



From boat to plate

The seafood industry faces inefficiency from lack of traceability in the supply chain: from capture to the consumer.

The challenge

Traceability is a critical challenge for the seafood industry. With the increasing demand for seafood concerns around food safety, quality, food fraud, sustainability and regulatory breaches make seafood provenance a concern for consumers, producers, and regulatory bodies across the globe.

Imagery from point of capture is seen as the basis for the supply chain management for industry, yet automated species identification and tracking remains a challenge.

The response

The Boat to Plate team developed an innovative solution in the form of an automated species identification system, embedded within a tagging and data management system. The product offers a convenient, cost and time-effective solution for seafood providers to monitor and manage their product throughout the supply chain. The implementation of the technology has the potential to reduce losses due to market and supply chain inefficiencies in the seafood industry.

The team collaborated with external organisations for testing and validating, including the Mures Tasmania fishing and strategic operations team, to get

insights about their supply chain challenges for development and testing of a mock-up system. The mock-up system is being used as a prototype to build similar systems for other fish species, and commercial partnerships.

Demonstrations have been presented at D61+ Live, and Seafood Directions, tradeshow in 2019.

The team is actively working with TunaSolutions for commercialisation planning of this technology.

The impact

The on-board automated visual identification of fish catch will help markets gain greater clarity of products and provide regulators assurances of sustainability, faster and more cost effectively than available practices. This will lead to enhanced seafood supply chain management, traceability and food security for industry, wholesalers and retailers that purchase Australian seafood products. Boat to plate has potential to boost confidence between buyers and sellers of Australian seafood and create a substantially improved product-market fit.

It presents an opportunity to generate cost-savings of the order of billions of dollars associated with current market inefficiencies and seafood wastage.

Enhanced seafood supply chain management, traceability and food security.

Domestic and global application

The work has significant application in Australian domestic industry to maintain good regulatory compliance. The work also offers significant potential for global application. New Zealand and Chile are installing electronic monitoring systems on thousands of fishing vessels over the next two years offering potential for uptake an adoption. Southeast Asian fisheries alone consist of 3.5 million fishing vessels and represent a significant global market for this innovation.

Financial investment

SIEF has extended financial support through funding \$450,000 over a period of eight months and played an instrumental role to advance this work from research project to its uptake and commercialisation.

Collaborators

Mures Tasmania, TunaSolutions, Austral Fisheries

SIEF case study

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