KLM + BCG

Turning airline operations into a competitive advantage

Our suite of AI-powered solutions developed in partnership between KLM Royal Dutch Airlines and BCG

DAY OF OPS

Runway
Runway restrictions

Pathfinder
Tail assignment

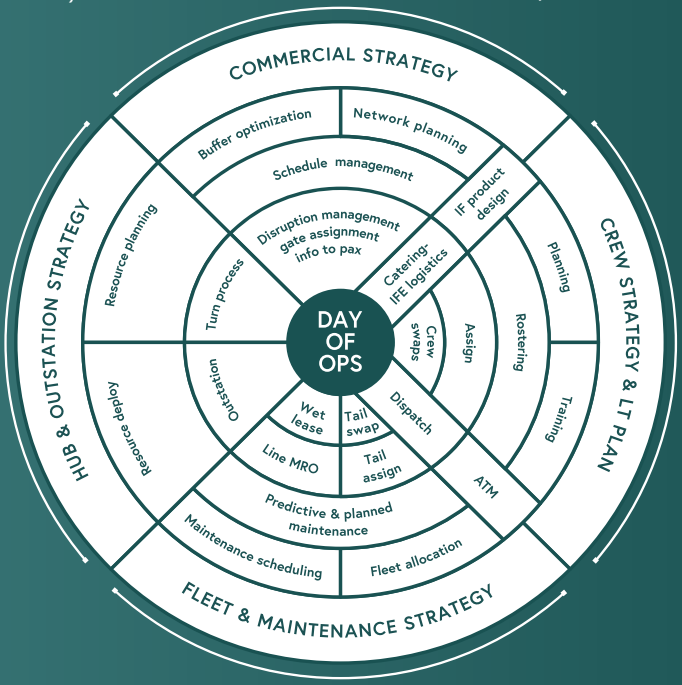
Sentry
Disruption management

CREW

CrewVision
Resource planning

Mentor
Crew training

Harbinger
Crew repair



FLEET AND MAINTENANCE

Phaser
Phase-out and shop visit optimization

Navigator
Short-term maintenance planning

GROUND

BagPro
Baggage flow

Terra
Ground resource allocation

NETWORK

Horizon*
Strategic network plan

Orbit*
Scheduling and fleeting

ALIGN
Schedule simulation and integral resource planning

*Horizon and Orbit are BCG tools

See more at: https://airlineoperations.ai

Navigator

AI-powered integral planning for short-term maintenance

Create an optimized balance between flying and maintaining by allocating aircraft to maintenance slots, determining the optimal length and location of the slots, and prioritizing tasks and faults effectively.

Balance maintenance and flying plan

Increase integral fleet availability and utilization

Plan maintenance dynamically

Continuously create and adjust the maintenance slots prioritizing issues that matter the most

Improve planning visibility and reliability

Integral fleet view that flags pressing and future issues in the maintenance schedule and proposes corrections

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The short-term maintenance planning challenge

Short-term planning is a daily balancing act in a constrained and volatile environment.

Planners face a complex puzzle to prioritize the right maintenance...

All tasks – planned or unexpected – must be dynamically planned, balancing due dates, interval utilization and impact on customer experience.

... While safeguarding the flying plan...

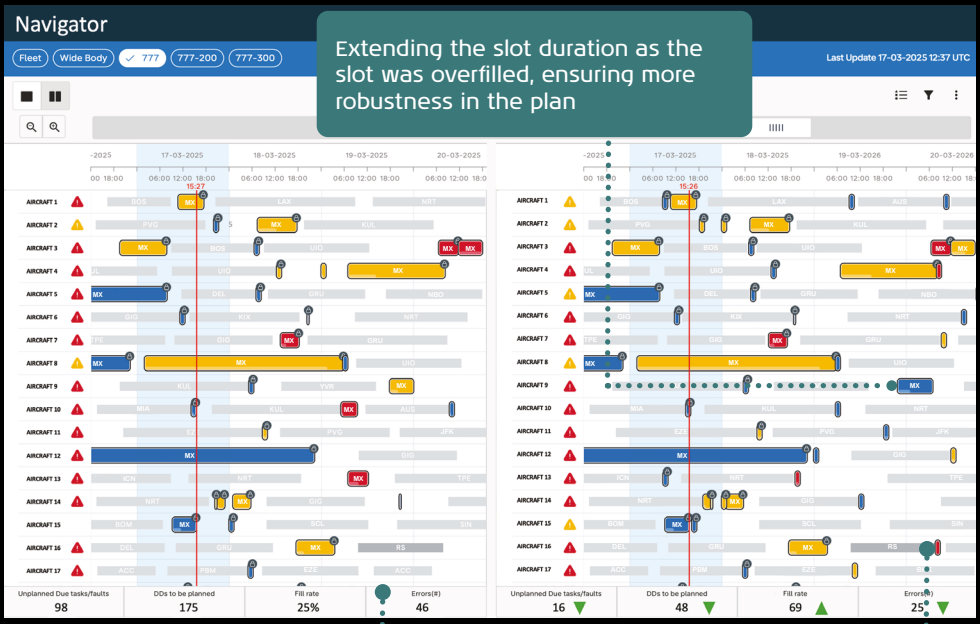
Ensuring aircraft health and protecting the flight schedule.

... While ensuring the plan is robust and meets operational constraints

Adhering to all operational constraints (hangar space, material), without overcommitting scarce resources.

Navigator enables airlines to create the optimal maintenance plan and adapt quickly to a frequently changing context

Our solution enables users to make the right trade-offs and can be tailored to specific needs



Improvement on all operational KPIs (number of tasks and faults planned, fill rate, issues in the planning etc.)

Extending the flight and maintenance planning horizon, providing more visibility and predictability

01
Single source-of-truth for integral decision making

02
Automatic ingestion of maintenance and operational data

03
Initial planning and dynamic replanning

04
Side by side comparison of current and optimized plan with KPI comparison

05
Custom settings per run/scenario

06
Easy export of selected results to source systems

Navigator delivers a reduction of 5-10% in technical cancellations and delays, with improved mechanic and planner efficiency

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