PELiCO

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 part shortages 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 part shortages 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 out 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 out 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 as increasingly complex operational environment

Ramp-up

25%
YoY Growth

50+
Daily Updates to WIP Status

280
Open Repair Orders in WIP

Value at stake

64% Delivery delays due to parts shortages

37% Revenue blocked by parts shortages

182 Part shortages for service orders

Equipments maintained

Transmission Systems

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**

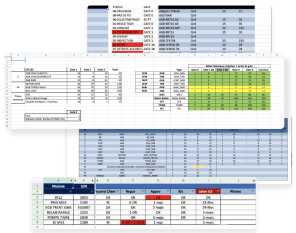
Process latency, inaccurate data and inadapted tooling made the daily adjustment to these disruptions even more challenging

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

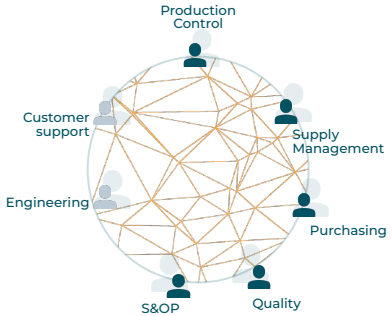
Data preparation & analysis → **Cross-functional collaboration**

- **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 comporting errors

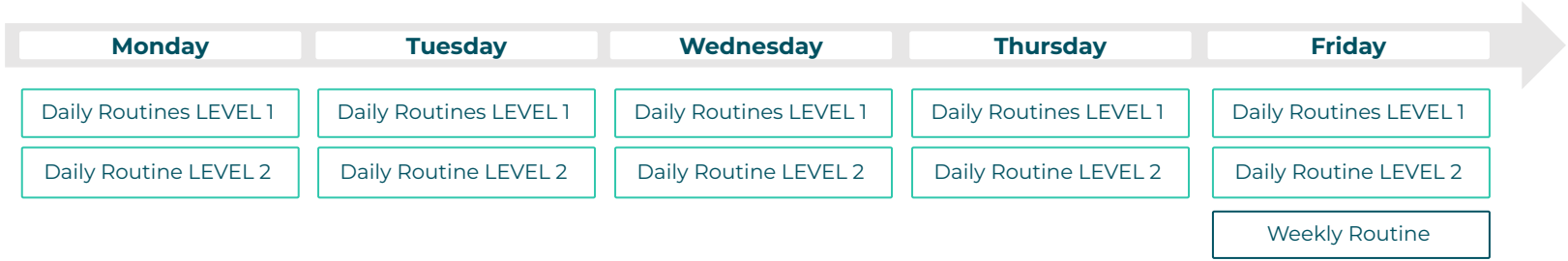
KPI(s) jeopardized: OTD, WIP

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 rhythmed 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 part shortages 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)

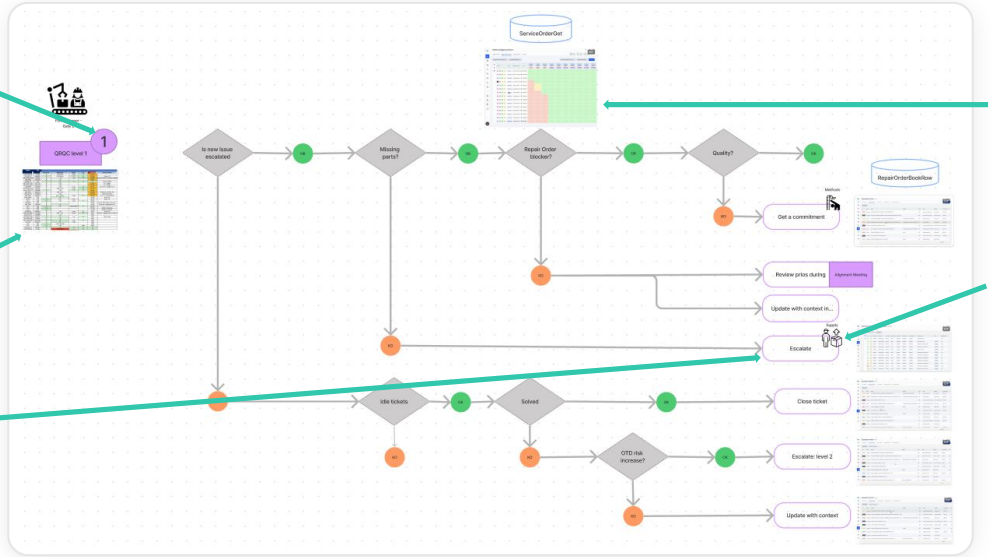
To identify levers to optimize those routines, Pelico mapped existing processes through users' shadowing

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



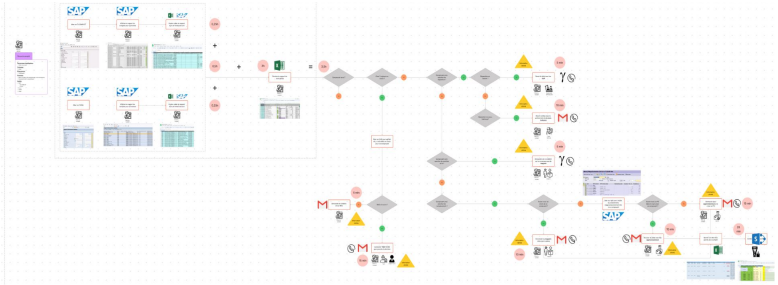
Identification of improvement opportunities

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

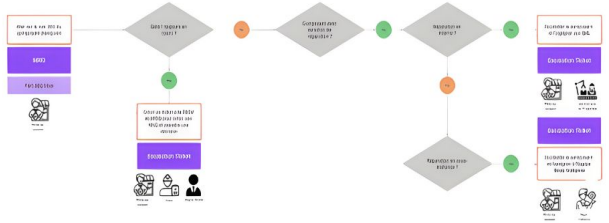
2. Identification of streamlined, data-driven decisions & cross-functional collaboration opportunities (e.g, simplification of routines)

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

ROUTINES MAPPING BEFORE PELICO



ROUTINES MAPPING AFTER PELICO

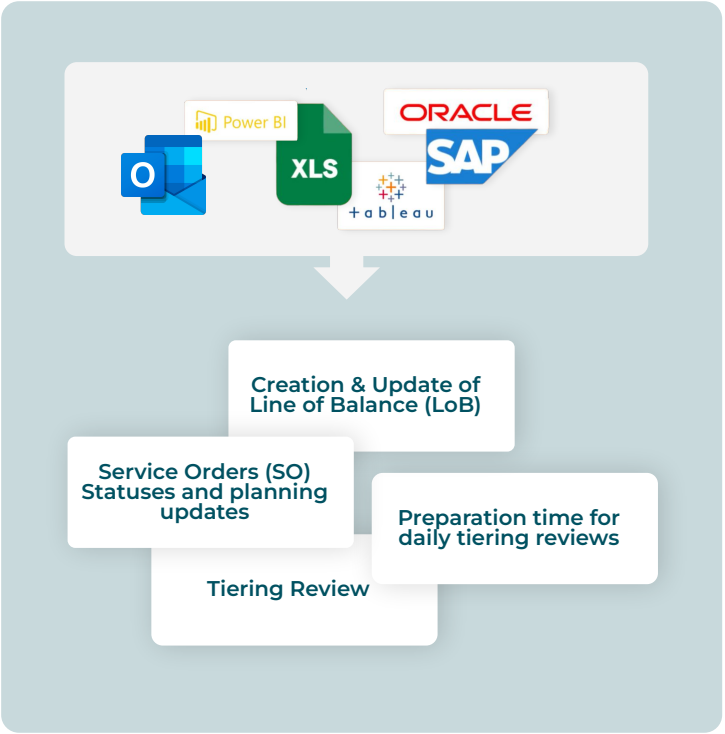


Time to complete the routines per perimeter: **2 hours** vs. **10 minutes**.

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



One platform to accelerate shop operations

- Alignment of all teams on a single source of data
- Early anticipation of bottlenecks
- Fast decision making
- Streamlined cross-team collaboration
- Quick simulation of alternative scenarios

Results

Key Achievements within 11 weeks

+15%

Customer OTD

-37%

Turnaround Time

-73%

Part Shortages

-18%

WIP

+38%

Data Quality Improvement within 8 weeks

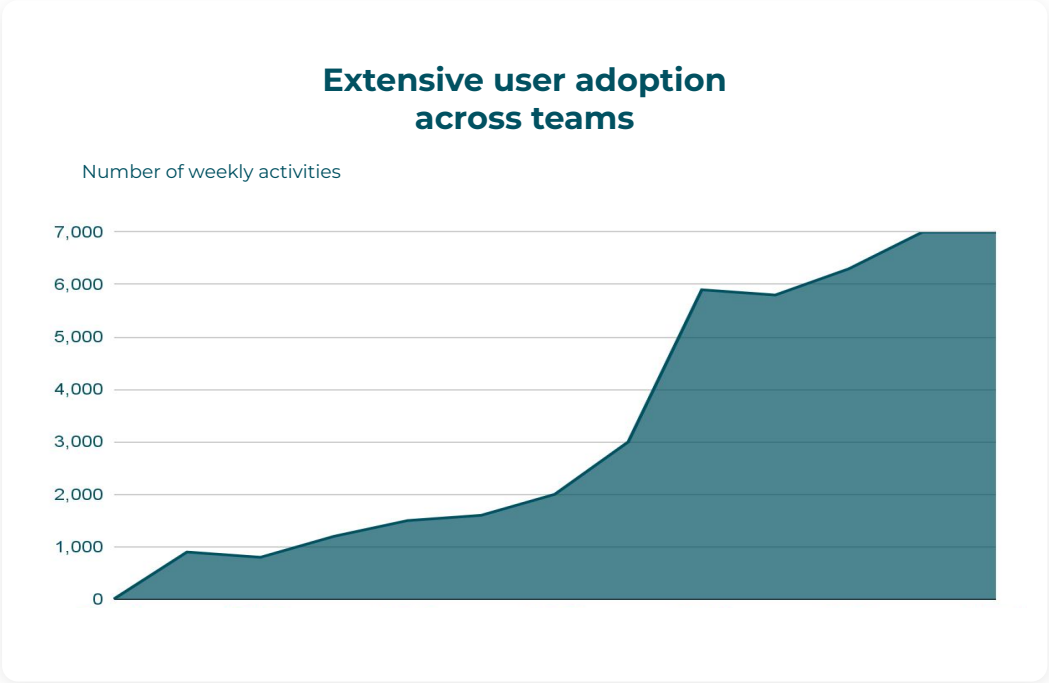
+80%

Team Productivity

97%

Users Adoption Rate

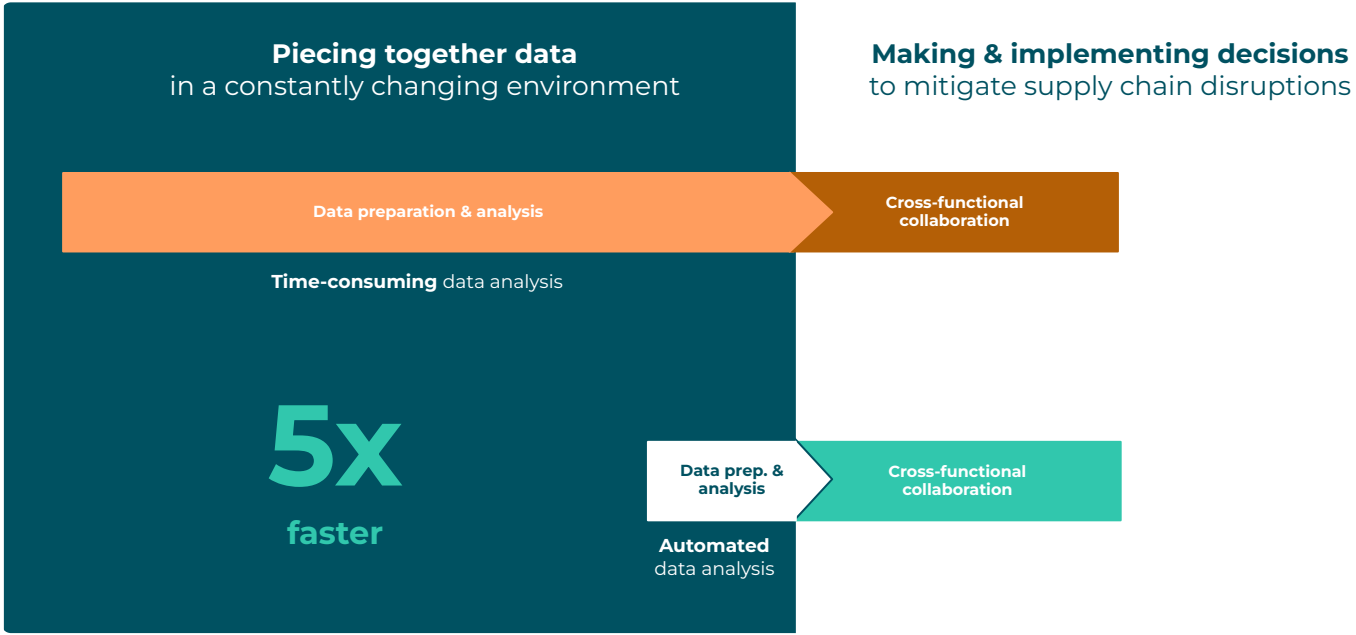
A high and extensive user (97%) adoption rate allowed MRO teams to experience results within a few weeks following Pelico's deployment



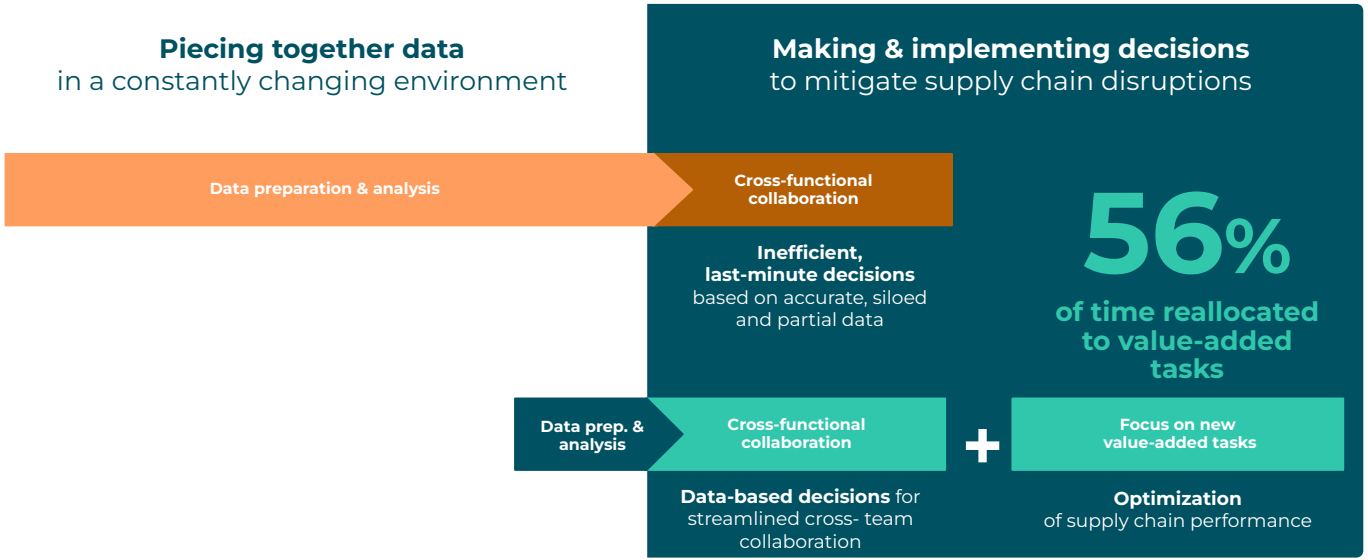
50%
Reduction of logistics cycle times

80%
Team Productivity

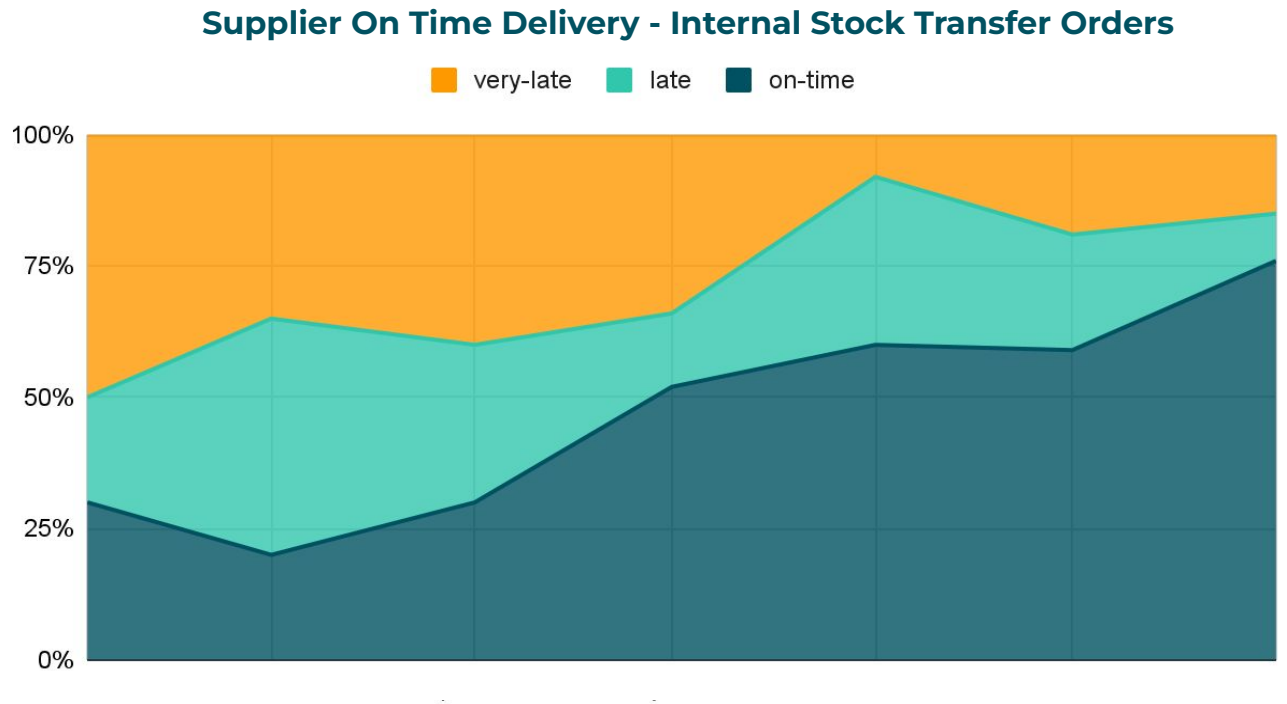
MRO team improved its productivity by 80% in data preparation & analysis, leading to decisions made 5x faster



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

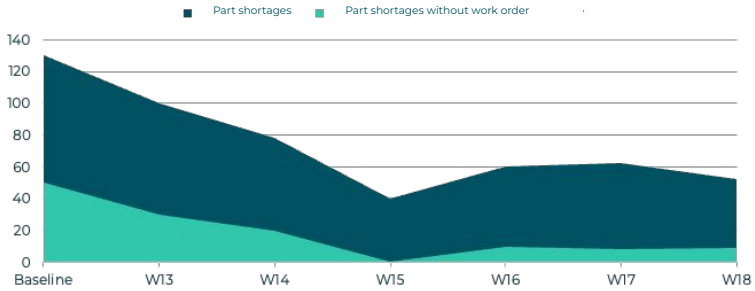


As a result, the MRO shop witnessed significant improvement in Suppliers OTD



The reduction in part shortages resulted in significant improvements in the global business

-77% part shortages over time



+15%

Customer OTD

18%

WIP reduction

PELiCO

SUPPLY CHAIN OPERATIONS MANAGEMENT PLATFORM

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