



Supporting Decision making using **OSM Insights**

10.11.2022

osm.no

OSM – About Us

1. Introduction



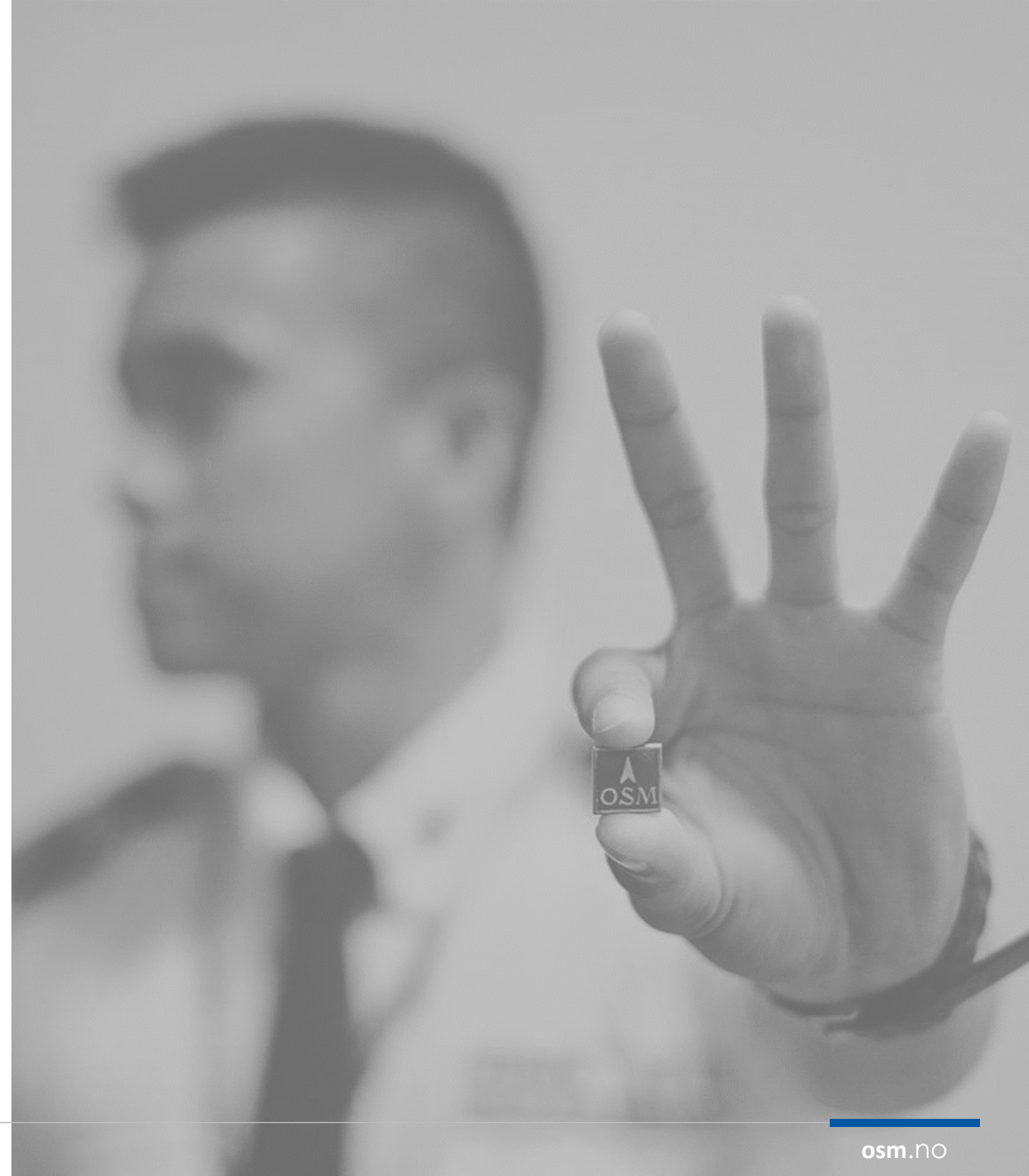
Arne Sørensen

IT Manager - Europe



Ernesto Miguel (Migs) Yandoc

Head of Enterprise Applications & Data Analytics



Who we are

1. Introduction

OSM Maritime Group brings over three decades of experience in the Maritime Industry, approximately 17,000 employees, 70+ nationalities, 20+ office locations, 700+ vessels/units under management, and a 90% retention to the table.

CORE SERVICES



Technical
Management



Crew
Management

Value Added Services

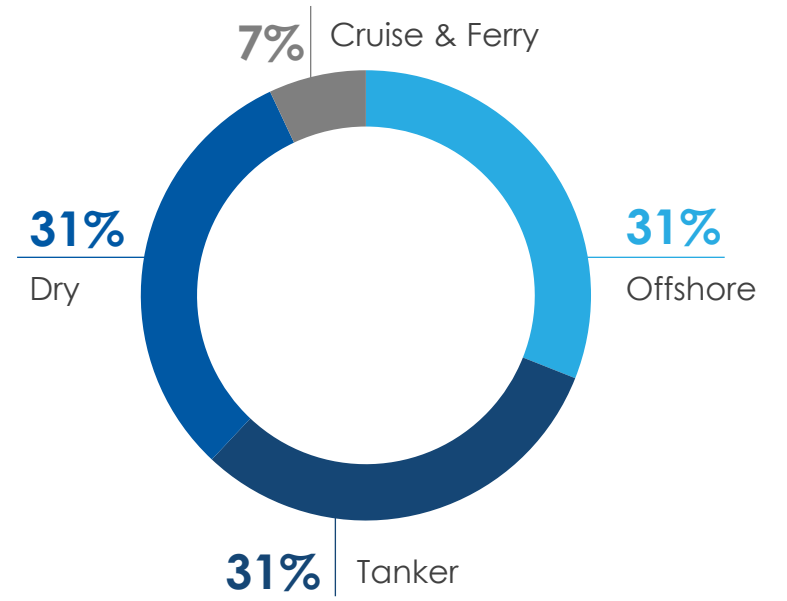
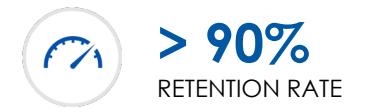
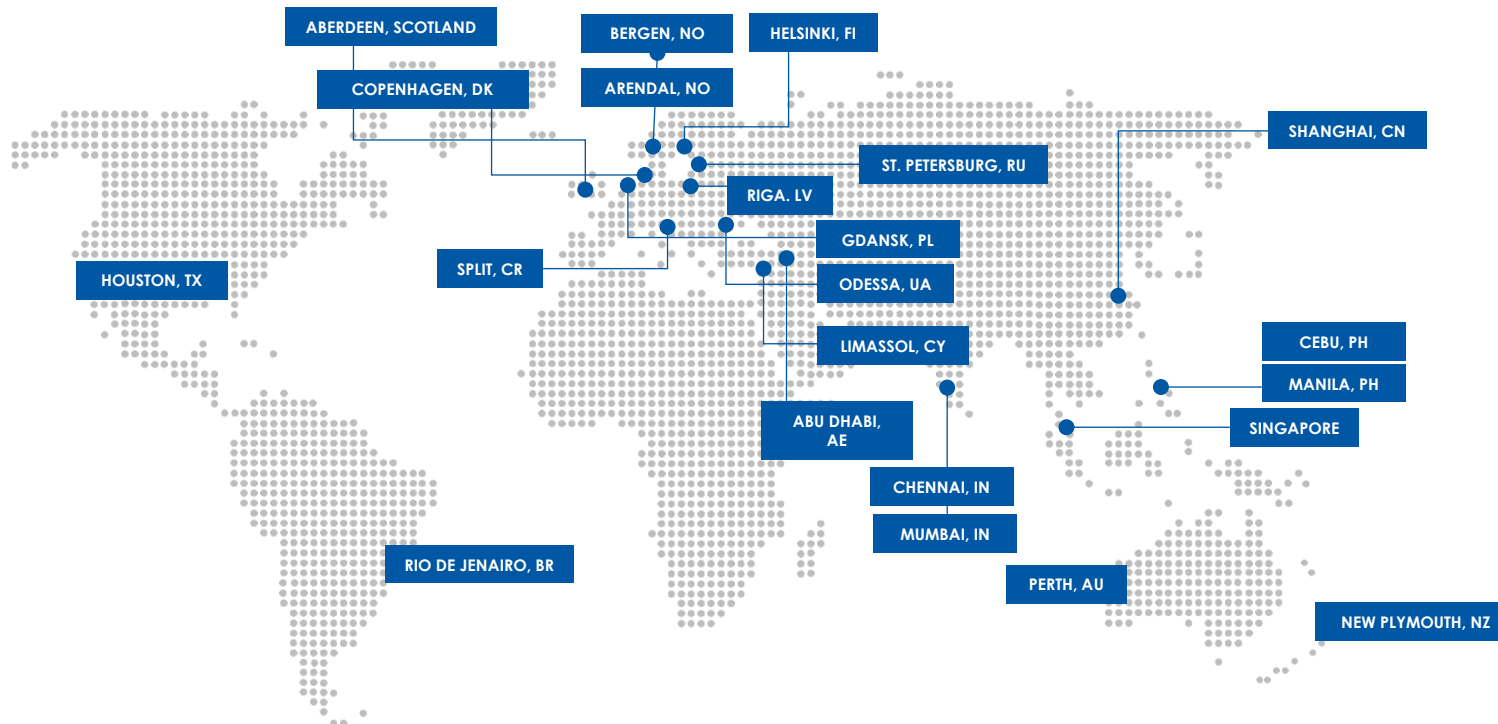
- Accounting Outsourcing
- Crew Recruitment
- Energy Efficiency
- IHM Maintenance
- Lay-up Management
- Marine Insurance & Claims Handling
- Maritime Leaders Academy
- New Building Supervision
- Nordic Medical Clinic (NMC)
- OSERV Catering
- Ship Recycling

OSM Fleet Distribution

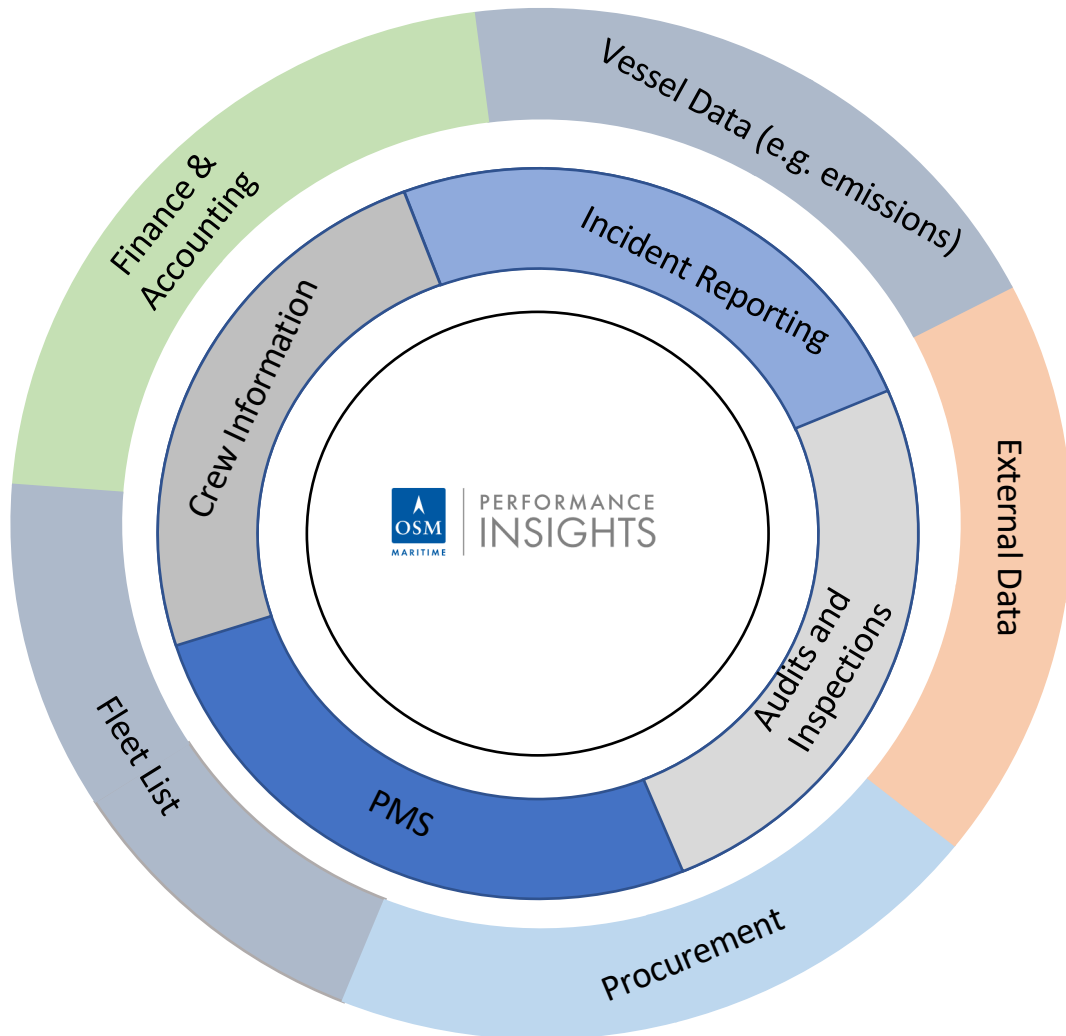
1. Introduction

Global Presence

- **ARENDAL, NO**
- **BERGEN, NO**
- **COPENHAGEN, DK**
- **HELSINKI, FI**
- **RIO DE JANEIRO, BR**
- **SINGAPORE, SG**
- **ABERDEEN, UK**
- **ABU DHABI, AE**
- **CEBU, PH**
- **CHENNAI, IN**
- **GDANSK, PL**
- **HOUSTON, TX**
- **LIMASSOL, CY**
- **MANILA, PH**
- **MUMBAI, IN**
- **NEW PLYMOUTH, NZ**
- **ODESSA, UA**
- **PERTH, AU**
- **RIGA, LV**
- **SHANGHAI, CN**
- **SPLIT, CR**
- **ST. PETERSBURG, RU**



Key Challenges



OSM APPLICATION LANDSCAPE

Many independent systems means data everywhere

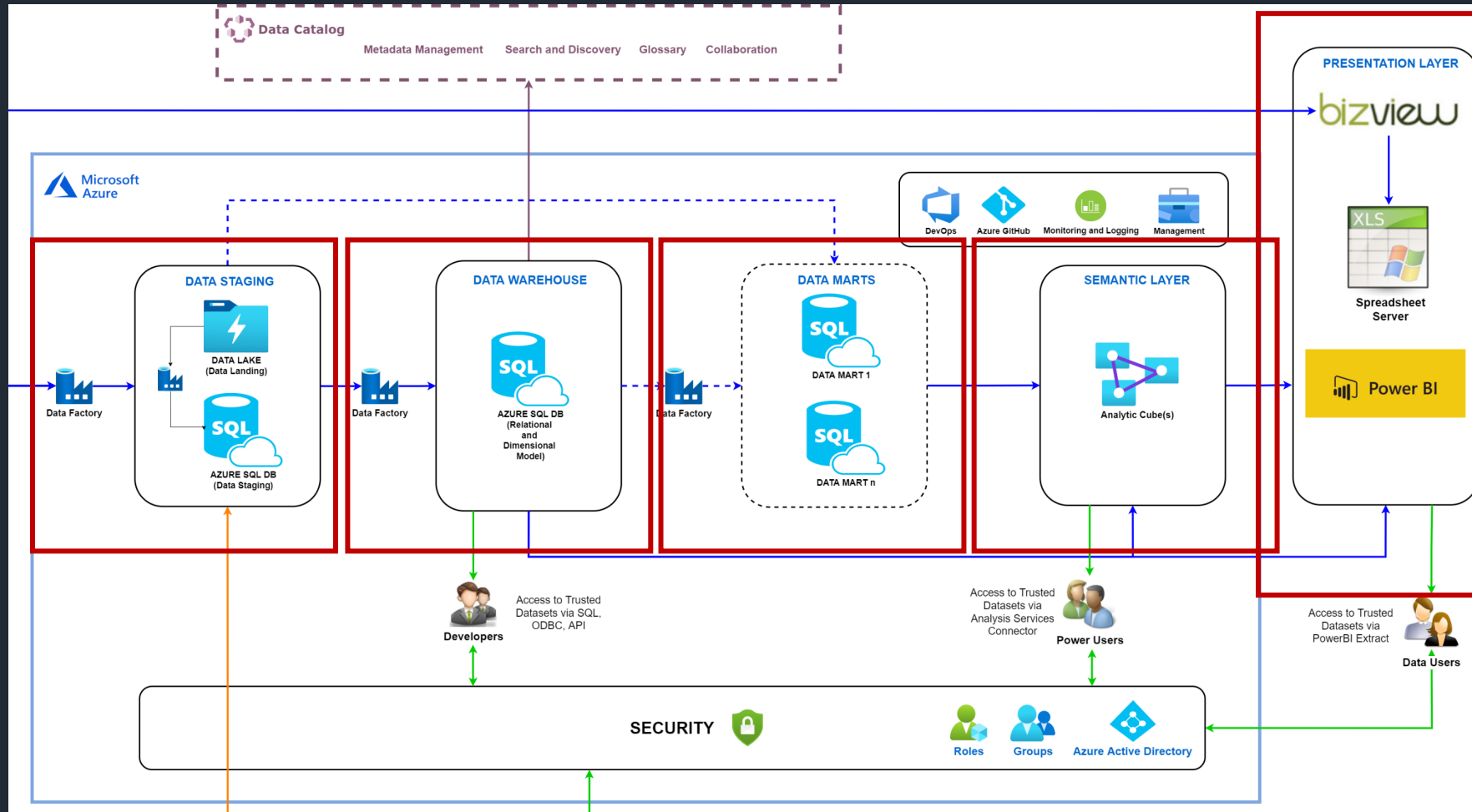
Teams ashore needs to spend time logging into various systems to look for issues or find data that needs action.

Generation and sharing of reports for both Customers and employees takes time.

Customers and Employees wants to have access to all data quickly.

IMO is launching new requirements for reporting such as Carbon Intensity Indicator, known as the "CII" from 01.01.23.

OSM Datawarehouse Architecture



Data ingestion and preparation

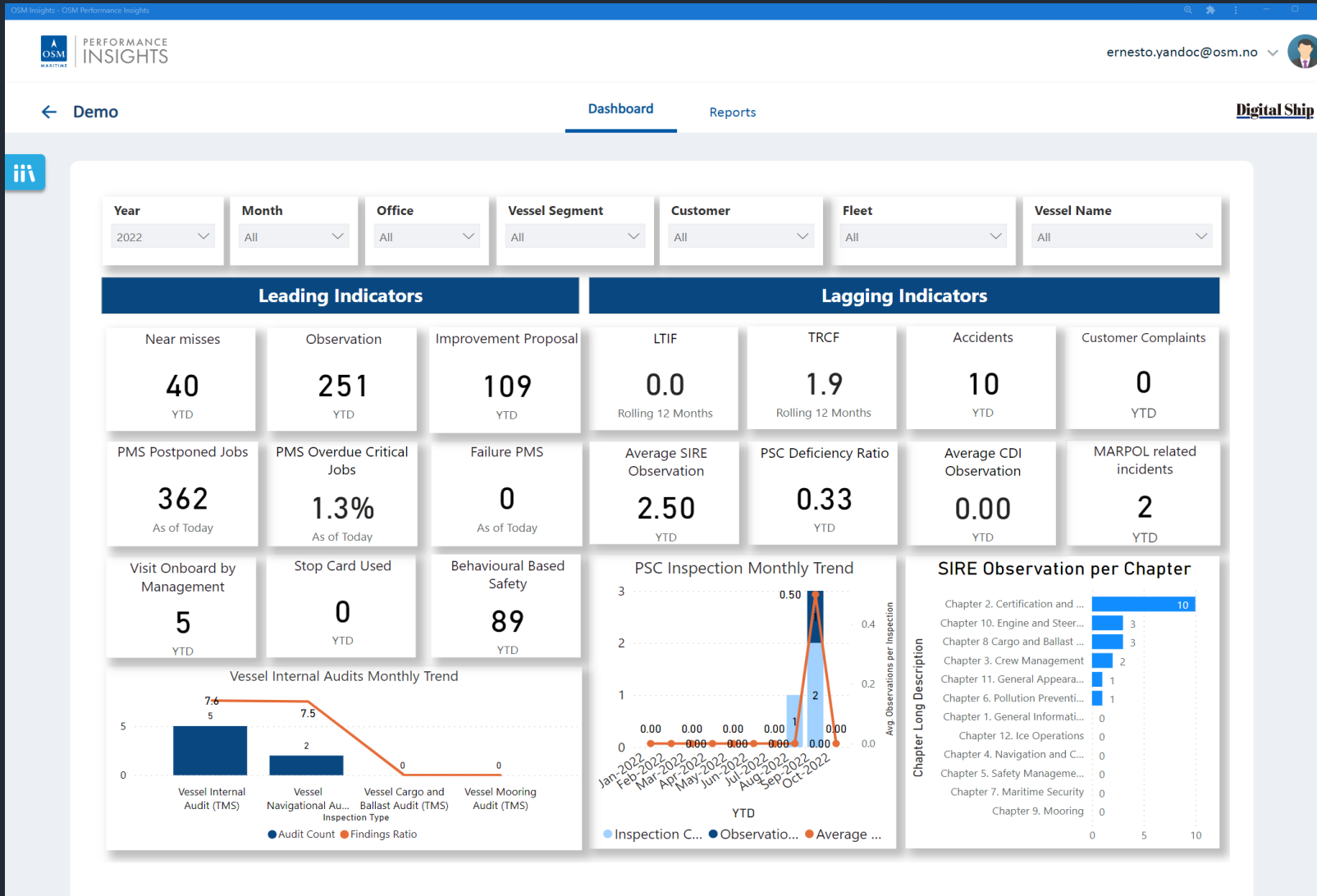
Enterprise Data warehousing

Data marts focusing on specific subject area

Dimensional models which holds measures and formulas which will be independent from any presentation tool

Reporting and Visualisation

OSM Insights

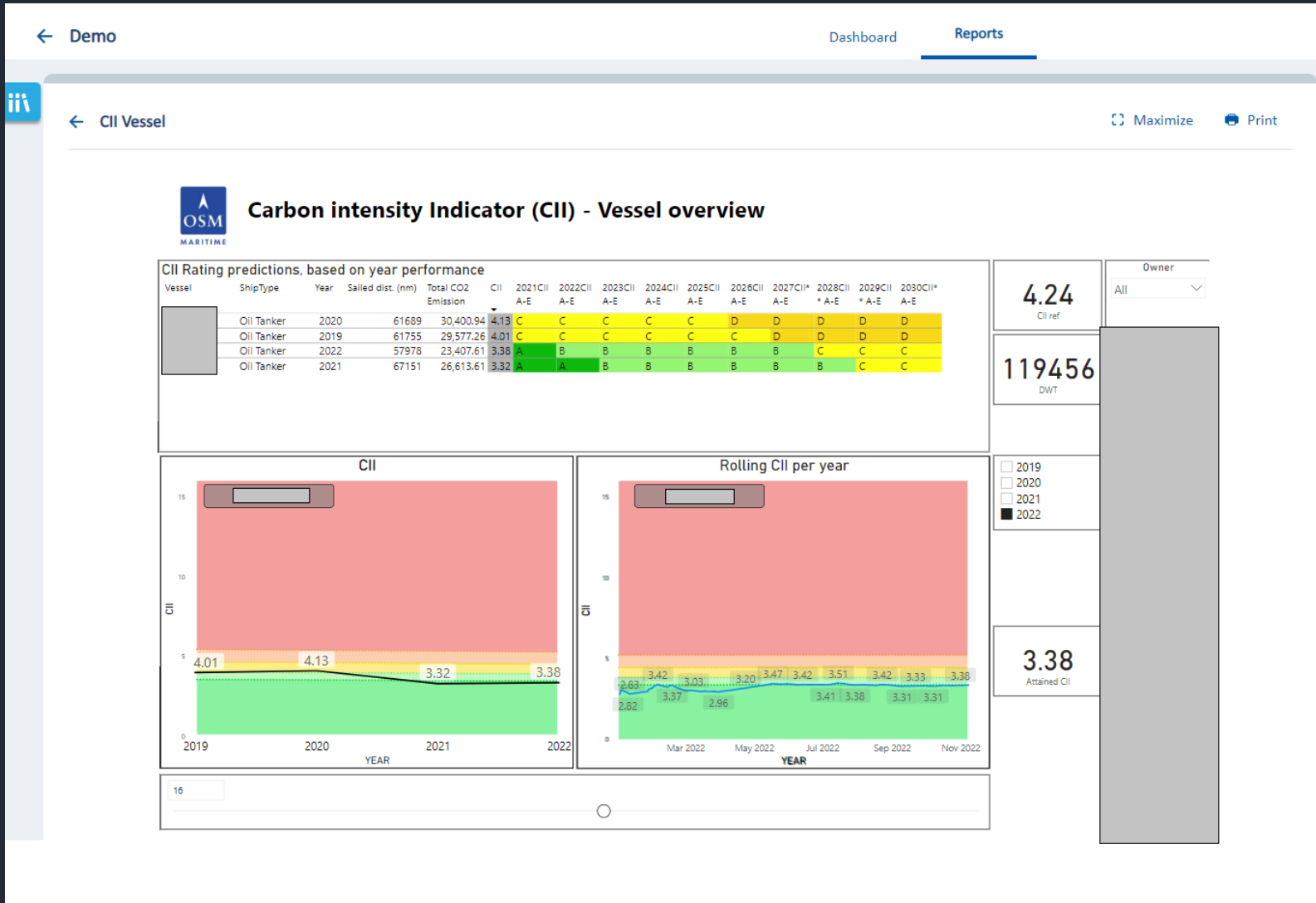


Monitor performance of the fleet and KPIs (both leading and lagging)

Provides factual business insights

Raise immediate awareness on what is happening within the fleet

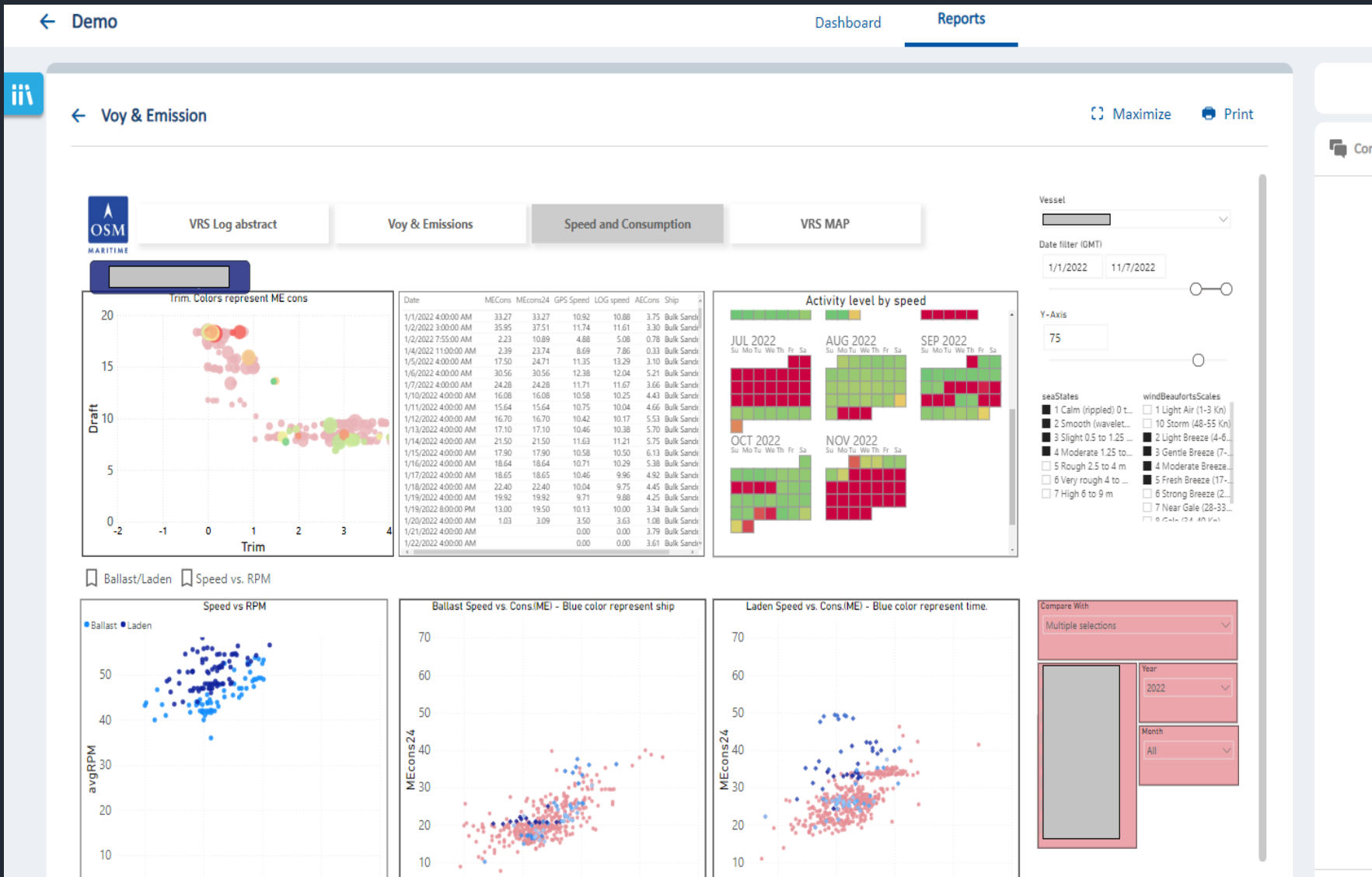
OSM Insights



IMO is launching the Carbon Intensity Indicator, known as the “CII” from 01.01.23.

We can monitor this continuously and propose actions or changes in trade etc. when we see that this is escalating.

OSM Insights

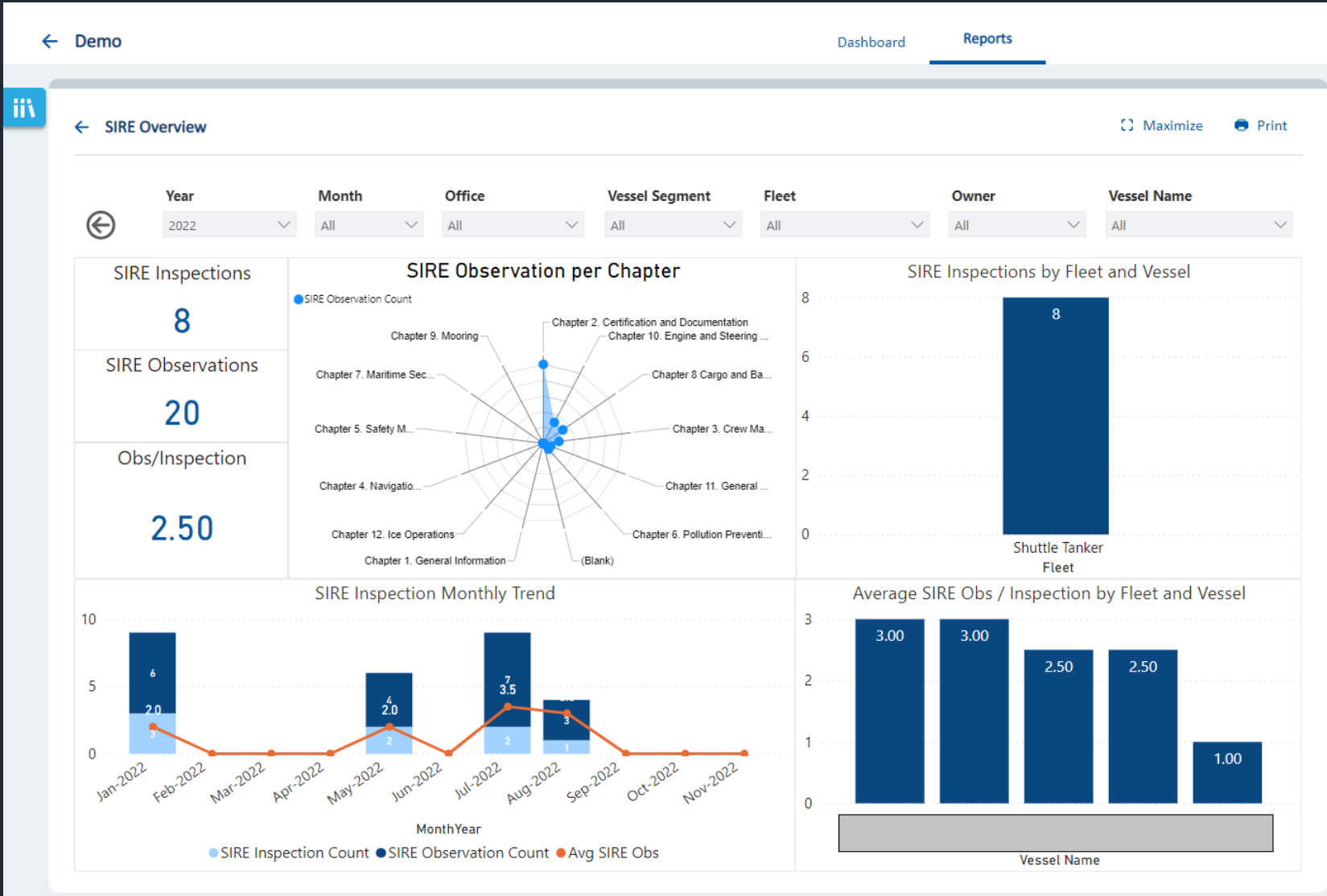


Energy consumption on board (optimal use of pumps, engine room fans, compressors, steam consumers etc.)

Waste and Environment performance (CO₂, NO_x, Sox, PM, BC etc.)

Hull performance monitoring – Can trigger actions such as hull cleaning, early dry docking, moving vessel away from exposed areas

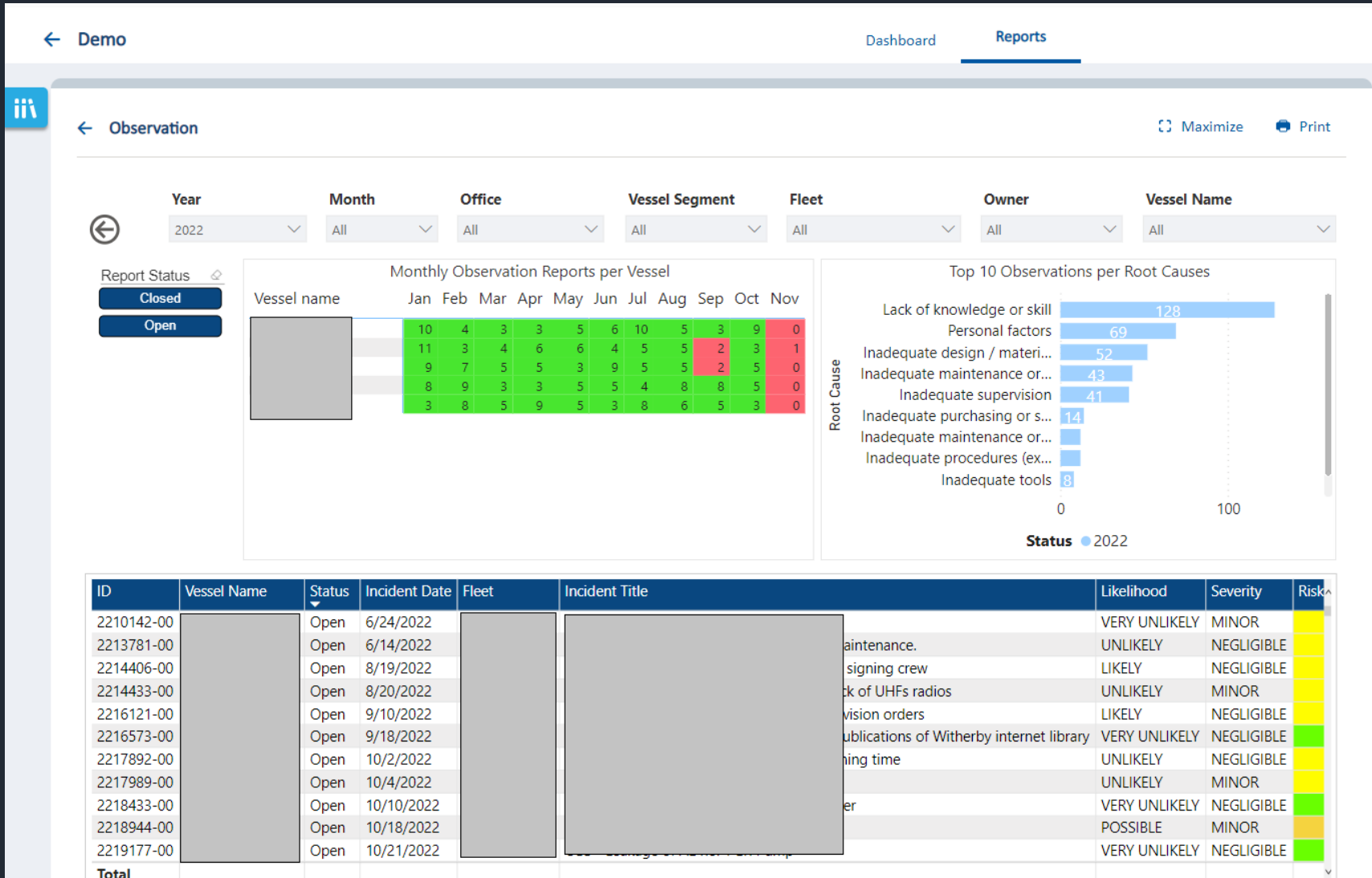
OSM Insights



Shows meaningful trends, resulting in:

- Focus areas (repeated observations),
- Outstanding maintenance (e.g. spare parts)

OSM Insights



Show clear indicators on which vessels are meeting the set KPIs which in result can trigger immediate attention / course of action.

Data – Supporting Decision Making



Monitor performance of the fleet and KPIs (both leading and lagging)



Hull performance monitoring (day by day) – trigger actions like hull cleaning, early dry docking, moving vessel away from exposed areas



Provides factual business Insights



Waste and Environment performance (CO₂, NO_x, Sox, PM, BC etc.)



Raise immediate awareness on what is happening within the fleet



Shows meaningful trends, result in:

- Focus areas (repeated observations)
- Outstanding maintenance (Spare parts)



Energy consumption on board (optimal use of pumps, engine room fans, compressors, steam consumers etc.)

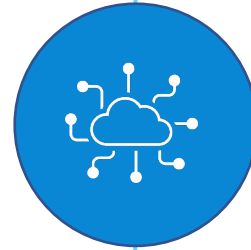


Reduce manual reporting

Key Learnings



Management support is vital



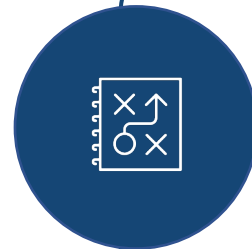
Data Driven Company is
80% Organisation and only
20% Techology

= People, Process, Data Ownership,
Change of habit, alignment of needs

= Data warehousing and Data
Visualization



Data governance is crucial
for Data Quality, Integrity
and Control



Organizational culture must
be aligned with DIGITAL
STRATEGY.

Culture eats strategy for breakfast,
lunch and dinner. YES, including
digital strategy!

Data Analogy

1 Data Collection



2 Data Preparation



3 Data Visualization



4 Data Analysis



5 Data Storytelling



OSM Maritime Group

We are a Ship Manager that wants to be the best in class, and we believe that one factor to be the best, is by utilizing and adapting to new technologies, **continuously**.



THANK YOU!

ERNESTO MIGUEL B. YANDOC
Enterprise Application & Data Analytics Lead
OSM Maritime Group

☎ : +47 415 33 509

✉ : Ernesto.Yandoc@osm.no

osm.no

ARNE SØRENSEN
IT Manager - Europe
OSM Maritime Group

☎ : +47 907 60 713

✉ : arne.sorensen@osm.no



OSM Maritime Group