

We specialize in cloud-native, modular, and data intelligence-driven software tailored for aviation. With deep industry expertise, we address the unique challenges airlines, ground handling agents, and airports face daily.

Our Polaris Resource Management solution streamlines airport operations using real time information during irregular operations as well as being used for planning and forecasting purposes. We prioritize enhancing staff productivity and satisfaction, addressing issues like on-time performance and disruptive schedules, whilst maintaining a healthy work life balance. The results: Millions in annual savings and increased profitability for our clients.

Are You Ready for the Future?



Cost Control & Efficiency

- 💡 How well are you managing labor, fuel, and maintenance costs?
- 💡 Is technology enhancing your efficiency without overspending?

Market Competitiveness

- 💡 Are you standing out in a competitive market?
- 💡 Can your pricing strategy balance competitiveness with profitability?

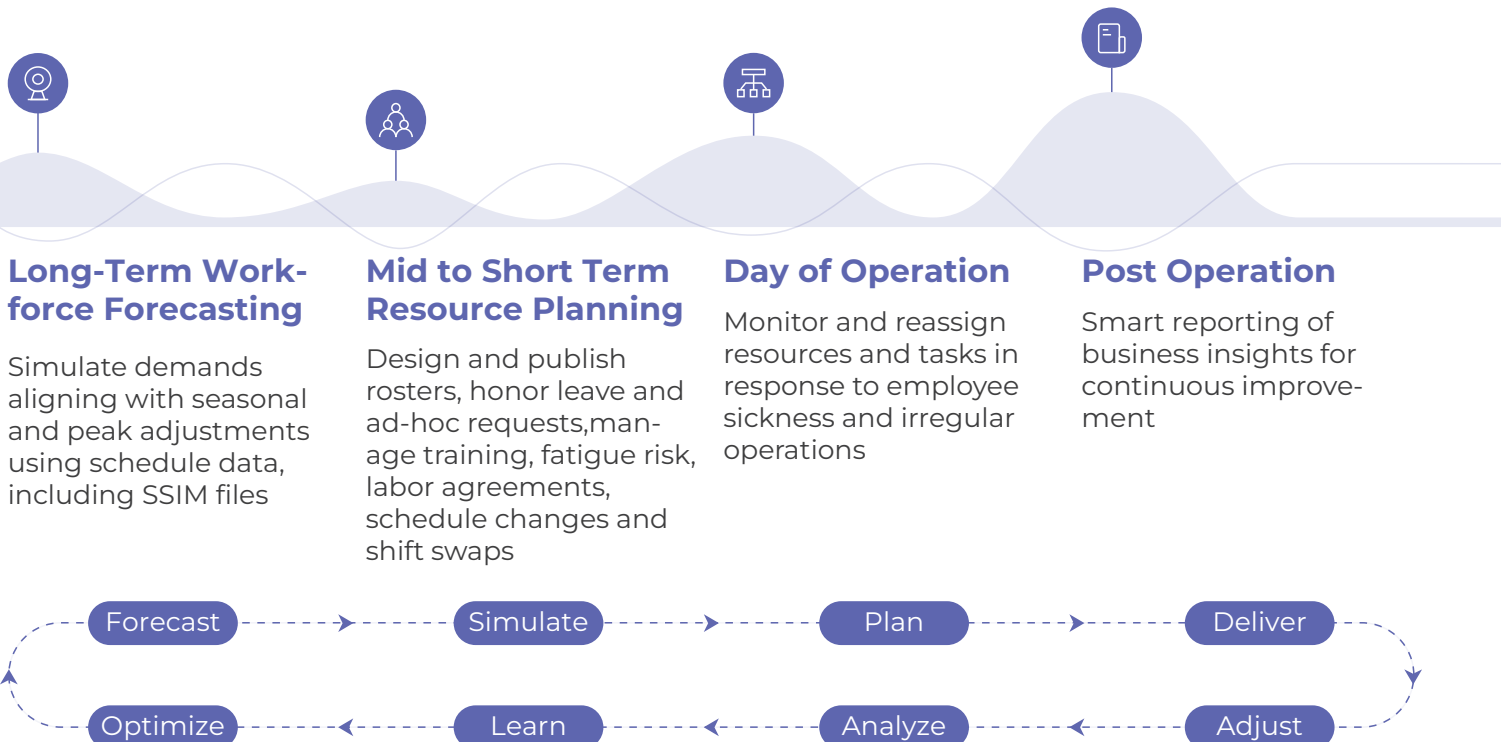
Resource Optimization

- 💡 Is your workforce aligned with demand and skills needed?
- 💡 How are you retaining skilled staff to reduce turnover?

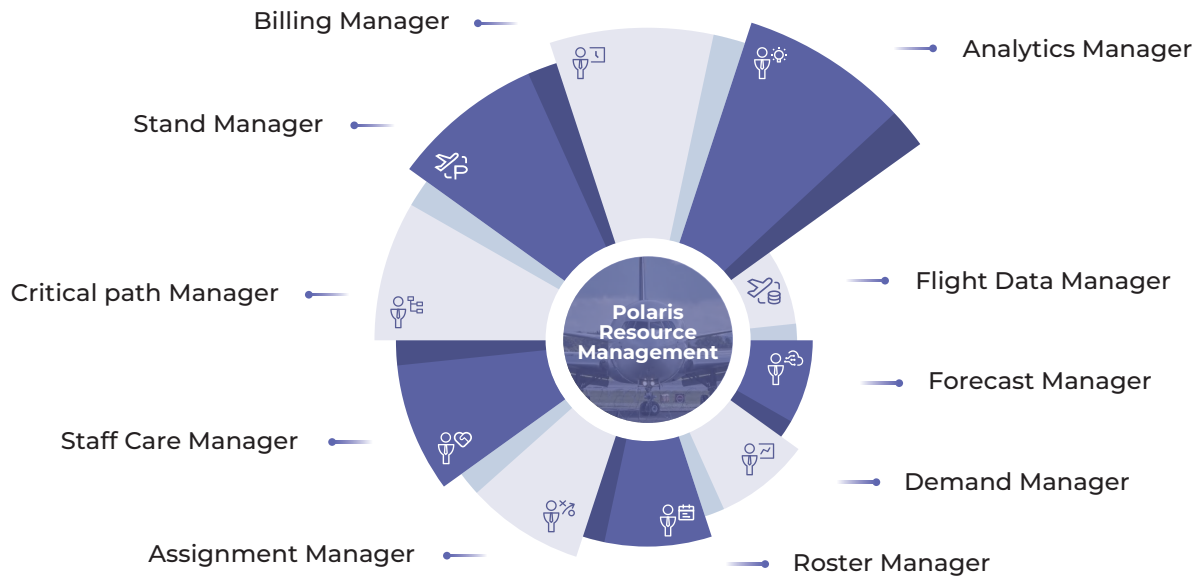
Seasonal Adaptability

- 💡 Is your staffing flexible enough for peak seasons?
- 💡 Are resources allocated efficiently year-round?

Unlocking the Power of a Smart RMS



Polaris Solution at a Glance



The Impact Polaris Delivers

Staff utilization improved by

2% – 23%

Weekly and monthly shift hours reduced by

3% – 26%

Roster planning resource costs lowered by

50% – 90%

New staff hiring reduced by

10%

Every time the real-time task allocation optimization runs

5 minutes

Total overtime hours decreased by

37% – 73%

Task distribution fairness improved by

5% – 15%

100% ad-hoc task capture achieved, eliminating potential revenue leaks



Customer Testimony

“Before adopting the Polaris RMS Solution, we struggled with limited visibility into compliance, inefficient rostering, high overtime rates, and revenue leaks from missed ad-hoc tasks. After implementation, all rules and SLAs are now digitalized, tasks are traceable and accurately quantified. We’ve increased task coverage by **up to 19%**, reduced shift hours by **up to 29%**, and cut overtime by **as much as 75%**. Labor costs dropped by **10%**, operational fairness improved, and our team turnover is trending lower. It’s transformed how we manage ground operations.”

— **Director of IT, Ground Handling Company in one of the busiest airport in Asia**

“Managing over 1,500 employees across 15 positions and 70+ work types used to be a challenge. We struggled with high labor costs, complex qualification requirements, and pressure to maintain on-time performance. Since adopting **ROIs Technology’s Ground Resource Management Solution**, we’ve transformed our operations with data intelligence and digital decision engines. Over 20 of our senior planners now fine-tune roster rules and real-time management modules using live flight and staff data. Our employee productivity has risen to **85%**. The solution has brought automation, transparency, and real operational efficiency to our ground handling.”

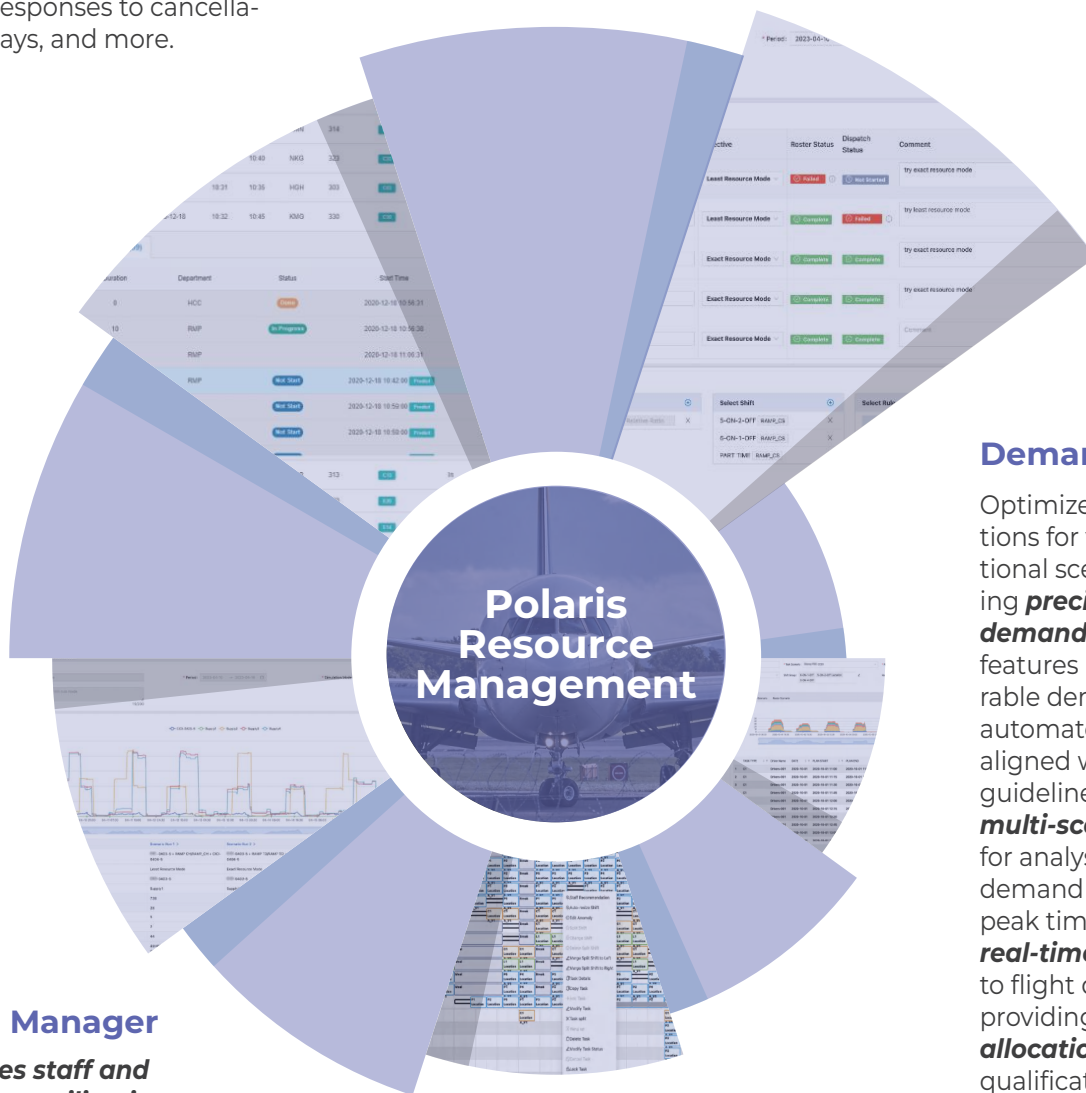
— **Head of Ramp Services, A Leading Global Ground Handling Company**

Flight Data Manager

Enables **multi-scene schedule** editing, real-time updates, and **comprehensive views** of flights, tasks, and resources in one place. Key features include advanced schedule editing, **multi-scenario** storage for analysis, and integration with systems like AODB, PSS, and ADS-B. Set custom alerts for critical flight changes to allow prompt responses to cancellations, delays, and more.

Forecast Manager

Enable risk-free **smart operational simulations** to identify, uncover efficiency opportunities, and achieve the right balance between pricing and profitability. Key features include **workforce forecasting** to accurately predict staffing needs; **Adaptive operations management** for peak and off peak seasons; **Configurable resource parameters** to align with business goals; **Comprehensive KPI reporting** covering cost, efficiency, and SLAs. The module delivers data-driven insights to optimize resource planning, and support strategic decisions.



Roster Manager

Maximizes staff and equipment utilization, identifies bottlenecks, and allows compliance in roster creation. Key features include optimized rostering, flexible shifts, multi-qualification matching, and tracking of leave and training. Tools respect fairness, preferences, and fatigue, while scenario comparison aids **decision-making based on KPIs**.

Demand Manager

Optimizes task calculations for varying operational scenarios, delivering **precise resource demand insights**. Key features include configurable demand rules, automated generation aligned with KPIs and guidelines, and **multi-scenario storage** for analysis. A visual demand curve highlights peak times, while **real-time updates** adapt to flight dynamics, providing **accurate task allocation** across qualifications and units.

Assignment Manager

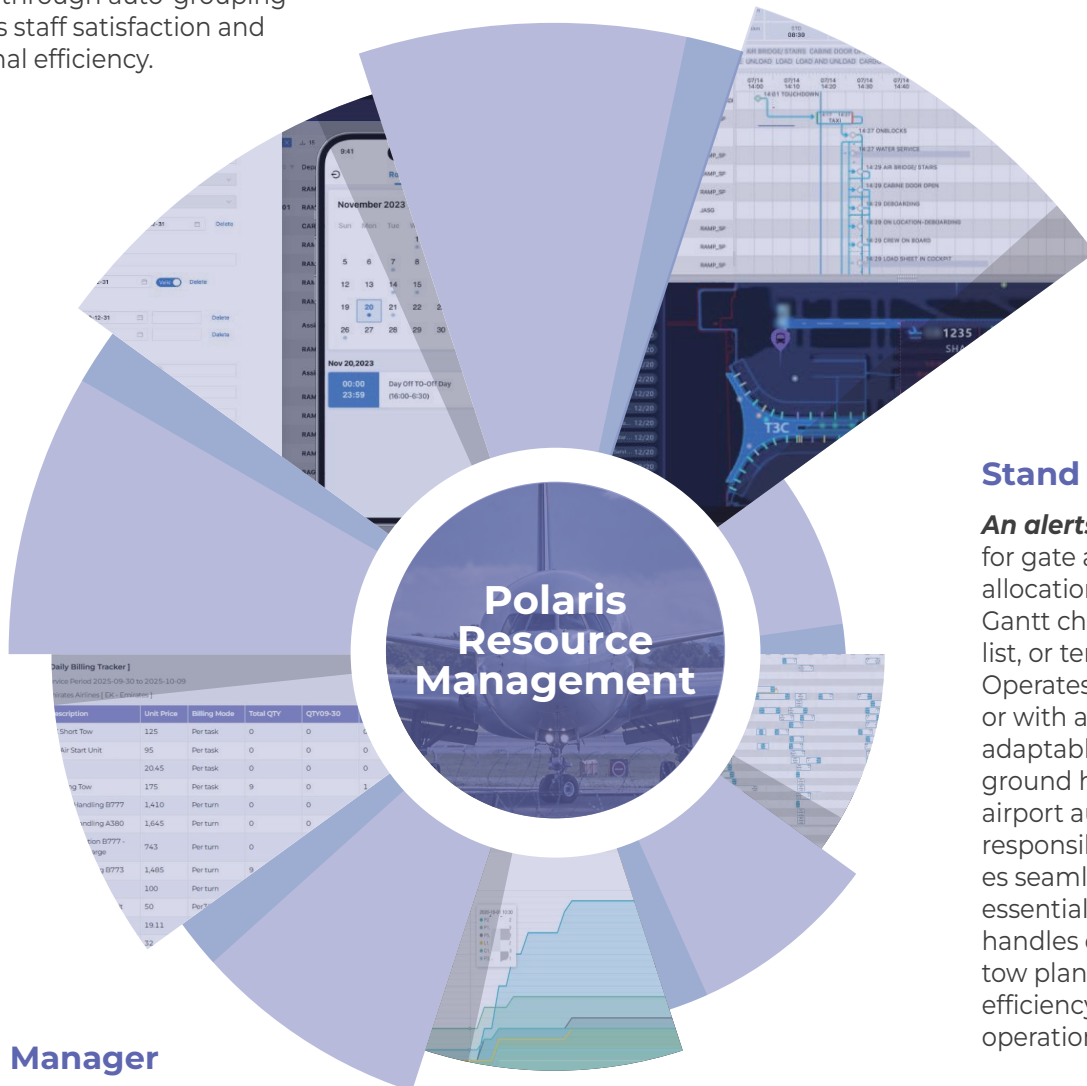
Automated, high-performance task assignment and re-assignment focused on **fairness, fatigue, and preferences**, with 24 hour demand prediction to anticipate resource needs. **Proactively** assign tasks, make quick adjustments, and receive alerts for potential violations to allow smooth, compliant operations.

Staff Care Manager

Offers a staff portal for schedule access, time-off requests, and shift swaps, supporting individual preferences. **Fairness management** ensures equitable task distribution by seniority, skills, and workload, while **fatigue management** aligns with regulations for optimal rest. **Real-time communication** through auto-grouping enhances staff satisfaction and operational efficiency.

Critical path Manager

Automates end-to-end monitoring of aircraft turnaround with tracking, alerts, and forecasting for **operational resilience**. Key features include Gantt chart-based monitoring, **real-time calculations of critical service paths**, and predictive tools for delays. **Dynamic alerts** highlight deviations for quick recovery actions, while a digital map visualizes resource status, task assignments, progress, and KPIs, supporting data-driven decisions.



Stand Manager

An alerts-based module for gate and stand allocation, viewable via Gantt chart, flight display list, or terminal graphic. Operates independently or with an A-ODB, adaptable to airline, ground handler, or airport authority responsibilities. Interfaces seamlessly with essential systems and handles complex aircraft tow planning, enhancing efficiency across operations.

Billing Manager

The **Billing Module** automates the entire billing cycle, from daily service fee tracking to seamless monthly invoice generation. It ensures every charge accurately reflects real-world activity. With fully configurable billing logic and flexible modes such as **By Month, By Flight, or By Task Duration**, it delivers transparency, flexibility, and financial accuracy.

Analytics Manager

Gain real-time visibility and actionable insights to make smarter, **data-driven decisions** that optimize scheduling, operations, and labor costs. **Dynamic dashboards and reporting** empower organizations to refine workforce efficiency and resource allocation for improved service quality.

ROIsphere

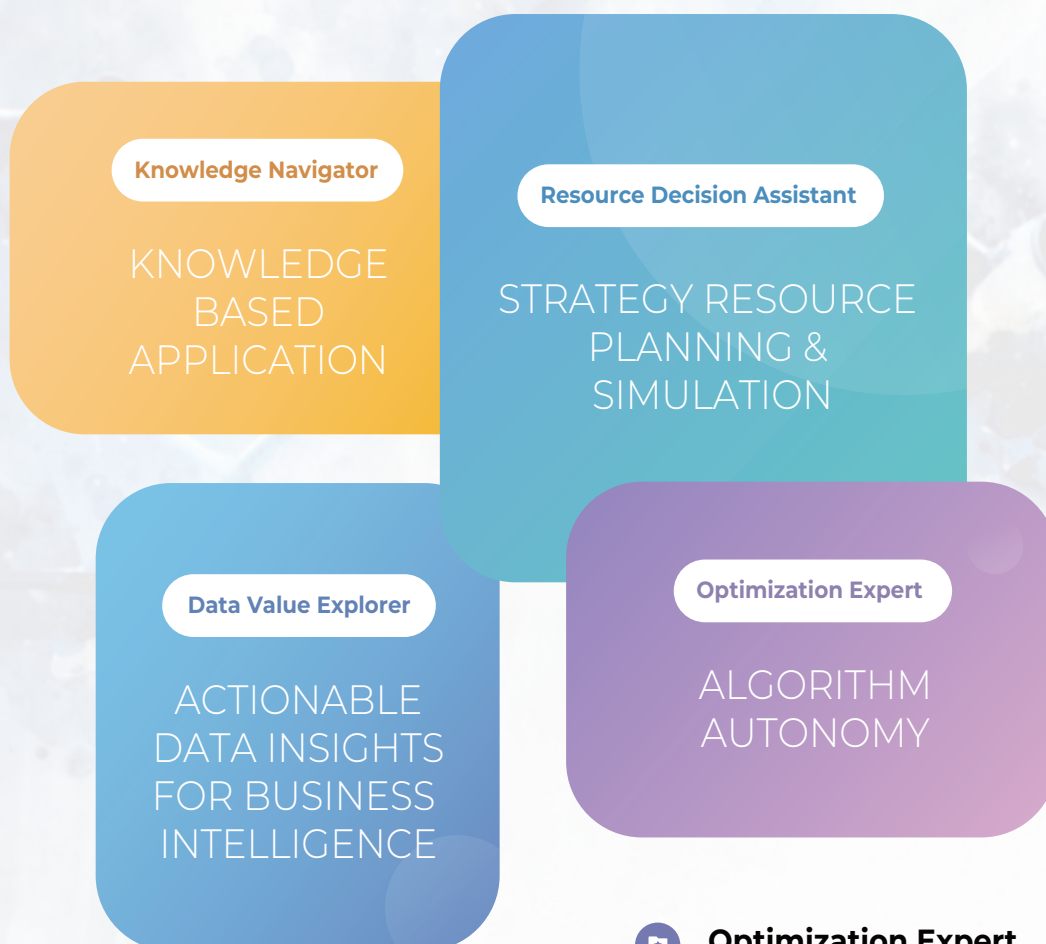
ROIsphere, the evolving AI intelligence of RMS, has at its core the **GRMS Small BLM** — a domain-specific AI business language model for targeted business applications that captures the semantics of operations, policies, and KPIs, enabling continuous learning, adaptive optimization, and future-proof intelligence for RMS.

Knowledge Navigator

- Knowledge based application
- System functionality support
- Business operation Q&A
- SOP & operation process support

Resource Decision Assistant

- Short term resource shortage forecast
- Long term resource planning
- Scenario-based simulation



Data Value Explorer

- Dynamic data to insight capability
- On-Demand Data Q&A without predefined
- Dynamic AI dashboard & KPI
- Scenario analysis and comparison

Optimization Expert

- Autonomic algorithm tuning (Parameter selection, solution quality improvement, strategy decision, etc.)
- Scenario analysis and comparison

ROIsphere

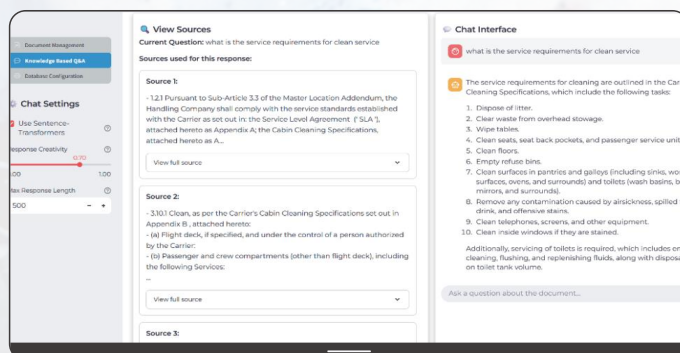
Polaris AI Agent

Integrated with LLM
-Large Language Model

Knowledge Navigator is an AI-powered knowledge Q&A tool that combines structured knowledge bases, domain expertise, and natural-language processing to deliver accurate, context-aware answers to user queries.

Converting Business Documents into Knowledge Assets

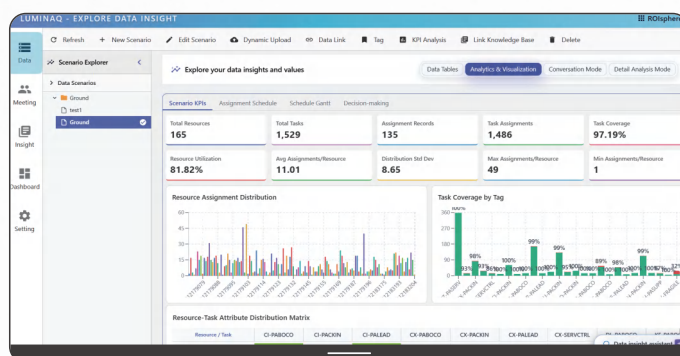
- **Analyze and compare service level agreements**, summarize key terms, conditions, and differences across multiple contracts.
- **Automate document processing**, extract service standards and regulatory content and seamlessly populate systems with structured information.
- **Enable business advisory and knowledge support**, provide Q&A, insights, and information retrieval powered by comprehensive business documentation and content repositories.



Data Value Explorer combines data, domain knowledge, and advanced models, offering dynamic, interactive analytics & reporting through an AI-driven agent. Empowers organizations with real-time, data-backed decision intelligence.

Turning Data & knowledge into Actionable Insights

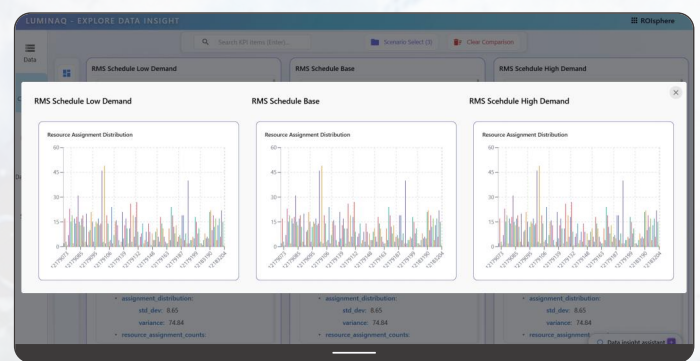
- **Gain real-time operational insights** through dynamic, configurable data models.
- **Analyze disruption causes** with in-depth, data-driven diagnostics.
- **Optimize resource planning** using scenario-based what-if analysis.
- **Leverage AI recommendations** to support both strategic and operational decisions.



Decision support AI is an agent that automatically identifies user requirements, performs autonomous optimization simulations, and delivers intelligent operational recommendations to support resource planning and decision-making.

Transforming Insights into Intelligent Recommendations

- **Automatically interprets** natural-language input to generate calculation scenarios and run simulation models based on identified content.
- **Performs autonomous decision analysis and provides multi-dimensional AI-driven recommendations**, including: short-term contingency plans for potential operational disruptions, long-term resource planning strategies and automated revenue and cost trend forecasting.



ROIsphere

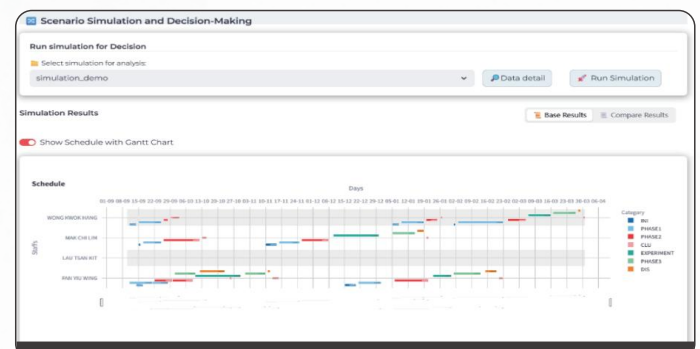
Polaris AI Agent

Integrated with LLM
-Large Language Model

Optimization Expert is an AI assistant for planners that autonomously assesses optimization quality, tunes algorithm parameters, and resolves optimization issues, delivering intelligent, hands-on support to enhance performance.

Elevating Optimization Algorithms into Smart RMS Decisions

- **Easily align optimization** models with business rules for faster rostering and task assignment deployment.
- **Quickly address** algorithm-related issues, analyze suboptimal results, assess regulatory impacts, and fine-tune parameters in real time.
- **Extend algorithm use** for smarter decision-making such as short-term resource shortage forecasting, evaluating new regulatory parameters, or creating "what-if" analysis scenarios.



Pioneering Ground Resource & Turnaround Management

Future Proofing Product with AI

Multi-Agent Collaboration

- Separate AI agents for rostering, compliance, incident handling.
- Agents coordinate in real time to resolve complex disruptions.



Multimodal AI Processing

- Combine CCTV video, IoT device feeds, picture & text logs.
- Automate baggage/jet bridge status recognition from camera feeds.

Operation Simulation

- Create simulation models of airport operations.
- Run "what-if" delay recovery scenarios before committing

Compliance-Safe Automation

- Models that embed and enforce complex legal/union rules.
- Reduce human rule-checking workload.

Continuous Learning Systems

- Feed every disruption outcome back into AI models.
- Improve prediction accuracy over time.

AI Differentiation Delivered for Ground Handlers

Proactive Scheduling

- Automatic real time task board with alerting and re-allocation.
- Minimize last-minute reactive reassignments.

Delay Recovery Engine

- AI playbooks suggest fastest recovery plans per disruption type.
- Prioritize high-penalty flights to protect high priority flights

Insight Driven Decision Assistance

- Natural-language analysis and scenario simulations generate proactive, multi-dimensional resource recommendations.

Compliance-First Monitoring

- AI as a "watchdog" that flags potential breaches in rostering.
- Retain audit logs to pass regulatory inspections.

Self-Learning Optimization

- Constant cost vs SLA trade-off tuning based on historical outcomes.
- Convert operational experience into a competitive advantage.

