creates the basis for big data applications.

The type of data is immaterial here. Data logisticians combine all kinds of data, e.g. of the type occurring industrial plants and machinery. In the course of developing and testing vehicles, IAV has gathered a vast amount of experience in merging large data volumes over the years. We now want to make this expertise available to industrial users as well.

In more than 35 years of automotive engineering, IAV has gathered experience in complex systems, using this to enhance numerous digital tools and methods. We are now making this expertise available to customers from industry, e.g. for the Internet of Things (IoT). Among other aspects, our mathematicians, data scientists, IT specialists and control engineers are working on solutions that meet our customers' needs in an ideal manner. Whenever necessary, we cooperate with leading solution providers in customer projects.

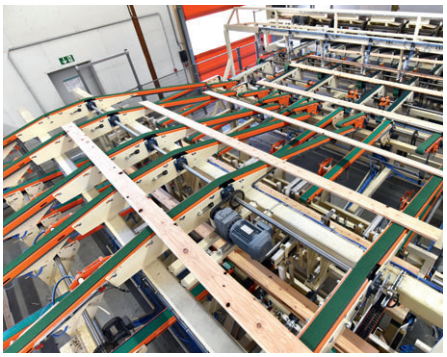


IAV GmbH
Carnotstrasse 1 · 10587 Berlin · GERMANY
doit@iav.com
+49 30 3997-89375

Customized Furniture Production 4.0

Whether visible ...

... or invisible ...



... data is produced ...

... at every stage of production.

Today, consumers expect individual solutions rather than products off the shelf. This is why the furniture industry is making it possible on the Internet for customers to configure shelf units or kitchens in line with their own specific expectations: batch size 1 production. The same applies to the production of special furniture which, by its very nature, is also manufactured in very small quantities.

Optimizing production with Industry 4.0 methods

Data from machines (e.g. milling machines, drills or saws) and production lines can be used for aggregating current information from manufacturing as the basis for optimizing production processes – for example, use of the compressed-air or drying system. This can also be used for introducing predictive maintenance as a way of avoiding unscheduled downtime.

Connectivity and data conversion by IAV Experts

Today, machines are often not interconnected, which means they cannot be accessed via a network. In an initial step, our experts analyze where and in which formats data is produced. If necessary, we then assist our customers with interconnecting production systems (wireless/cable-connected) and with converting data into standard formats. They benefit from our experience in automotive engineering. For example, testing vehicle fleets generates very large data volumes which come from geographically remote areas and must be brought together before they are analyzed.