CASE STUDY

SAP Business Process Monitoring for the Smart Factory or How to Integrate ERP and IoT Operations

INDUSTRY 4.0 PLACES HEIGHTENED DEMANDS ON IT OPERATIONS

SEW-EURODRIVE is a world-leading producer of drive and automation technology. With its more than 17,000 employees worldwide, the owner-managed family business based in Bruchsal, Germany offers a complete portfolio of electrical drive technology and customized services. Depending on their requirements, customers can choose between preconfigured package solutions and individual components from the company's comprehensive modular system.

In its 15 production plants, SEW-EURODRIVE employs the latest in technology such as SAP Manufacturing Execution, SAP HANA, and cyber-physical systems. Aiming to leverage Industry 4.0 to drive value creation, the company is more deeply integrating its traditional ERP systems with agile Internet of Things (IoT) architectures. This in turn increases the complexity of its IT infrastructure and creates new demands on SAP operations and monitoring.

Intelligent assistance systems, machines, and robots need to be integrated with ongoing SAP ERP operations and monitored in just the same way. At the same time, it is essential to ensure the reliable and efficient execution of SEW-EURODRIVE's existing revenue-critical SAP processes such as its customer and order management, which uses a single SAP CRM tenant for over 30 countries.

SIMPLIFIED ERP OPERATIONS TO FOCUS ON WHAT'S IMPORTANT

The SAP monitoring solution Avantra is one of the pillars that helps Daniel Müller, Head of IT Data Center Services at SEW-EURODRIVE, and his team of thirty IT experts stay ahead of these new demands. In addition to simplifying and automating the company's IT service management

EXECUTIVE SUMMARY

CUSTOMER NAME:
SEW-EURODRIVE

INDUSTRY:
Automation technology

LOCATION:
Germany

ORGANIZATION SIZE:
17,000+ employees

BUSINESS CHALLENGE:
- Added complexity with Industry 4.0
- Optimization opportunities for the integration of IoT and ERP operations
- Need for improved automation in IT service management

SOLUTION:
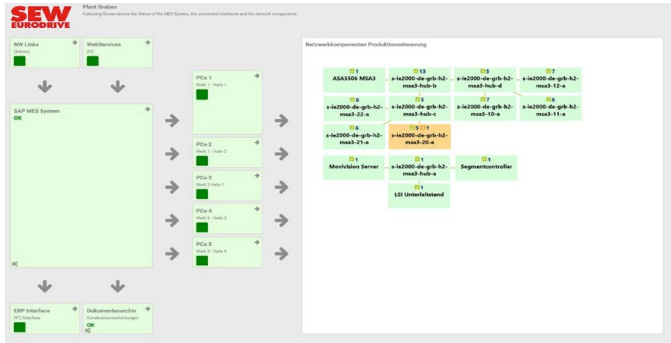Avantra SAP & Business Process Monitoring

BUSINESS VALUE:
- Reliable monitoring of innovative Industry 4.0 processes
- Higher resource efficiency in IT service management
- Faster assembly processes

processes, it also lets them roll out and monitor the novel and highly complex manufacturing processes that are at the heart of its smart factories.

Unlike many other solutions, Avantra delivers a wide range of functionality without sacrificing its intuitive ease of use.

With its out-of-the-box checks and granular configuration options, it saves the IT team valuable resources by only notifying them of critical system alerts. This allows them to provide 24/7 support without having to work in shifts to accommodate the factories' three-shift operations. Relevant employees just have to be on call, saving SEW-EURODRIVE time and money.

The company also relies on Avantra to monitor its cutting-edge HANA-based industrial processes using the built-in best practice checks. Taking full advantage of the software's flexibility, SEW-EURODRIVE was also able to create and implement its own custom monitoring scenarios in no time. On top of that, it leveraged the open interfaces with non-SAP systems to integrate its current enterprise automation solution with these monitoring processes, making it much easier to schedule and control maintenance tasks and reducing the need for manual intervention.

"What sets Avantra apart from other SAP monitoring vendors is the intuitive usability, the high degree of flexibility, the software's rapid ROI, and its unmatched and extremely helpful support. – Avantra enabled us to boost the efficiency of our IT service management processes and prevent downtime of revenue-critical processes in our smart factories."

Daniel Müller, Head of IT Data Center Services at SEW-EURODRIVE

BUSINESS PROCESS MONITORING IN THE SMART FACTORY

Avantra enabled SEW-EURODRIVE to simplify not only its conventional ERP operations, but also its cutting-edge factory processes. It comes with customizable dash-boards that let plant managers determine the root cause of an issue and its impact without in-depth IT training. As a result, they can distinguish between events in automation components and in IT components. This reduces both downtime and the on-call burden on the IT team.

Avantra is also used to monitor the company's innovative and revenue-critical assembly processes. Each assembly station at SEW-EURODRIVE is equipped with a touchpad that monitors every single step in the assembly and supports assembly operators with 3D blueprints and reference videos. Operators need to fully complete each step and confirm it accordingly before they can move on to the next phase in the process. This gives SEW-EURODRIVE the ability to maintain an extraordinarily high level of product variation using standard assembly processes. And with Avantra's proactive monitoring processes in place, downtime is kept to a minimum.

SUMMARY AND OUTLOOK

Today, Avantra monitors more than 100 SAP installations at the company's headquarters and an additional eight decen-tralized systems are currently being rolled out.

Since introducing Avantra, SEW-EURODRIVE has been able to significantly increase the efficiency of its SAP monitoring and take the overall availability of its IT environment to a new level.

Avantra has also been instrumental in establishing a successful and highly innovative operational concept for monitoring Industry 4.0 processes that will soon be available to SEW customers as a cloud service.