

IOT PROJECT ONBOARD OUR VESSELS

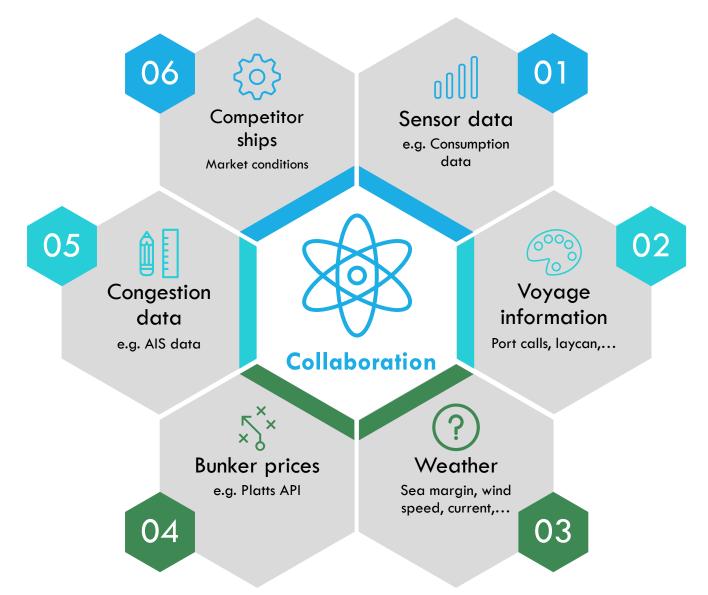
23 SEPTEMBER 2021



VISION: A CENTRALIZED COLLABORATION PLATFORM

Plus:

- Integration of external data sources for smart alerts
- AI/ML models that forecast voyage duration, port stay, sea margin, etc.





DATA ACQUISITION TARGET:

NEAR-REAL-TIME MONITORING AND ALERTING

- Gather all possible **real-time** info onboard:
 - Machinery
 - CMS/AMS
 - Weather
 - Other systems
- Make the data available onboard in a structured and useful manner
- Ensure that data are **and remain** in high quality
- Make the data available on the cloud for ship-to-shore collaboration
- Make the data available to 3rd parties for analysis

'MAKE' VS 'BUY'

Buy:

- No established solution
- Too many free dimensions nobody gets it exactly right
- Difficult to steer the existing solution for extra (custom) developments

Make:

- Innovation-ready => adapt to specific Euronav needs
- Define our own development roadmap
- Easier to interface with in-house systems



- Integration of different modules
- Change management
- Covid-19 travel restrictions
- Cost justification in early stages

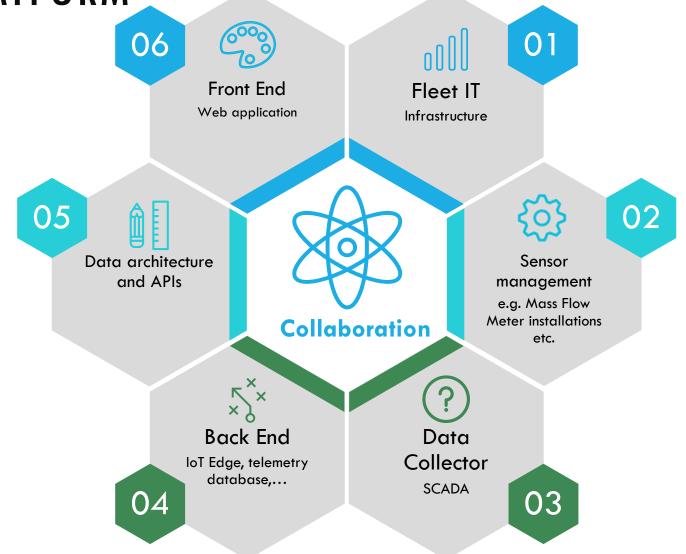


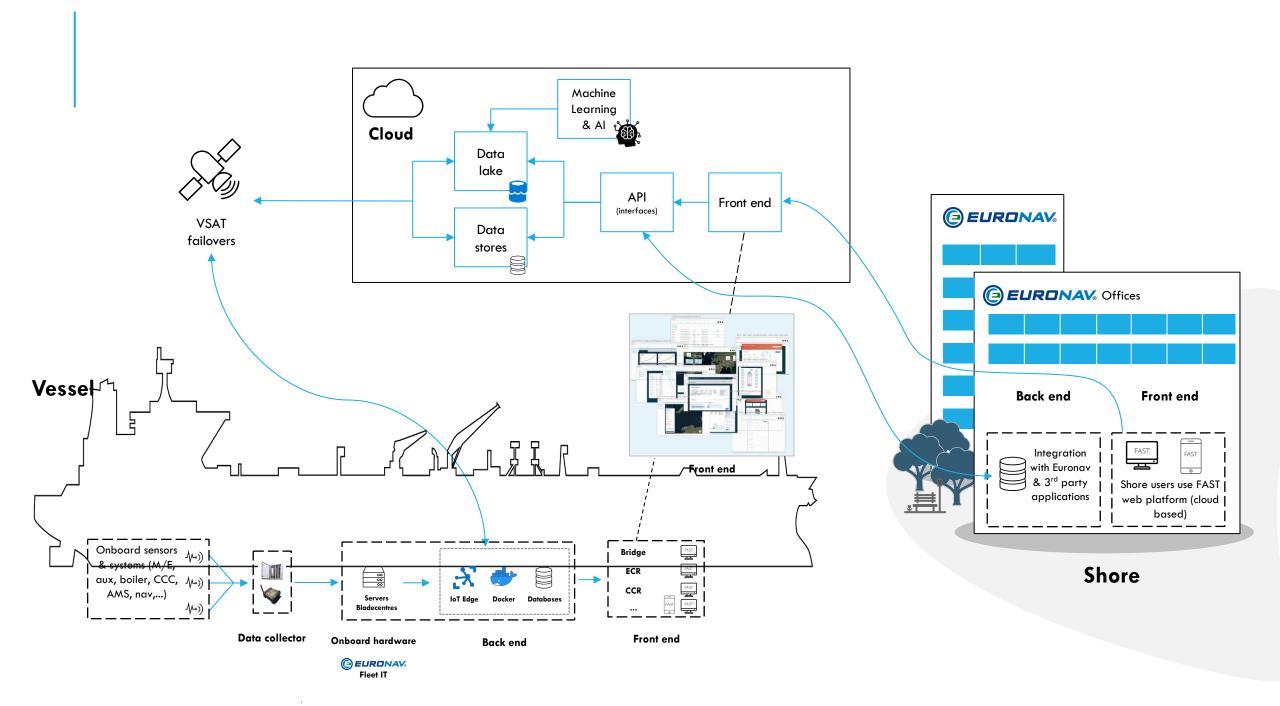
COLLABORATION PLATFORM

Stakeholders & dependencies

A lot of different players (internal and external)

Needs strong project management and focus by the project team





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SHAPING THE APPLICATION

Captains as ambassadors – permanent members of the team

Drive from the top

User feedback & validation is key

Analysts

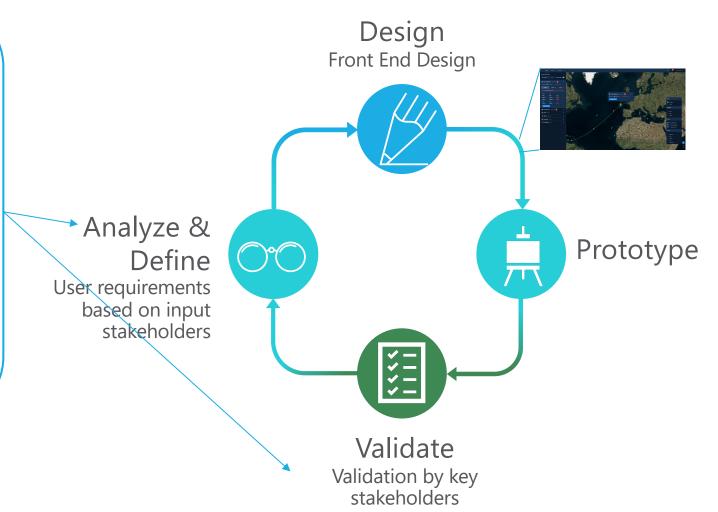
Analysis by Euronav & external business analysts

Subject Matter Experts

Operations HSQE Technical

Ambassadors

Masters ChEngs



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COVID-19 IMPACT

- Travel restrictions
- Quarantine -> increased costs of hardware deployments onboard
 - => relentless pursuit of alternatives
- Dedicated team managing the purchasing of equipment, flights, measures, visas, letters, etc.



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COST JUSTIFICATION

- Not clear ROI
- Huge potential in
 - Performance optimization
 - Fuel savings
- Possibilities for integrations
 - => Innovation ready

