



If a spare part is needed immediately and it is also unwieldy, a logistics provider who is familiar with special transports is necessary. It's all about money, customer satisfaction, and, above all, security. **Lufthansa Technik Logistik Services (LTLS)** has this **core competence**.

The logistics service provider offers its customers from the aviation industry worldwide tailor-made solutions for the transport and storage of spare parts. LTLS itself relies on innovative solutions to digitalize processes and thus continuously increase performance, quality, and transparency. Workforce management is the latest component of the digitalization program. With the **software solution WorkforcePlus from INFORM**, LTLS wants to make staff scheduling simpler, faster, more efficient, and more transparent.

A few screws are quickly shipped. Not so with a 14-ton aircraft engine. That's exactly Michael Krämer's area of specialty. Krämer is a planner and project manager in the Maintenance Logistics Center of Lufthansa Technik Logistik Services (LTLS). LTLS supplies its customers

worldwide with spare parts for aircrafts, as quickly as possible. Because if somewhere in the world an aircraft in the customer fleet is defective and unfit to fly, this means delays in air traffic, financial losses, and dissatisfied customers. Now we have to move fast.

"If a mechanic needs a spare part for the repair of an aircraft, LTLS is used. If there is an emergency in Madrid, for example, an onboard courier takes the spare part under his arm and flies to Madrid on the next scheduled flight," says Krämer. "There's no faster way." Other parts are shipped by air or truck. "We had the case of a plane with a broken engine in New York," says Krämer. "An engine like this is about 4.80 meters high and 6 meters long. Of course, we can't deliver it that quickly, it takes a few days because we have to disassemble the engine in order to ship it," says Krämer. "These special transports are part of our core areas of expertise."

The logistics service provider has a sophisticated system to provide all aircraft components - from the hydraulic valve to the emergency slide - as quickly as possible. On the one hand, this requires a highly specialized storage system and, on the other, optimal staff scheduling. Ideally, the spare part is then ready for dispatch within just 15 minutes - and that with around 247,000 different spare parts stored at LTLS in 100,000 square meters.

In such a time-critical environment, it is all the more important that the planner can react correctly and quickly. "We can't calculate when flight cancellations will occur," says Krämer. Short-term emergencies cannot be foreseen and it is, therefore, difficult to forecast the working time demand.

This is a big challenge for the planner. LTLS employees need to be in the right place at the right time. To this end, the special logistics service provider is investing in good workforce management. To ensure this, LTLS uses WorkforcePlus, the software solution for workforce management from INFORM.

The software is installed at LTLS's German locations in Frankfurt, Hamburg, Munich, Cologne, Düsseldorf, Berlin and Stuttgart. A total of around 1,800 employees perform shift work there. Up to now, the planners have organized employee shifts with the help of an excel-based planning tool; only in Frankfurt an in-house development was used.

Reducing administrative cost

Due to the steady growth of the company, shift scheduling became ever more extensive and complicated. "The planners had to consider many formulae and links," says Krämer. "And if I wanted to transfer an employee or if he got a new shift plan, it was always difficult because I had to copy everything manually. Knowing and adapting all of the formulae and rules is something that only a few key users in Germany could do. We were really

dependent on them." Those who hadn't mastered this simply couldn't know all the tricks and rules. "In order to schedule shifts properly, you needed a lot of specialist knowledge about the planning tool, working time laws and collective agreements," says Krämer. The users had to have this information in their heads because it was too time-consuming and complicated to store the working time rules in the planning tool. Rule violations



"In WorkforcePlus I can do changes directly from my desk, whilst all associstions behind it happen automatically."

Michael Krämer, Projectmanager and Planner in the Maintenance Logistics Center at LTLS

were therefore not automatically apparent. The planning tool was not transparent enough and was error-prone due to manual editing.

It took several planners almost a month to sort out the annual roster for around 300 employees. In doing so, they had to deal with numerous requirements and take into account a very wide variety of different working time models: Individual rosters, together with part-time employees and temporary workers. "That was very cumbersome with our old planning tool," recalls Krämer. The administrative, decentralized work was enormous. "That was an extreme effort," says Krämer. "We wanted to be more flexible, more up-to-date." Krämer is convinced that with WorkforcePlus they have taken an important step towards digitalization.

What does the annual plan look like now? "Many things have become much easier," says Krämer. The planners no longer have to create extensive spreadsheets. Once a year, the shift schedule for the following year is released before the planners incorporate vacation and detailed planning. "I can release the roster from my desk and generate the following year's schedule with the push of a button." The complex tasks, the specialist knowledge, and the associated changes behind it happen automatically. "The software does all of this in the background so that the employee on the computer has it easier." Instead of several months, the planners now only need a few days for Germany-wide planning. "After that, we can concentrate fully on medium-term to short-term scheduling."

The project started at LTLS at the beginning of 2018. The introduction to the WorkforcePlus software initially took place with 10 specialist planners. In his role as administrator, Krämer has already become familiar with the new





system after only 2-3 days, and had already been able to plan properly. "Of course, it's initially an adjustment. If you have worked with a system for 10 years, you know every mouse click there. But you quickly get used to the new interfaces of WorkforcePlus." After a short time, the remaining planners could be trained in the system. Krämer was able to do most of the employee training himself. "The platform is pleasant and modern,

state-of-the-art and supports flexible working," says Krämer, satisfied with the decision in favor of INFORM. "We wanted to increase flexibility while reducing complexity and effort," says Krämer. "This makes the work for the specialist departments easier and we have more time for important things such as material flow and staff dispatching - especially in short-term emergencies."

Implementing changes agilely

Krämer is also convinced by the flexible adaptability of the software. "The consultant could simply model minor changes flexibly with the modelling language Roxx. Major modifications were implemented in an uncomplicated manner by the INFORM development team, following a short consultation. Thus, time and budget limits were met. "We are very satisfied with the agile way in which our change requests were received and implemented," summarizes Krämer. "And if there were any technical questions, I could always quickly turn to our consultant."

Krämer's work has already become much faster and more precise, thanks to WorkforcePlus. User permissions can now be assigned more easily, and roles can be configured. Drag-and-drop makes it easy to work in the software and there are many different ways to plan shifts. "WorkforcePlus now also involves employees to a greater extent. They can easily use the employee portal on their smart-phones." The interface to the employee is much more open and flexible than before. Next, LTLS wants to address the interfaces to payroll and time management systems. "We want to pass on as much complexity as possible to the software and no longer have to maintain everything multiple times in different systems," says Krämer. "With WorkforcePlus, we are also creating opportunities for further digitalization, which will have a positive effect on other areas of the company."

Michael Krämer, Projectmanager and Planner in the Maintenance Logistics Center at LTLS

"With WorkforcePlus we could reduce the efforts tremendously by simplifying the planning for all specialist departments."

LTLS company profile:

Lufthansa Technik Logistik Services (LTLS) was founded in 1998 as a wholly-owned subsidiary of Lufthansa Technik (LHT) AG. The company specializes in logistics services for customers in the aviation industry and is one of the world's leading providers in this field. The headquarters of the more than 1,800-strong company is in Hamburg, Germany.

LTLS manages a global logistics network with a total of 30 warehouse locations and around 50 partner and service companies. The broad spectrum of services ranges from transport management, including the transport of engines and ad-hoc requirements (AOG), to complete warehouse management.

Source: https://www.ltls.aero/de/

The project at a glance:

- LTLS offers exact logistics solutions for airlines, maintenance companies, manufacturers, and suppliers worldwide.
- Workforce management is an important part of the digitalization program.
- WorkforcePlus takes over the workforce management of 1,800 employees at the Frankfurt, Hamburg, Munich, Cologne, Düsseldorf, Berlin, and Stuttgart sites.
- The aim is to make planning in a time-critical environment simpler, faster, more efficient, and more transparent - and to involve employees in the process.

Lufthansa Technik Logistik Services



Results:

- The administrative effort is considerably lower.
- The planning processes are faster and more transparent.
- The employees are directly involved in the planning process.
- Scheduling is easier for all departments.
- Complex sets of rules are checked automatically and take the pressure off the planner.
- Legal certainty: Violations of working time rules are displayed.
- The software is intuitive to use after a short training period.



INFORM GmbH
Pascalstr. 35
52076 Aachen / Germany
www.inform-software.com