Success Story: Data Management at Schaeffler





Comprehensive Data Management is Imperative to Digitalization

Integrated high-quality data facilitates industry 4.0, advanced analytics, efficient end-to-end processes, digital business models, smart products, and machine learning. The globally active automobile and industrial supplier Schaeffler recognized this potential early on and started professionally managing data over ten years ago. Schaeffler recently received a second CDQ Good Practice Award for its continued success.

Schaeffler precision components can be found in vehicle powertrains, high-speed trains, and wind turbines as well as aeronautical and astronomical solutions. The company identified professional data management as one of the key factors to its success. Today, Schaeffler takes on a leading role in this field, as it is among the few companies that comprehensively manage more than just the standard master data.

"We began making the defragmented master data in the ERP system available for all areas of business and countries in 2008. Today, we manage almost all enterprise data, not only the master data," said Markus Rahm, Vice President of Corporate Data Management at Schaeffler. Schaeffler follows a federated approach to data management by employing a central governance team and a decentralized network of data managers within each division of the company.

The Reference Model as an Essential Support

"Schaeffler has its master data under control and has already achieved a very high level of data management maturity," concluded Prof. Dr. Christine Legner of the University of Lausanne. She leads the jury for the CDQ Good Practice Awards, which Schaeffler received for the second time in 2019. The distinction was first announced in 2013 as a collective initiative between the Competence Center Corporate Data Quality (CC CDQ) and the European Foundation for Quality Management (EFQM). An expert jury provides half of the evaluation based on the predefined criteria, while the other half of the ranking comes from CC CDQ members themselves. These members include Beiersdorf, SAP, ZE, Bayer, Bosch, Siemens, and approximately 15 additional companies.

The path to today's maturity level came with great effort on the part of Schaeffler experts. The governance and quality management areas, in particular, were able to achieve remarkably fast results. A significant step was taken in 2014 when Schaeffler organized data management with a comprehensive framework. In the same year, a maturity level assessment took place, which provided orientation. The company analyzed what the benchmarks were and also identified its strengths and weaknesses. Schaeffler was able to comprehensively define a strategy, processes and performance indicators based on this assessment. The company took advantage of the <u>Data Excellence Model</u> and best practices provided by the CC CDQ.

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And it was, therefore, able to impart security, accelerate the project, and lay the foundation for all data domains. Schaeffler saw the reference model, in particular, as one of their keys to success.

Structured Path to Data Management

Schaeffler recognized early on that a wider base of data is necessary for continued success in its digitalization efforts and expanded data management beyond master data to include additional scopes of data. In order to bundle and share know-how, Schaeffler built a methodology team within the corporate data management team. This core team defined data domains as well as roles and responsibilities, lead training seminars with over 170 participants, enhanced the Schaeffler management handbook with new processes, developed data quality KPIs, established a data culture, optimized select data domains and created data models. "Among the many things we achieve with structured data management, we lay the foundation for fast and efficient processes, business intelligence, and predictive maintenance," said Markus Rahm.

Strong Business Intelligence

Today, Schaeffler makes even more data-based decisions than ever before. The company utilizes a single SAP system for nearly all 77 factories. Likewise, it uses Salesforce for the customer relationship management (CRM) system and PTC Windchill in the 20 R&D centers. Clean software architecture is a necessity for efficient data management.

Success Factor: Data Excellence

Schaeffler works diligently on high data quality. In the "product & material master data" domain alone, the production facilities systematically review 46 data quality indicators in structured meetings. A good data culture is the foundation for these activities. At Schaeffler, experts work together openly, meet regularly, and hold training sessions and yearly workshops on data quality analysis in the factories. This creates the potential for more efficiency, higher product quality, and innovation. It is just another example of how

structured data management directly contributes to company success.

Success Factor: Innovation

Data management is not often associated with trendy innovations taking center stage, but rather behind the scenes. However, the Schaeffler example clearly shows that data management is groundbreaking. The holistic Data Strategy and its implementation in 47 data domains is an irrefutable advancement. Professional data models accelerate processes and enable company success. The now available data allow for new business models and help further improving the existing ones. An additional result of structured data management is the fact that it enables more innovation in the business divisions. For example, Schaeffler was able to plan a customer's product information management system by using the data management framework.

Success Factor: Business Benefits

Universally available data can increase the efficiency within the company and also enable new business models. Existing products are improved upon and further developed with the use of data. Data-based services supplement that which can be offered to customers, while data can also be used to optimize, redesign, and proactively plan internal processes.

From Data Management to Data Sharing

Company-wide managed, and commonly used data is the foundation for successful digitalization. With this knowledge, Schaeffler managed to create an internal data market-place where the employees can access the required data in compliance with the legal requirements. Furthermore, Schaeffler began using the so-called data shareconomy because, as Prof. Dr. Christine Legner says, "there is an increasing amount of data to manage and that presents the company with particular challenges. Therefore, it is reasonable to share data across company borders and use it collectively in accordance with predefined rules."

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Schaeffler has also already implemented a data sharing solution for the customer and vendor domains. The company is a member of the CDQ Data Sharing Community and among the companies who want to minimize the effort required to maintain Customer Master Data and Vendor Master Data. There are significant overlaps of business partner data maintained by different companies, even across sectors. Leaders in the data quality domain have come together in the CDQ Data Sharing Community and share quality-assured data in a legally compliant manner over a cloud platform. Addresses, tax data, and more are consistently updated through this cooperation.

As a small tip for anyone who wants to professionalize their data management, Markus Rahm suggests the following: "Have your goal in sight and make small, manageable steps on your path to structured data management. Work in a high-quality manner and invest in change management. Do not make a one-time seven-digit investment, but instead, think sustainably and globally. Agile methods, performance indicators, and a systematic roadmap are helpful."

Links

- CDQ Good Practice Award
- **Output** Competence Center Corporate Data Quality
- **ODD** CDQ Data Excellence Model
- **ODE IN COMMUNITY** COMMUNITY