

Moving towards the ideal data strategy in manufacturing

Establish long-term success with digital twins and semantics!

A white paper from Bosch Connected Industry



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Management Summary

Products are increasingly shifting into focus as part of the digitalization of manufacturing processes. Thanks to IoT capabilities, the connection to manufacturers no longer ends with the delivery of the products but continues at best throughout the entire lifecycle. Backflowing data streams form the basis for product optimization and digital services – and make it possible to meet new legal requirements such as the digital product passport.

To keep up with these developments as efficiently as possible and to remain competitive, enterprises need a coherent data strategy, i.e. a structured and goal-oriented framework that enables them to use data as a business asset. An important element is a uniform understanding of the meaning (and context) of data. Semantics makes data universally usable regardless of its source and solves one of the biggest current challenges many companies are facing.

This white paper describes the technologies required to implement a coherent and future-proof data strategy that homogenizes data both vertically – i.e. from source to application – and horizontally across the entire lifecycle. The digital twin approach – i.e. the generation of digital representatives of real products, product types, and instances – is at the heart of this approach. Three practical examples show how digital twins and semantics can be used to create significant added value. If they start implementing a coherent data strategy now, companies not only set the course for compliance with future legal requirements, but also lay the indispensable foundation for future success.



Make the first move!

The ideal data strategy with digital twins and semantics

Bosch Connected Industry is at your side with the Bosch Semantic Stack portfolio, comprehensive domain knowledge and pinpoint consulting. Together, we harness the valuable information from the various phases of your product life cycle – creating not only greater transparency along the value chain, but immediate added value.

We help you with holistic product optimization and ensure fast and scalable success with approach. You can also rely on us in the further course of data strategy and your data-driven projects: from existing blueprints to integration expertise to comprehensive training offerings, our experts are ready with in-depth knowledge of Bosch Semantic Stack and other topics.

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This document is a schematic representation and not an operating manual.