



مجموعة موانئ أبوظبي
AD PORTS GROUP



Building Human-AI Teams

AD Ports Group's Blueprint
for Tomorrow's Workforce

BLUEPRINT

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Executive Summary

Top Takeaways

01

AI Agents are becoming digital colleagues.

They will complement humans by handling repetitive, data-heavy, and analytical tasks, while employees focus on creativity, judgment, empathy, and strategic leadership.

02

Workforce transformation is inevitable.

Hiring practices, job descriptions, and required skills will evolve toward adaptability, digital literacy, and human-AI collaboration.

03

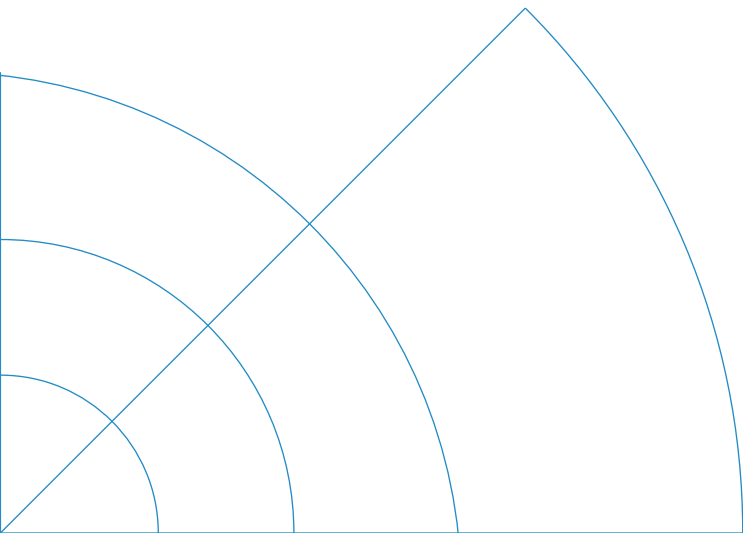
Technology readiness is as important as people readiness.

Secure, scalable infrastructure and responsible AI governance must align with talent development and cultural adoption.

04

AD Ports Group is pioneering the agentic workforce model.

By blending advanced AI capabilities with human strengths, the organization is redefining the future of work in the ports and logistics sector globally.



Setting the Context

Why Agentic AI Now?

Global trade, logistics, and port operations are entering a new phase of digital transformation. If the last decade was about digitization and automation, the next decade will be about agentic intelligence AI systems that act independently, collaborate with humans, and continuously learn.

For AD Ports Group, a global leader spanning more than 50 countries, the adoption of agentic AI is not just an option but a strategic imperative. As operations scale and workforce diversity grows, hybrid models of humans and AI agents working together are emerging as the most sustainable, competitive approach.

The global logistics industry faces unprecedented challenges: labor shortages, increasing complexity, sustainability demands, and customer expectations for real-time visibility. AI agents offer a pathway to address these challenges while elevating human potential.



“The workforce of tomorrow will be defined by synergy, humans & AI agents working side by side, each focusing on their unique strengths”

Mohamed Jamal-Eddine
Group CIO

The Agentic Organisation Model

The Agentic Organization is one where AI agents are integrated into daily workflows as digital colleagues. They are not side tools, but part of the operating model.

Core Competency Distribution



Agents excel in;

- ✓ Continuous monitoring and anomaly detection
- ✓ Pattern analysis across vast datasets
- ✓ Predictive modelling and forecasting
- ✓ Process automation and optimization
- ✓ 24/7 availability and consistency



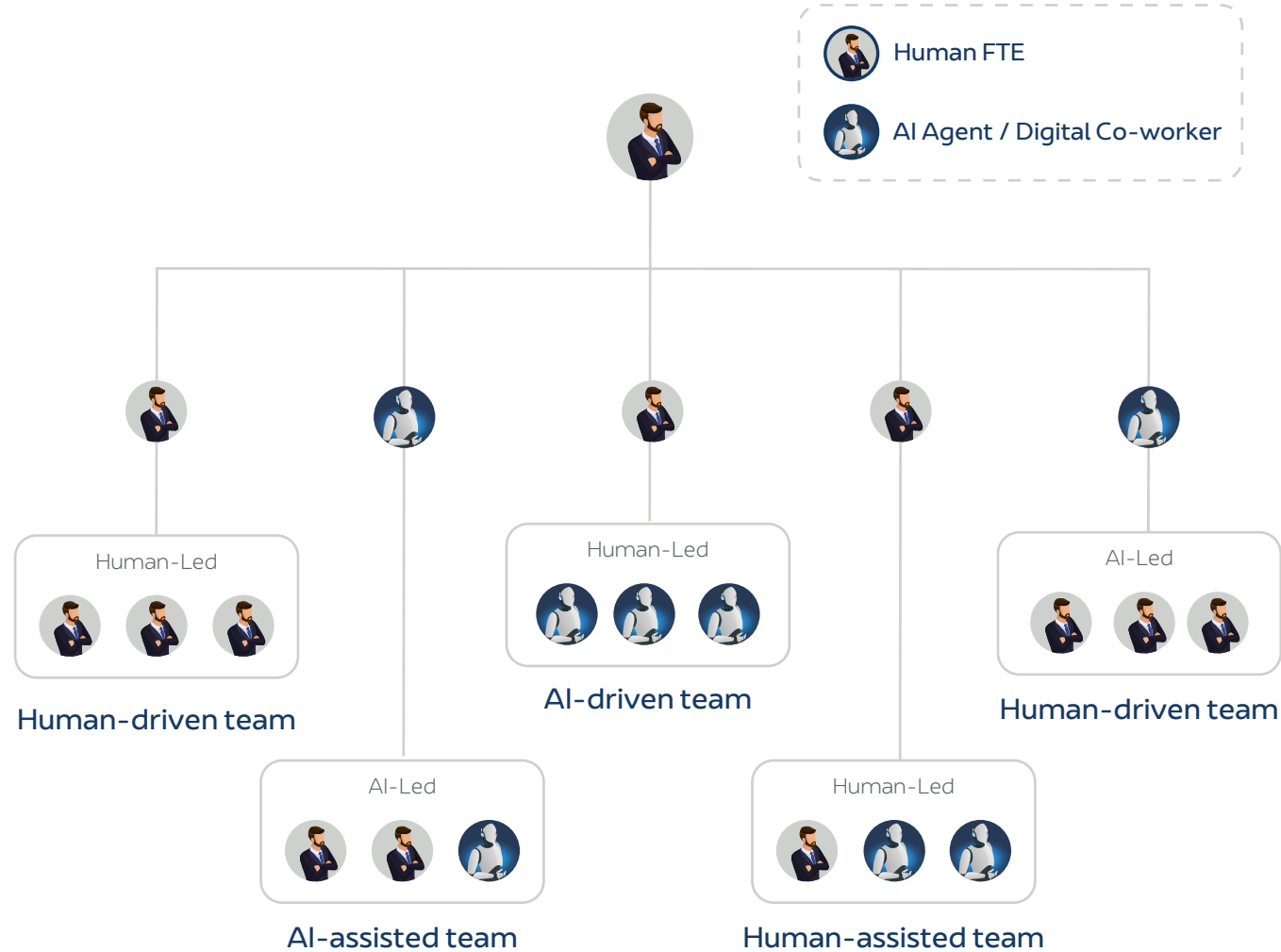
Humans excel in;

- ✓ Strategic leadership and vision setting
- ✓ Ethical reasoning and moral judgment
- ✓ Empathy and relationship building
- ✓ Complex negotiation and conflict resolution
- ✓ Creative problem-solving and innovation

The Agentic Organisation Model

This complementary design allows AD Ports Group to create an enterprise where efficiency and human value both scale. The organization chart of tomorrow will show AI agents as integral team members, working alongside human managers in HR, IT, Legal, Operations, and Strategy.

Agentic Organization



Impact on People & Hiring

As AI agents become embedded, hiring strategies will fundamentally shift. Routine process and manual analysis roles will decline, while augmented specialist and supervisory roles will rise.

Strategic Priorities Enhanced by AI Agents

Designing an Optimized Operating Model

AI agents analyze organizational data to identify redundancies, bottlenecks, and optimization opportunities

Recommend span of control adjustments and reporting structure improvements

Simulate different organizational scenarios to predict efficiency gains

Productivity Management

Real-time productivity dashboards powered by AI tracking KPIs across all clusters

Predictive analytics identifying teams at risk of missing targets

Automated resource reallocation suggestions based on workload analysis

Identifying and Developing High-Potential Talent

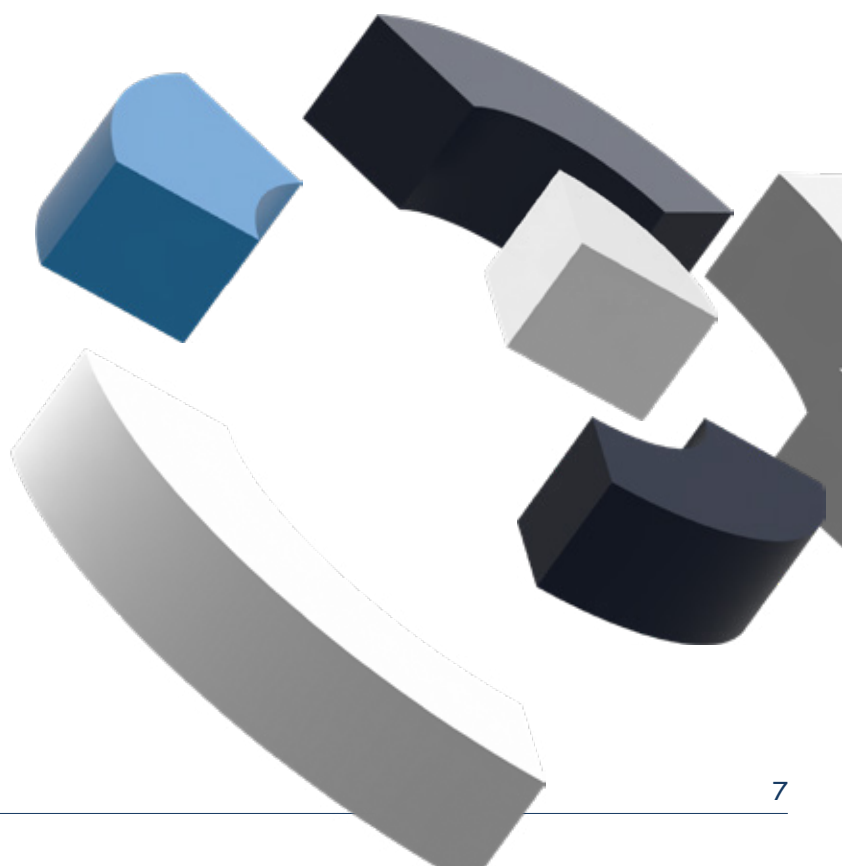
AI agents analyze performance patterns, learning agility, and leadership indicators

Create talent heat maps showing potential across the organization

Generate personalized development plans for high-performers

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Sultan Al Ghaithi
Group CHRO



Impact on People & Hiring

Strategic Priorities Enhanced by AI Agents

Succession Planning & Leadership Pipeline

Agents maintain dynamic succession risk matrices

Identify skill gaps in leadership pipeline

Recommend targeted development interventions and rotation opportunities

Monetizing Value Hotspots (Critical

AI identifies roles with highest revenue impact

Analyzes talent market data to ensure competitive positioning

Predicts retention risks for critical positions



Emerging Roles

NEW

Agent Supervisor - Oversees AI agent output, ensures accuracy and ethical compliance

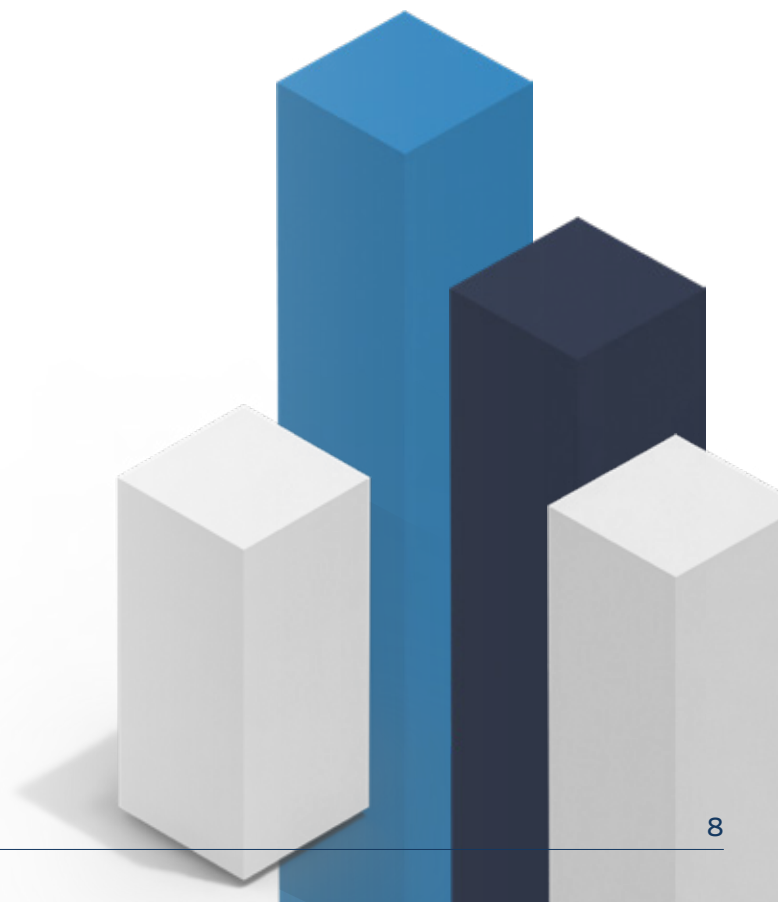
Prompt Engineer/Designer - Designs instructions and workflows for agents

AI Risk Manager - Monitors ethical, compliance, and cyber risks

Human-Agent Experience Designer - Creates seamless workflows between teams and AI

AI Performance Analyst - Measures and optimizes agent effectiveness

Digital Ethics Officer - Ensures responsible AI deployment



Impact on People & Hiring

Roles Likely to Be Augmented (Not Replaced)

Current Role	Future Augmented Role	Key Challenges
Port Operations Manager	AI-Enhanced Operations Director	Focus shifts from monitoring to exception management and strategic optimization
HR Business Partner	Talent Intelligence Partner	From transactional support to predictive workforce planning
Financial Analyst	Strategic Finance Advisor	From report generation to scenario modeling and decision support
Customer Service Rep	Customer Success Specialist	From reactive problem-solving to proactive relationship management
Procurement Officer	Strategic Sourcing Partner	From vendor management to AI-assisted negotiation and risk assessment
Safety Inspector	Risk Prevention Specialist	From routine inspections to predictive risk modelling and prevention

Skills & Capability Development

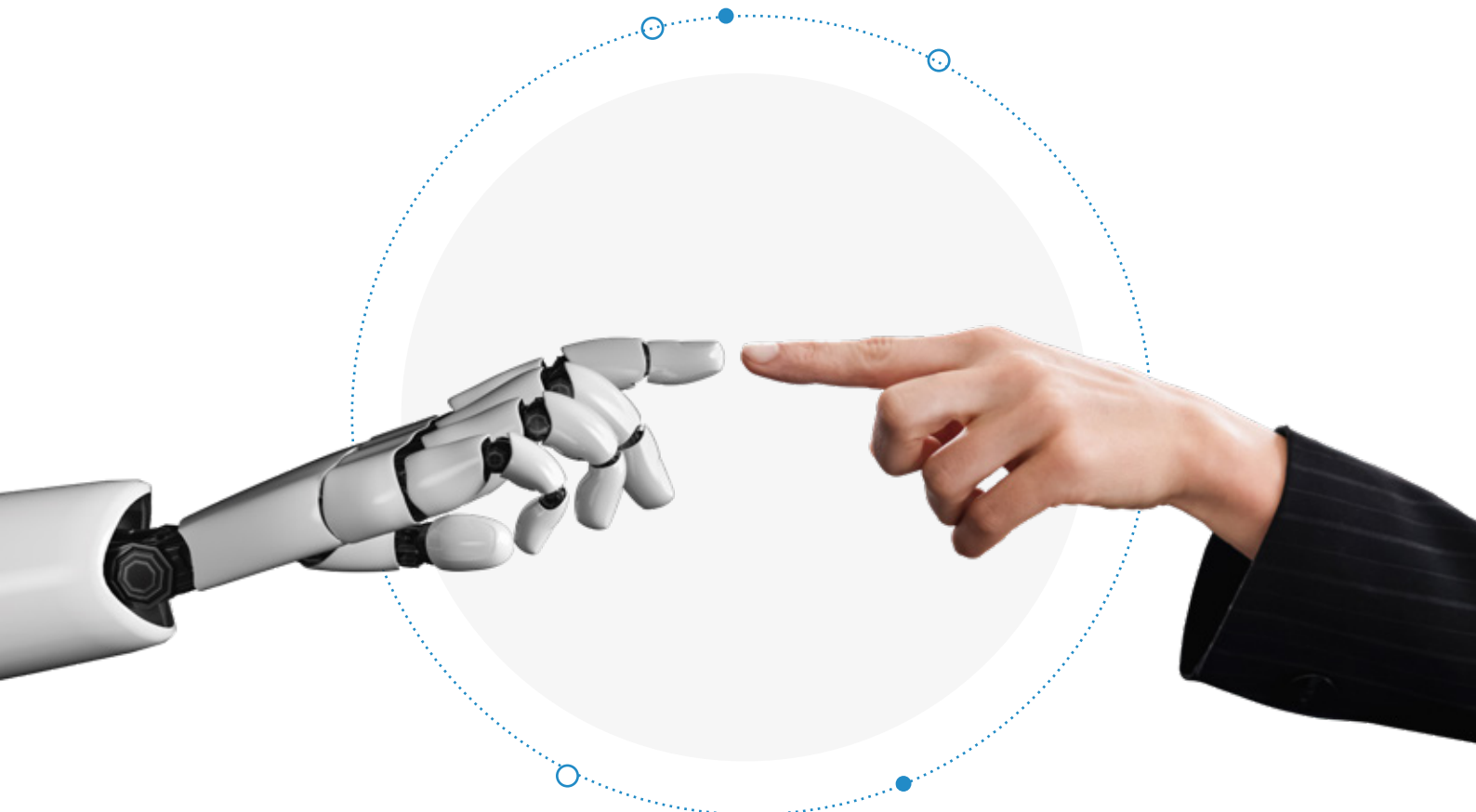
The rise of agentic AI does not reduce the importance of human skills, it enhances them.

Critical Human Skills

- Leadership: Vision setting, team motivation, change management
- Negotiation: Complex deal-making, stakeholder management
- Creativity: Innovation, design thinking, problem reframing
- Problem-solving: Handling exceptions, ambiguous situations
- Ethics: Moral reasoning, fairness assessment, bias detection

New digital skills

- AI Literacy: Understanding AI capabilities and limitations
- Prompt Engineering: Crafting effective instructions for AI agents
- Data Interpretation: Making sense of AI-generated insights
- AI Monitoring: Supervising agent performance and accuracy
- Human-AI Collaboration: Optimising hybrid workflows





Skills & Capability Development

Upskilling and Reskilling Programs

Leadership Level (Managers and Executives)

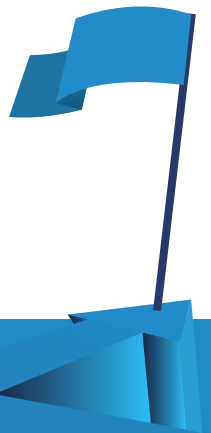
- Strategic AI deployment planning
- Human-AI team management
- AI governance and risk management

Advanced Level (AI-Adjacent Roles)

- Advanced prompt design and optimization
- AI performance monitoring and quality assurance
- Ethical AI and bias detection

Foundation Level (All Employees)

- Introduction to AI agents and their capabilities
- Basic prompt engineering skills
- Understanding AI-generated outputs





Technology Readiness & Infrastructure

Agentic AI cannot thrive without the right foundations.

Infrastructure Requirements

- Multi-cloud architecture for scalability and global reach
- Edge computing capabilities for real-time port operations
- High-speed connectivity across all facilities
- Robust data lakes for training and operating AI agents

Integration Approach

- AI agents embedded into ERP, HR, operations, and legal systems
- API-first architecture enabling seamless agent deployment
- Microservices approach for modular agent capabilities
- Real-time data synchronization across platforms

Governance Framework

- Cybersecurity: Zero-trust architecture, continuous monitoring
- Responsible AI: Explainability, fairness, transparency protocols
- Data Integrity: Quality assurance, validation processes
- Compliance: Regulatory adherence, audit trails

Access Model

- Central AI Agent Directory where employees can discover available agents
- Self-service portal for agent deployment
- Role-based access controls
- Usage analytics and feedback mechanisms

Culture & Change Management

Embedding AI agents requires cultural transformation as much as technological change.

Overcoming resistance

- Agents as colleagues, not replacements
- Celebrating early wins and pioneers
- Regular updates on AI initiatives
- Involving employees in agent design

Transparency and Trust

- Clear documentation of what AI agents do
- Explainable AI dashboards showing decision logic
- Regular town halls addressing concerns
- Feedback mechanisms for continuous improvement

Change Champions Network

- Ambassadors in each cluster leading adoption
- Regular community of practice sessions
- Recognition programs for successful human-AI collaboration
- Mentorship programs pairing AI-savvy with learning employees

Ethics and Fairness

- AI Ethics Committee with diverse representation
- Regular bias audits of AI systems
- Clear escalation paths for ethical concerns
- Commitment to human-in-the-loop for critical decisions

Case Studies from AD Ports Group

AD Ports Group has already deployed specialized AI agents across clusters with measurable business impact.

Operational Excellence Cases

~3%

Fuel Savings

Vessel Speed Optimizer

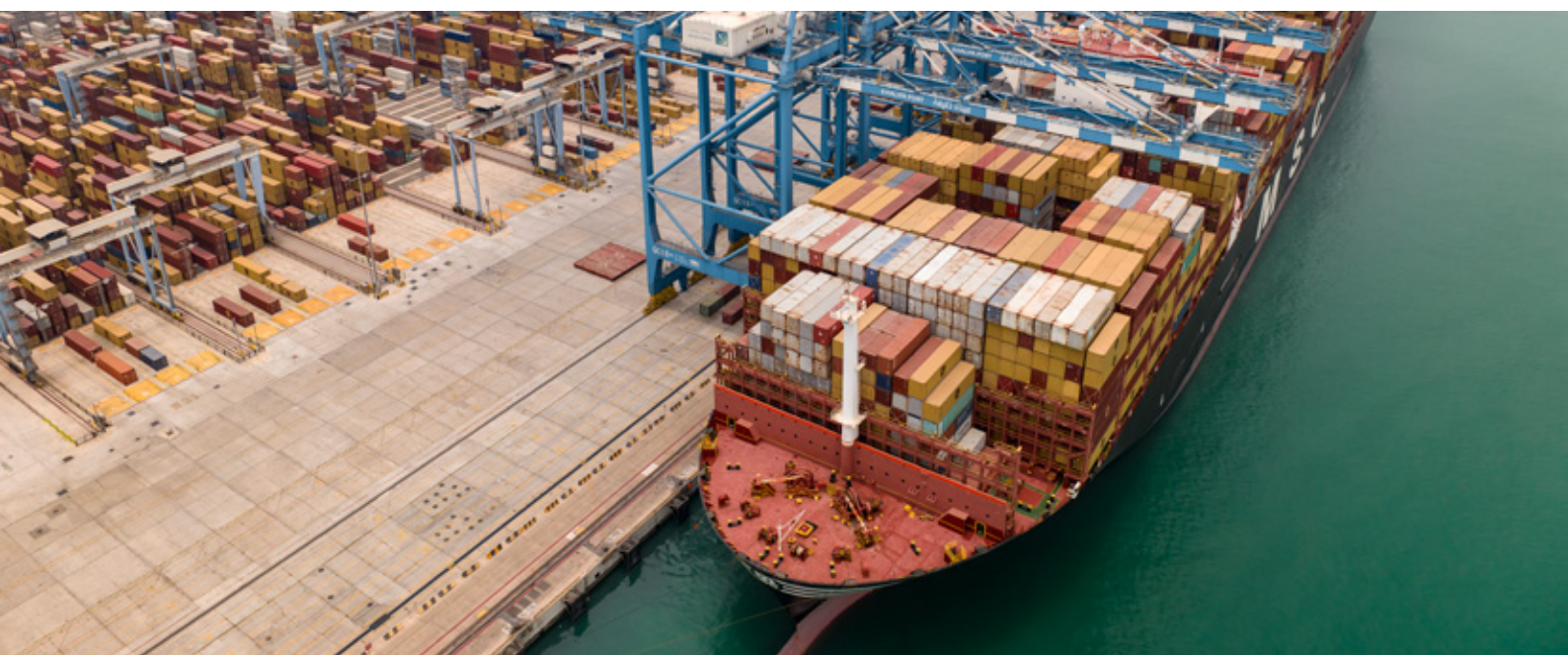
OPERATIONS

Challenge: Balancing fuel efficiency with schedule reliability

Solution: AI optimizing speed based on weather, port congestion, fuel prices

Result: ~3% fuel savings, up to 98% on-time arrivals

Business Impact: annual fuel cost reduction, improved sustainability metrics



Case Studies from AD Ports Group

Commercial Excellence Cases

90%

Increase Utilisation Container Balancer

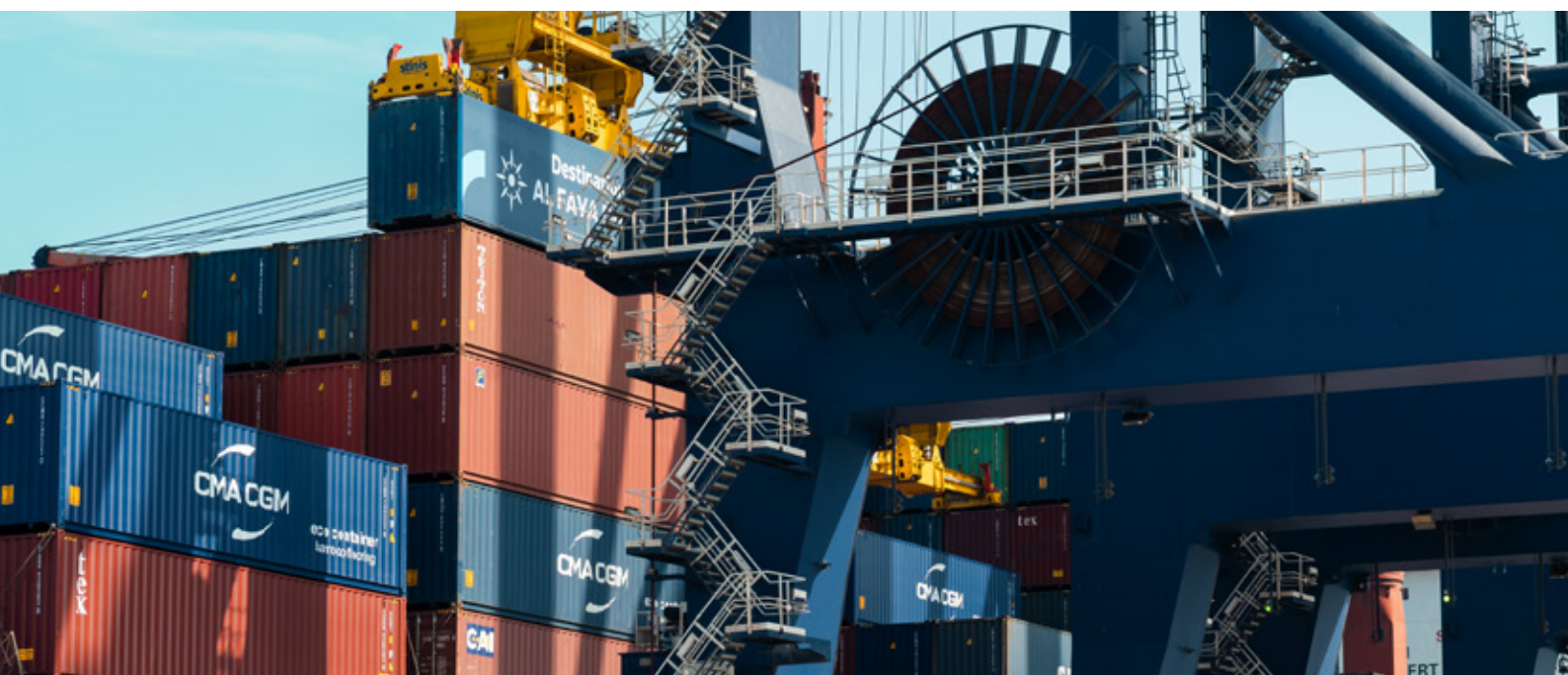
COMMERCIAL

Challenge: Empty containers stuck in low-demand, high-cost locations.

Solution: AI agent shifts empty containers toward demand hubs or cheaper storage.

Result: lower storage costs, up to 90% increased utilization.

Business Impact: storage cost saving, increased revenue.





Case Studies from AD Ports Group

People & Productivity Cases

98%

Reduced in Creation Time

JD Creator

HR

Challenge: Outdated job descriptions not reflecting AI-augmented roles

Solution: AI agent generating modern, skills-based job descriptions

Result: 98% reduction in JD creation time, improved candidate quality

Business Impact: Better talent acquisition, reduced time-to-productivity

90%

Faster Processing

ClaimDetective

LEGAL

Challenge: Manual claim review missing patterns and anomalies

Solution: AI agent analyzing claims for fraud indicators and compliance

Result: improvement in fraud detection, 90% faster processing

Business Impact: prevented false claims, reduced legal exposure

90%

Faster Schedule Plan

Intelligent Workforce Scheduler

OPERATIONS

Challenge: Manual shift planning leading to overtime and understaffing

Solution: AI agent optimizing workforce schedules based on predicted workload

Result: 90% faster schedule plan, 15% improvement in productivity

Business Impact: annual savings, improved employee satisfaction

Future Outlook

In the coming 3–5 years, AD Ports Group envisions more than 50% of workflows being agent-augmented. These workflows will transform how we operate daily

Examples of AI-Augmented Daily Workflows

Operations & Logistics

- **Morning Operations Brief:** AI agents compile overnight vessel movements, port utilization, and incident reports, presenting prioritized action items to port managers
- **Real-time Berth Allocation:** Agents continuously optimize berth assignments based on vessel size, cargo type, and turnaround targets, with humans approving exceptions
- **Automated Documentation:** Customs clearance, bill of lading, and cargo manifests processed by agents, with staff handling complex cases

Finance & Commercial

HR & Talent Management

“What was once a concept is now a proven reality. Agentic Intelligence is already generating tangible outcomes for AD Ports Group and many organisations harnessing the potential of Agentic Intelligence to redefine how industries operate and grow”

Mohamed Jamal-Eddine
Group CIO

Future Outlook

Examples of AI-Augmented Daily Workflows

Operations & Logistics

Finance & Commercial

- **Dynamic Pricing:** AI agents adjust pricing models in real-time based on demand, capacity, and competitor analysis, with humans setting strategic boundaries
- **Invoice Processing:** 90% of invoices validated and processed by agents, with exception handling by finance teams
- **Revenue Forecasting:** Daily revenue projections updated by agents analysing booking trends, with the Finance executive team's focusing on strategic adjustments

HR & Talent Management

Future Outlook

Examples of AI-Augmented Daily Workflows

Operations & Logistics

Finance & Commercial

HR & Talent Management

- **Candidate Screening:** AI agents conduct initial resume reviews and skill assessments, with HR focusing on cultural fit interviews
- **Performance Analytics:** Agents generate weekly team productivity insights, enabling managers to have more meaningful coaching conversations
- **Learning Recommendations:** Personalized skill development paths created by AI based on role requirements and career aspirations

Future Outlook

70% + LongTerm

Agent-first operations where humans focus almost exclusively on leadership, creativity & innovation

30% Near Term

Workflow augmentation, pilot expansion, workforce reskilling, recruitment of AI-specialized talent



50% Mid Term

Workflow augmentation, organizational redesign with AI teams embedded in all clusters

Closing Call to Action



To employees

Embrace AI as a partner. Your creativity, judgment, and humanity are more valuable than ever.



To Executives

Invest boldly in both infrastructure and people. The future belongs to organizations that master human-AI collaboration.



To partners

Join us in shaping a model for the future of work that others will follow.



To stakeholders

Support this transformation knowing it will deliver both financial returns and human advancement.

Closing Call to Action

AD Ports Group stands at the forefront of organizational transformation. By combining technological readiness with human capital innovation, the Group is shaping a large-scale Agentic Organization in the ports and logistics sector.

The path forward requires courage, investment, and unwavering commitment to our people. This is not about replacing humans with machines it's about elevating human potential through intelligent augmentation.

The journey to becoming an Agentic Organization is not just about technology it's about reimagining what's possible when human brilliance meets artificial intelligence. Together, we're not just adapting to the future; we're creating it.





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