



Paperless Factory for an Improved Shop Floor Collaboration

Industrial IoT at ZF Friedrichshafen AG



“The cooperation in the project with Camelot ITLab was characterized by a fast and target-oriented solution finding. It was not about digitizing for its own sake, but about a real improvement of our processes”.

Reinhold Geiselhart,
Head of Smart Factory Engineering,
ZF Friedrichshafen AG



The challenge

On the shop floor of the production hall at ZF Friedrichshafen AG, a Germany based global technology expert, a lot of paper was still being used, as there was no mobile application available to cope with all activities and for documentation. The result was: inefficient processes and slow setup times. There were no digital collaboration possibilities between operator team, foremen, quality assurance and support.

ZF Friedrichshafen AG wanted to realize their vision of a “paperless factory” instead and therefore chose Camelot IMLab as their implementation partner.

The project

After a Proof of Concept phase, Camelot IMLab delivered the project within three months, coordinating many stakeholders from different departments with an agile project management approach. The SAP MII system (Digital Manufacturing) used had to be connected to the existing SAP ERP system (Enterprise Resource Planning) in such a way that data exchange in both directions is seamless and information is available in real time.



PAPERLESS = SUSTAINABLE

The “paperless factory” is not only increasing efficiency and agility, but also has a positive impact on the environment.

Camelot IMLab and its competence center GreenMind² support enterprises around the globe in their journey for a greener way of working with more sustainable supply chains and manufacturing plants.

“Our teams adopted the new system quite quickly and now benefit from the more efficient and transparent work flows in their daily operations.”

Reinhold Geiselhart,
Head of Smart Factory Engineering,
ZF Friedrichshafen AG



left:
Maintenance of machines on the shop floor of the production hall is now digitally driven

middle:
Reinhold Geiselhart, Head of Smart Factory Engineering,
ZF Friedrichshafen AG

right:
Instructions are provided directly during the task

The result

The “Paperless Factory”, in the sense of digitizing documents and document accesses as well as entire workflows, has become reality at technology leader ZF. Instead of rolling over folders, production employees now have instructions and plans digitally available directly in the system. Schedules, responsibilities and already completed steps are clearly visible and can be planned for the long term as well as clearly assigned. This has reduced administrative effort, increased employee satisfaction and improved efficiency.



HIGHER EFFICIENCY

- ▶ Create activities digitally and assign them to specific shifts
- ▶ Digital approval by master craftsman and logging
- ▶ Authorization management



TIME SAVING

- ▶ Appropriate instructions are provided directly during the task
- ▶ Smooth machine maintenance
- ▶ Less paper work



EASIER COLLABORATION

- ▶ Master data can be entered directly in the system
- ▶ Digital collaboration platform for the shop floor
- ▶ Integration of SAP MII and SAP ERP



SATISFIED TEAMS

- ▶ High user acceptance
- ▶ Visibility through all process steps
- ▶ Administrative effort reduced

About

ZF Friedrichshafen AG

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. With its comprehensive technology portfolio, the company offers integrated solutions for established vehicle manufacturers, mobility providers and start-up companies in the fields of transportation and mobility. ZF continually enhances its systems in the areas of digital connectivity and automation.

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Camelot ITLab

Camelot Innovative Technologies Lab (Camelot ITLab) is the leading SAP consultancy for digital value chain management. With more than 20 years of experience Camelot ITLab leads clients in their digital transformation. Our capabilities range from the strategic dialogue around current challenges in the digital world to the implementation of the new, digital solutions. As part of CAMELOT Group with 1,800 employees worldwide, Camelot ITLab stands for customer orientation, innovation, highest quality and feasible end-to-end solutions. From innovations to solutions.

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