Speaking of... data

Five questions for Prof. Dr.-Ing. Boris Otto on the key factor of data sovereignty in the era of digitalization

Prof. Otto, your data infrastructure expertise is in high demand around the world, both in industry and in the EU—including at Dräger as part of its Data Framework initiative.

1. What situation are companies facing at the moment?
   The role of data has changed over the course of the past few years. Data is no longer a byproduct of more-or-less digitalized business processes. It has become an important resource for new digital services and therefore new revenue and market opportunities. Many companies are extremely well positioned because they possess valuable data from areas such as their production operations or from customers using their products. That being said, this “treasure trove” of data is usually not collected and no use is made of the data.

2. How do companies maintain their future sustainability?
   The importance of digital services to the success of a business will only increase. Full-service packages—covering the entire customer process from needs analysis to support “as a service”—are only possible with the use and combination of diverse range of data (e.g., on products, contracts, customers, but also on how customers deploy and use products in the field). The digital transformation refers to the evolution in business models away from focusing on the physical product and more toward digital product-service systems. Many companies are skilled at developing “conventional” products but have yet to reach the same maturity when it comes to developing digital services, which often takes place in collaboration with customers and business partners.

3. What risks and opportunities are there in your eyes?
   The digital transformation and the trend toward digital product-service systems offers significant potential for differentiation and gaining a competitive edge. After all, digital services enable companies to pool together and combine their knowledge of customer requirements, the customer process, and also the actual product itself, of course. Other companies that compete on unit labor costs in manufacturing “conventional” products will find it tough to copy this established and deeply rooted knowledge. Companies in Germany need to see the digital transformation as an opportunity to compete on innovation and not simply on price. The lack of pace in this process poses the largest risk in my opinion. The rest of the world won’t sit up and wait for us.

4. How can the digital transformation be successful? Is there a magic formula?
   There is definitely no single recipe for guaranteed success; there is simply too much variation in terms of business model from company to company. But there are a number of key success factors, including the need for companies to have a handle on their internal data management. If I am looking to develop a new digital maintenance service but I have to consider which system in which department houses the right product data, and indeed how I can access this data, the project is already not economical before I have even gone to the customer with the first prototype. Data management must be just as efficient and effective as other value-creation processes in the company. What’s more, businesses require a strategic plan for the digital transformation. Many companies will set up a proof of concept (which isn’t necessarily a bad idea), but fail to analyze what is working well and what can create economies of scale. Only once this analysis is complete can a project make a significant contribution to the business.

5. How do you perceive the situation at Dräger?
   Fraunhofer ISST and myself have an outstanding opportunity to support Dräger in the continued strategic development of its data management strategy and in its digital transformation journey. In my opinion, Dräger has thought through its strategic data management extremely well and nested it in the organization in a way that fits in perfectly with the company. The high level of integration between innovative data management approaches and specific applications offering direct benefit to the business is a prime example of the successful concept. Dräger also benefits from the fact that trust and collaborative partnerships with customers form core elements of the Dräger brand. These elements give Dräger a major advantage in the digital transformation, because trust and the protection of customer data is crucial to successful digital services.

* Prof. Dr.-Ing. Boris Otto’s research focuses on the fields of industrial information management, business and logistics networks, and methods for the design of digital business solutions. Fundamental academic research provides key impetus for practical knowledge transfer into industrial settings. As the Executive Director of the Fraunhofer ISST, Prof. Otto is responsible for the Federal Ministry of Education and Research-backed International Data Spaces project, which aims to establish a secure data infrastructure for agile, flexible, and competitive industry.