Smart, safe & connected ROV operations

How to enhance net integrity and fish welfare in aquaculture

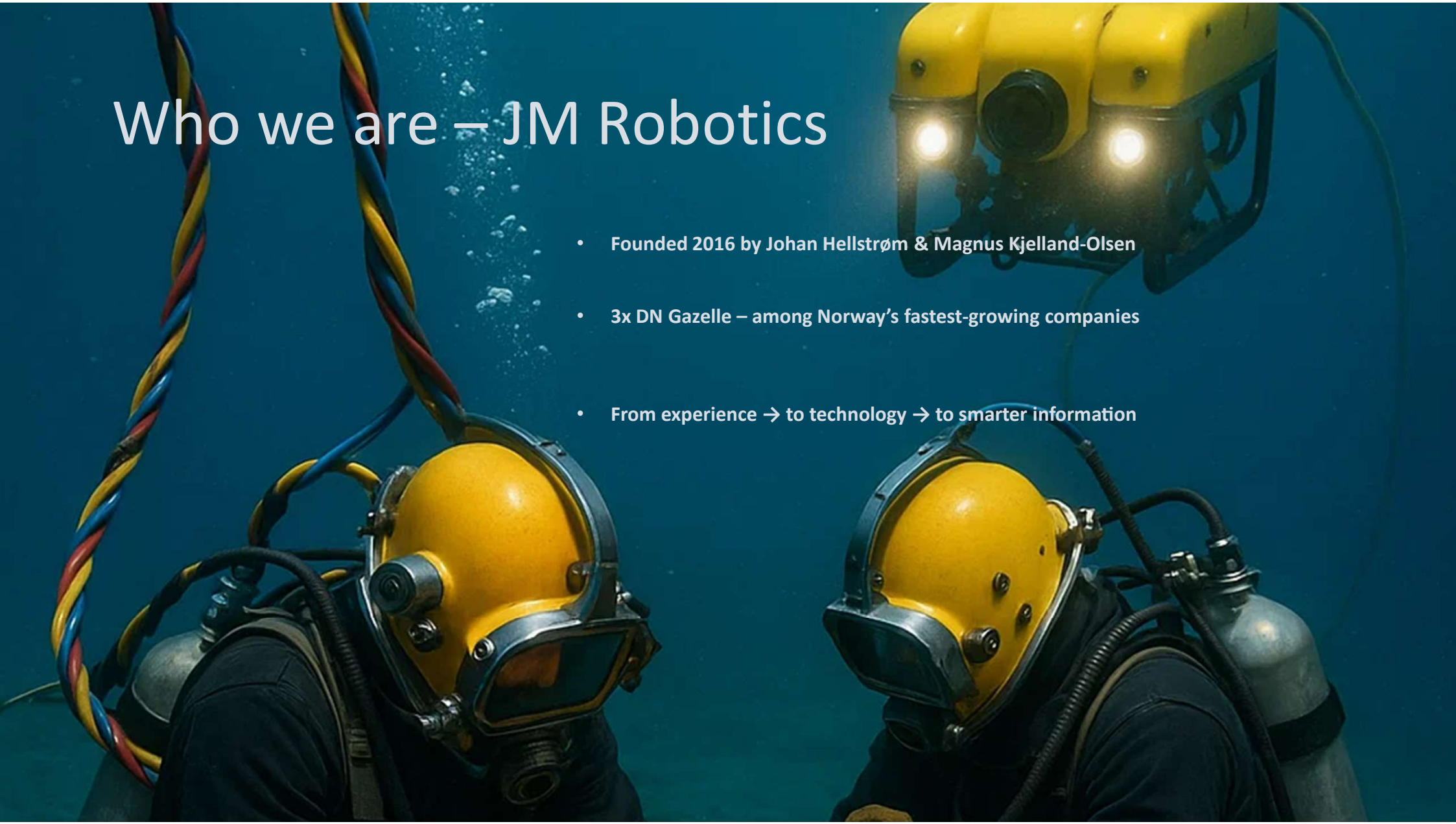
Jostein Dyrset

Key Account Manager at JM Robotics.

Aqua Ice 2025

Harpa 30th of September and 1st of October

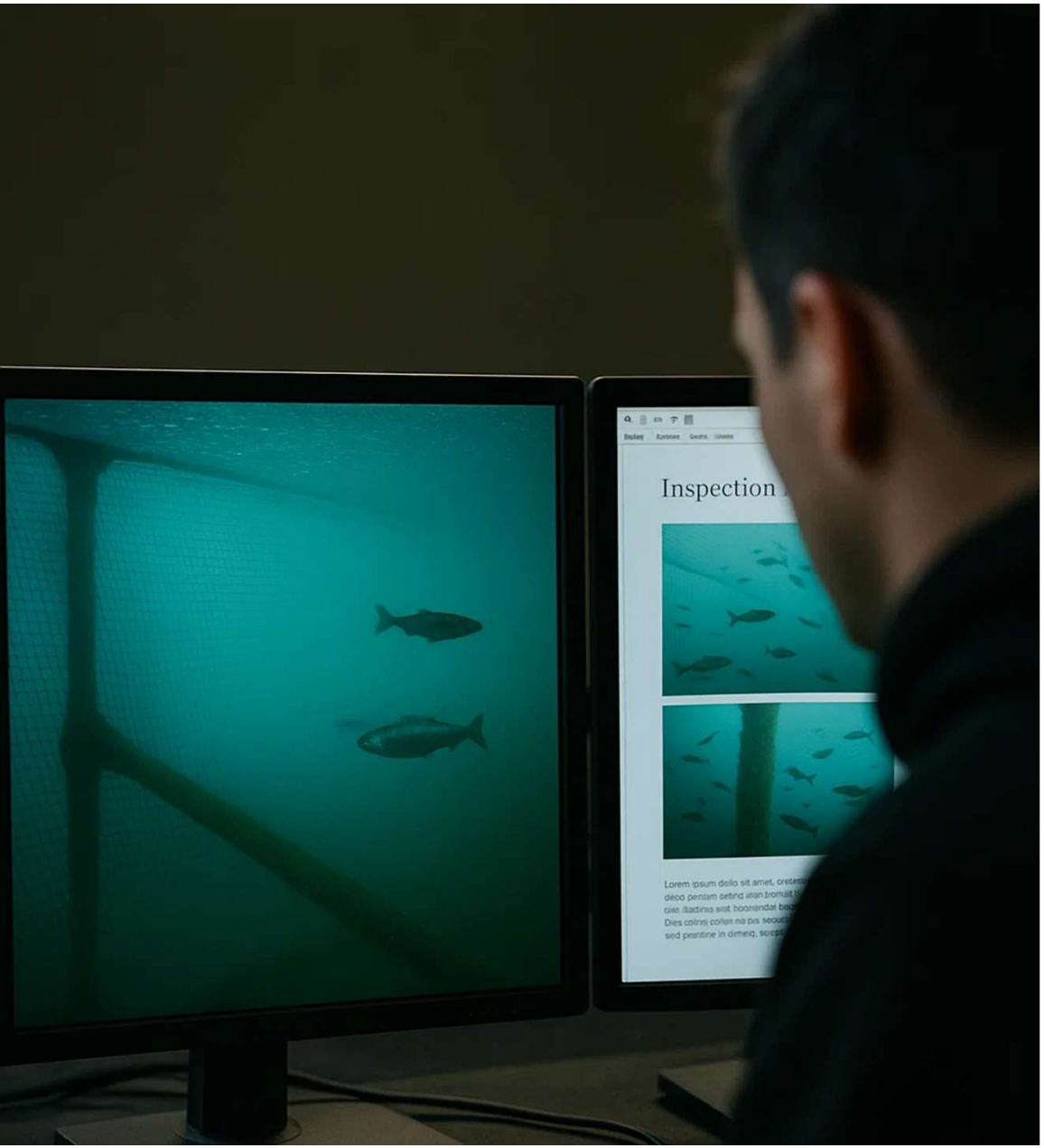
Who we are – JM Robotics



- **Founded 2016 by Johan Hellstrøm & Magnus Kjelland-Olsen**
- **3x DN Gazelle – among Norway's fastest-growing companies**
- **From experience → to technology → to smarter information**

The ROV challenge

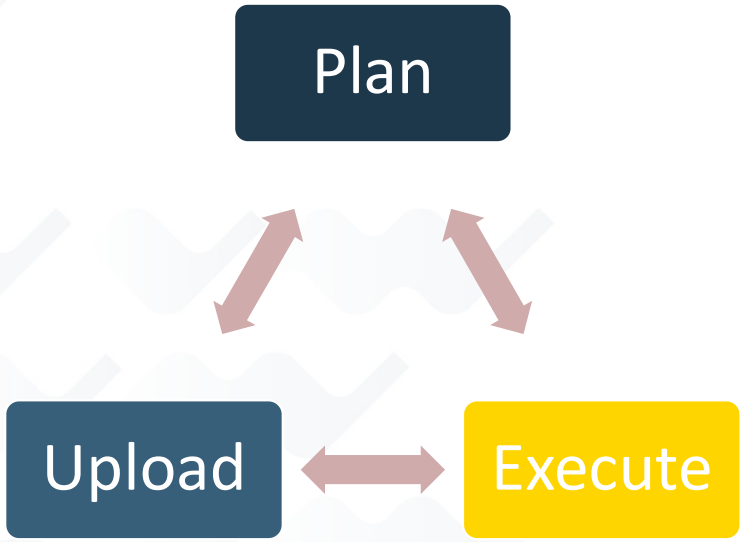
- **Inspections of nets and moorings**
- **Operational windows often close to soon**
- **Data stuck in manual reports that drives delays**
- **Challenge not just documentation but also collaboration & intelligence**



What is JM Connect

- **Connects piloting & reporting**
- **Monitor remotely and invite guests**
- **Create inspection mission and send to pilot**
- **One dashboard for inspection needs**

How it works – simple 3-step workflow



- **Create inspection routines anywhere**
- **Send tasks directly to pilots and ROV's**
- **Cloud upload = instants accsess**

Core Features

- **Mission control – remote order & monitoring**
- **Send tasks directly to pilots and ROV’s**
- **Transparency & trust as a competitive edge**

Automated documentation

- User friendly interface
- Deviation tracking
- Consistant routines
- Automatic reporting

Automated documentation

Automatic reporting
Saves video, pictures, video and digital reports automatic in the cloud

User friendly interface

Deviation tracking

Consistant routines

Automated documentation

Consistant routines

Checkpoints ensure that critical areas is assesed

Automatic reporting

Deviation tracking

User friendly interface

Automated documentation

Deviation tracking

Deviation reports provide the structured information that you need

Automatic reporting

Consistant routines

User friendly interface

Automated documentation

User friendly interface
Complete and searchable archive

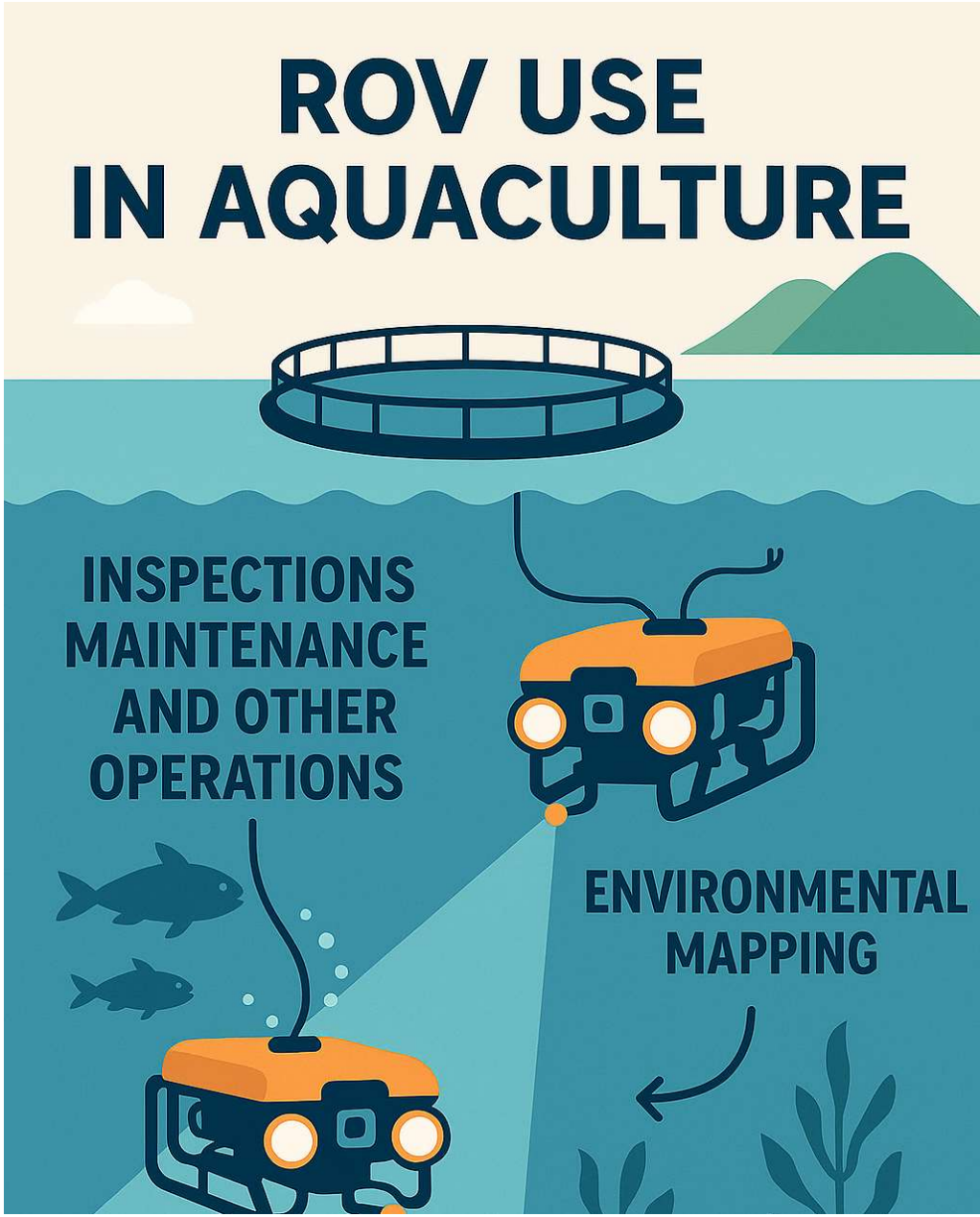
Automatic reporting

Consistant routines

Deviation tracking

ROV Applications in Aquaculture

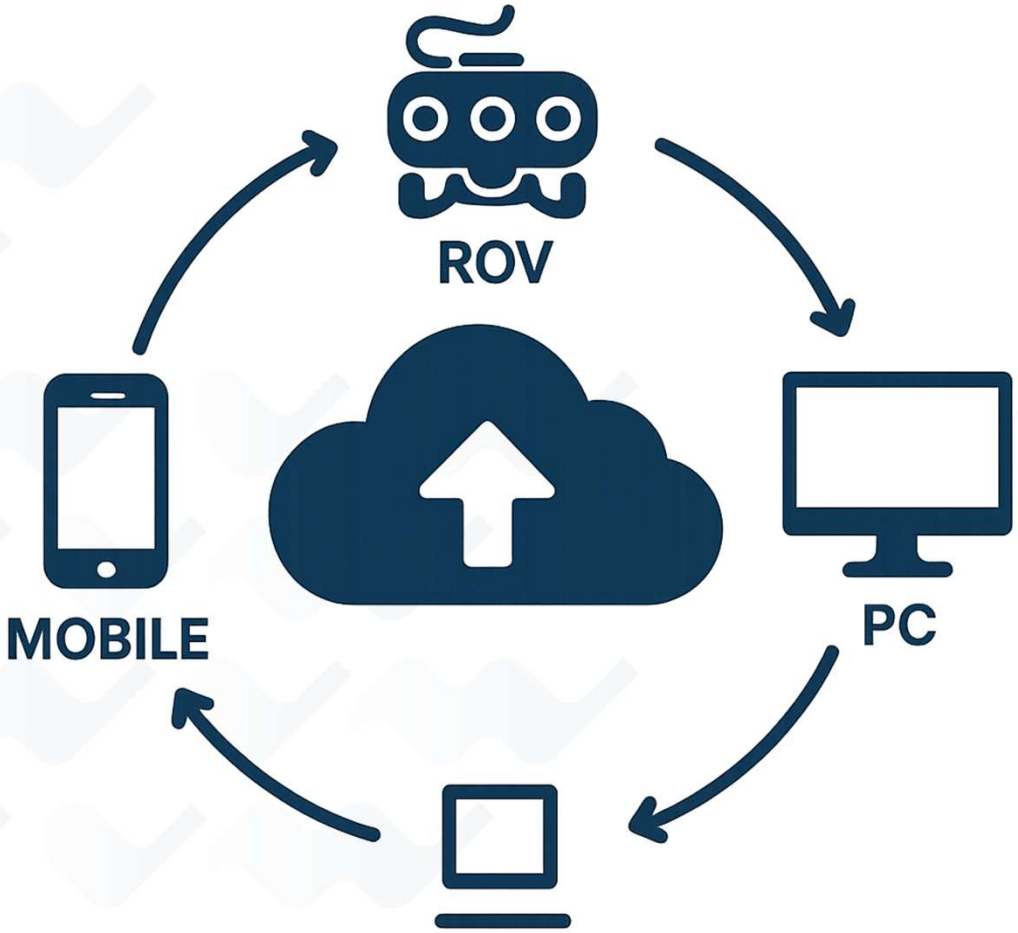
- **Net integrity inspections = prevent escapes**
- **Mooring line inspections**
- **Environmental monitoring = compliance**



Benefits for fish farmers

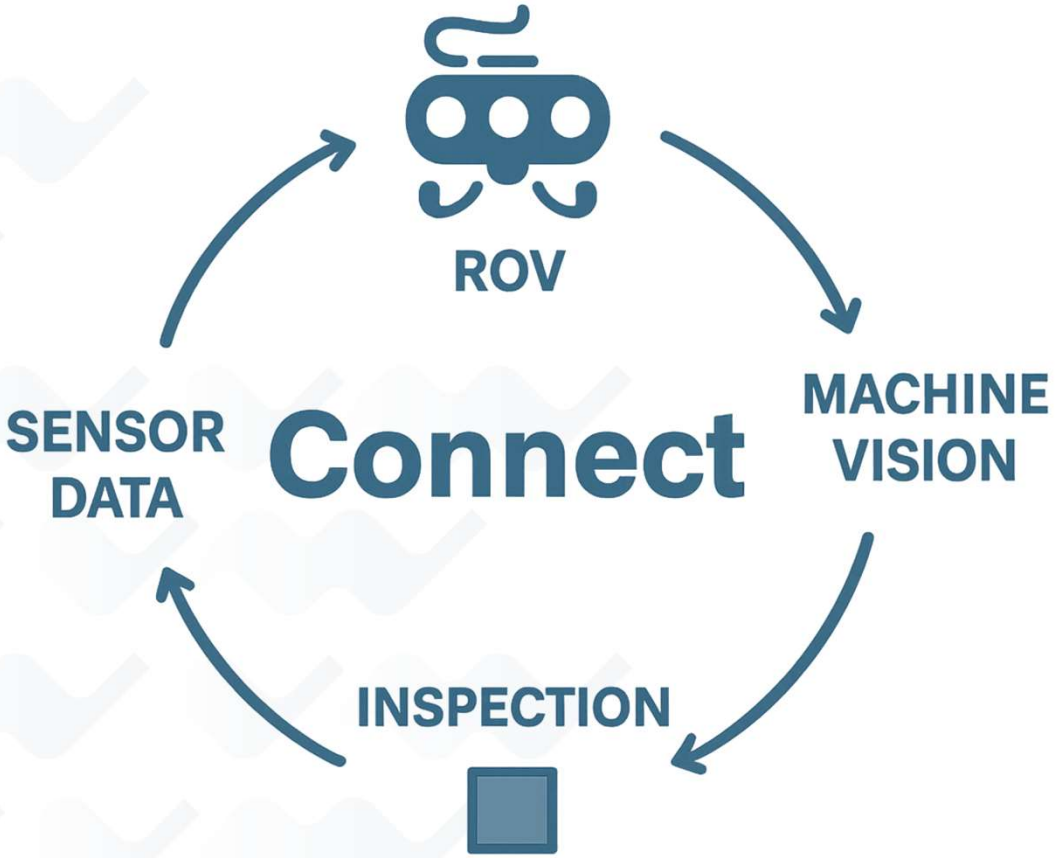
- Better documentation quality
- Remote stakeholder participation
- Easy compliance reporting

Technology integration

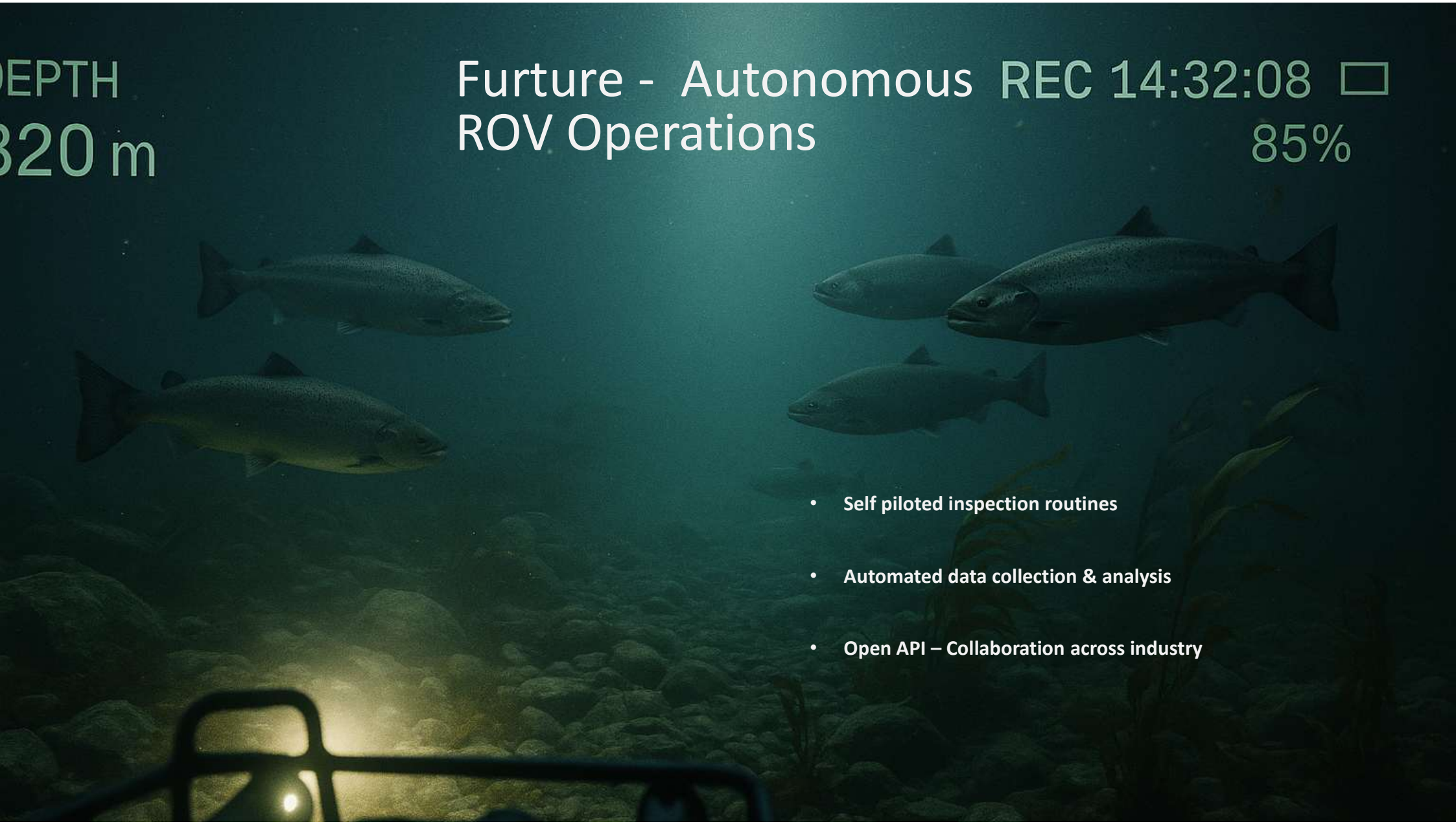


- **Works with existing ROV's (JM and others)**
- **Cloud based**
- **API integrations with farm systems**

Future – computer vision & AI



- **Automated net damage detection**
- **Fish behaviour analysis**
- **Environmental anomaly alerts**



Furture - Autonomous ROV Operations

- **Self piloted inspection routines**
- **Automated data collection & analysis**
- **Open API – Collaboration across industry**

Partnership approach

Start your digital ROV journey

The transformation of aquaculture operations through digital technology isn't optional - it's inevitable. The question is whether you'll be leading this transformation or following it.

Thank You

Let's work together to build the future of intelligent underwater operations.