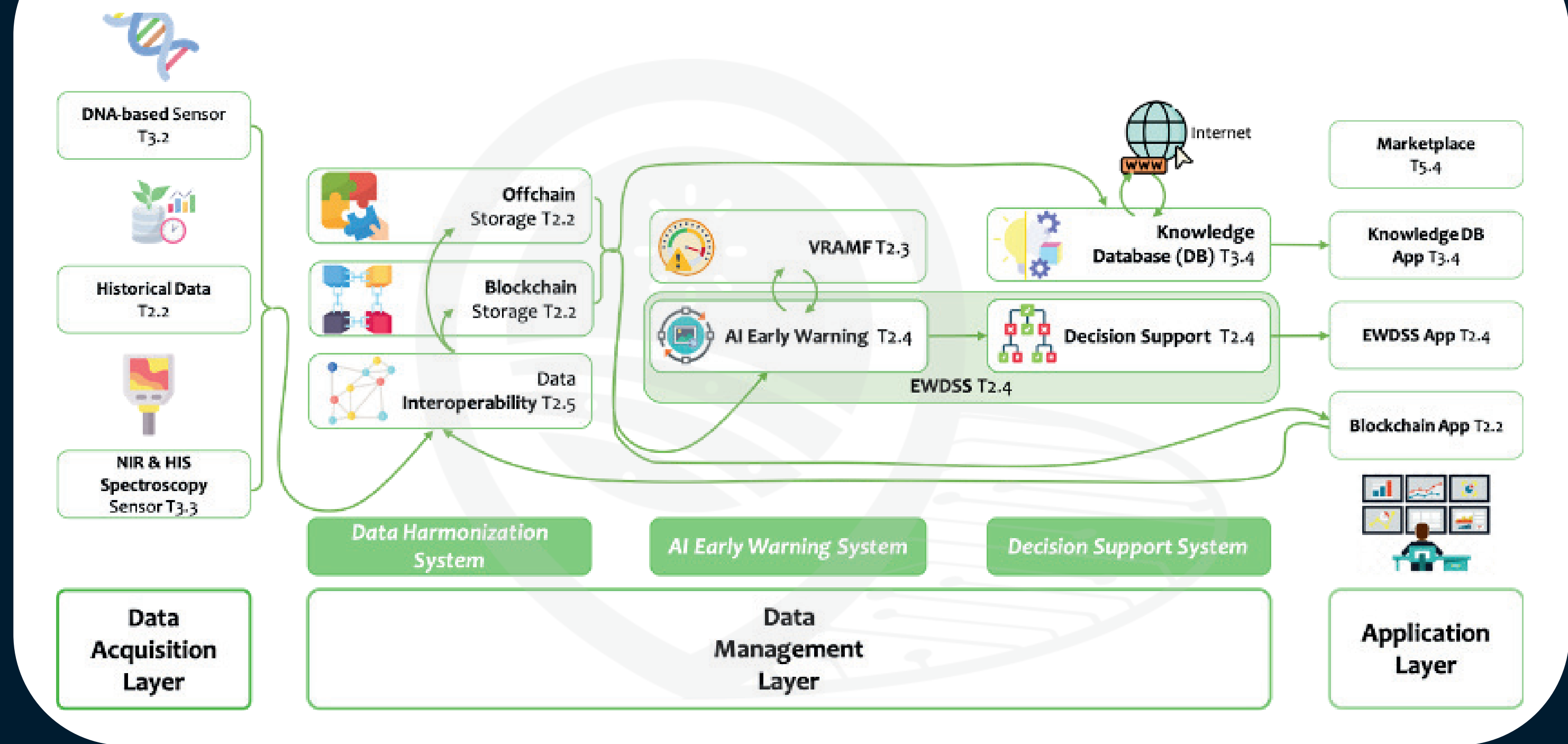


Aims

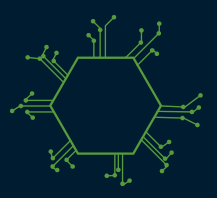
ALLIANCE will provide a holistic framework that safeguards **data integrity and veracity**, enhances **traceability and transparency** and reinforces **interoperability in quality labelled supply chains** of organic, PDO, PGI, and GI foods through innovative technology solutions.



Reference architecture



Key Offerings



Blockchain Technology

Enhancing traceability with tamper-proof records, enabling transparency and verifying authentication of claims



Next-Gen Portable DNA Sequencing

For verification of the geographic origin of EVOO utilizing specific genetic markers confirming the authenticity of the product



Advanced Spectroscopy

Providing precise, rapid, and reliable analysis of Faba beans, ensuring their authenticity and safety throughout the value chain



AI Early Warning System

Analyzing data performance metrics from various steps in the food value chain and detecting patterns and anomalies indicative of food fraud in real-time, offering timely decision-making to food actors



Predictive Analytics

Forecasting future risks with historical and real-time data analysis and identifying high-risk areas to proactively countermeasure vulnerabilities in the supply chain



Digital knowledge base

Providing and sharing comprehensive information on food products, supply chain practices, and known fraud incidences, informing involved stakeholders and actors

7 Demonstrators



Validating authenticity of PDO/PGI Extra Virgin Olive Oil through portable DNA fingerprinting



Registration of milk information on blockchain for increased traceability of PDO Feta Cheese



Building a digital knowledge base for Organic Honey combining in-hive sensors and lab tests



Portable NIR devices to detect bean substitution in the IGP Faba de Asturias supply chain



Improving transparency and traceability of PGI Lika Potatoes via a blockchain-based data storage



Multi-residual analysis to detect pesticides and prevent mislabelling of organic pasta



Blockchain-enabled traceability systems for the PDO Arilje Raspberries Food Supply Chain



Partners



Funded by
the European Union



linktr.ee/alliance_eu



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101084188