

BearingPoint®

Driving digital continuity in product development through a data management hub

BearingPoint is supporting BMW Group in establishing a central data hub to create a high-quality data foundation for electrics/electronics (E/E) developments. This centralized data management enables cross-departmental digital continuity and, as a result, BMW Group benefits from increased efficiency and a shortened time-to-market.

Addressing data reliability in the development of Electric/Electronic (E/E) vehicles

As vehicle development becomes increasingly complex with the transition to electromobility and the integration of software across almost all components, seamless coordination among specialized departments involved is more critical than ever. At the same time, competitive pressures demand shorter development cycles, making traditional methods of data exchange, such as point-to-point interfaces or manual processes, less efficient and prone to inconsistencies. However, a high level of data consistency is essential to ensure smooth development, integration, and validation, particularly in the development of electric control units and onboard communication systems.

Establishing a central master data hub for electrics/electronics development

To tackle these challenges, BMW Group initiated the development of a central master data hub for the E/E development process and entrusted BearingPoint with the functional conceptualization of the master data portfolio as well as the technical integration and operations. Relevant data is imported from the IT system where it is generated, and it is also harmonized both from a functional and technical perspective before being linked to other data. Then, it is distributed to all IT systems whose users require it for their product development activities. The project team built robust yet flexible standard interfaces that significantly streamline data exchange.

Together with the general platform development and technical integration of the new hub with more than 70 IT systems, BearingPoint continuously supports the BMW Group in the functional harmonization of the distributed data. This approach was crucial to meet the different needs and perspectives of various departments in developing electric control units. Additionally, the quality of processed data is proactively ensured to prevent the distribution of inaccurate records across the organization.

Accelerating time-to-market and data quality improvements

The BMW Group's centrally provisioned data hub has increased the efficiency of the product development process at the BMW Group, enabling seamless collaboration between numerous departments based on a unified, up-to-date, and high-quality data foundation. The hub supports faster development cycles in these times of constantly increasing vehicle complexity. Additionally, the central hub simplifies the IT landscape by reducing point-to-point interfaces, which helps reduce development and maintenance costs. Overall, the solution contributes to the continuous optimization of the product development process.

Contact

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