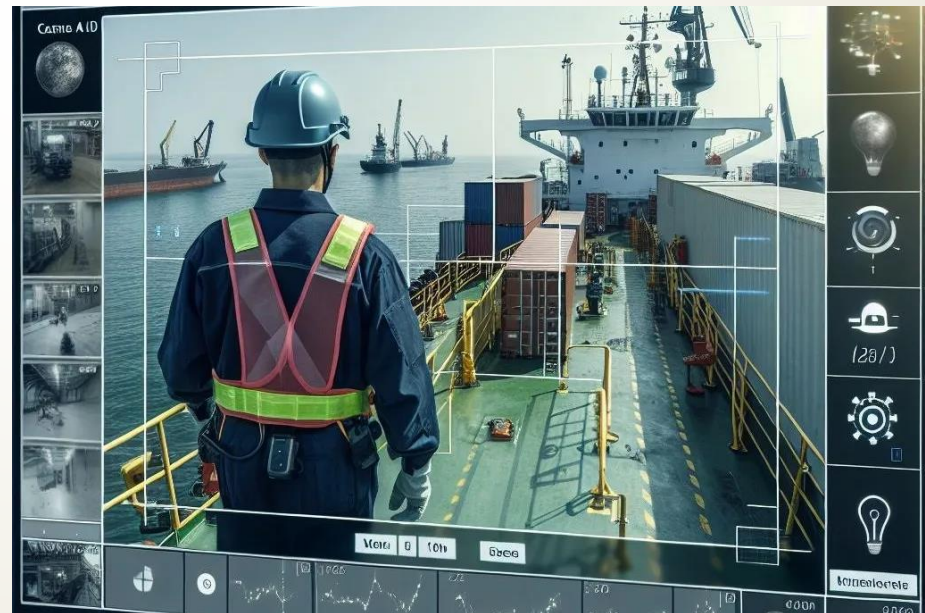


**LASKARIDIS
SHIPPING CO.LTD.**

Enhancing Crew Management Efficiency through Artificial Intelligence

Tsoulakos Nikolaos

Innovation & Technology Manager



The Evolving Role of AI in Crew Management



Growing complexity in managing crew data, reports, and selection procedures



Increasing need for faster, data-driven decision-supporting



AI as a tool to enhance accuracy, transparency, and efficiency

Key Issues Faced by the Crew Department

Large volume of crew data to process and update regularly

Manual evaluation of seafarer performance, feedback, and reports

Time-consuming selection and matching of suitable candidates

Difficulty identifying trends, risks, or potential performance issues early

Limited insights from fragmented or qualitative data

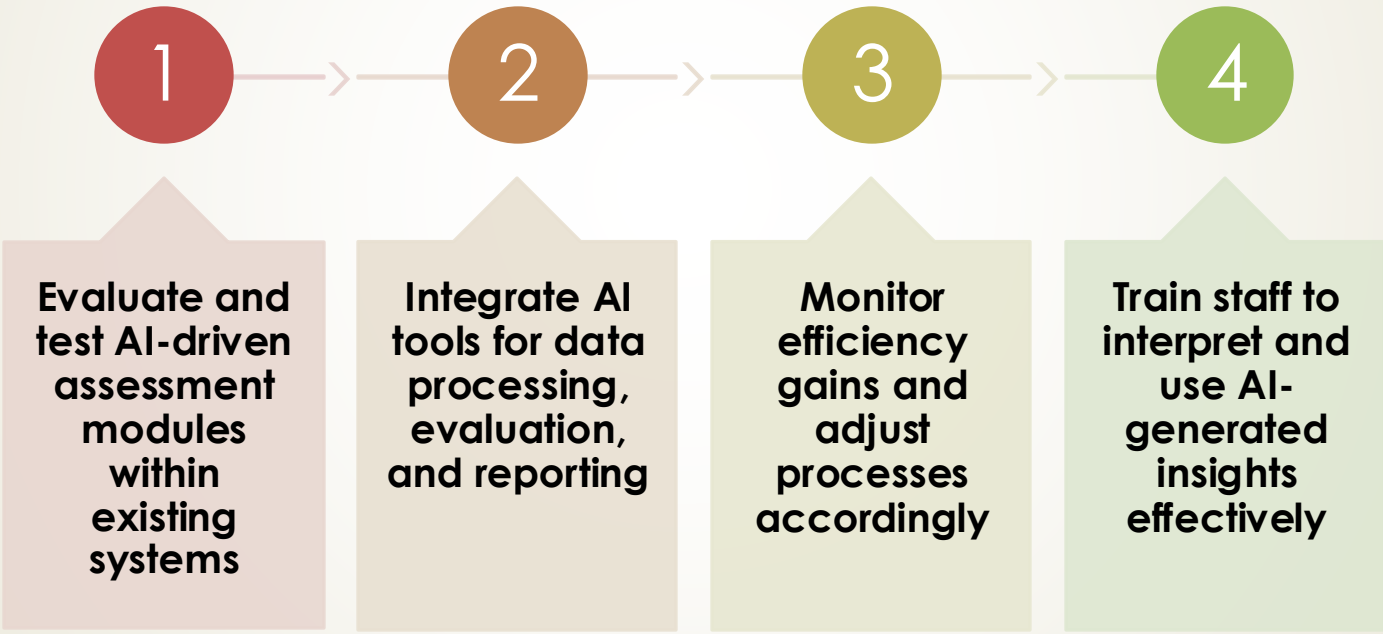
How AI Can Transform Crew Management

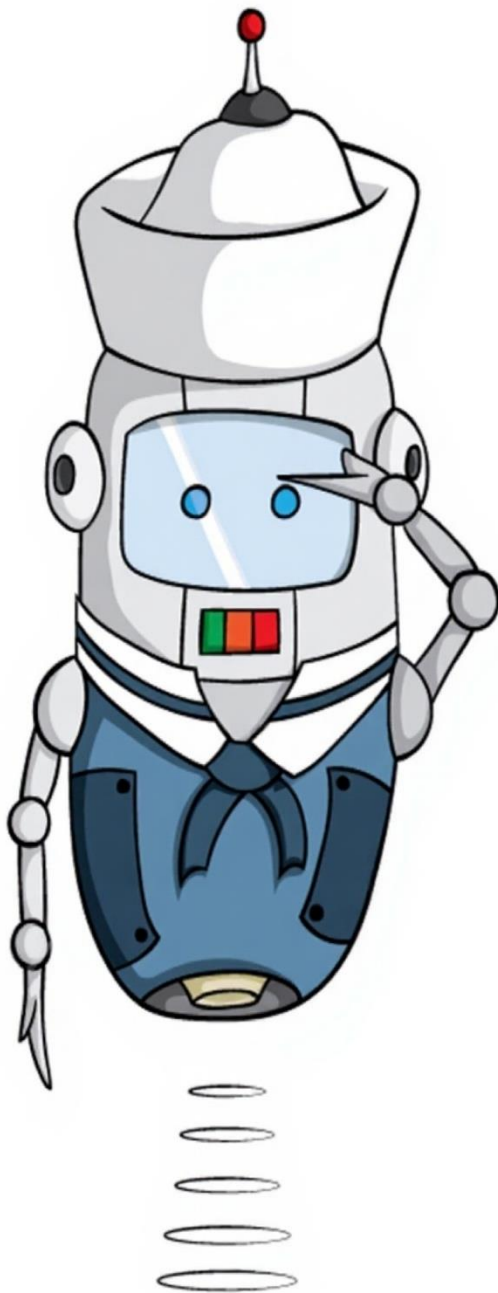
- Automates candidate screening and ranking based on multiple criteria
- Identifies patterns in historical data to improve selection accuracy
- Enhances reporting and feedback analysis using natural language processing
- Supports predictive analytics (e.g., performance prediction, retention likelihood)
- Reduces administrative workload, allowing staff to focus on higher-value tasks

Expected Benefits from AI Integration

- Faster decision-making and more consistent evaluations
- Improved quality of crew placement and retention
- Early detection of performance or compliance risks
- Streamlined internal communication and reporting
- Data-driven insights for strategic planning

Moving Toward AI-Enhanced Crew Operations





Preparing for the Future of Crew Management

- ▶ AI offers a significant opportunity to modernize crew operations
- ▶ The department is actively exploring solutions to support data-driven decision-making



Goal: To adopt an AI-supported system to enhance accuracy, speed, and transparency in all crew management activities

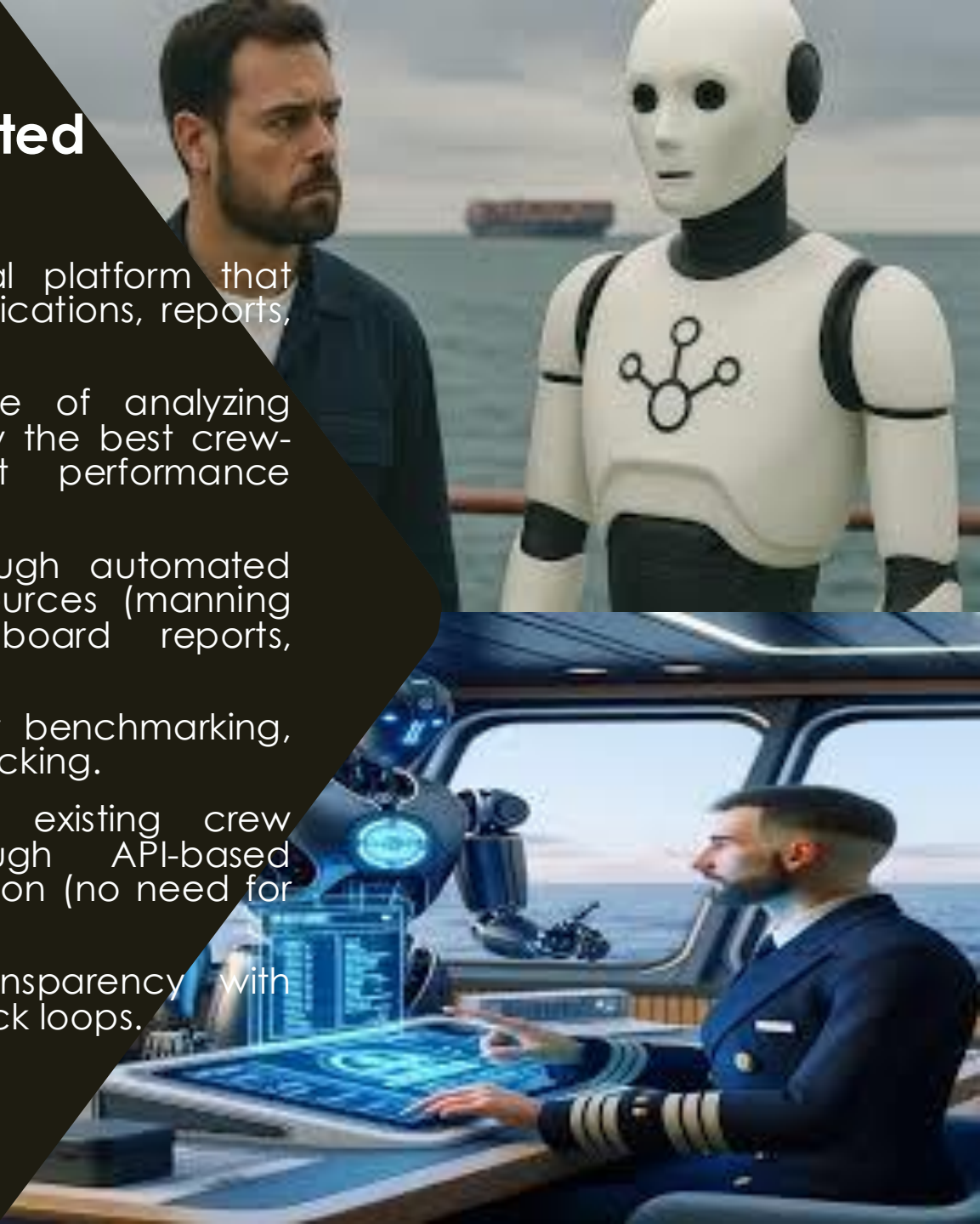
Enhancing Crew Competence through Simulation-Based Training

- ▶ Use of Bridge and Engine simulators provides a realistic environment for both deck and engine officers to develop and refine their technical and decision-making skills.
- ▶ Enables hands-on training in navigation, machinery operation, and emergency response without operational risk.
- ▶ Improves team coordination between deck and engine departments through joint scenario exercises.
- ▶ Allows repetition of complex or rare situations, reinforcing learning and confidence.
- ▶ Contributes to safer, more efficient ship operations by ensuring that seafarers are fully prepared for real-world challenges.
- ▶ Supports continuous professional development and aligns with international training standards (e.g. STCW requirements).



How AI Can Be Seamlessly Implemented in Crew Operations

- Begin with a centralized digital platform that consolidates all crew data (applications, reports, contracts, evaluations).
- Develop AI algorithms capable of analyzing millions of data points to identify the best crew-vessel matches and predict performance outcomes.
- Enable real-time analytics through automated data collection from various sources (manning agents, training centers, onboard reports, performance records).
- Use predictive insights for salary benchmarking, retention risk, and compliance tracking.
- Integrate AI gradually within existing crew management software through API-based workflows and modular automation (no need for full system replacement).
- Ensure data integrity and transparency with consistent validation and feedback loops.



LASKARIDIS

SHIPPING CO.LTD.

Smart Crew Platform in practice



The screenshot shows the 'Vessel Manager' interface. At the top, there are navigation options for 'Home' and 'Vessel manager'. Below this, a summary section displays key metrics: 1375 SEAFARERS ON-BOARD, 283 CONTRACTS EXPIRING IN 1 MONTH, and 14 PROVISIONAL LINEUPS. The main area is a table titled 'List of vessels' with the following data:

VESSEL	# SEAFARERS ON-BOARD	TOTAL SALARIES	# EXPIRING CONTRACTS	# PROVISIONAL LINEUPS	OPERATORS	STATUS
AENEAS IMO: 9650626 Dry Bulk Cyprus cv	19	\$ 67,172	0	0	Theima Gkouma (Crew)	ACTIVE
AEOLOS IMO: 9670901 Dry Bulk Liberia Lx	19	\$ 67,820	2	0	Theima Gkouma (Crew)	ACTIVE
AIANAS IMO: 9729679 Dry Bulk Panama Pa	19	\$ 68,708	4	0	Maria Moutselou (Crew)	ACTIVE
APOLLON IMO: 9646663 Dry Bulk Liberia Lx	20	\$ 68,674	5	0	Maria Moutselou (Crew)	ACTIVE
ARIADNE IMO: 9721877 Dry Bulk Liberia Lx	23	\$ 74,904	4	0	Sofia Dimou (Crew)	ACTIVE

Fully customizable
Tailored to match
Laskaridis Shipping
policies (SMS/ISM),
workflows, and
reporting standards.

Compliance-ready
Built-up for Rightship
and DryDBMS
compliance, ensuring
we stay audit-ready
at all times.

Powerful reporting
Generate real-time
customizable reports that
meet Laskaridis Shipping
needs and industry
standards.

Seamless integration
Integrate easily with
existing systems to
centralize our operations.

Other AI Tools-Applications related to Crew

- ❖ Through the use of Smart AI Cameras, an integrated vessel monitoring platform can proactively alert shipowners, managers, and seafarers to onboard events in real time.
- ❖ Adaptive learning platforms can tailor e-learning or simulator exercises based on crew performance and feedback.
- ❖ AI-based fatigue monitoring can analyze work-rest patterns and suggest optimal scheduling to prevent human error.
- ❖ Voice-to-text and smart data entry tools help officers record information faster and more accurately.
- ❖ Enhanced situational awareness through AI-powered navigation support, collision avoidance, and weather routing systems.
- ❖ Virtual reality (VR) or Augmented reality (AR) and AI-driven simulators make onboard and shore-based training more realistic and effective.
- ❖ AI chatbots and digital assistants can provide mental health support, welfare information, or onboard services 24/7.

Artificial Intelligence will not steer the ship, but those who know how to use it will sail ahead...

N.T.



Thank You!!!



**LASKARIDIS
SHIPPING CO.LTD.**