

Digital Solutions to support technical
ship management, by improving
vessels' efficiency and performance

World Maritime Week
22 March 2023



Some figures on Lloyd's Register

260+ yrs

of service, being the world's first classification society to improve safety of ships and sea.

40,000+

clients, split in +80 country locations all over the world.

75 m€

donated to the Lloyd's Register Foundation in the last five years.

>2,500

ships using our solution for fleet management (CFM – Hanseaticsoft).

>4,000

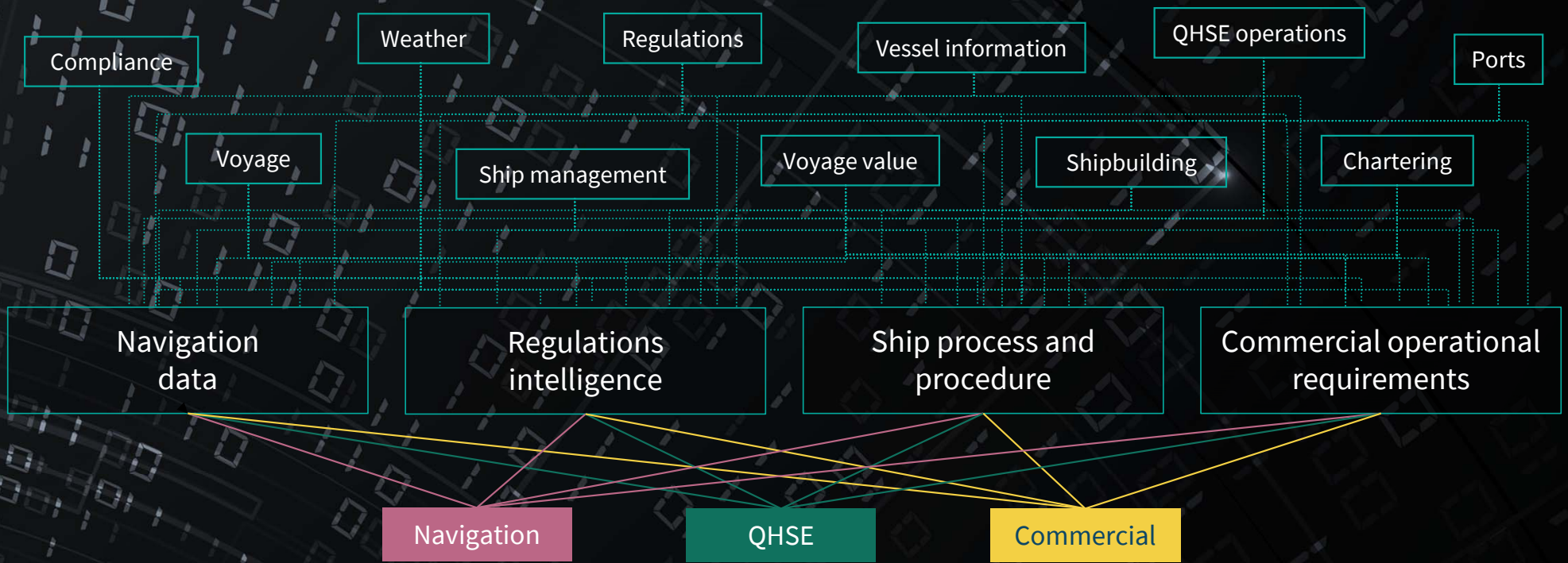
ships using our solution for fleet optimization (i4 Insight).

>10,000

ships using any of the OneOcean's digital solutions (i.e. Regs4ships, Docmap)

Optimisation
Transformation
Opportunity

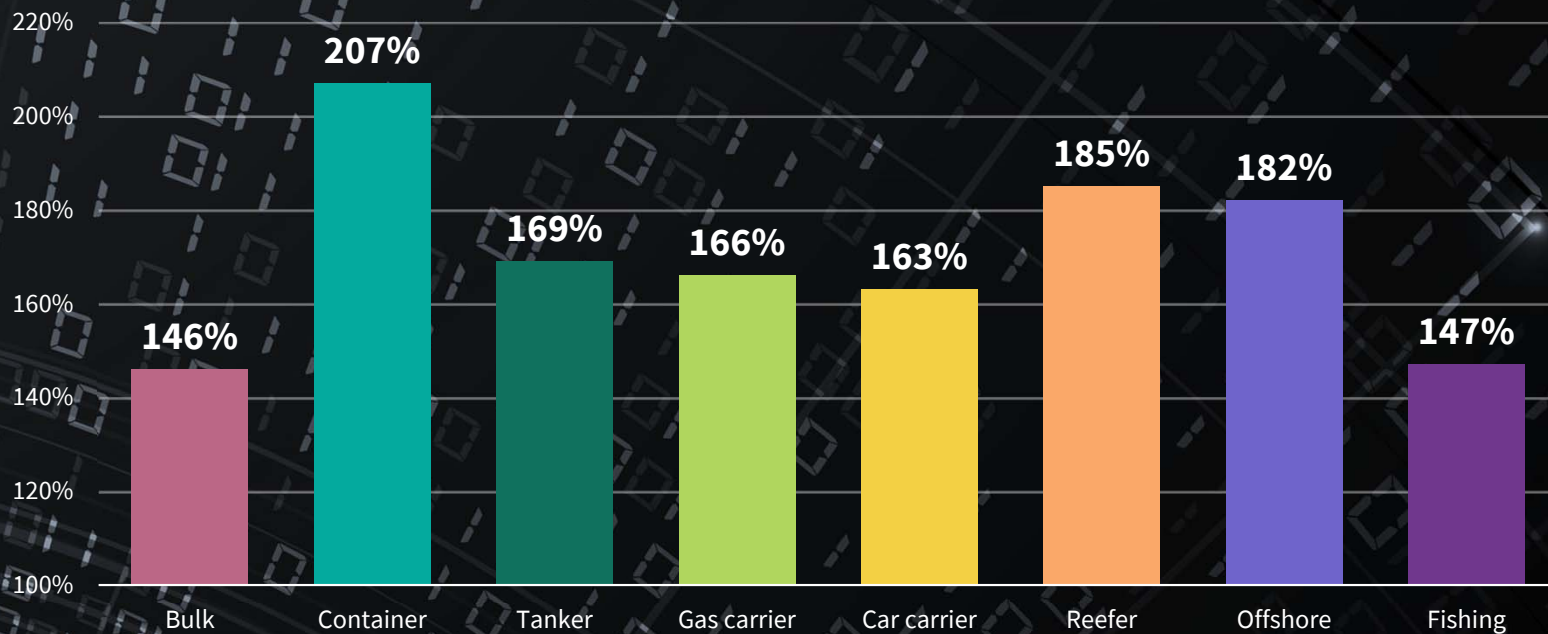
The problem: multiple dimensions & data siloes



The problem: multiple stakeholders



The solution: data applications are increasing across our industry



131%

growth in data usage for business optimisation

149%

growth in data usage for crew welfare or connectivity

Data usage trends
June 2021 vs June 2022

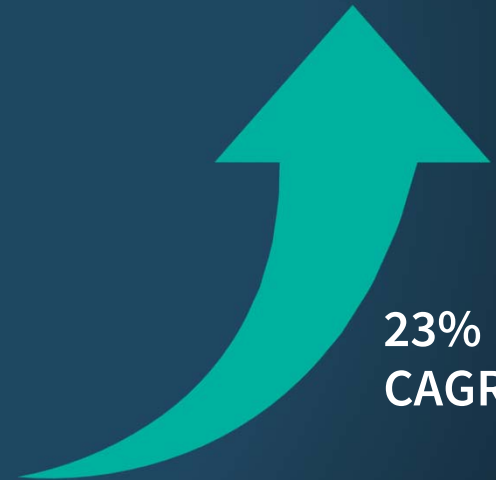
Source: Inmarsat



\$2.7bn USD
estimated spend on AI in 2027

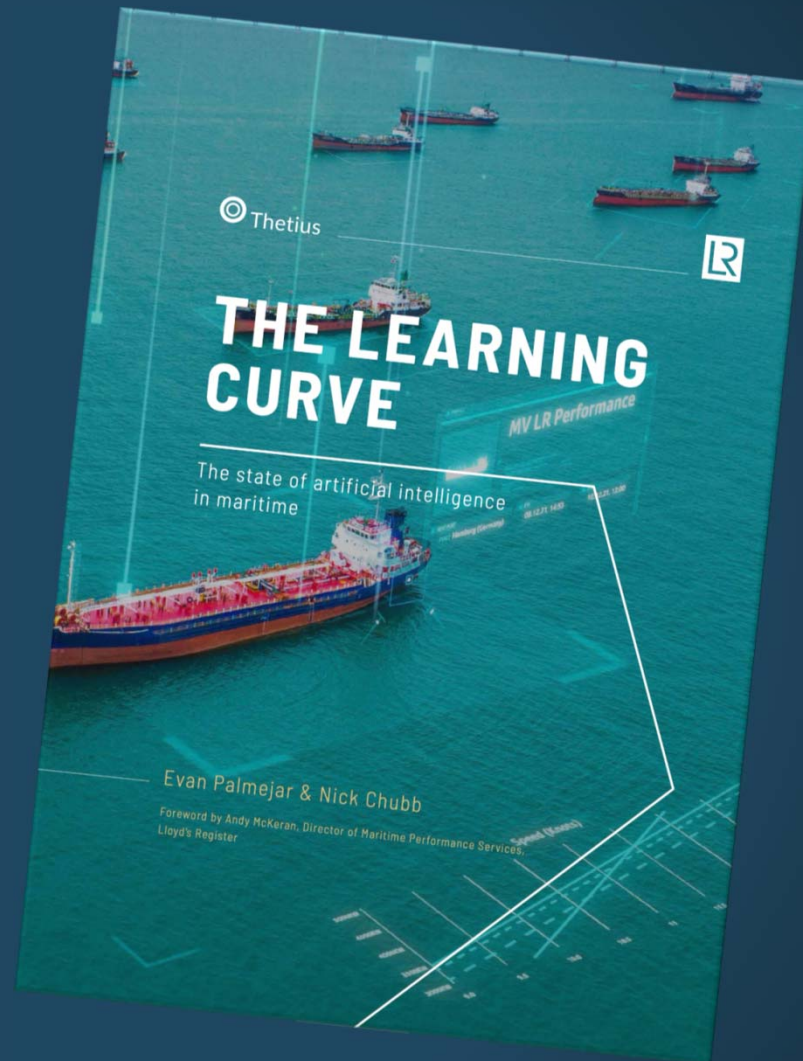


\$931mn USD
estimated spend on AI in 2022

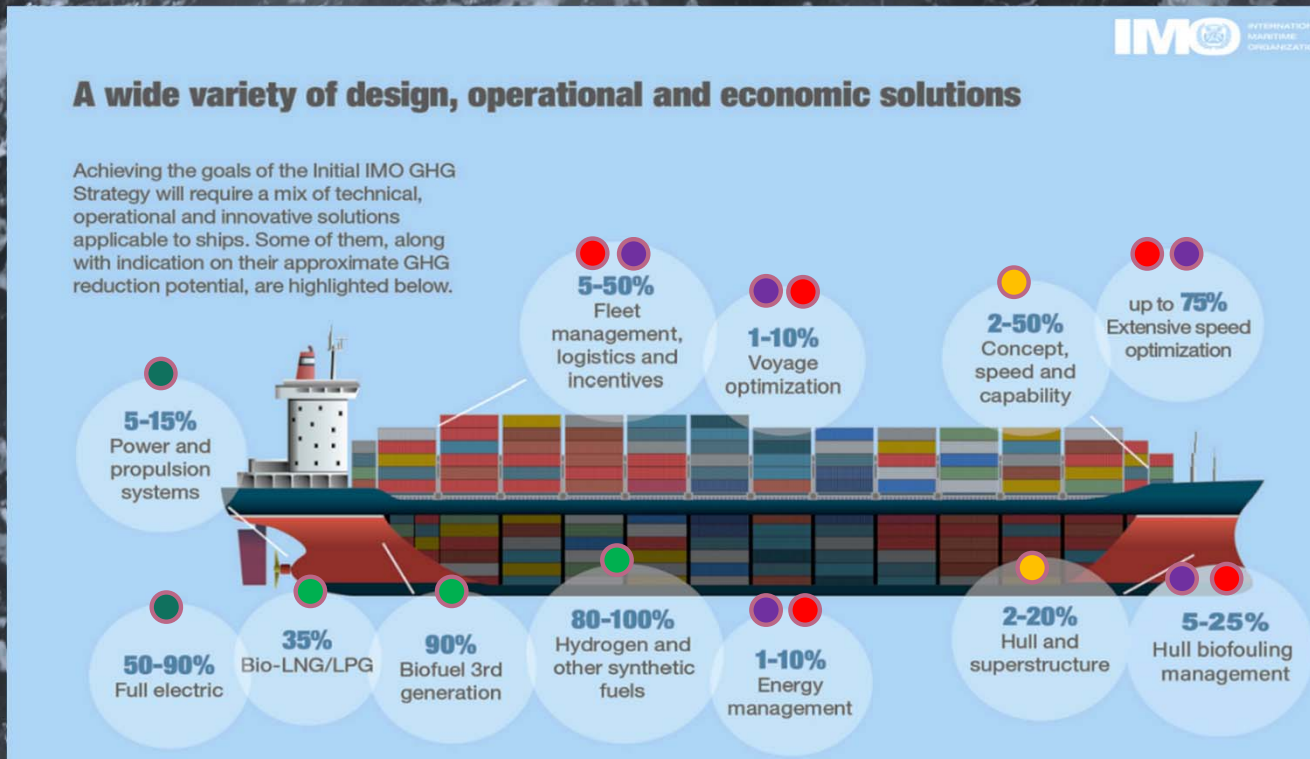


23%
CAGR

The rise of Artificial intelligence in maritime



Decarbonisation solution levers



Machinery

Fuel

Design

Operational Excellence

Digital Solutions

Source: [IMO's work to cut GHG emissions from ships](#)



The Solution: tools to optimize the use of connected data in context

Chartering fixtures



Shipping and commercial operations

Voyage planning



Voyage execution



Alternative route



Post-voyage analysis

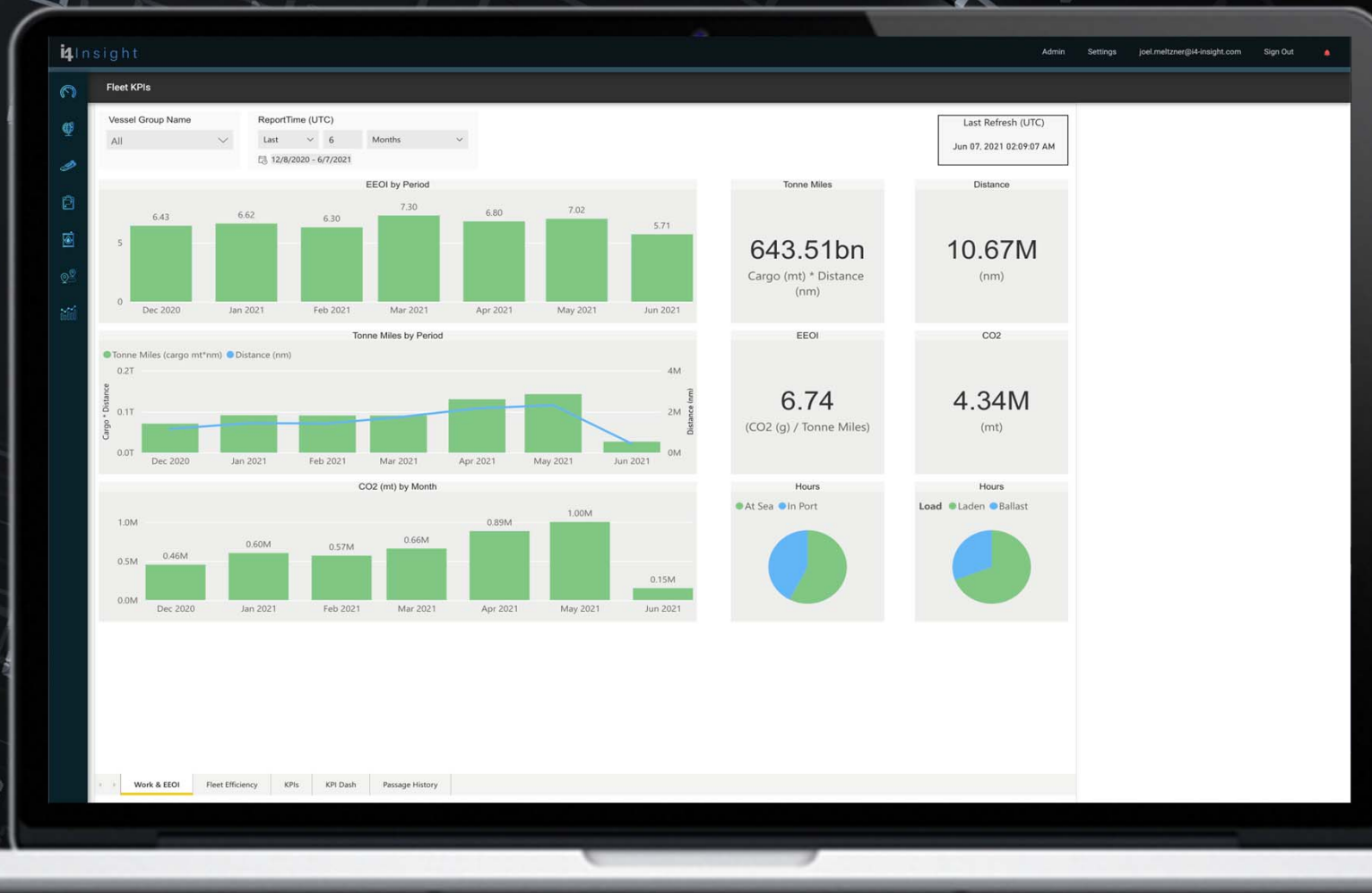


Voyage accounting and close

Solution: Holistic Passage Planning



Solution: Environmental Analysis



Solution: Hull Fouling Analysis



Solution: Route Optimisation

The screenshot displays the 'Integrated Maritime Suite' software interface, specifically the 'Routing' and 'Weather Data Manager' tabs. The main window shows a map of the North Atlantic Ocean with a route plotted between North America and Europe. The left sidebar contains 'Passage Criteria' and 'Passage profile' settings. The bottom section shows 'Passage Details - Route' with a table of route data.

Passage Criteria:

- Search port by name or coordinates
- Departure date/time (UTC) Dep. window: 01 / + 01
- Search port by name or coordinates
- Ordered speed Shortest
- 16.00 kn
- Required arrival date/time (RTA, UTC)
- Earliest arrival
- Least cost

Passage profile: Laden Profile

- Aft draft: 13.00 m Fwd draft: 13.00 m
- GM: 1.00 m
- Nat. roll period: 40.4 s Auto

Passage Details - Route

Passage Name: New passage															
Show Details >>															
Plot	Status	Route Name	Limits	Slow Down	ETD dd/hhmmZ	ETA dd/hhmmZ	Dist nm	Dur	Fuel Total mt	Cost Total \$	Average				
									SOG kn	STW kn	Cur kn	RPM	Power MW	Wx %	

Solution: Fleet Management Platform





Putting
digital at
the heart of
everything
we do

Fleet
management

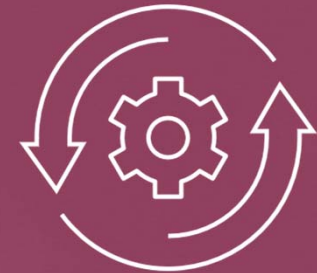
Fleet
optimisation

Digital
voyage
compliance &
optimisation



Assurance of technology for digital health management

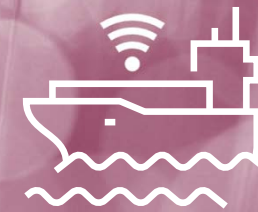
Enhancing the way compliance is obtained through physical, remote and digital inspections



Digital at the heart of the client experience



Future rule sets



Assurance of autonomous navigation technology

Strategic open-innovation to solve safety & risk challenges with emerging digital technologies



Technology Companies / Start-ups



Sensors & Wearables



Data Analytics



Artificial Intelligence



Visual Analytics



AR & VR



Drones & Robotics

Maritime Technology Accelerator for Safety & Risk Solutions



Tech expertise



Risk focus



Not-for-profit



Challenge led



Industry specific



Safetytech Accelerator

A safer and more sustainable world through the wider adoption of safetytech



Thank you
Eskerrik asko
Gracias

Emanuel.ruiz@lr.org
M +34 618 055 319

