

# **OVERCOMING BARRIERS** Solutions for adopting electronic traceability

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Economic Benefits of Electronic Traceability



WALTON FAMILY FOUNDATION

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### Introduction

**Illegal, unreported, and unregulated (IUU) fishing** damages fish stocks around the globe. Additionally, illegal fishing practices can sometimes occur alongside human rights abuses. Now, the world is waking up to these injustices. Government import regulations are working to ensure illegal products don't enter their national markets, and some consumers are voicing their preference for certified and sustainably harvested fish<sup>1</sup>.

Electronic traceability is the recording and sharing of relevant seafood product information via electronic means<sup>2</sup>. Full chain, electronic traceability entails the electronic capture and sharing of seafood product information from the point of catch until the point of sale. It has the potential to make it easier for the seafood industry to comply with regulations and meet consumer demands.

Thankfully, companies currently deliberating making the switch to electronic traceability are not the first companies to undergo this conversion. The trailblazers who have piloted electronic traceability, along with their NGO partners, have written case studies, described solutions that helped them overcome obstacles, and created tools to make the process easier for others. Here, the <u>Seafood Alliance for Legality & Traceability</u> (<u>SALT</u>) has distilled this information to walk the seafood industry through the barriers to adopting electronic traceability and provide potential solutions to overcoming the challenges a company might face.

This blog is the second in the series "Overcoming Barriers: Solutions for adopting electronic traceability."

<sup>1</sup><u>Sterling et al., 2015</u> <sup>2</sup><u>Future of Fish Seafood Traceability Glossary</u>



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In the **previous blog**, SALT addressed the indirect benefits for industry when widespread electronic traceability is adopted - such as the potential for improved fisheries management, greater social responsibility, and women's empowerment, all of which can also help improve a business's bottom line. Here, we continue to address the following barrier:

# *The benefits of implementing electronic traceability are unclear, and the cost can be intimidating.*

In this blog, SALT covers the direct benefits to industry from electronic traceability – namely, the economic advantages – and suggests helpful tools to use when considering the cost of implementation. These economic advantages relate to:



## **Regulatory Compliance**

Regulations are springing up around the globe that require more progressive and extensive product data management. Additionally, many either have an electronic component or are easier to comply with if the data is in electronic form. Take into consideration the growing **U.S. Seafood Import Monitoring Program (SIMP)** or the recently announced electronic **<u>'CATCH' certification scheme from</u> the European Union** (EU); compliance with both can be easier when using electronic traceability systems, mitigating some of the bureaucratic burden for companies. For instance, one case study of importers found that electronic recordkeeping made it easier to access the information needed to produce reports to meet SIMP requirements<sup>3</sup>. Not only is report generation easier, but fewer in-person meetings are needed to file paperwork when online reporting is used, as was the case with tuna fishers and harvesters in Indonesia<sup>4</sup>.

SIMP and the EU 'CATCH' certification scheme are just two recent regulations in which electronic traceability can lessen the lift of compliance. It may also ease compliance with other catch documentation schemes currently in development. More accessible data as a result of electronic traceability can both help companies maintain their current markets as nations revolutionize their seafood import requirements, and help companies expand into markets with more strict regulations in place. **Regulations in the seafood industry are a rapidly changing arena, and electronic traceability makes it easier to stay ahead of the curve**.

### **Food Safety Assurance**

A food safety recall is a nightmare. Companies lose valuable business by disrupting their operations and losing inventory. Moreover, their reputation may suffer a blow, which can lead to loss of consumer trust that has taken years to establish<sup>5</sup>. In 2018 alone, there were dozens of recalls of products involving seafood<sup>6</sup>.

A food safety recall in the seafood industry can be particularly disastrous, as seafood products are often an amalgamation of products. For instance, salmon from sources both in Puget Sound, Washington and in the southeast Pacific Ocean may travel to a processing plant where they are ground up and combined into a salmon patty. As a result, it's difficult to pinpoint where to draw the line for the scope of the recall. If salmon from Puget Sound was the culprit, would a company be able to confidently declare which products it went into? This uncertainty can create recalls that are more comprehensive than needed, resulting in significant and unnecessary losses.

Product recalls initiate scrambles to find information. Shuffling through stacks of paper or cross-referencing hand-written entries is tedious and costs valuable time. It is also more difficult to verify data when hand-written (e.g., is that number a one or a seven?). Imagine if - rather than scouring through paper records - a company could identify with certainty which sources ended up in what products. Effective data management via full chain, electronic traceability can narrow the potential recall scope by enabling efficient diagnosis of affected products<sup>7</sup>.

"[Having traceability has] definitely been a benefit because we have been able to do much more targeted and smaller recalls," says Helen Packer of Anova Food, LLC.

"So that means saving money because we need to recall less product."

"Sampling doesn't work in a product recall—you need to track every shipment, every lot," says Andy Furner, Marketing Vice President of Trace Register, a traceability technology platform.

"In the event of a problem, you can quickly pinpoint any product that comes from a tainted lot [with a traceability system], so you can get much more precise in the scope of your recall<sup>8</sup>."

The possible disaster wrought to a brand's reputation due to a food safety issue can be mitigated faster and easier with an electronic traceability system. Prompt management of the crisis shows that the company is organized and responsible, and can help to regain customer trust quickly.

<sup>7</sup> Sterling & Chiasson 2014

<sup>&</sup>lt;sup>3</sup> USAID Ocean's Case Study: The Value of Traceability for Business (Anova Food, LLC.)

<sup>&</sup>lt;sup>4</sup> USAID Ocean's <u>Case Study: The Value of Traceability for Business (PT. Nutrindo)</u>

<sup>&</sup>lt;sup>5</sup> Lewis & Boyle 2017

<sup>&</sup>lt;sup>6</sup> U.S. Food & Drug Administration Recalls, Market Withdrawals, & Safety Alerts

<sup>&</sup>lt;sup>8</sup> Future of Fish's <u>The Business Wins of Seafood Traceability Technology</u>

#### **Overcoming Barriers**



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#### **Strengthened Brand Reputation**

<u>Media exposés of slavery in supply chains</u> or environmental degradation occurring from harmful fishing practices are also serious dangers to a company's reputation and profits. A tainted supply chain can injure a company's image, violate social and environmental responsibility commitments, and lead to costly lawsuits.

Knowledge is power. The greater transparency offered by full chain electronic traceability helps identify and mitigate potential risks of environmental and human rights infractions. Mitigating these risks can ultimately strengthen brand reputation. When leveraged effectively, increased transparency can also yield market advantages. In a consumer survey by the Global Food Traceability Center, customers have shown a preference for sustainably sourced products<sup>9</sup>. Electronic traceability can lend support for sustainability claims, such as how and where a specific species was harvested. Retailers and restaurants can feel more assured when claiming a product's sustainability when they have the ability to digitally trace a product to its source<sup>10</sup>.

Additionally, fishers and seafood processors with electronic traceability have more opportunity to prove their sustainable practices to end-buyers that are looking to source responsibly. As a result, those harvesters and processors may stand out to interested distributors and retailers. Then, retailers can stand out to consumers. Some technology and seafood companies, such as **ThisFish** or **Gulf Wild**, are even developing traceability systems that allow consumers to learn more about the origin, and sometimes even the fisher, of their seafood. **Regardless of where a company finds itself across the supply chain, adopting electronic traceability will establish them as one of the leaders in the field.** 

<sup>&</sup>lt;sup>9</sup> <u>Sterling et al. 2015</u>
<sup>10</sup> <u>Sterling & Chiasson 2014</u>

#### **Overcoming Barriers**



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## **Increased Operational Efficiency**

Electronic traceability can ease the storage, sharing, and accessing of relevant data. The ability of electronic traceability to streamline data management can, as a byproduct, increase operational efficiency in such areas as inventory control, quality control, and order fulfillment<sup>3</sup>. Electronic traceability also allows companies to more effectively grade stock and assess quality by monitoring time and location of harvest to track product freshness. Monitoring quality means more control over the price of products so less products go bad on the shelf. Additionally, electronic traceability - full chain or internally within the company - can increase efficiencies to substantially reduce overhead, thus saving the company money.

## "SeaTouch (a seafood software) cut our overhead dramatically while increasing our gross margin," says Atillio Cerqueira, president of Mayport C&C Fisheries<sup>11</sup>.

For Mayport C&C Fisheries, the payback period for implementing SeaTouch (a food management software for the seafood industry) was only four months<sup>11</sup>. For Norpac, a seafood processing and distribution company, electronic traceability helped to identify so many inefficiencies that the number of overtime hours in a month was reduced by more than 90%.<sup>11</sup>

#### The operational efficiencies induced via electronic traceability can ultimately save companies valuable time and money.

A reduction in overtime hours is not the only way electronic traceability can save a company time. As mentioned earlier, electronic traceability allows for faster record recall, assuring food safety and making it easier to generate reports to comply with regulation. Electronic traceability demonstrated its ability to speed up logistics and communications chains for a tuna fishing and processing company in Indonesia:

"Previously, catch information was relayed by radio, manually recorded, and then typed into a messaging application to inform company staff. Time spent by fleet managers to get in touch with the vessel, record, and relay information has now been eliminated."<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Future of Fish's <u>The Business Wins of Seafood Traceability Technology</u>

<sup>&</sup>lt;sup>12</sup> USAID Ocean's Case Study: The Value of Traceability for Business (PT. Nutrindo)



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#### **Tools to Address Cost**

Electronic traceability requires an investment of both time and money. Like many investments, the return may not be reflected immediately. In fact, seeing a return took longer than initially anticipated for many electronic traceability pilots, which is not surprising since increases in operational efficiency do not happen overnight. Rather, a reduction in efficiency may first occur as companies work to train and incorporate the system into their operational infrastructure.

To understand the potential costs and benefits of implementing an electronic traceability system, it's essential to weigh the price of the technology against the expected monetary returns on the investment. For some businesses, traceability costs may be lower than initially estimated. Many companies already have infrastructure to support operations or food safety that, when used differently, can support traceability<sup>13</sup>. If you need help calculating potential economic return on investment (ROI), use the ROI tools featured at the bottom of this blog.

To decrease costs, companies may want to use a request for proposal (RFP) to select a technology vendor. RFPs help to create the best matches between the needs of a company and the capabilities of a traceability technology vendor. Creating an RFP can thoroughly assess a company's needs and clearly articulate the objectives of their proposed traceability system. That, in turn, helps to foster a better pairing with a technology provider that can meet those needs within an outlined price range. Future of Fish has created resources to walk companies through how to craft an effective RFP, featured below.

### **Sharing Information**

We can only continue to learn how businesses use and benefit from electronic traceability if businesses continue to share their experiences. If companies have created a case study for their work in electronic traceability or have improved their traceability system, **let SALT know** and we can feature it on our website.

Multiple organizations are working to study and produce reports on the ecological, social, and economic return on investment of electronic traceability, which means that the field may soon know even more about the breadth of benefits offered by it. In the meantime, more details on the business benefits of traceability from the primary case studies featured above can be found here:

#### CASE STUDY

The Business Wins of Seafood Traceability Technology

Future of Fish 2014

These case studies accompany Future of Fish's 'Getting There from Here: A Guide for Companies Implementing Seafood Supply-Chain Traceability Technology'. This case study series highlights vendor-specific examples of market incentives for traceability, laying foundational evidence for the business wins of traceability technology.

#### CASE STUDY

#### Business Benefits of Electronic Catch Documentation and Traceability Technologies

USAID Oceans and Fisheries Partnership 2020

USAID Oceans has partnered with members of the public and private sectors across Southeast Asia to pilot a range of traceability technologies. This guide presents impact studies from each node of the seafood supply chain, exploring the various applications of eCDT technologies, benefits realized, and recommendations for further enhancements.

## **Contact Us**

If you have a traceability system that has yielded benefits not outlined above - or has failed to see the ones listed above - we'd love to hear from you. <u>Contact us here</u> or reach out at SALT@FishWise.org, as learning is critical to moving the field of seafood trace-ability forward. Stay tuned for our next blog, exploring the barriers and working solutions to interoperability.

#### Resources

Like what you've read so far? Here are key resources to dive deeper into the topics of cost and benefits to electronic traceability:



