



EUROPE INTERMODAL 2019

Beyond the Blockchain hype: low-cost & open-sourced technology is available to ensure data integrity and trust in supply chain coordination

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Head of Global Trade & Supply Chains,
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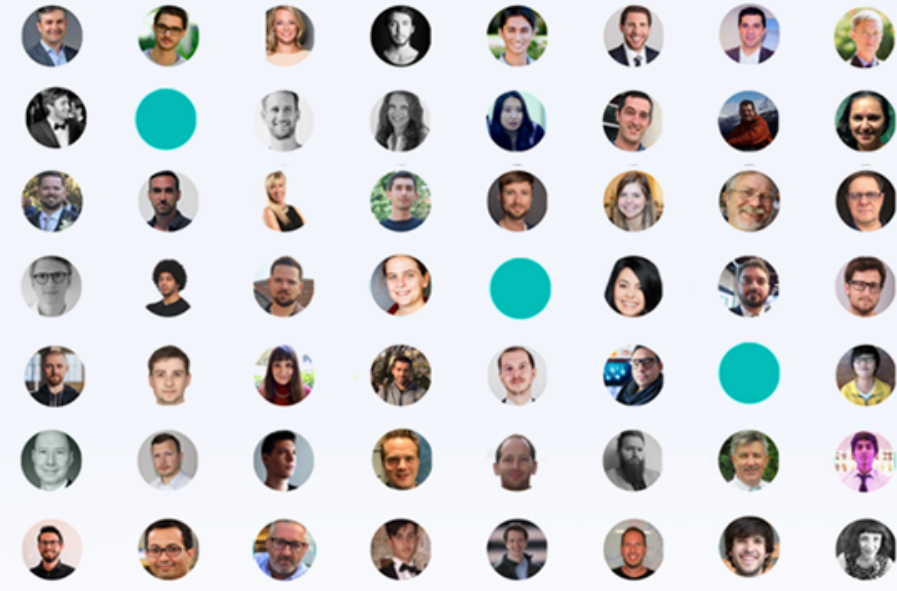
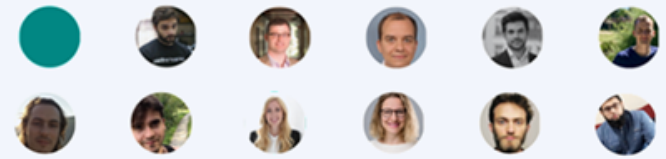
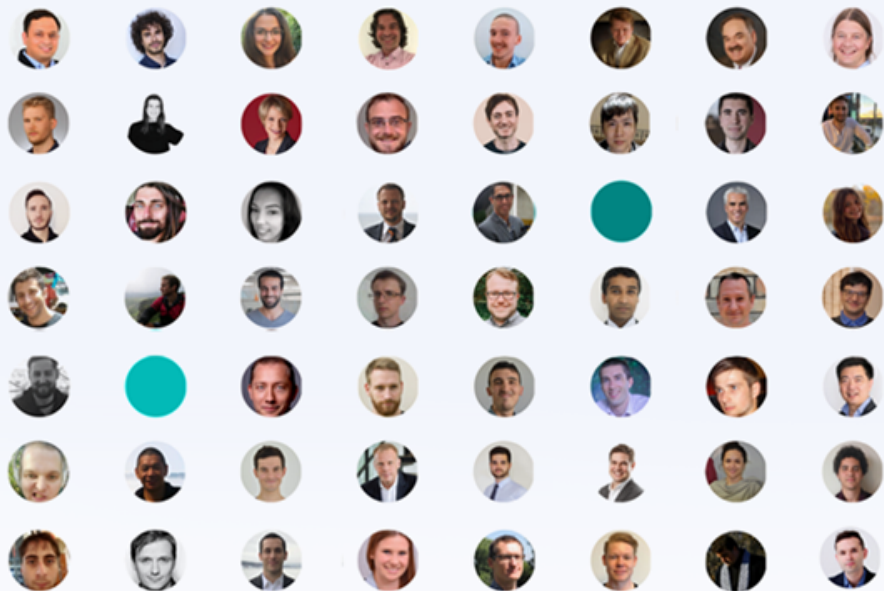


Jens Munch Lund-Nielsen

Head of Global Trade & Supply Chains,
IOTA Foundation

- Experience from Maersk, PwC, NGOs on strategy, new ventures, digitalization and sustainability
- Danish, live in London, worked globally
- Advisor to UK Parliament on Blockchain, advisor the World Economic Forum's "Blockchain for supply chains", advisor to the IBCS Group
- Executive MBA, INSEAD & Master in Philosophy, Copenhagen University





The IOTA Foundation

Non-profit Foundation based
and regulated in Berlin,
Germany



Growth from 4 to **100+ full time employees** across 23 countries

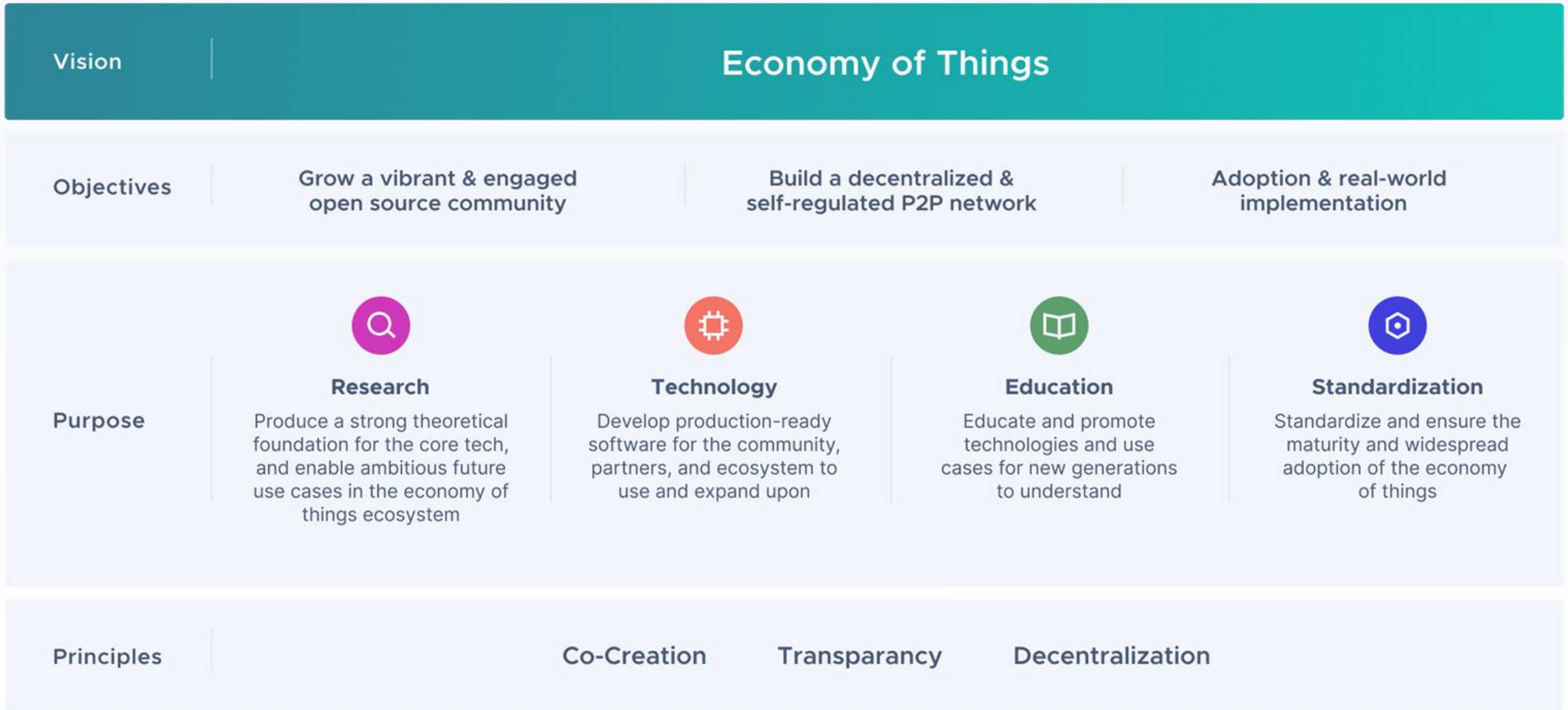


\$40m+ in funding



Focused on Technical and Regulatory Challenges of Crypto-Currencies & DLT

The IOTA Foundation is working towards a big vision



Building a digital trade pipeline in East Africa

- in partnership with Trademark East Africa, Kenya Revenue Authorities and industry players

The data pipeline will be used to manage cross-border trade processes to make international trade a truly digital experience.

- **Be owned collectively:** *“For our region, we want a platform that is owned and managed locally by local stakeholders and the government”*
- **Accommodate current infrastructure:** *“Any electronic solution should be able to communicate effectively with all systems”*
- **Authenticate trade documents:** *Provide the technology to authenticate that trade documents/data (Certificate of Origin etc.) are authentic and haven’t been forged.*



The innovation

Building on existing infrastructure - only to add the available innovation of DLT



Principle of data generated at source

By using DLT, we ensure data is generated at source - giving trust and accountability to information



Single-version-of-truth

Enable a shared Information Pipeline where all actors can have higher visibility on consignment status and trade certificates.



Authentication of trade documents/data

Provide the technology to authenticate that trade documents/data (Certificate of Origin etc.) are authentic and haven't been forged

Why the Tangle (IOTA)

A number of features were critical in the choice of underlying technology



Data management

No central database - full control reside with data owner (as well as accountability)



Security

The protocol use encryption and quantum-secure principles to ensure highest level of security



Open source

The technology is open source and freely available for all - making the cost of implementation low



IOTA Tangle Technology

Overcoming the limitations of Blockchain



Secure data transfer



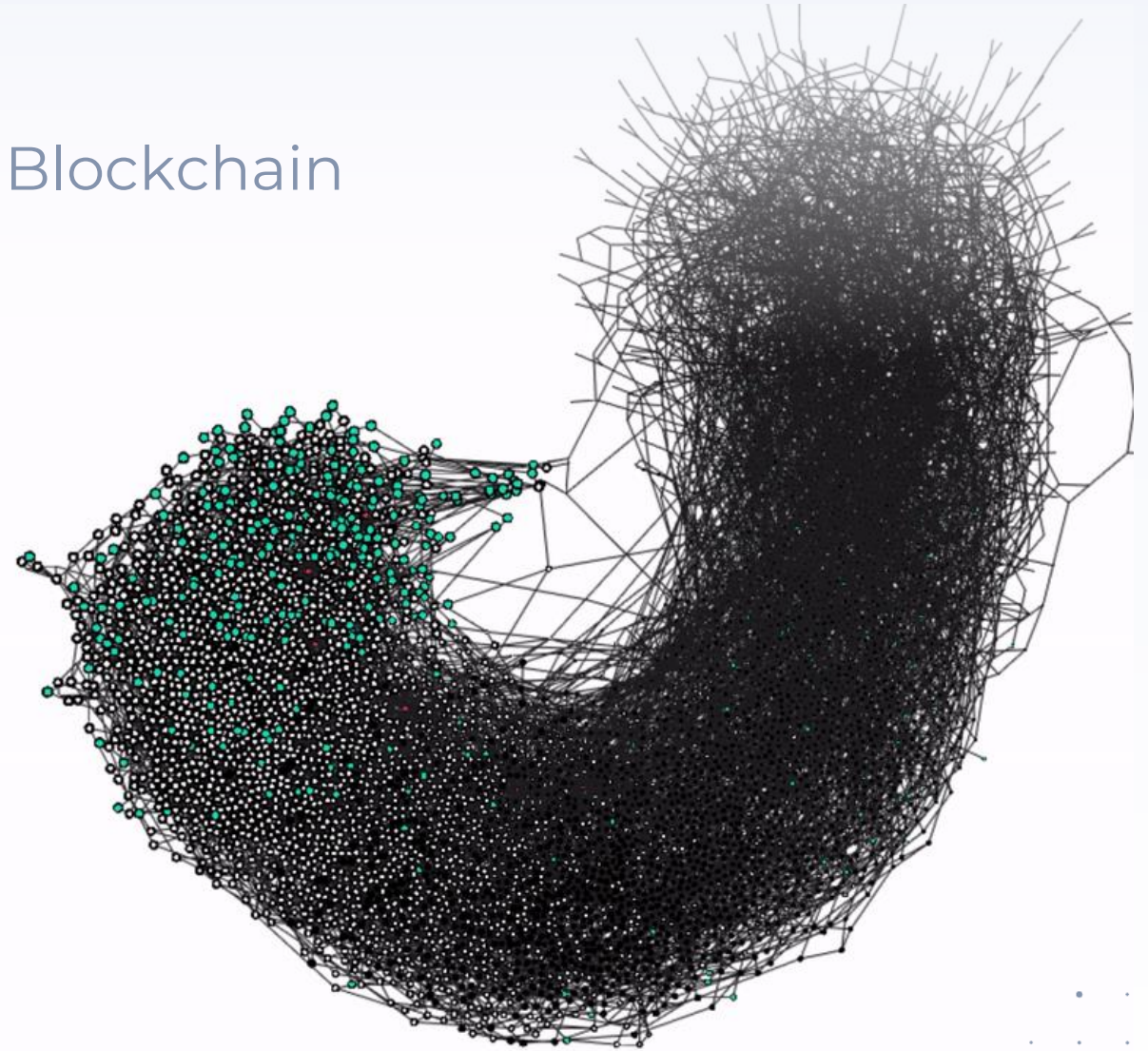
Highly Scalable



Quantum Immune



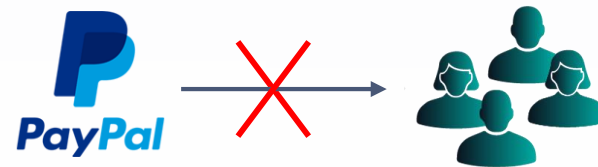
Zero-fee transactions





Permissionless Innovation

- Traditional ecosystems are owned by a single entity, leading to discrimination, exclusion and limitation of the innovation potential
- Permissionless Innovation gives everyone the ability to innovate and participate
- Innovation Assumption: Nobody, even the creator of a technology, is able to fully understand its potential and the use cases



Track the provenance and authenticity of your clothing

SIMPLY TRACK THE PROVENANCE AND AUTHENTICITY OF YOUR SHIRT



Powered by




1017 A L Y X 9SM

[try the demo](#)

<https://uat-ad.tn.gg/ADF4SCD8Lr00121>

Multiple use-cases are being tested

- engaged in pilots, working groups and consortiums




How Future Farm is Revolutionizing the grass-to-milk process

Using digitalization and the Distributed Ledger Technology to build an integrated value chain to create visibility from the grass production to a glass of milk.

This demo showcases how sharing of data and collaboration around crop yield enables optimal production and facilitate a peer-to-peer marketplace for fodder between farmers.

[Try the demo](#)



IOTA-PRIMORITY PARTNERSHIP: TRACKING FOOD ALLERGENS & IMPROVING CONSUMER SAFETY



Building a “blockchain kit” for the industry




White Paper
Inclusive Deployment of Blockchain for Supply Chains: Part 1 – Introduction

White Paper
Inclusive Deployment of Blockchain for Supply Chains Part 2 – Trustworthy verification of digital identities

White Paper
Inclusive deployment of blockchain for supply chains: Part 3 – Public or private blockchains – which one is right for you?

We are working with start-ups, large companies, consortiums and influencers to set standards, to explore the full potential of DLT in trade & supply chains, and to share experience.

Foundation Software



IOTA

IOTA is a distributed ledger for the Internet of Things. The first ledger with microtransactions without fees as well as secure data transfer. Quantum proof.

Berlin, Germany <http://iota.org> contact@iota.org

Repositories 79 **People** 38 **Teams** 14 **Projects** 0

Pinned repositories

wallet
IOTA Wallet

JavaScript ★ 2.2k 🍴 426

iri
IOTA Reference Implementation

Java ★ 1k 🍴 350

iota.lib.js
IOTA Javascript Library

JavaScript ★ 636 🍴 221

The software that the IOTA Foundation produces is publicly available.
Developers should start here: <https://docs.iota.org>



Thank You!

Jens Munch Lund-Nielsen

Head of Global Trade & Supply Chains, IOTA Foundation