

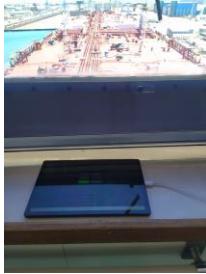


VIRTUAL BUOYS | SHIPS EFFICIENCY

NAVIGATION SENSORS & ROUTE OPTIMIZATION



PROJECT 386: VIRTUAL BUOYS FERNANDO CAÑAVATE



“First efficient navigation system based in ship motions measurement using smartphone MEMS sensors and AI for routes optimization”

- Integrated in a SaaS. Payment for use or per fuel savings.
- Not invasive installation so it can be used by shipowners and operators.
- System able to be used in ships of any age.
- Highly scalable.
- Virtual Buoys network system that improves inference with data from other vessels.

Technical objectives

- Reduction of ship consumption and emissions in more than a 5%.
- Reduction of methane loss by boil-off in LNG ships in more than a 8%.
- Reduction of risk of cargo lost.



Business objectives

- To be the leader efficiency system in ships over 10 years old (50%).
- To open a window on board to offer other services for shipowners.
- To be the leader company in sailing data producer for organizations.
- To be a reference company regarding green corridor information for ships.

Team

- Naval engineering, data science and financial background.
- Long experience in ship data analysis, IT projects and maritime industry.
- Long entrepreneurial experience.

Facilities

- Web application with different monitoring tools.
- Sensorization onboard unit based in smartphone MEMS sensors..
- Artificial intelligent exclusive algorithms integrated in a SaaS.

Ships Market

- Large: > 19 M x 10 units
- Medium > 45 M x 3 units
- Small > 55 M x 1 units

Marketing

- SaaS strategy from free to premium subscription.
- Direct marketing to fleets and large shipping companies.
- Congress and corporative strategy for public organizations(data clients).

Competitors analysis

- Less than 20 global companies specialized in ship routing.
- AIS satellite analysis systems are cheaper, but they don't have enough accuracy.
- Onboard sensors-based systems are more accurate but expensive.
- Analysed systems are not based in ship motions measurement so they can't offer motions analysis services.

Financial Plan

