



# Reducing Parts Shortages and WIP While Ramping Up Aerospace MRO Operations

How an aerospace leader in MRO leverages data to streamline cross-functional collaboration and accelerate shop operations



# MRO teams of the aerospace leader in MRO share their feedback



# MRO

*"In the past, I spent a lot of time updating Excel files, but now Pelico saves me a huge amount of time so I can focus on tasks with real added value."*

**Charlotte**  
MRO Master Planner



*"In 4 months, we reduced by 88% the number of our missing parts and we don't have any missing components left without PO associated."*

**Sammy**  
Production Planning  
and Supply Chain  
Manager



*"The benefits of Pelico have been the increase in the MRO Supply chain team's productivity. For example, there were 73% fewer missing parts at the end of grid 2."*

**Paul**  
Services and MRO  
Manager



# Customer Service

*“Services, at our company, are growing massively. In this context, we have launched a major operational excellence plan to enhance our customer delivery framework as well as our client satisfaction. With this in mind, we decided to deploy Pelico platform to first of all, improve our performance towards our OTD but also, to boost our resource capacity, which is limited. Pelico platform precisely helps us optimize resource usage and focus the team on value-added activities.”*

## **Matthieu**

**VP Customer Support & Services**



*“Pelico has made our operations easier. We’ve gone from emergency mode, wondering why deliveries were missed, to thinking ahead and asking what needs to be done to deliver.”*

## **Anne**

**Customer Account Manager**



# Context & Challenges



# Pelico's Aerospace MRO customer was growing quickly in an increasingly complex operational environment

## Equipments maintained



*Transmission Systems*

**25%**

YoY Growth

**50+**

Daily Updates  
to WIP Status

**280**

Open Repair  
Orders in WIP

## Parts shortages were the main bottleneck of the business

**64%**

Delivery delays due  
to parts shortages

**37%**

Revenue blocked by  
parts shortages

**182**

Missing parts for  
service orders



# Daily supply chain disruptions hindered the shop's performance

## Daily disruptive factors occurring frequently...

Part shortages



Late supplier deliveries



Quality issues



Specific customer requests



## ...hindered shop operations...

Difficulties to **align teams** & **prioritize subjects**



Teams living in the **parallel universe of spreadsheets**



**Firefighting mode** creating high stress levels amongst teams



**Lack of visibility** on factory forecasts & performance



## ...affecting supply chain performance

Delayed **customer deliveries**



Costly **last minute solutions**



Revenue **deteriorated**



Sub-optimal **manpower management**



# Process latency, inaccurate data and inadapted tooling made the daily adjustment to these disruptions even more challenging

**70%** of operations teams' bandwidth is allocated to piecing together the data required to adjust repair planning to factory disruptions



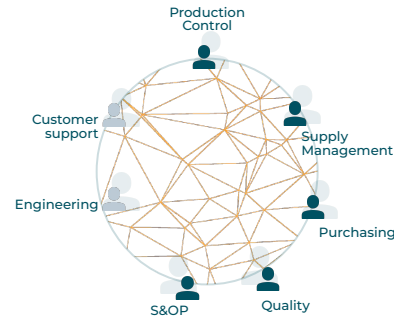
## Data preparation & analysis

## Cross-functional collaboration

### Multiple data tables required

### Ad hoc Excel & Dashboards

### Complex cross-functional coordination



## Wrong decisions taken

as they were based on:

- ▶ Inaccurate information
- ▶ Siloed data
- ▶ Partial data





# Decision-making was jeopardized by teams' difficulty to manage data efficiently

Because they didn't benefit from a tool supporting the operational management of the plant's supply chain teams were being confronted to erroneous data, all having tangible detrimental effects.

## Work Orders date in the past

**KPI(s) jeopardized:** OTD, WIP, planning adherence

For each work order (PO) with a starting date erroneously positioned in the past, all associated work orders dates would also start in the past.

As a result, the whole repair planning would become obsolete.

## Lost Work Order request due to tedious manual updates

**KPI(s) jeopardized:** Customer Satisfaction

For each Work Order, the Customer Service team would have to update various tools (CRM, ERP, spreadsheets).

Manually replicating the data would lead to data loss or depreciation.

## Spreadsheet computing errors

**KPI(s) jeopardized:** OTD, WIP

When formatting the data from the ERP to spreadsheets, teams risk to make mistakes in formulas.

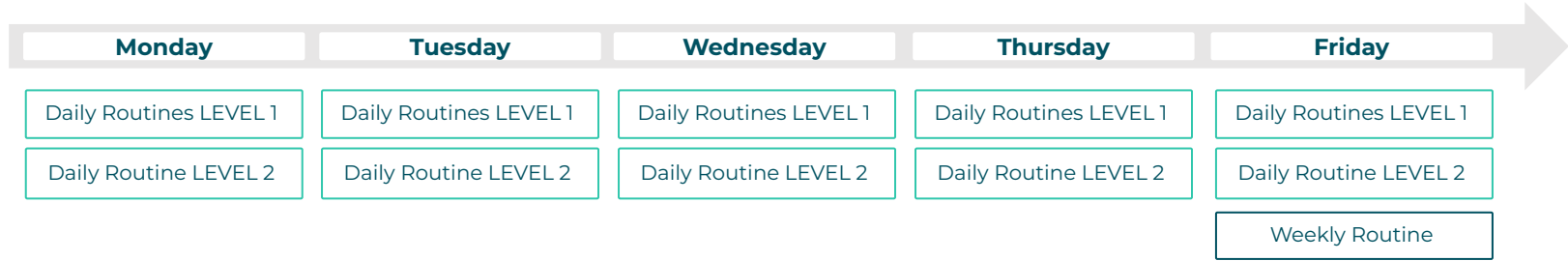
Each of these mistakes can result in an insufficient parts order, and hence jeopardize the delivery date.



# Approach



# Starting situation: the shop's operations were rhythmmed by team's routines requiring access to data



## DAILY ROUTINES

### Level 1

#### Reception Routine

**Routine:** Manual updates of new Service Orders (SO) received and planning of technical reviews.

**Contributor(s):** MRO Flow Manager of each gate, Gatekeepers

**Tool(s):** Tracking spreadsheet, paper file

#### Reassembly Routine

**Routine:** Piecing together the data to assess the most critical missing parts to be addressed in order to complete an SO.

**Contributors:** MRO Flow Manager of each gate, Customer Support/Commercial Teams

**Tool(s):** Spreadsheets, CRMs, emails, ERPs

#### Inspection Routine

**Routine:** Review of late or at risk modules, analysis of the planning to find a mitigation solution and assessment of its feasibility.

**Contributor(s):** MRO Flow Manager of each gate

**Tool(s):** Spreadsheets, phone calls and/or emails.

### Level 2

#### Daily Escalation meetings

**Routine:** Manual updates of new Service Orders (SO) received and planning of technical reviews.

**Contributor(s):** Shop management, MRO Flow Manager of each gate, Gatekeepers

**Tool(s):** Excel files

## WEEKLY ROUTINE

### Weekly Load & Capacity Schedule

**Routine:** Decision making on the planning and the repair orders to prioritize

**Contributor(s):** Master Production Scheduler, Gatekeepers, Supply chain managers, Planner

**Tool(s):** Spreadsheets (holidays planning, PIC)



# To identify levers to optimize those routines, Pelico mapped existing processes through users' shadowing

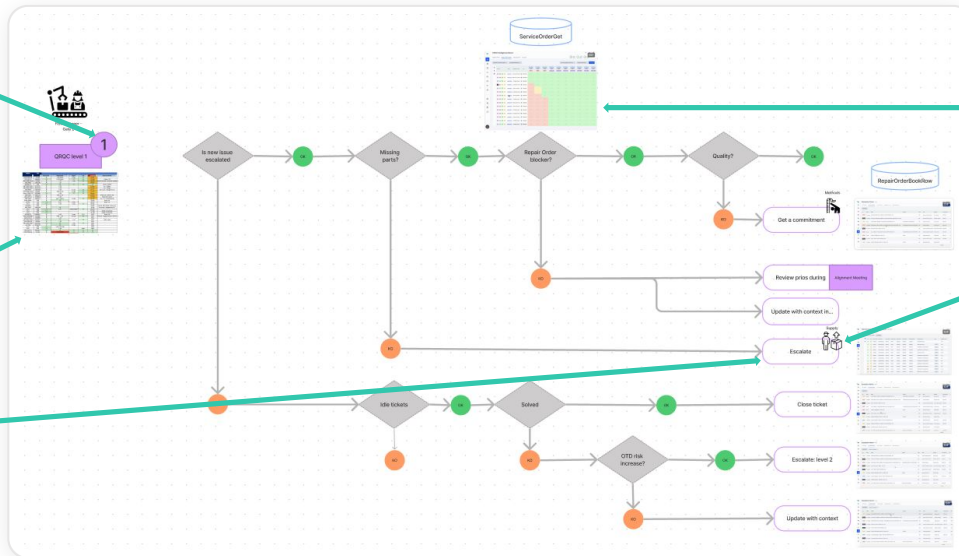
## Mapping of existing operational routines

### 1. Mapping of Recurring Questions

that are systematically addressed during operational routines

### 2. Mapping of manual tools used to support current operational routines

3. Mapping of actions and outcomes connected to the operational routines



## Identification of improvement opportunities

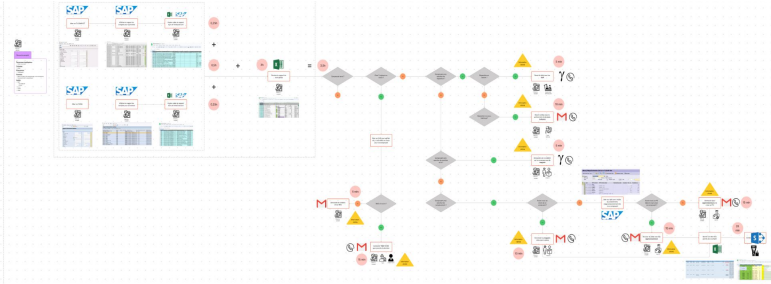
1. Automatization of actions with Pelico functionalities, by displaying the right data for each recurring question

2. Identification of streamlined, data-driven decisions & cross-functional collaboration opportunities (e.g, simplification of routines)

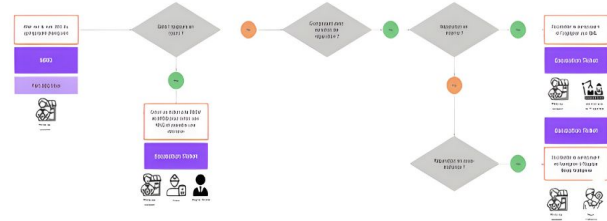


# Thanks this mapping, Pelico was implemented to support the productivity and efficiency of those routines

## BEFORE PELICO



## AFTER PELICO



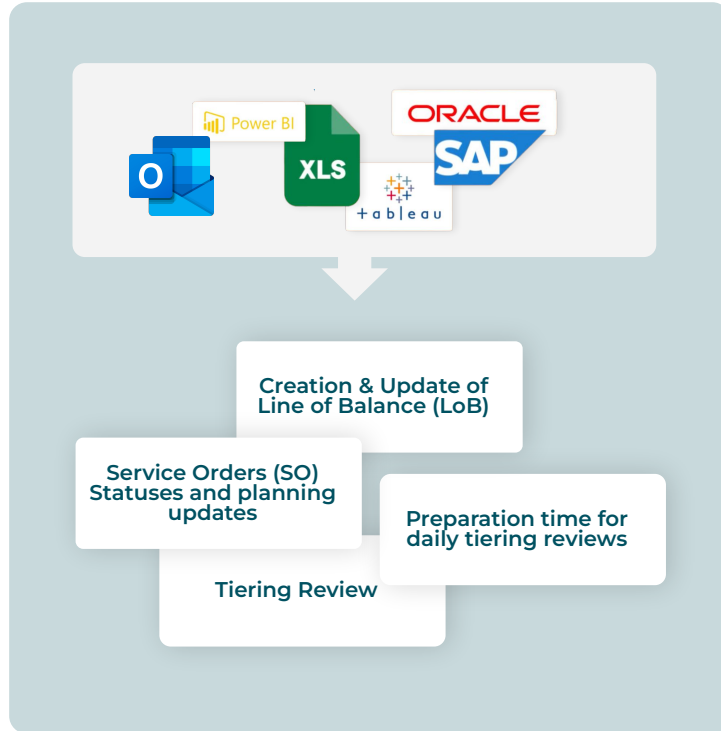
 Time to complete the routines per perimeter: **2 hours** vs. **10 minutes**.

 Number of tool(s) required: **6** vs. **1**.

 Time required to find a mitigation strategy for each bottleneck: **18 minutes** vs. **5 minutes**.



# Because the MRO shop's team could keep its existing processes while using Pelico, adoption of the tool went smoothly



# Results



# Key Achievements within 11 weeks

**+15%**

**Customer  
OTD**

**-37%**

**Turnaround Time**

**-73%**

**Missing Parts**

**-18%**

**WIP**

**+38%**

**Data Quality  
Improvement**  
within 8 weeks

**+80%**

**Team  
Productivity**

**97%**

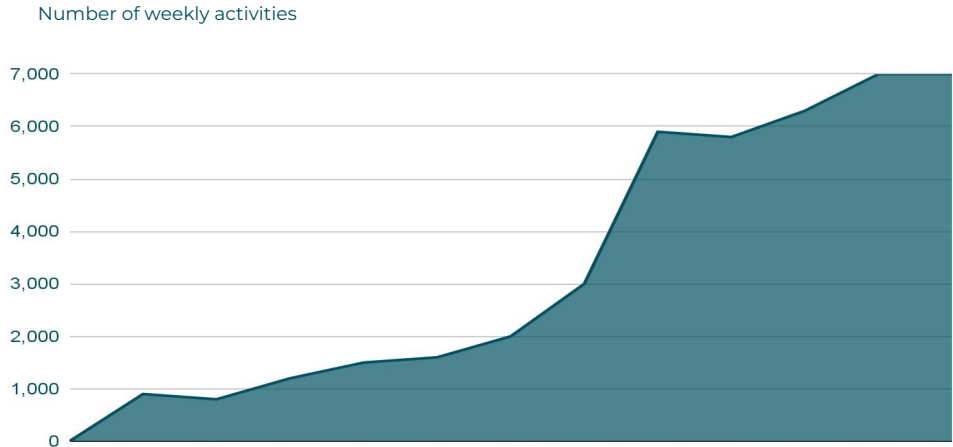
**Users Adoption  
Rate**





# A high and extensive user (97%) adoption rate allowed MRO teams to experience results within a few weeks following Pelico's deployment

## Extensive user adoption across teams

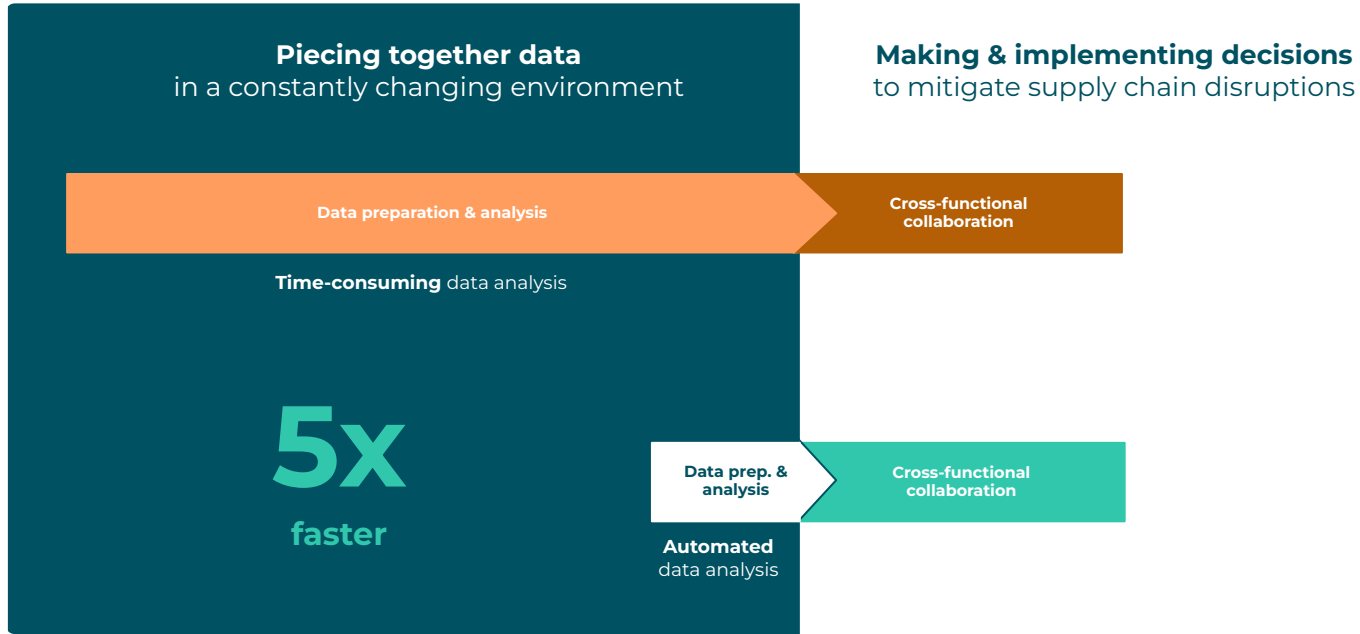


**50%**  
Reduction of  
logistics cycle times

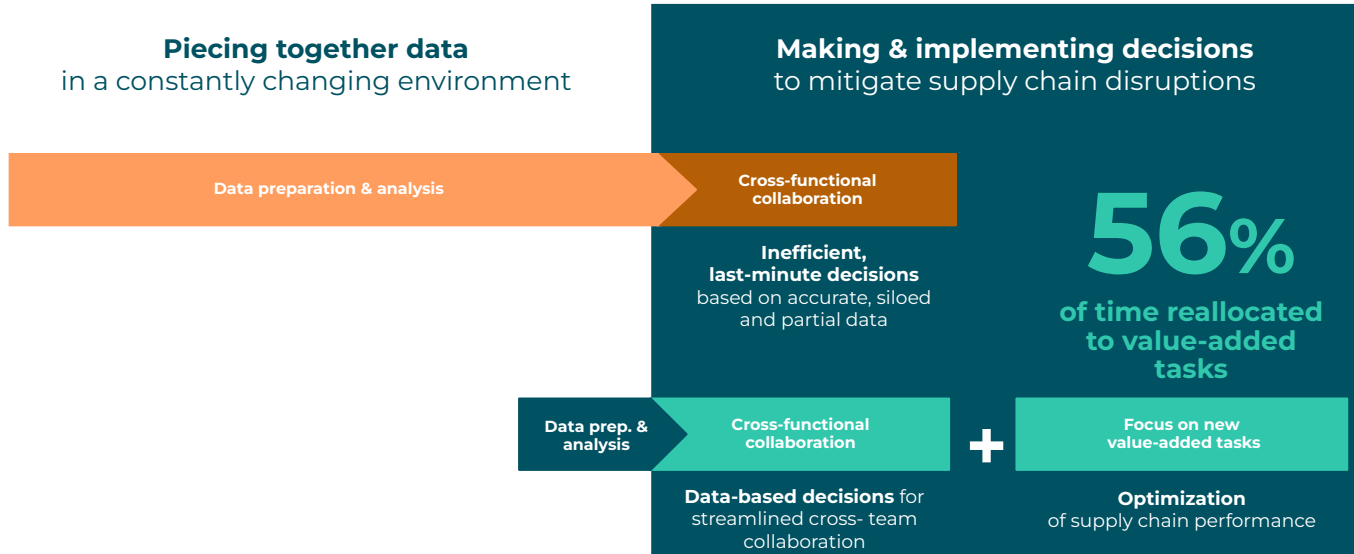
**80%**  
Team  
Productivity



# MRO team improved its productivity by 80% in data preparation & analysis, leading to decisions made 5x faster

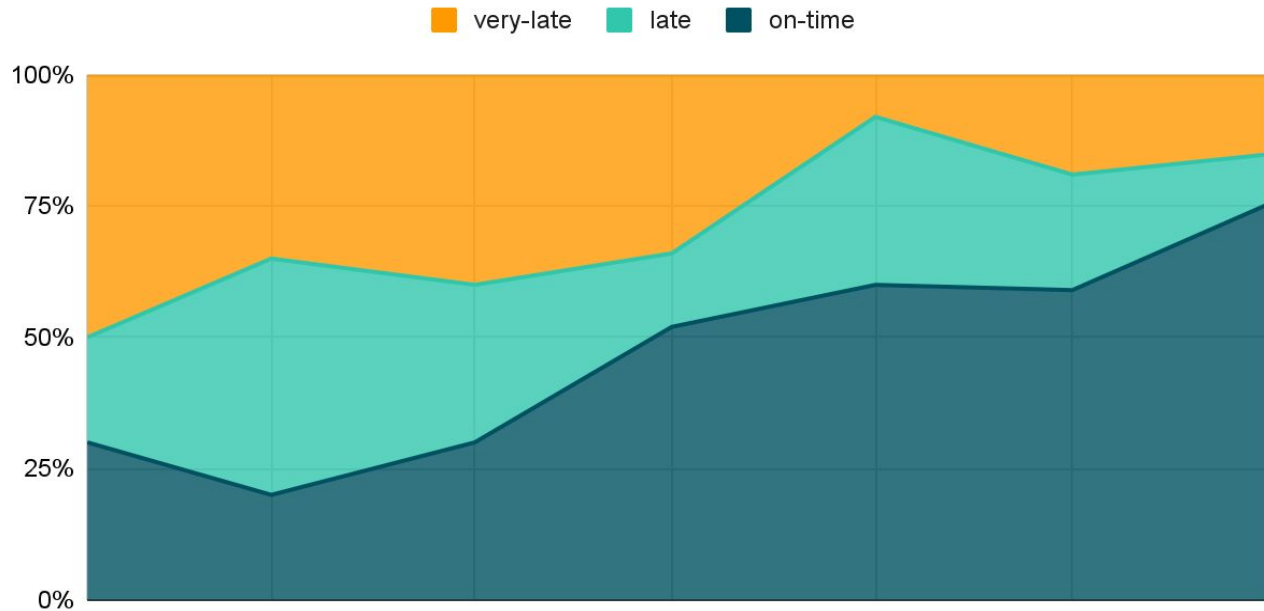


# Shop team made better decisions and reallocated 56% of the time saved on data preparation and analysis to value-added tasks



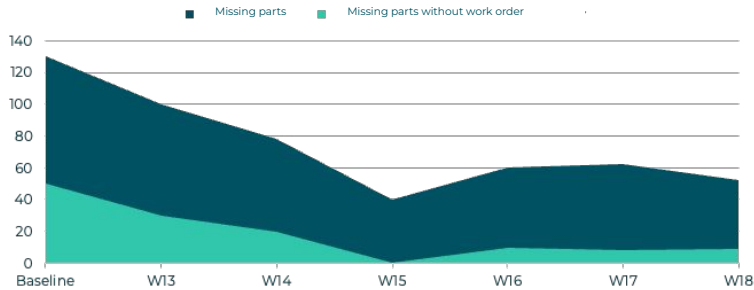
# As a result, the MRO shop witnessed significant improvement in Suppliers OTD

## Supplier On Time Delivery - Internal Stock Transfer Orders



# The reduction in missing parts resulted in significant improvements in the global business

**-77%** Missing parts over time



**+15%**

**Customer OTD**

**18%**

**WIP reduction**





FACTORY OPERATIONS MANAGEMENT PLATFORM

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