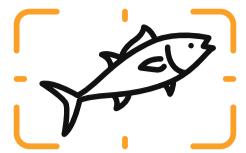


Risk Assessment on the Edge

PROJECT OVERVIEW FOR STAKEHOLDERS



PROJECT OVERVIEW

In response to current industry needs and desires, this project has been designed to test the plausibility, hurdles, and opportunities of conducting a risk-based assessment of fishing activities at sea in near real-time, using AI and edge technology.

The potential benefits of a near-real-time risk analysis include increased efficiency of Electronic Monitoring (EM) review, catch accuracy verification, and expedited responses or remedies to potential compliance issues. There are likely more benefits and opportunities that will come to surface during the course of this project.



GOALS & DELIVERABLES

This project consists of the building, testing, deployment, and evaluation of a risk assessment model. We aim to discover and document how EM, AI, and eLogs can be tied together to determine the risk of a vessel for further review outside of submitted logs.

The final product of this project will be a report on the feasibility of deploying a risk assessment at sea. If the technology and operations are found to be viable, it will also include recommendations and a roadmap towards expanding the scale to more vessels, fisheries and uses.

It is not the goal of this project to deliver a model or tool that is viable at market or scale. We believe that it is important to test and prove both the technology, and its benefits prior to a large scale deployment. This work will be vital in the success of future AI and edge deployments.



PARTNERS

This project is currently set to take place in Panama or Costa Rica (with the possibility of expansion to Chile, Australia, or other countries). A small number of vessels (currently three) will be used to test the systems and models at sea, with initial tests conducted in a lab environment prior to deployment.

In addition to an advisory board consisting of the Nature Conservancy, productOps, and other market players, we are looking to engage with EM and eLog providers, and AI experts.



TIMELINE

This project is expected to take approximately 9 months to complete, with some learnings coming early from model development, lab testing, and early trips.



POTENTIAL VALUE CASES

Evaluation of risk in near-real time means:

- Targeted review can take place within hours or days of risky behavior, rather than months or even years. Sets can be prioritized for review by risk level.
- Expedited and targeted review means increased efficacy and impact of analyzed review.
- Expedited responses and remedies to potential issues.
- Changes in behavior for safer and more sustainable fishing practices.
- Increased levels of trusts for vessels and captains proven to remain in compliance, may lead to lower review costs and less admin or oversight.



EDGE RISK ASSESSMENT ACTIVITIES & TECHNICAL ARCHITECTURE

EXISTING

Current data is collected when the vessel lands or sent only to the EM provider.

NOVEL

New system can send edge-analyzed data to a centralized data platform, do additional analysis, send notifications, and aggregate data across programs, all while the vessel is still at sea.

