

Discover Sulzer.

Efficient maintenance: relevant knowledge always to hand

Discover why top companies in the industry rely on Sulzer IT Solutions and Business Consulting to shape their digital transformation.



We have the proven business and IT experience to accompany you on your journey.

Case Study

AI in maintenance



Maintenance made easy

In the coming years, we can expect to see increased expansion in the automation and networking of plants and systems. At the same time, the integration of robot technology in various areas of work will increasingly become the norm. The maintenance and servicing of these highly interactive components requires specialised technical expertise. In view of the ongoing shortage of skilled labour, however, the recruitment of qualified technicians is proving increasingly challenging. In this context, the use of Artificial Intelligence (AI) is emerging as a potentially decisive factor in bridging this gap and ensuring the efficiency and sustainability of system maintenance.



The challenge

The advancing automation and digital networking of systems and buildings poses increasingly complex challenges for maintenance, exacerbated by the existing and worsening shortage of skilled labour. Comprehensive strategies and solutions are required to meet these challenges effectively:

Increasing system complexity

- The increased complexity of automated and networked systems requires highly specialised technical knowledge. Specialists must be able not only to maintain these systems effectively, but also to repair them.

Continuous training required

- The rapid evolution of technological standards requires a lifelong learning approach for technicians in order to keep pace with current and future technologies.

Shortage of qualified specialists

- The lack of qualified specialists leads to potential delays in rectifying system failures, which can jeopardise business continuity.

Growing costs

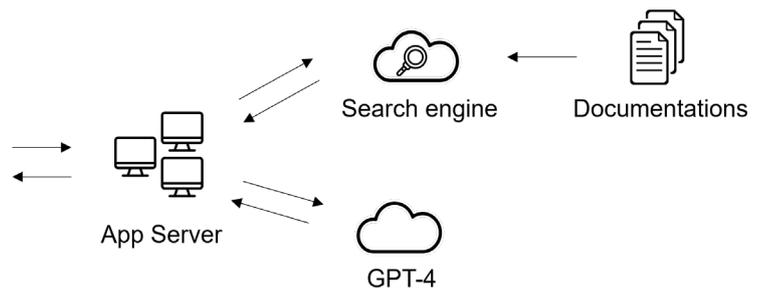
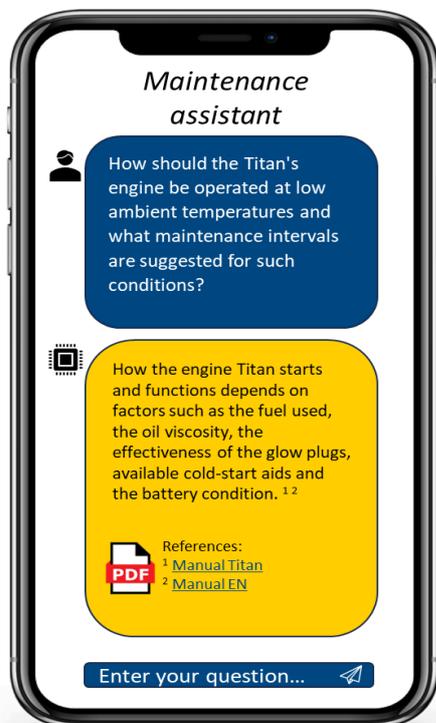
- The financial outlay for training technicians, increased maintenance and repair times and the purchase of specialised equipment and software is considerable.

To tackle these complex challenges effectively, companies should not only invest in the ongoing training and specialisation of their technical teams to increase access to talented professionals. The implementation of advanced technologies to simplify the maintenance and monitoring of systems is also crucial. Through these measures, companies can not only master the challenges of modern maintenance, but also ensure their operational efficiency and safety in the long term.

Solution

Sulzer GmbH uses an AI that utilises knowledge from manuals, maintenance logs and error databases. Users can ask questions about system via browser on every device. The AI filters out relevant

information and makes it available in the app together with document references.



The increasing automation and networking of systems makes their maintenance more complicated for technicians. Effective and sustainable maintenance requires in-depth expertise and detailed documentation. A shortage of skilled labour and time pressure threaten quality and cost control.



Customer benefits

The implementation of this system enables technicians to gain access to the information essential for their work in the shortest possible time, which significantly reduces the time required to search for relevant data. This leads to a noticeable increase in maintenance quality, minimises system downtimes and ultimately results in significant cost savings both in terms of maintenance and system failures.

The feedback from the first practical applications of this system has been positive:

- The technicians find using the system extremely supportive.
- In the initial enquiry, satisfactory answers were found in **80%** of cases.
- The time spent researching documents was reduced by **75%**.
- The familiarisation time for inexperienced technicians has been reduced by **25%**.
- The need for improvements fell by **50%**.

These results underline the efficiency and benefits of the system for the optimisation of maintenance processes.

Added value of cooperation with Sulzer



Focus on the customer's success



A partner with all the expertise



Holistic approach



Cooperative partnership



Proven tools



Agility and flexibility of a medium-sized company

Contact

Would you like to find out more about AI in maintenance?

Our team of experts will be pleased to advise and support you



Holger Schlaps

Head of Research & Development

 Holger.Schlaps@sulzer.de

 +49 89 31858 4231