

Autonomous Vessel Comms Platform

Henry Härm - Navigate 2022



MindChip



WAYREN

About Us

We build a autonomous vessel communication platform

- **MindChip** is a TalTech spinoff, building a modern autonomous vessels
- **Wayren** is an Estonian Defence Forces spinoff, developing secure data exchange for demanding conditions



Introduction

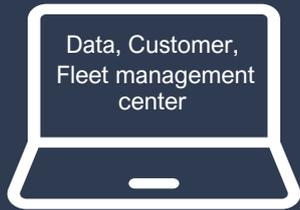
Autonomous vessels are transforming maritime

- Reducing human error
- Increasing fuel efficiency
- Reducing pollution
- Executing dangerous missions



The Vision

END USER

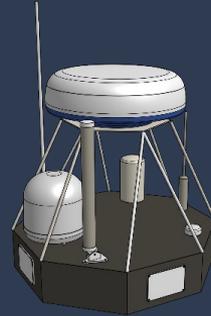


ARTIFICIAL CAPTAIN



CLOUD SERVICES

- Digital Twin
- Weather Data
- Third party data services
- Predictive maintenance



- Situational awareness
- GNSS
- Weather station
- Radar
- Lidar
- Cameras

APPLICATIONS



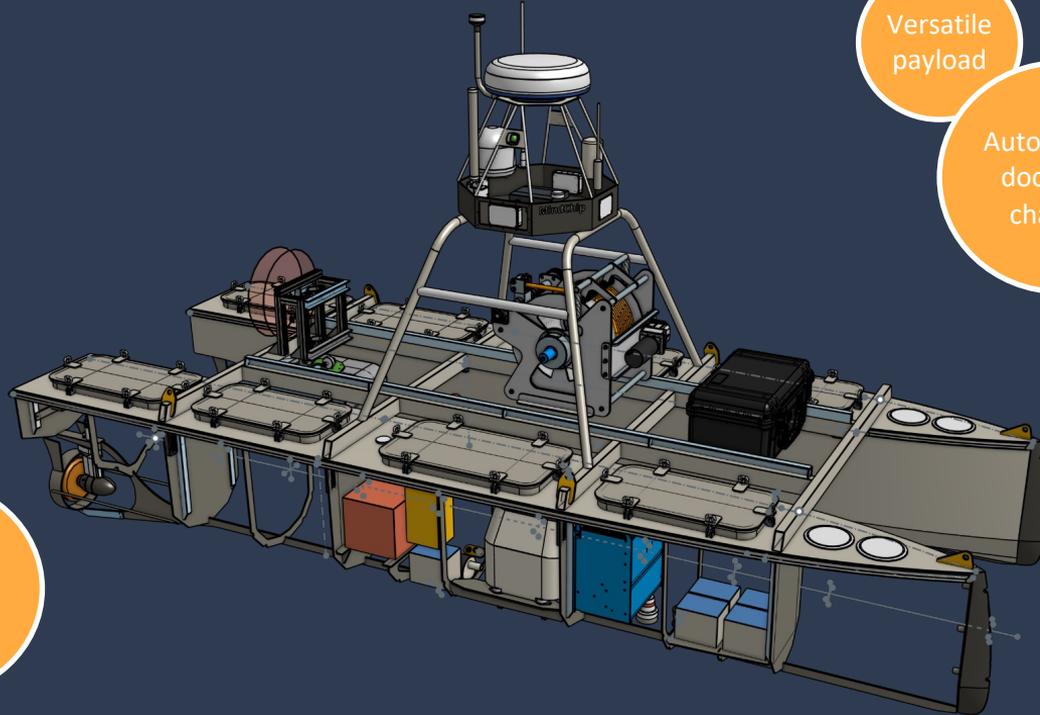
Autonomous Platform

Easily
scalable

Modular

Situational
awareness,
radar, lidar,
camera, AI

Object
detection,
collision
avoidance,
COLREG



Versatile
payload

Autonomous
docking &
charging

Connectivity
4G, WIFI,
433 MHz,
AIS

Electric &
diesel
propulsion

MindChip



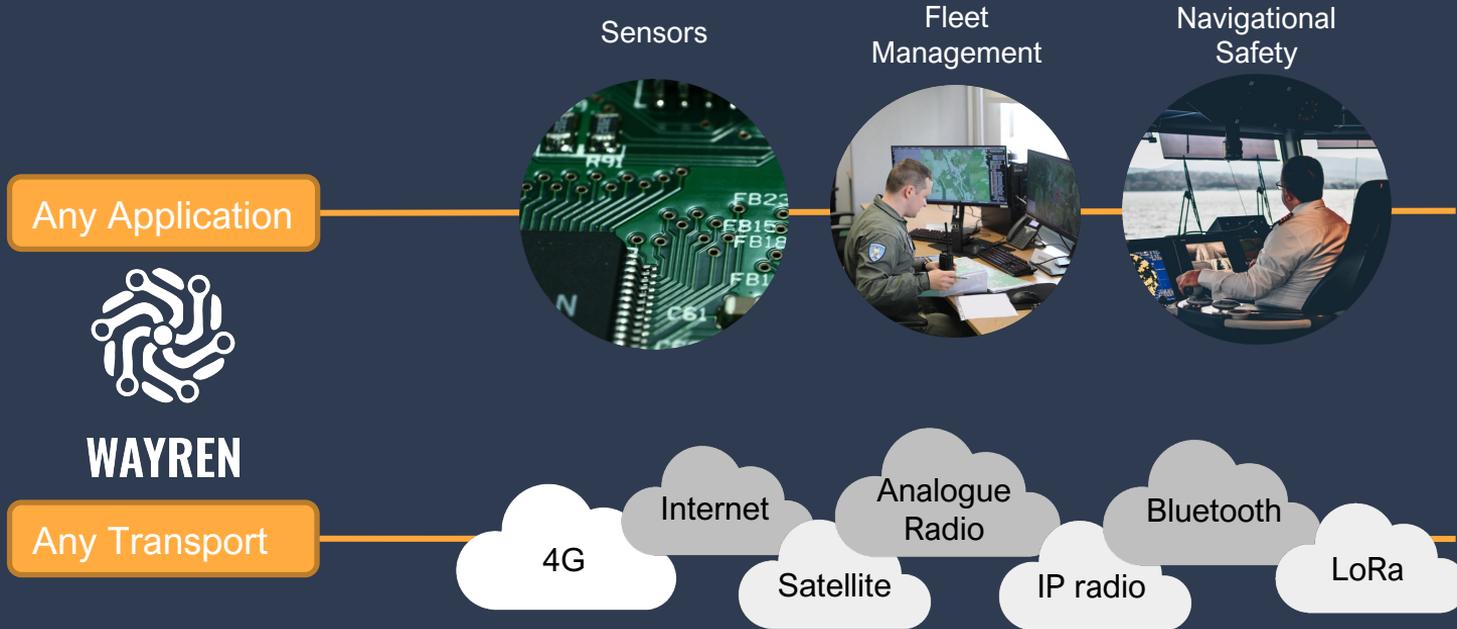
The Problem

How to provide visibility and awareness?

- 1 Navigational safety and crisis response
- 2 Lack of 4G and Satellite connectivity for monitoring and control



Vessel Comms Platform



WAYREN



Example

Fleet efficient vehicle-to-vehicle operational data



Navigational safety with digitized maritime VHF



Thank You!

MindChip



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