

## Agenda:

- → Introducing the team & Advisors
- → Fraud problem in food & CPG industry
- → Tracifier solution overview & benefits
- → FDA strategies for the smarter food safety
- → Use Case with GALAB Laboratories GmbH
- → Document and process flow sing Tracifier Blockchain
- → Technical architecture on Oracle Blockchain Platform
- → Tracifier solution demo

#### Introducing The Team

We have generated €5m annual revenue on food manufacturing and export during three years from 2012-2015

Mina Kordi CEO and Co-founder



International Marketing and business consultant with six years experience

mina.kordi@tracifier.com

Jako Kordi COO and Co-founder



Food technologist and quality control manager with ten years relevant experience

Jako.kordi@tracifier.com

#### Joost Volker



EMEA Blockchain Domain Leader at Oracle



#### Mark Rakhmilevich



Senior Director, Oracle Blockchain Product Manager



#### Dr. Jürgen Kuballa



CEO and founder of GALAB Laboratories GmbH



#### Trusted by:

Advisors







# \$50b

Annual global business of food fraud

#### The Problem

Fraud in products and certificate impact the food sector

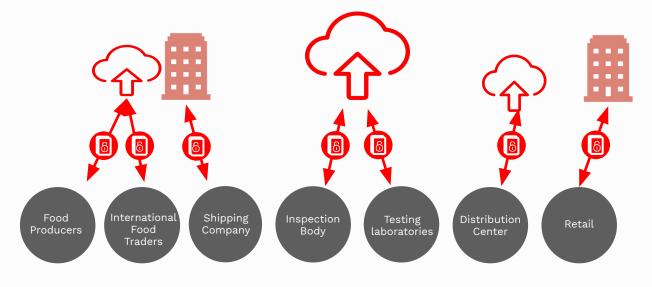
\$10m

Direct cost of food recall for one product for manufacturers

5% Lose

Companies lose 5% of their annual gross revenues to Fraud

A disconnected supply chain network makes it easy to fake paper-based documents



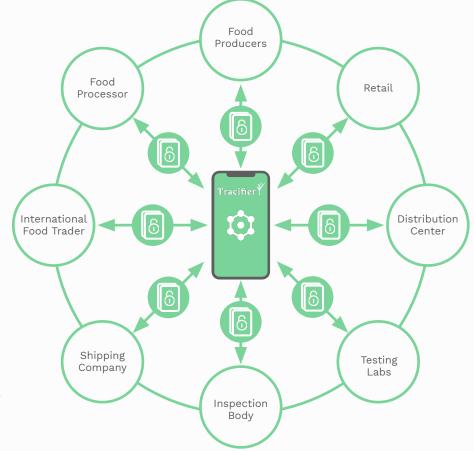
82%

of global companies were impacted by product and certificate fraud in 2018-2020

#### The Solution

Tracifier turns the stacks of documents across many siloes into an intelligent network that identifies the transferred documents and triggers corresponding actions

- → Distributed ledger technology
- → Encrypted for confidentiality
- → Immutable and non-repudiable
- → Maintained via smart contracts



Tracifier creates a single source of documents — Accessible to stakeholders via a simple user app



# FDA strategies for the smarter food safety

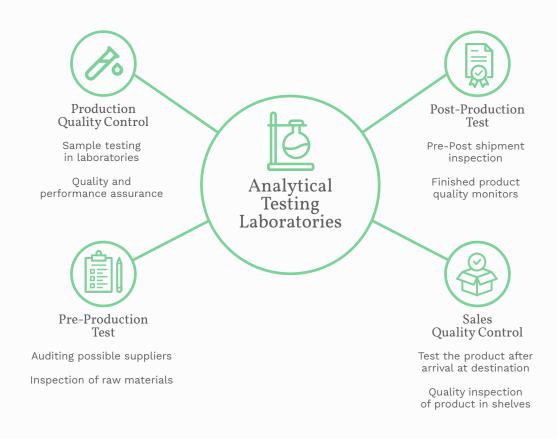
- Food Defense
   Mitigation strategies to protect food against intentional adulteration
- Food Safety Modernization Act (FSMA)
   Preventing intentional adulteration
   from causes wide-scale harm to
   public health

Four foundational pillars of the recent FDA Blueprint for the New Era of Smarter Food Safety:

- Tech-enabled Traceability
- Smarter Tools and Approaches for Prevention and Outbreak Response
- New Business Models and Retail
   Modernization
- Food Safety Culture

#### We start by tracking food certification at analytical testing laboratories

Laboratories are the trust anchors in the food production chain and partnerships with them are key to growth





#### GALAB Laboratories GmbH

Galab Laboratory GmbH, located in Hamburg, is the biggest independent service laboratory for external quality control. GALAB analyse and evaluate food, industrial products, biopharmaceutical products or the environment for substances or contaminants.

## Toward Laboratory 4.0

GALAB aims to use the blockchain technology:

- To detect and kill frauded Testing Certificates in the market
- To speed up communication with customers in real time
- To enable faster action on safety concerns with surgical-like precision food recalls









#### Two main service in focus



Analytical Testing Certificates





Sampling and Inspection Services



Testing product and release quality certification





Sampling is the taking of a representative sample from a batch according to a specified procedure.

https://galab.com/

# **Analytical Testing Certificates**





Testing products and releasing quality certification





https://galab.com/

### Sampling and Inspection Services





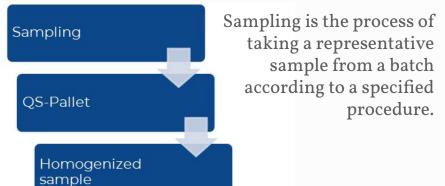








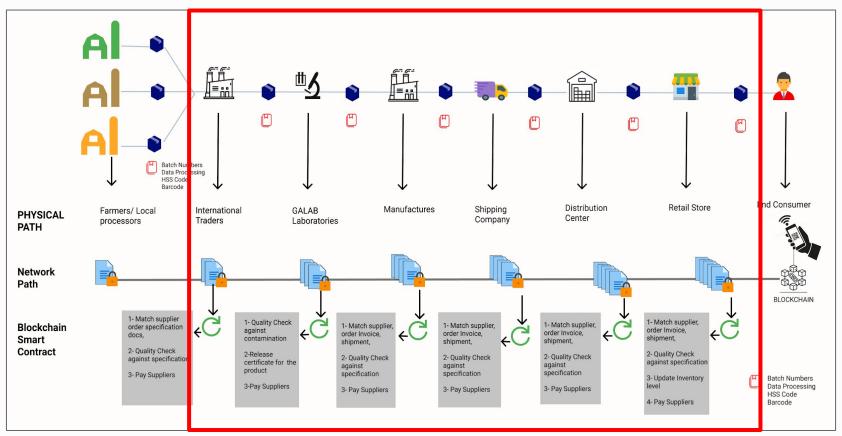




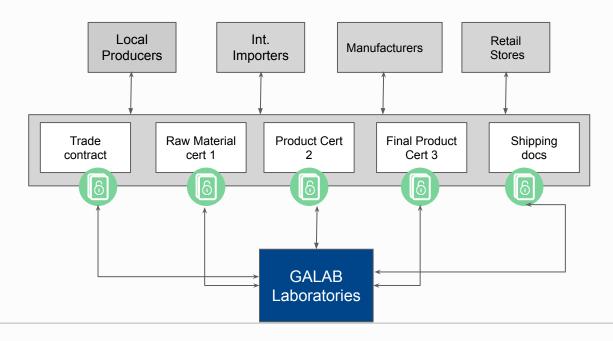


https://galab.com/

## The Ecosystem of the GALAB Consortium



# Documentation Process flow using Tracifier Blockchain Solutions



Blockchain:

Near real-time updates of documents.

Cryptographic proof of trust replaces intermediaries.

Shared & transparent data access.

Automated and tamper-proof audit of all data

# The Technology:

Simple. Swift. Secure.



Tracifier is built around a blockchain core, powered by **Oracle Blockchain Platform** 

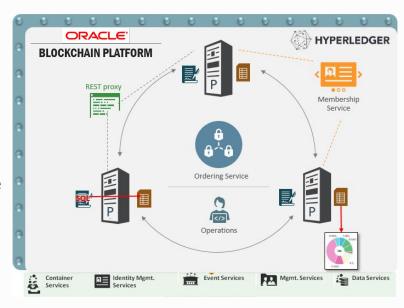
Hyperledger Fabric addresses the resiliency, flexibility, scalability, performance and confidentiality challenges by separating the transaction flow into three steps:

- execute a transaction and check its correctness, thereby endorsing it,
- order transactions via a (pluggable) consensus protocol, and
- validate transactions against an application-specific endorsement policy before committing them to the ledger

## Deploying on Oracle Blockchain Platform

Pre-assembled, managed service. Rich integrations. Enterprise production-ready.

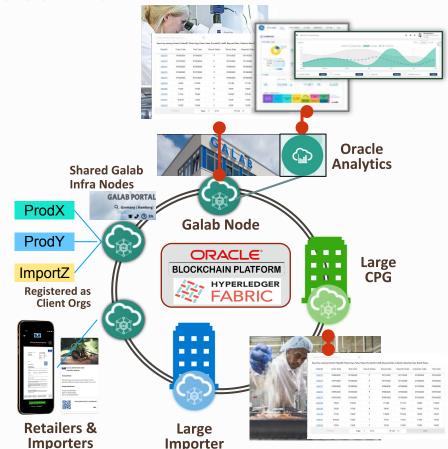
- Simple and quick deployment in the Cloud, On-Premises, or hybrid
- Oracle-managed or customer-managed options
- Interoperable with 3<sup>rd</sup> party Fabric nodes
- API Gateway for REST-based and Event-driven, bi-directional integrations
- Many enterprise adapters for rapid connection with Oracle and 3<sup>rd</sup> party ERPs
- Integrates with Analytics/BI for real-time dashboards and visualizations of on-chain data
- Dynamic scalability and built-in HA
- Strong security and simplified member on-boarding



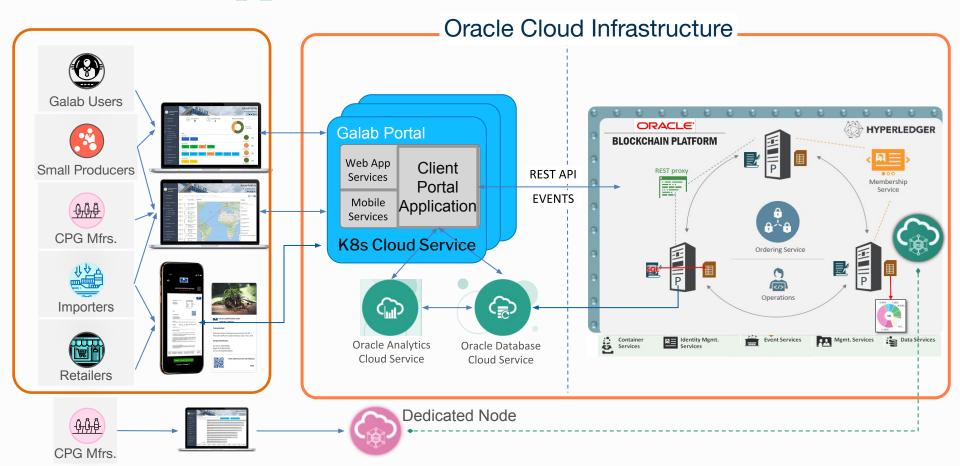
#### Tracifier Network Architecture:

Flexible Enterprise Blockchain Network

- Dedicated and shared nodes
- Portal-based registration and on-boarding of smaller producers and importers using Oracle Identity Management
- Mobile and Web-based front-end
- Using channels to isolate
  - Certification order tracking, samples, and fulfillment
  - Certification issuance and verification linked with reports



### Tracifier Application Architecture



Tracifier process flows Sample Local Importer or Producer Shipment Test Lab Retailer or Final **Product Importer** Test Work Order & Results Report & Certificate **Test Cert** Request Certificate Check Orders Shipments Reports Invoices Certificates LAB HQ Report & Certificate Additional GALAB LABORATORIES GMBH HAMBURG, GERMANY Testing Method: Pesticides Scope of substances and methods. GALAS **CPG Manufacturer** Pesticides 500Plus® complex matrices, dated 1 Nov. 2019. Sample Identification: Certificate Check Sample ID: 2020106866 Report ID: P2020106380 LOT ID LDF5236954756DFA PROF CERTIFICATE OF THE PRODUCT

