



CLIENT STORY

Global maritime services provider charts new course with AI crew scheduling

Story snapshot

Following a pilot programme to validate AI value, Insight helped a global maritime provider rapidly prototype and deploy an AI-powered Crewing Planner that transformed maritime crew scheduling.

- Insight deployed a working AI prototype within the maritime provider's Microsoft environment.
- The Crewing Planner cut crew assignment time by around 60% per voyage.
- Strong foundation established for production deployment and ongoing AI Centre of Excellence partnership.

Background

Across the maritime sector, AI pilots are accelerating, yet the majority fail to reach operational deployment. While value has been proven, the challenge has shifted from experimentation to execution at scale.

A global maritime services provider initiated an AI-driven pilot programme for its ship management operations with a clear objective: validate tangible business value from AI and establish the foundational elements needed for sustainable AI success. The pilot was structured to deliver measurable early results while building the infrastructure required for future scaled deployment.

Insight and the maritime provider adopted a co-authored approach to the AI strategy, working in close partnership to identify high-impact opportunities and build the foundational elements needed for sustainable AI success.

Challenge

The global maritime provider's crew planning process represented a critical operational bottleneck that was both manual and time intensive. Superintendents had to manually sift through tens of thousands of seafarer records to staff each voyage, balancing complex criteria including:

- Certifications and qualifications specific to vessel types
- Compliance with international maritime regulations
- Crew availability and scheduling constraints
- Vessel-specific requirements and experience levels
- Historical performance data across multiple systems

Each crew assignment required a considerable amount of manual review and decision-making. With hundreds of voyages to staff annually, this represented significant operational overhead and potential for human error in a safety-critical industry.

Beyond the immediate crew scheduling challenge, the client lacked the foundational AI infrastructure, governance frameworks, and internal expertise to evaluate and scale AI solutions across the organisation within their Microsoft environment. The pilot programme was designed to address these gaps systematically.

Solutions & outcomes

Rapid AI Prototype & Validation

Using Insight's proven Rapid AI methodology and Microsoft Azure AI services, the joint team built a working 'Crewing Planner' prototype in five business days, proving the solution's viability and demonstrating early ROI.

The AI-powered agent streamlined crew planning by automatically filtering candidates based on certifications, vessel experience, and compliance requirements, and then applied an AI reasoning layer to rank the strongest options and explain each recommendation. These explainable outputs gave planners clear visibility into selection decisions, a critical requirement in safety and compliance-driven maritime operations.

The prototype cut crew selection time by around 60%, reducing each assignment timeline and thus strengthening the case for further investment.

This was not just a productivity gain. The Crewing Planner represents a shift from manual decision-making to AI-augmented operational workflows, embedding intelligence directly into the crew planning process.

Building the AI Foundation

During discovery and prototyping, Insight worked closely with the client stakeholders to build the foundations for long-term AI success, including governance, a scalable Microsoft Azure architecture, and agile delivery processes. Executive presentations highlighting ROI helped secure leadership support for further investment.

Importantly, the initiative went beyond proving the prototype. It also tackled the wider barriers to scaling AI in maritime, including governance, architectural alignment, and integration into day-to-day operations.

Next Steps: Scaling to Production

With prototype success validated, the partnership is now evolving into an Extended Delivery Team, functioning as an extension of the client's AI department. This joint team is preparing to scale the Crewing Planner into a production-ready MVP while developing additional AI agents including 'Knowledge Assist' for enterprise search across maritime documentation. Operating as a co-managed AI Centre of Excellence, this model is positioned to deliver continuous value through rapid iteration and deployment as the programme matures.

Why Insight?

The global maritime services provider selected Insight for its proven expertise in delivering rapid AI validation while building sustainable enterprise capabilities within Microsoft environments.

- Insight's Rapid AI methodology was instrumental in jump-starting the project with a working prototype and clear ROI metrics within days, building the business case for further investment.
- The ability to balance quick wins with strategic foundation-building aligned perfectly with the client's mandate to validate value early while establishing long-term AI infrastructure.
- Insight's collaborative approach gave the client confidence to expand from a single prototype into an ongoing AI partnership.

Pilot Results

60% reduction

in crew selection time per voyage.

Tens of thousands of seafarer records

now searchable and analysable by AI, surfacing insights previously missed by manual processes.

Strong foundation established

for production deployment and Centre of Excellence expansion, with clear roadmap for scaling to additional use cases.

Hundreds of voyages

annually will benefit from these AI-augmented workflows.