

Getting the foundation right

Efficiently scale digital initiatives, maximizing the value from vessel data

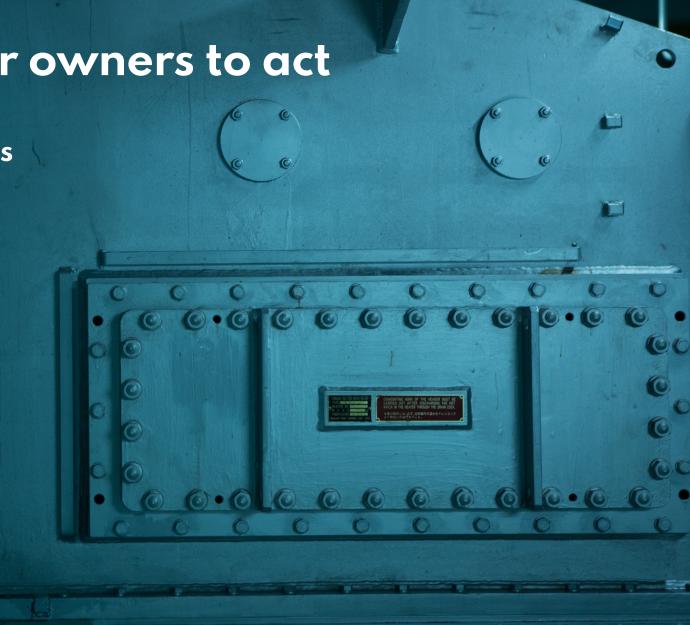
Ari Marjamaa CEO



Annually, the maritime industry has

- 100 bnUSD in vessel OPEX
- ~250 bnUSD bunker cost
- 2.5% of global CO2 emissions

This presents a clear <u>improvement</u> <u>imperative</u>



Two routes to decarbonization

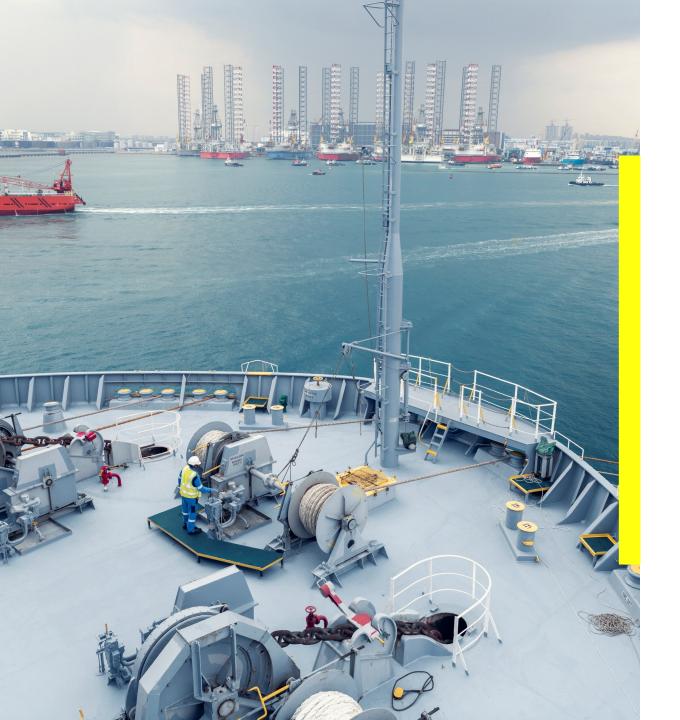
New zero emissions vessels



Efficiency improvements on existing fleet



Digitalization is a common theme across these two paths



What does vessel digitalization imply?

- Connect to any digital signal onboard the vessel
- Make the data flow available onboard the vessel and onshore
- Structure, harmonize and standardize data across all your vessels
- Share the data you want, where you want and as often as you want
- Ensure the data can be trusted: reliably available, complete and correct
- Ensure data quality is continuously monitored and assured
- Ensure cyber security



Getting vessel digitalization right Creating the foundation that will give you future flexibility

3 core principles for vessel owners seeking to digitalize their vessel....

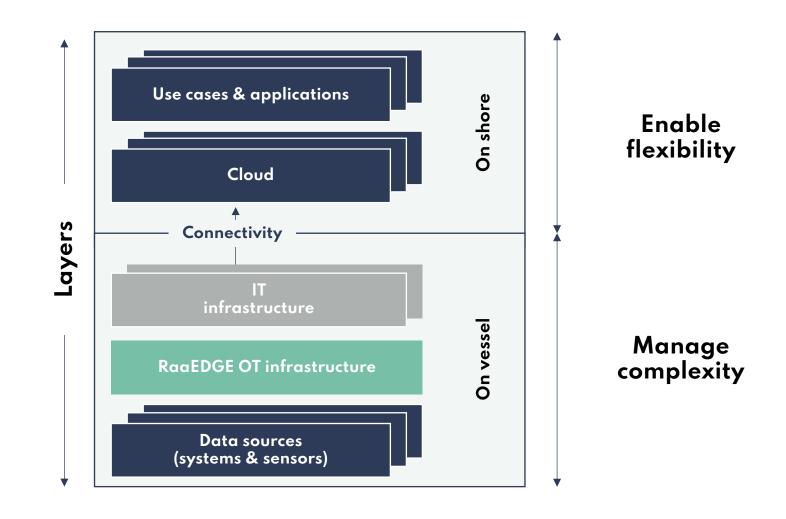
Data ownership
You (should) own the data
generated from your vessel

Future flexibility..
Plan today for tomorrow

..through layers
Don't get locked in a vertical



Manage complexity, enable flexibility through layers



What it requires of your organisation Criteria for successful digitalization

Vision & management commitment

Organization able to realize value from data

Transformation journey

Think production from the start enterprise grade, fleet scale





Real 7% fuel savings

The vessel data provided by Raa Labs enabled Wallenius Wilhelmsen to reduce fuel consumption by 7% and improve CII rating

The RaaEDGE infrastructure rolled out across the Wallenius Wilhelmsen fleet, creates a foundation for digital initiatives

- Capturing data from key onboard systems, quality checking and providing the data as a reliable service
- Using the Raa Labs provided data and a third party application, optimal route speeds and engine power settings are calculated, leading to the tangible fuel reductions

Vessel data is the foundation, driving actions



Getting the foundation right

- We need to act
- Vessel data is an essential ingredient
- Digitalization is multi-faceted...
- ..and requires the right foundation
- Manage complexity and ensure flexibility through layers
- Build the organizational capabilities to take advantage of your data

