FARZATI spa
research | develop | innovation

Beyond traceability

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ISSUES

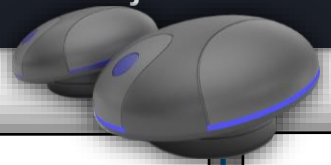
numbers	**67€ billions**	**40€ billions**	**60-100M recalled product**
	sales generated by **IMITATIONS**	impact of **FOOD FRAUD** in terms of cost	recalls due to **CONTAMINATION**, **PRODUCTION ERRORS**, and **LACK of VERTICAL TRACEABILITY**
challenges			
	ensuring **TRANSPARENCY** in the Supply Chain	develo gainst **FR N**, and **ITALIAN SOUN G**	developing support **SUST CES**

THE SOLUTION

Farzati has developed **BluDev®**, a proprietary technology (3 patents) that revolutionizes analysis and traceability systems.

beyond spectrometry BluDev® is a molecular sensor	**'AI' inside** digital bio finger print	**effective & timely** analysis results are available in real-time	**tamper-proof** all data are notarized in blockchain
BluDev® uses a near-infrared spectrometer, allowing qualitative, quantitative, and structural chemical analyses in operational conditions where traditional analytical methods are ineffective, **It's non-destructive and non-invasive and does not use reagents**	BluDev® employs a neural network trained on the matrices to analyze, precisely recognizing compounds, their properties, and characteristics, and creating the digital twin of the matrix **(Digital Bio Fingerprint).**	BluDev® enables material analysis directly on production lines and in mobile settings. Analysis results are available in **real-time**.	The Digital Bio Fingerprint is registered on **BLOCKCHAIN**

TRACEABILITY | from standard to objective



before BluDev®

Standard traceability, quality assurance, and control systems rely on auditing, validation, and certification processes based on documentation and voluntary declarations.

Industry	Example Systems
Food	HACCP, ISO 22000, BRCGS, IFS
Pharmaceutical	GMP, GS1 Standards, ISO 22716
Agriculture	Global G.A.P., USDA Organic Certification
Automotive	ISO/TS 16949, AIAG Standards
Textile and Apparel	OEKO-TEX Standard 100, GOTS
Technology and Electronics	RoHS, ISO 9001
Environmental	ISO 14001, EMAS
Healthcare	UDI, ISO 13485
Supply Chain and Logistics	GS1 Traceability Standards, ISO 28000
Fisheries and Aquaculture	MSC, ASC

after BluDev®

BluDev® evolves traceability from being primarily documentation-based to became objective and data-driven.

Standard traceability faces the problem after it occurs, BluDev® prevents the problem from occurring.

“We certify the content, not the label”

COMPETITIVE ADVANTAGE

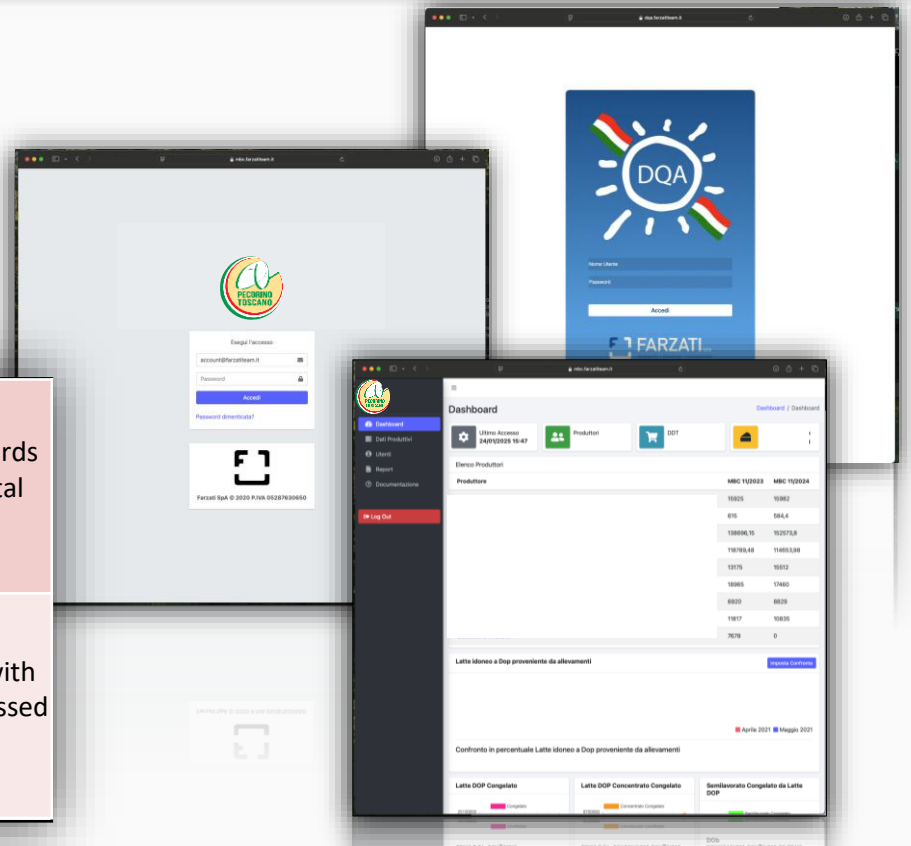
BluDev® surpasses the limitations of traditional tools for measuring organic and inorganic compounds, including spectrometers

Efficient	It does not require constant calibration, only initial neural network training on matrix var
Discerning	It recognizes the compound, not just its characteristics.
Accurate	It is precise and reliable.
Continuous	It performs continuous analysis on production lines.
Compact	Its dimensions can be compressed to the size of a tennis ball.
Versatile	It is applicable to an extraordinarily wide range of scenarios.

BUSINESS CASE
TRACEABILITY PLATFORM

Farzati has developed a software platform enabling complete traceability across production chains, already adopted by the consortia protecting **Pecorino Toscano DOP**, and Mozzarella di Bufala Campana DOP

and by the leading national certification and inspection bodies, such as D.Q.A, C.S.Q.A, QUALITALY, IZSM, IZSLT.



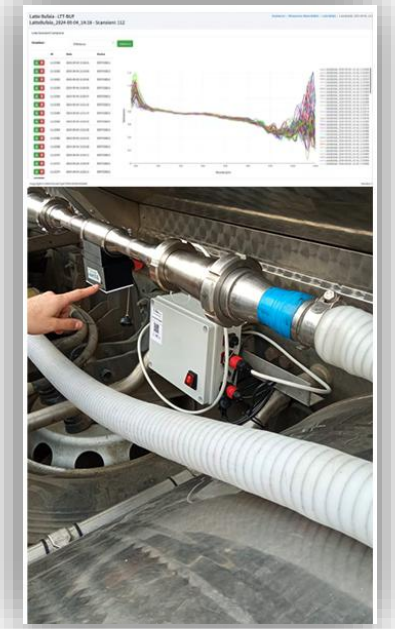
GOALS

The platform is managed by Farzati on behalf of the Consortia and records every step from raw materials to finished products and creates a 'digital passport' certifying product quality, origin, and sustainability.

In the Pecorino Toscano DOP supply chain, the platform is integrated with BluDev® to trace the organoleptic characteristics of collected and processed milk, combating counterfeiting.

BUSINESS CASE

WORKFLOW



MACHINE LEARNING & TRAINING

DIGITAL BIO FINGER PRINT

1
Sampling by BluDev®

AI

FBdev®

2
DBFP Definition

BC

BluDev®

3
Record DBFP in Blockchain

Blockchain

FBchain®

BUSINESS CASE

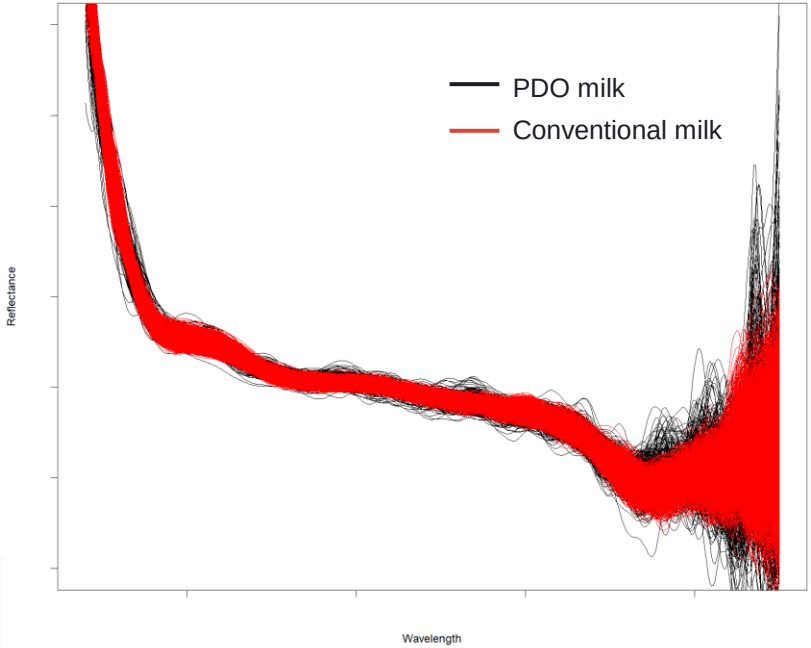
Italy vs Other Countries
(France, Spain)

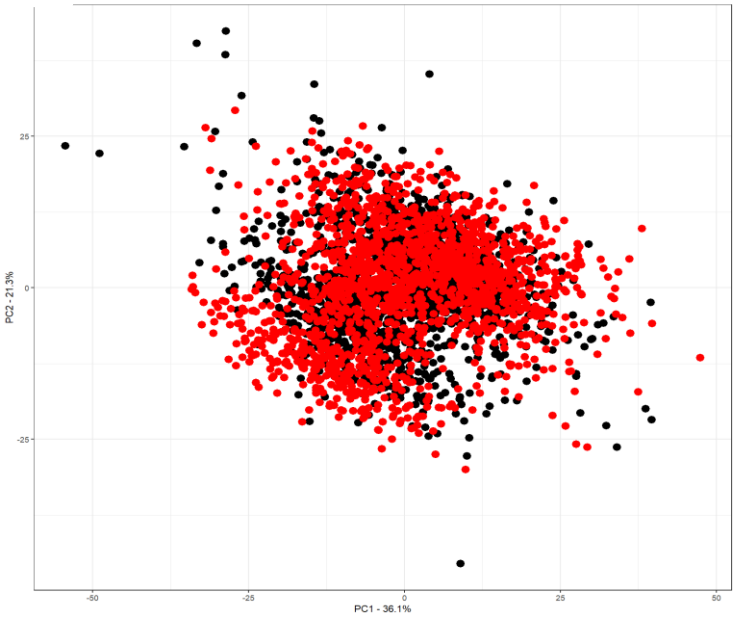
→

PDO milk vs Conventional milk

→

Three areas
(Siena, Grosseto, Viterbo)



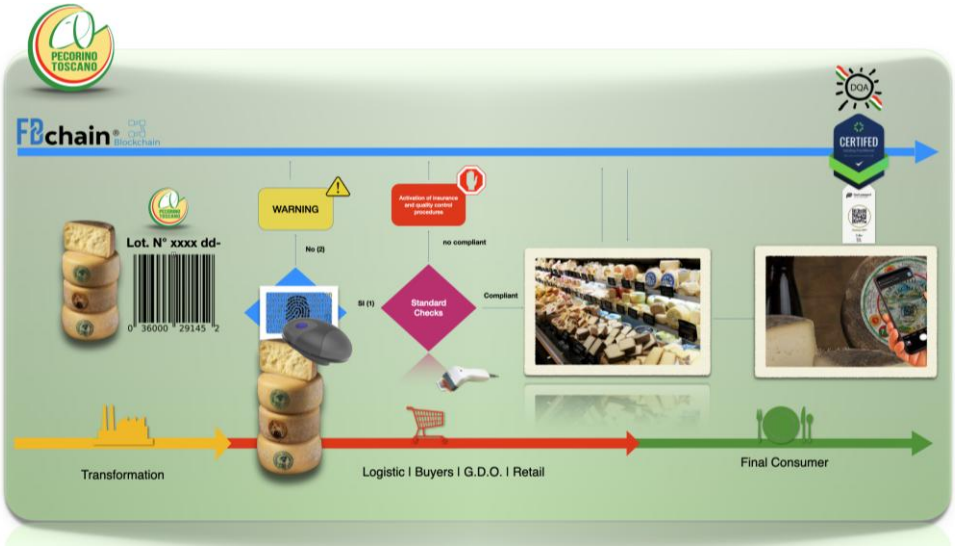


BUSINESS CASE

GOALS

Supply chain tracking can make the difference between virtuous farmers and counterfeiters.

SUPPLY CHAIN VIA BLUDEV®



MEET THE TEAM

Founders
Antonella Farzati, *CEO*
Giorgio Ciardella, *CTO*

Management
Andrea di Stefano, *CCO & ESG Expert*
Attilio Mondelli, *Project Manager*
Enrico Famiglietti, *Project Engineer*
Aurelio Latella, *CFO*

Executives
Arianna Papa, *Biologa molecolare*
Alfonso Positano, *Sviluppo prototipi*
Domenico Cascone, *Data scientist*
Gianluca Sansone, *Tecnologo medico*

Operational staff
Antonio Farzati, *agronomo e tecnico di laboratorio*
Nicola Aversa, *sviluppatore software jr.*
Giuseppina Feo, *amministrazione e contabilità*
Samuele Baratta, *tecnico specializzato*

Join the future, Join

BluDev®

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