

BLOCKCHAIN TECHNOLOGY FOR FOOD



VIDA

value-added innovation  
in food chains

Edoardo Misino - Project manager



# Foodchain: Company Presentation

1. In 2012, we started the phase of research and development working towards the creation of an advanced digital tool able to track and trace assets and monitor transactions.
2. In 2016, Foodchain<sup>®</sup> S.p.a. has been established.
3. Today we are 20 passionate people work everyday to tell the story of every product, using the power of blockchain technology.





# Foodchain



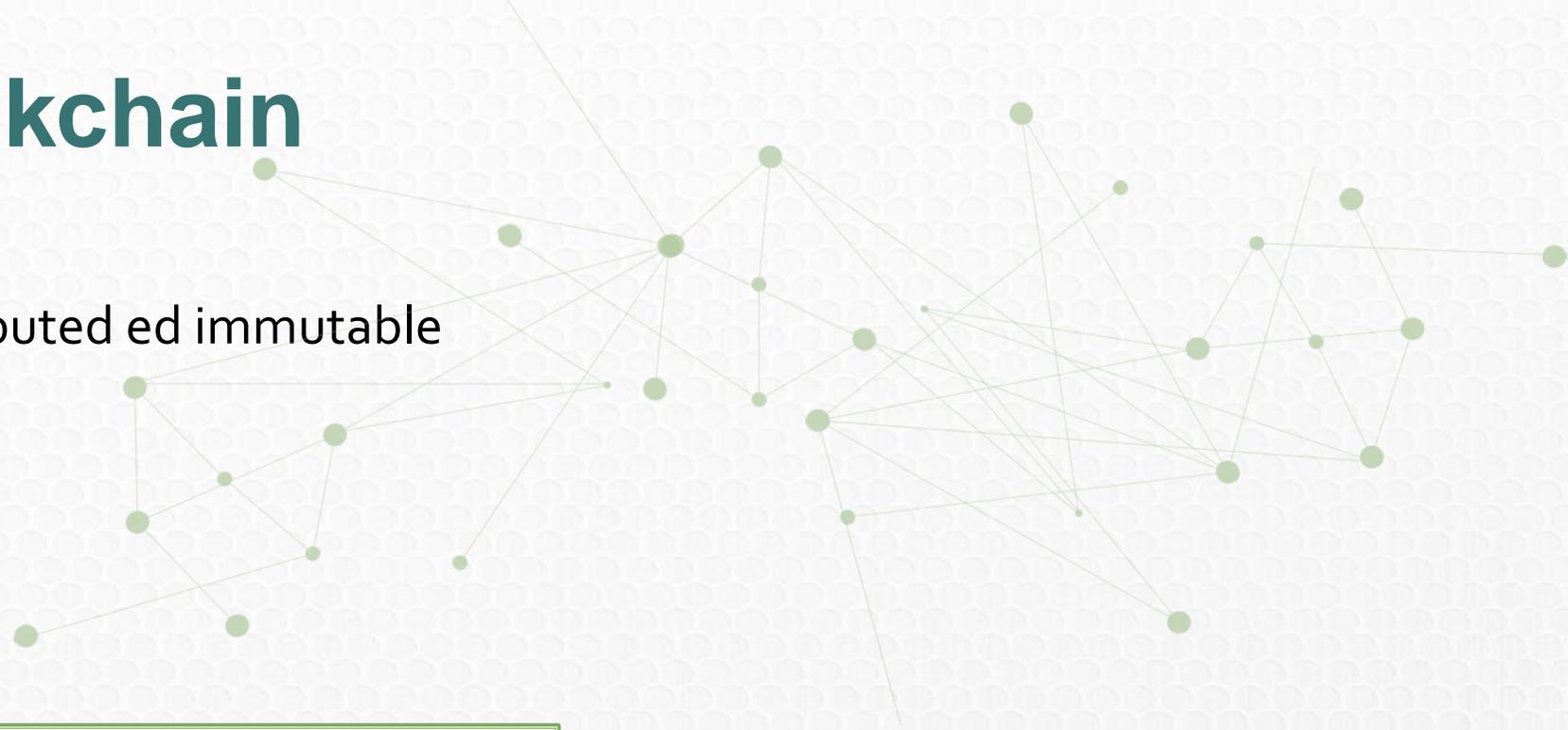
**The revolution begins from the fields**





# What is Blockchain

- Public Register, distributed and immutable
- Peer-to-Peer nodes
- Unique Id



**Blockchain is...  
THE NEXT BIG THING**

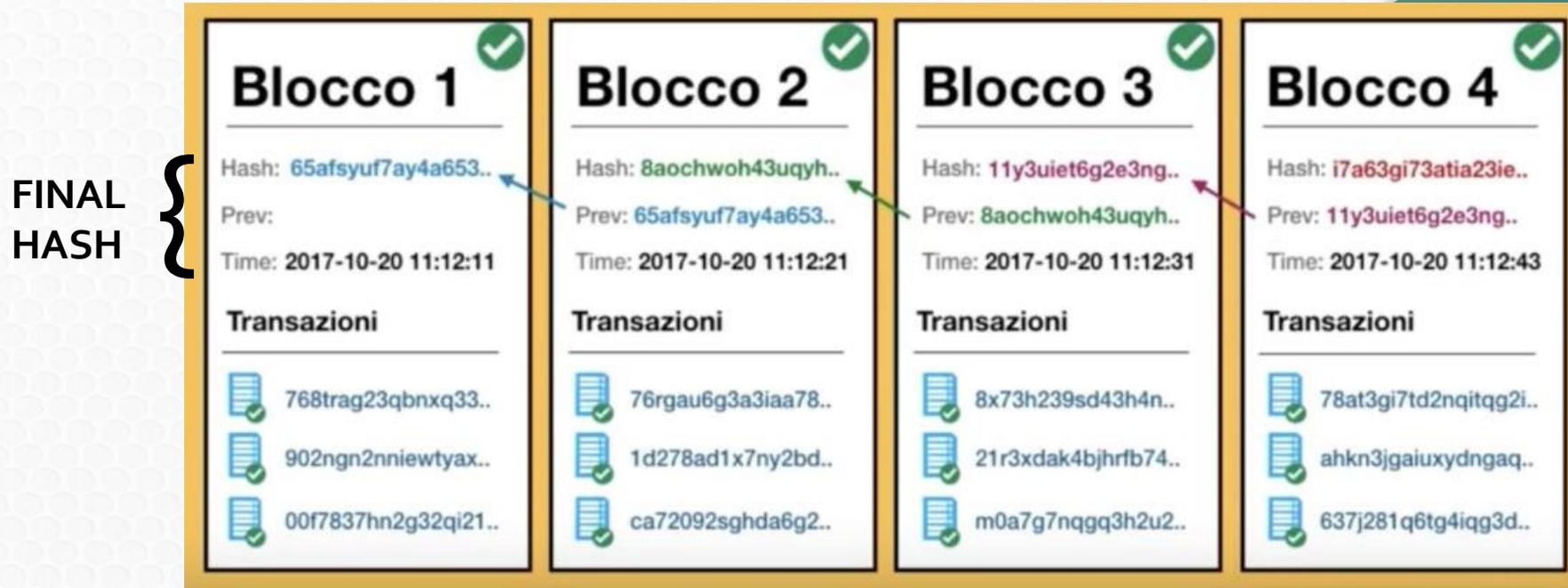


# Foodchain: Type of blockchain

<i>Public</i> ✓	<i>"Private"</i> ✗
Decentralized	Centralized
Transactions verified by public consensus	Transactions verified by private consensus
High transparency	Low transparency
Strong immutability	Low immutability



# Blockchain → Chain made of blocks



- Each block contains transactions.
- When a block is closed, it is bound to the following block with its unique hash.
- Each transaction is serialized.



# Blockchain today

**Blockchain 1.0: Cryptocurrencies**

**Bitcoin**



**Blockchain 2.0: Smart Contracts**

**Insurance, banks**



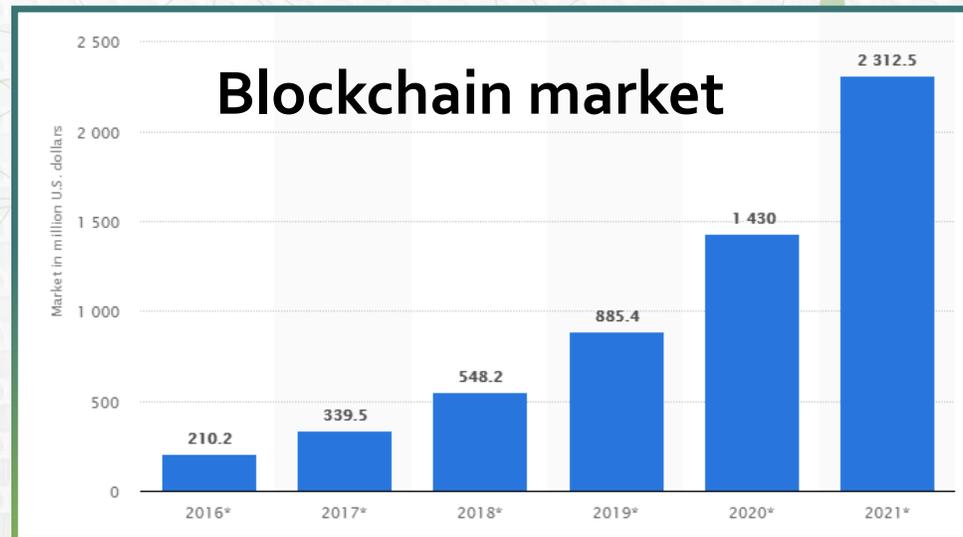
**Blockchain 3.0: dApps**

**DEX**



**Blockchain 4.0: Industry 4.0**

**Foodchain**



Source: [www.statista.com](http://www.statista.com)

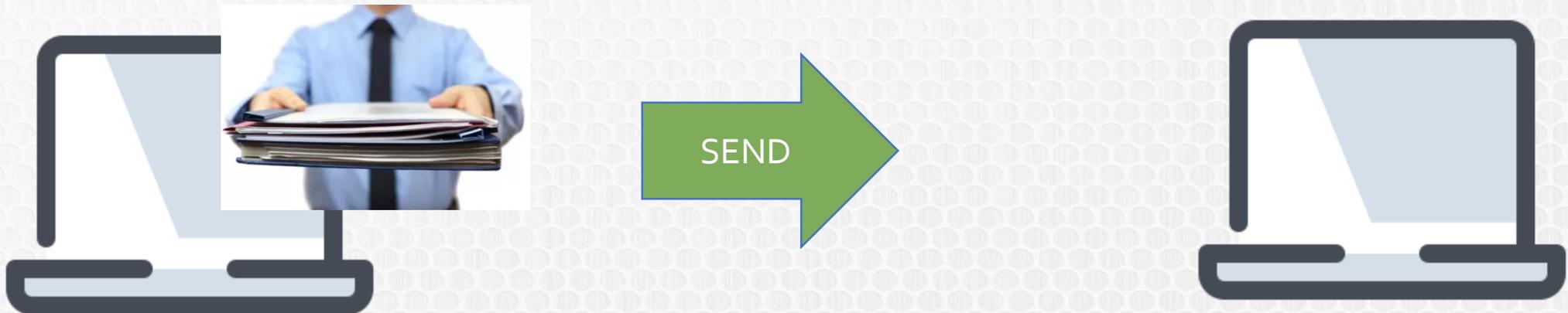


# Blockchain: the “new” Internet

## “Old” Internet : Copy Information (2 Copies)



## “New” Internet : Send Information (1 Copy)





# Foodchain Model



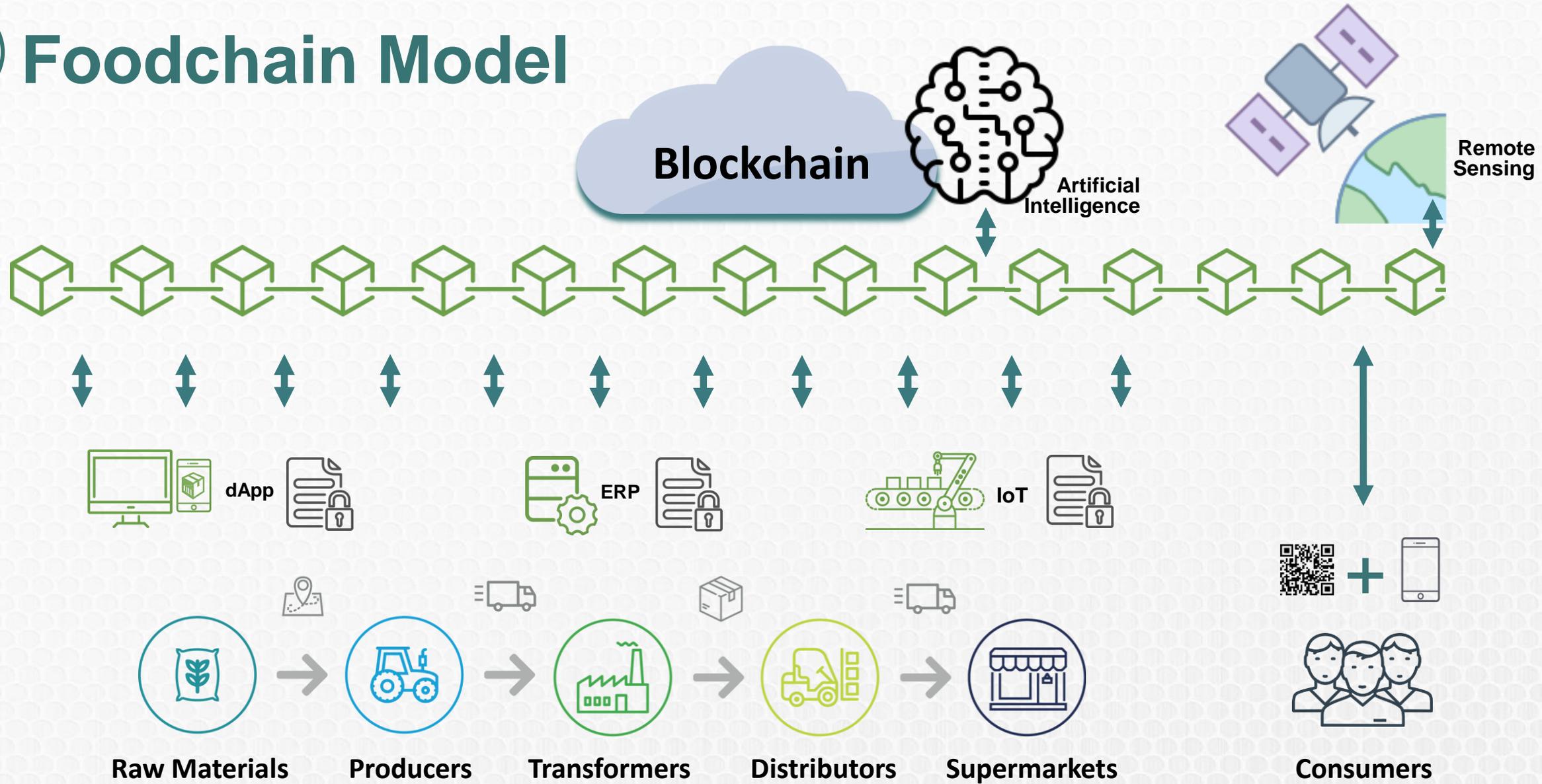
Foodchain® **tracks** and **traces materials and products** using *blockchain* technology to store **information** to create the digital twin.

=

**DIGITAL TWIN**



# Foodchain Model





# Foodchain architecture



DApp



Miners



QR



Software



Nodes



NFC



IoT



Smart contracts



RFID



Mobile Tablet

Company

Network Foodchain

Smart labelling

Consumers



# Foodchain Example: Coffee, traceability & storytelling



Powered by  
**Foodchain**

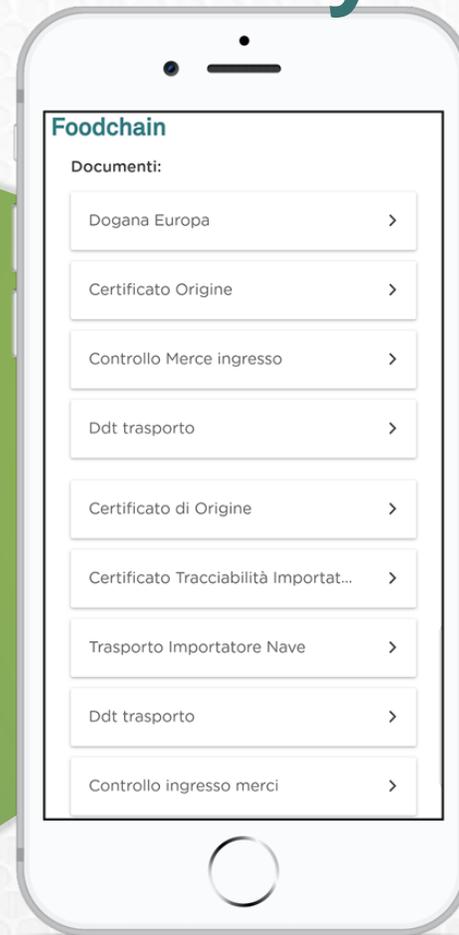
Inquadra il QR-code e scopri la storia di:

Reale PP

Lotto-11/2018-100

Scadenza: 12-2019

amarezza





# Foodchain challenge

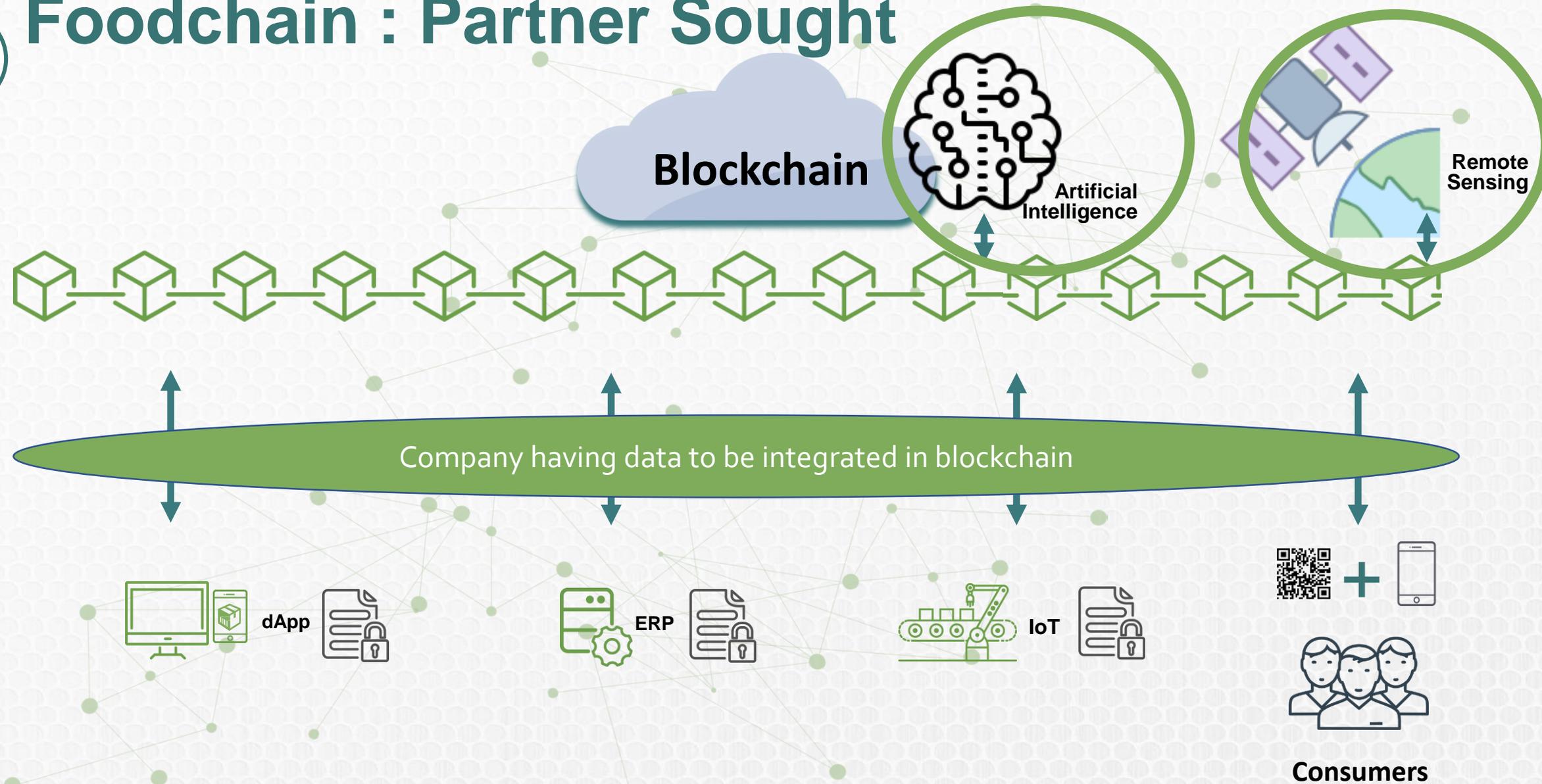
**Let's give to the people the information they want  
about what they eat.**

**Let's give to companies information about their  
consumers.**

**Let's give Value to the food we eat.**



# Foodchain : Partner Sought



# Foodchain<sup>®</sup>

Each product tells a story





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## Q & A

Edoardo Misino

[edoardo.misino@foodchain.it](mailto:edoardo.misino@foodchain.it)  
[info@foodchain.it](mailto:info@foodchain.it)

**Foodchain SpA**

Via Cavour, 2 – 22074 Lomazzo (CO)

CF – PI 03648070138

