

Practice Abstract

Combating the counterfeiting of Norwegian white fish through blockchain

Description

The Watson project aims to combat the counterfeiting of Norwegian white fish by developing a blockchain-based platform that ensures product authenticity and quality.

The platform will secure data sharing through blockchain technology, collect real-time data from IoT sensors, and provide reliable access to this data via non-copyable labels, such as QR codes and near field communication (NFC) tags. These measures will ensure that all information is exchanged securely across the supply chain, maintaining privacy and security.

The main practical recommendation for fishers and end-users is to implement this blockchain solution to guarantee the origin and quality of their fish products. By adopting this technology, stakeholders can prevent species substitution and adulteration, ensure ethical trade practices, and meet the environmental standards necessary for global export.

The solution offers substantial benefits to practitioners. The platform expected to slash the number of illegally sold fish by over 70%. Additionally, maintaining the cooling chain will boost fish quality by more than 60%, and the traceability feature is projected to increase consumer willingness to pay more for authenticated fish by over 30%. An increase in turnover of 15% outside the EU and 7% within the EU are also expected. Practitioners can leverage the secure labels and IoT sensor data to track and verify the fish's journey from the sea to the consumer. This comprehensive approach will not only improve product quality and safety but also foster stronger trust among stakeholders.

The result will be an overall enhancement in the efficiency and profitability of the seafood supply chain, meeting the needs of all involved parties.

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Stakeholders

Food Industry
Food Safety Authorities
Policy Makers
Consumers
Academic and Research
Community
Industry Association
Trade Organizations
Technology and Data
Analytics Experts
Supply Chain Partners

Country

Norway



A holistic frameWork with Anticounterfeit and inTelligence-based technologieS that will assist food chain stakehOlders in rapidly identifying and prevenTing the spread of fraudulent practices



About Watson

Watson is a 3-year project funded by the Horizon Europe programme, aimed at tackling fraudulent practices in the food supply chain. Our interdisciplinary consortium of 47 partners from 20 EU and non-EU countries is collaborating to develop a holistic traceability framework that integrates data-driven services, intelligence-based toolsets, and risk-estimation approaches, enabling food safety authorities to detect and prevent food fraud more effectively.

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