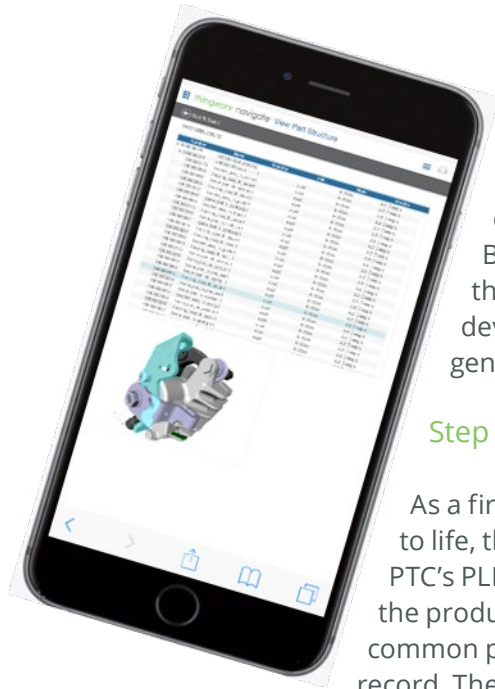




## PTC's Product Lifecycle Management Solutions Establish PDM Backbone and Improve Enterprise Collaboration for German Manufacturer

A large multi-national German engineering manufacturer had the very difficult task of consolidating all product data gathered over 25 years and on 25 disparate systems. In addition, the manufacturer needed a way to break down organization siloes and make it easier for non-engineering teams to engage with product data in an intelligent way. The company was suffering because product data was only accessible to engineering. In fact, an internal study on engineering/designer productivity revealed that engineers wasted a staggering 60% of their time creating and distributing drawings.



These two challenges were crucial to resolving if the manufacturer was going to begin pursuing its future vision of incorporating Industrie 4.0 technologies into its products. By establishing a product data management (PDM) backbone, the company would set itself up with a fully digitalized product development process and a foundation on which to build next-generation technologies.

### Step One: Establish a PDM Backbone

As a first step in bringing its product lifecycle management (PLM) vision to life, the manufacturer consolidated its multiple instances of Windchill, PTC's PLM solution, that were being used by individual teams across the product lifecycle. This enabled the manufacturer to create a single common platform to manage product data across multiple systems of record. The primary objective of the project was to collaborate effectively across business units worldwide in a network of cross-functional (i.e. product management, development, production, and sales). Creating the PDM backbone helped this company to:

- Create and develop a central platform for product data
- Standardize definitions for product data through bills of materials (BOMs)
- Ensure product/process documentation is seamlessly supplied to the manufacturing plants
- Preserve intellectual property and facilitate the secure sharing of product data

### Step Two: Extend Product Data to the Enterprise with ThingWorx Navigate

Once its PDM backbone was in place, the company deployed ThingWorx role and task-based applications to better manage, share and review product data across engineering and non-engineering stakeholders alike. This helped the manufacturer break down organizational siloes with highly consumable, real-time access to product data.

This new foundation has served as the launchpad for the development of in-house applications including:

- A lightweight service app for downloading CAD data
- An app that allows users to create new materials across different systems, replacing redundant data entry in three systems
- A cross system user app that enables an automated process to define roles and privileges

The organization still uses Windchill to fulfill business requirements. However, engineers can now create specific use cases with ThingWorx Navigate without compromising painful future customizations within Windchill.

## The Results

Combined, Windchill and ThingWorx Navigate established a true backbone for engineering and manufacturing, and enabled the company to transform how it managed product data. Leveraging PTC solutions, the manufacturer has created a single platform for data previously spread across multiple disparate systems, enabling effective work across business units worldwide. This open engineering platform initiative has empowered better engineering collaboration across 65 global locations. The results have been quite impressive. After initially implementing the PDM backbone, the manufacturer saw multi-million euros in cost savings annually, which has increased threefold in recent years. Also significant from both a cost and productivity perspective, was the 25% reduction in data duplication, resulting in an additional multi-million euros in annual savings.

In addition to major process and cost improvements, a major benefit across the organization is IP protection, as the company now has full control over the data flow between its internal teams and partners. With ThingWorx Navigate, the company can share data across the company in a controlled, but flexible, way. ThingWorx Navigate has made it possible for employees all over the globe to safely tap into product data from a single platform. This has significantly improved engineering efficiency, as well as made it possible for all stakeholders to quickly find the information that they need.

The company's vision is a full enterprise implementation for engineering and manufacturing users with extended PLM to partners and customers through virtual engineering and a digital twin.

Says the organization's director of IT engineering: "This digital transformation starting with PDM will enable major business benefits, but even greater, a clear path to utilizing IoT technologies for continuous improvement and differentiation for both ourselves and our customers in the industry."

Discover how your organization can also transform the way that it collaborates and shares information throughout the product lifecycle. Visit [www.ptc.com/plm](http://www.ptc.com/plm) to learn more.

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