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SEA FOOD SOUQ

Ensuring traceability in fisheries

A step-by-step guide to implementing digital standards

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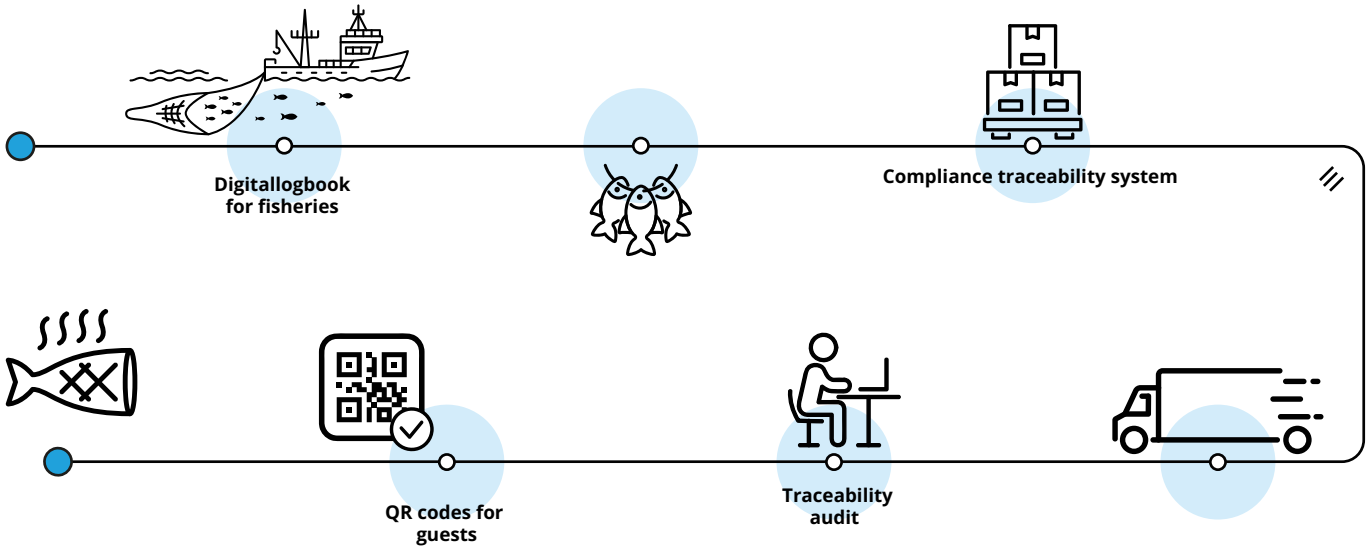
Introduction to Traceability in Fisheries

In fisheries, traceability is essential to guaranteeing that the seafood on your plate is legal, sustainable, and of the highest standard. Transparency about the provenance of our food is increasingly something that consumers demand. Authorities are also taking action by requesting improved monitoring programs that confirm the provenance and care of marine life.

While implementing these systems may seem daunting, they offer tremendous opportunities. The digital transformation of supply chains empowers even smaller businesses to compete on a global scale. Advanced technologies streamline operations, reduce costs, and enhance the efficiency of tracking seafood from ocean to table. This shift to digital not only helps in meeting regulatory demands but also opens doors to new markets, improves customer trust, and drives the fishing industry towards a more sustainable future.

Fisheries often have existing systems in place for managing operations, such as lotting, barcoding, and grading products. These systems, whilst functional, may not fully support the requirements of modern traceability standards. Integrating Global Dialogue for Seafood Traceability (GDST) standards with these existing systems requires a strategic approach. One key tool in this approach is developing a digital logbook.

Implementing a GDST compliant digital logbook



A logbook, traditionally a record-keeping tool used by fishermen to document their daily catch, locations, and other relevant details, is vital for monitoring fishing activities. Transitioning to a digital logbook modernizes this process, allowing for real-time data entry and access, enhancing traceability across the supply chain.

Setting up a digital logbook is a key initial stage for adopting digital traceability. To ensure that the digital tools are user-friendly and meet the needs of all stakeholders—from quality assurance managers to fishermen—a design thinking approach is crucial for the effective implementation and adoption of these technologies.

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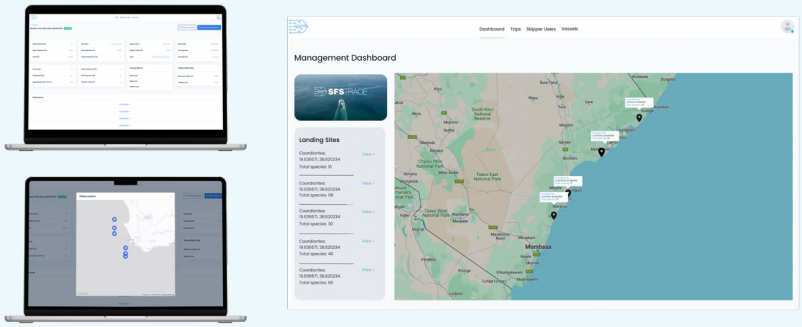
Case study: SFS eLogbook

The SFS eLogbook is a suite of tools that digitizes the traditional logbooks used for regulated species in regulated fishing zones. The eLogbook consists of two main solutions, the operations dashboard and the skippers' app.



The operations dashboard manages trips, vessels and skippers and allows fisheries to manage their whole operations with live data feeds and actionable insights. Additionally, the skippers' app allows skippers to create trips and add fishing events with an easy-to-use experience that works online and offline.

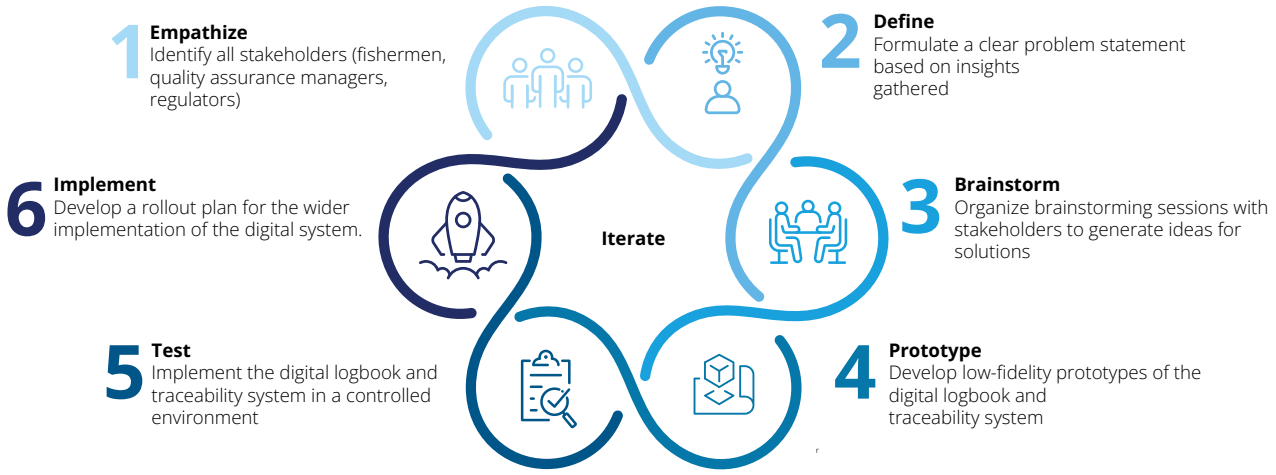
All the data captured by the logbook is GDST compliant and follows the rules and regulation of the Food and Agriculture Organization (FAO) zone, local and regional governing bodies.

To successfully implement an effective digital logbook, the following key steps must be followed:

Stage 1	**Understand**
Action	Understand the diverse fishing techniques, geography specific legal restrictions, and the digital literacy levels of the users. Insights into their challenges, preferences, and requirements should be gathered.
Who's involved	Fishermen, vessel owners, landing site agents.
Stage 2	**Define**
Action	Clearly define the problems, like the complexity of digital tools, the inefficiency of paper logs, or the regulatory constraints in various regions, faced by stakeholders to create targeted solutions. Accurately defining these issues ensures that the digital logbook addresses the real needs of its users.
Who's involved	Fishermen, vessel owners, landing site agents.
Stage 3	**Ideation**
Action	Engage diverse stakeholders in brainstorming sessions to generate innovative ideas and solutions tailored to their needs. This will help ensure the digital logbook is intuitive and user-friendly.
Who's involved	Fishermen, quality assurance managers, regulatory bodies, technology developers.
Stage 4	**Prototype**
Action	Develop simple, functional prototypes of the digital logbook based on the ideas generated. Test these prototypes with real users and obtain feedback on usability and functionality, allowing for iterative improvements.
Who's involved	Fishermen, quality assurance managers, technology developers.
Stage 5	**Test and Refine**
Action	Continuously engage with stakeholders and collect feedback during the testing phase to refine the solution and better meet user needs. This iterative process ensures that the digital logbook is functional and effectively serves its users.
Who's involved	Fishermen, quality assurance managers, technology developers.
Stage 6	**Implement**
Action	Implement the digital logbooks, including ongoing support and training to help users transition smoothly. Ensuring that stakeholders are comfortable and confident with the new system is key to its success.
Who's involved	Fishermen, quality assurance managers, vessel owners, technology support teams.

Monitoring, evaluation, and continuous improvement

After implementing the digital logbook, ongoing monitoring and continuous improvement are crucial. Regular evaluations using KPIs ensure optimal functioning and adaptation to evolving requirements. User feedback and staying updated with technological advancements drive iterative improvements, enhancing data integrity, system reliability, and long-term sustainability of fisheries.



Case Study: The ICV Africa case study: 137,500kg of tuna landed and validated in first 4 months of the pilot project

Background: ICV Africa, one of South Africa's largest Tuna Pole & Line fisheries, has a rich history deeply rooted in traditional fishing practices. The company has consistently upheld the values of responsible and ethical fishing, committing to preserving the ocean's delicate balance.

The challenge: With the increasing regulatory requirements and challenges of scaling operations, ICV Africa took the initiative to digitize their operations as the existing paper-based system was cumbersome and prone to errors.

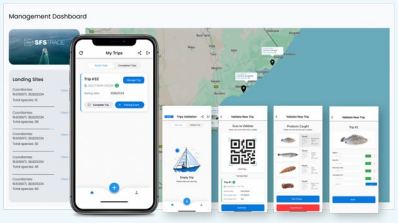
The solution: In collaboration with SFS Trace, the first GDST-compliant digital logbook for fishing vessel operations was developed. This digital logbook revolutionized ICV Africa's operations by digitizing paper records, managing vessels and permits, and enabling electronic submissions of compliance data and landing declarations.

Results: The digital transformation led by SFS Trace yielded significant benefits for ICV Africa: streamlined operations, ensured GDST compliance and MSC certification, enabled expansion into new markets, enhanced traceability and transparency, and created a scalable model for future growth.

Pilot success: The first fishing season with the digital logbook was a success with the following insights:

- Onboarded 41 fishing vessels
- Logged over 50 trips and 150 fishing events.
- Traced more than 137,500 kg of tuna
- Secured MSC certification for ICV Africa

Conclusion: The partnership between ICV Africa and SFS Trace exemplifies how traditional fishing practices can be harmonized with modern technology to achieve greater efficiency, compliance, and sustainability.



Future Outlook

Embracing digital traceability standards ensures sustainability, legality, and quality in fisheries' operations. Technologies like blockchain, AI, and IoT can enhance traceability systems, making them more efficient and reliable. Continuous improvement and innovation are key to maintaining effective traceability systems and meeting the expectations of consumers and regulatory bodies.

By adopting digital standards and leveraging modern technologies, fisheries can ensure a sustainable and transparent future for the seafood industry.

Authors:

Osama Al-Muqbel | Chief Technology Officer (CTO)
Seafood Souq
osama@seafoodsouq.com

Aindrea Sewell | Head of Data
Seafood Souq
aindrea@seafoodsouq.com

Laura Jepson | Partner
Monitor Deloitte
LJepson@deloitte.com

Jassim Bangara | Senior Manager
Technology Strategy, Deloitte Middle East
jbangara@deloitte.com

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