

Blockchain in Logistics - BiL

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iLink Νέες Τεχνολογίες

AT-A-GLANCE

iLink is active in the Telematics Industry since of 2005:

- Has launched the Telematics platform PowerFleet
 - More than 500 B2B customers (public & private sector)
- In 2018 iLink launches Optimo, an innovative route optimization platform,
 - Optimo is an mTSP algorithmic platform
- iLink continually invests in R&D, New Technologies and its Software Engineers
 - 2019 is a landmark year since iLink pioneers in Blockchain in Logistics
- ITS Hellas member 2017 (BoD member 2019)
- HAMAC (ΣΕΚΕΕ) member 2017



















Logistics Industry



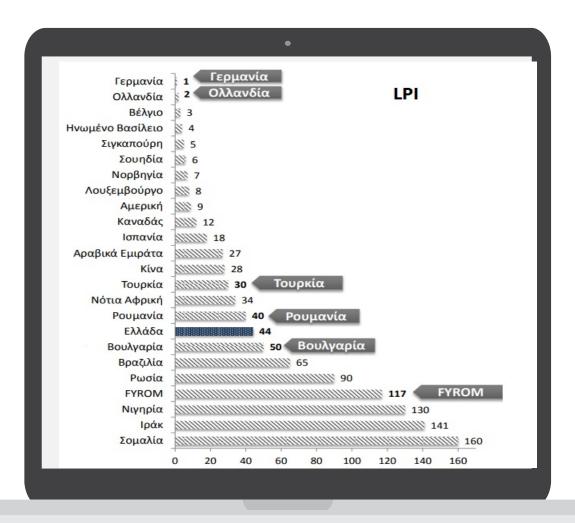
Revenue 10% GDP



4,7% of total workforce



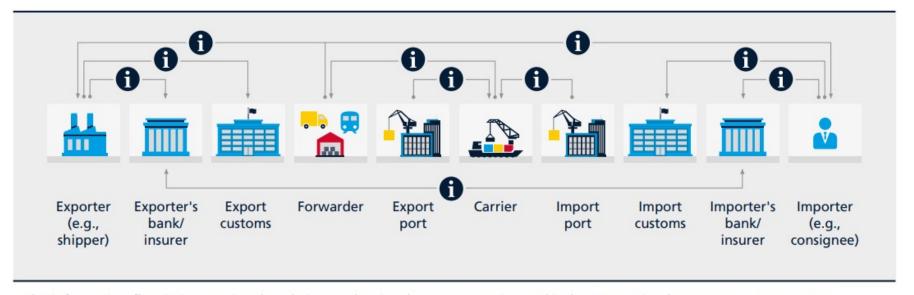
A strong ecosystem Startups, Ten-T





Logistics workflow





ROUTE

55%

The information flow in international trade is complex, involves many parties, and is documentation heavy; Source: Accenture



Industry 4.0

Al

- Machine
 Intelligence
 intelligence demo
 nstrated
 by machines
- Intelligent Agents:

 any device that
 perceives its
 environment and
 takes actions that
 maximize its
 chance of

 successfully
 achieving its goals



loT

- Smart Sensors
- monitor environmental factors
 - temperatu re
 - humidity
 - asset performan ce
- Predictive maintenance
- Wearable technology



Blockchain

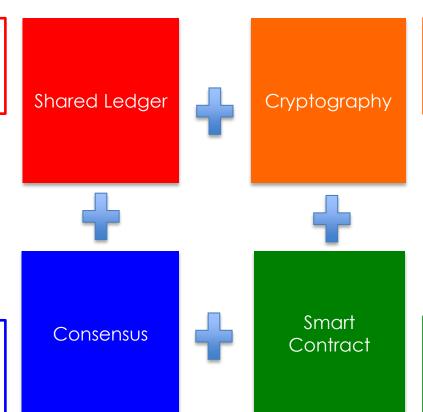
- A continuously growing list of records, called blocks
- Linked and secured using cryptograp hy.
- Bitcoin example
- 19 industries to extinct by 2030





Blockchain in a nutshell

Append-only system of record shared across business network

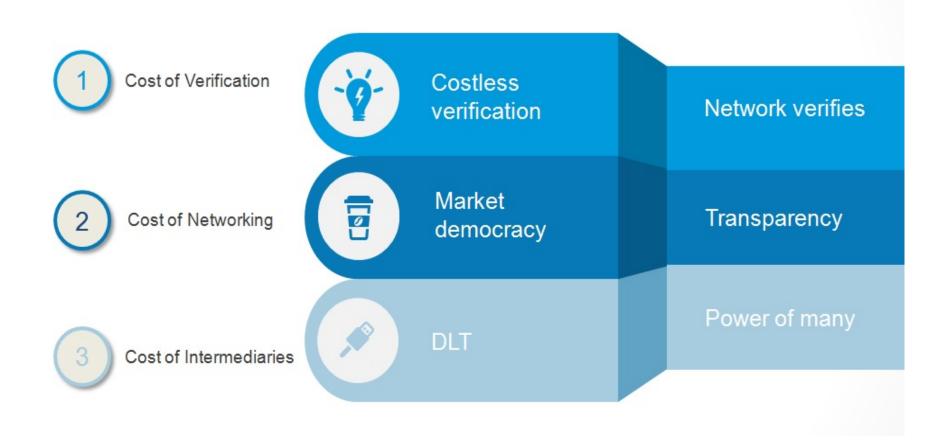


Ensuring secure, authenticated & verifiable transactions

All parties agree to network verified transaction Business terms embedded in transaction database & executed with transactions

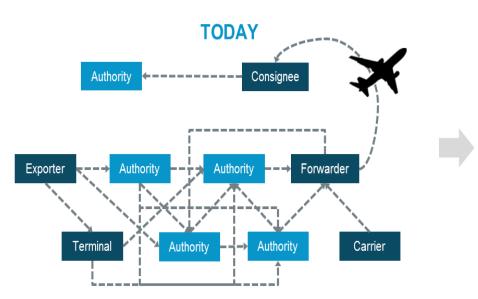


Why Blockchain?...





Blockchain @ Logistics future



- Inconsistent information across organizational boundaries and "blind spots" throughout the supply chain hinder the efficient flow of goods
- Complex, cumbersome, and costly peer-to-peer messaging
- Manual, time-consuming, paper-based processes; high air courier expense and delays
- Risk assessments often lack sufficient information; clearance processes subject to fraud
- The administrative cost of handling a container shipment is comparable to the cost of the actual physical transport

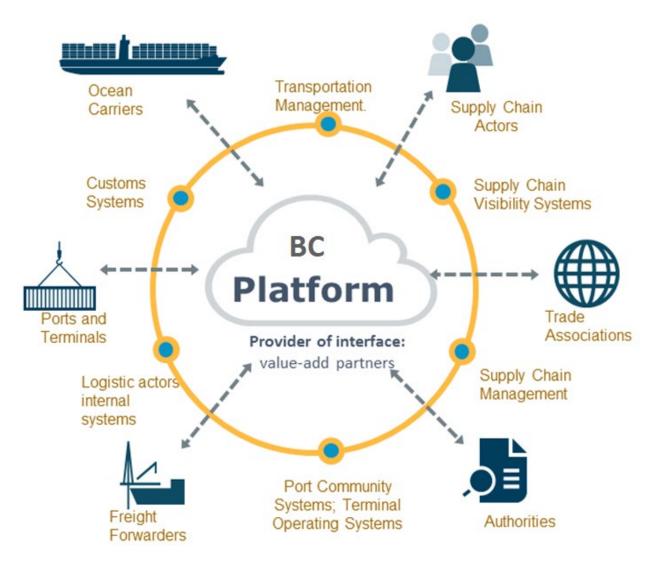
TOMORROW



- Instant, secure access to end-to-end supply chain information; single source of the truth
- Assurance of the authenticity and immutability of digital documents; trusted cross-organizational workflows
- Better risk assessments and fewer unnecessary interventions
- Far lower administrative expenses and elimination of costs to move physical paper across international borders
- Estimated global savings from more efficient sharing of information: \$27 billion

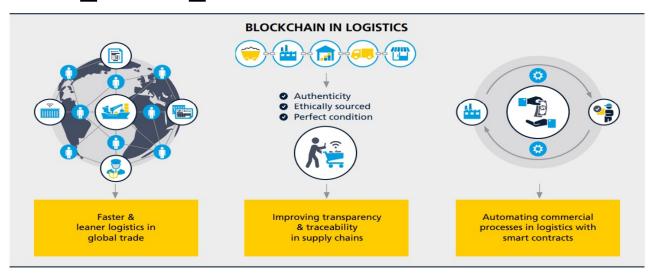


Logistics blockchain bus





Another perspective



Logistics nightmare

- \$140b in disputed payments
 - 42 days to receive payment
- Admin cost -> 20% of TC
- Tons of papers
- Huge diversity of ERPs and SWs
- Demand & Supply mismatch
 - (29 billion miles half loaded trucks
- Sensitive products overlooked
 - 8,5% of shipment deviations

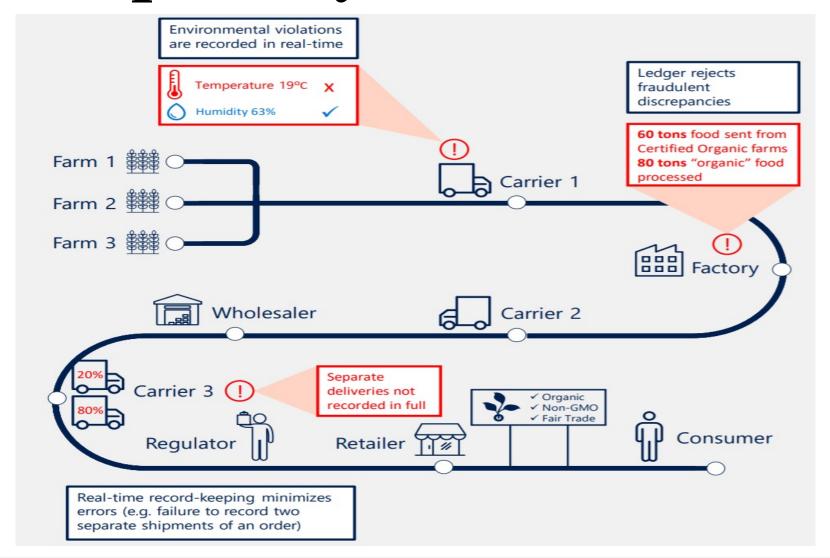
Blockchain approach

- Smart contracts
 - Immediate payments
- No intermediary is required
- Just electronic transactions
- Interoperability is guaranteed
 - One common DLT
- Timestamped load data
- IoT transactions
 - Sensor data





Transparency





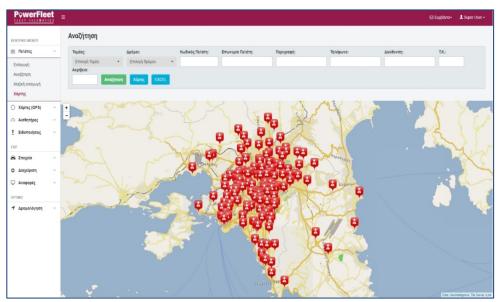
PowerFleet Optimo



- Multiple routing
- Optimization
- Scheduling
- Driver dispatching
- Real time monitoring
- PoD (Proof of Delivery)

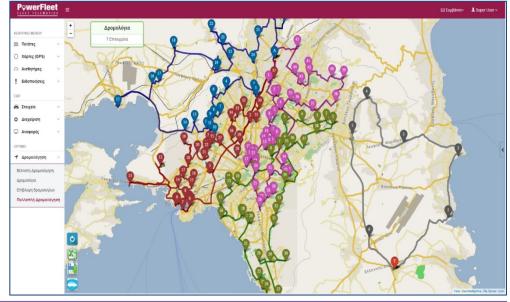


RaaS (Routing as a Service)



- POIs (handling & selection)
- Demand (What & When to deliver)
- Vehicles (Capacity, number & depos)
- Special (Tolls, restricted location etc)

- Optimized Routes
- Minimum resources (veh./trav. time)
- 100% Service delivery
- Customer exceptional experience





BiL platform































SWOT

Strengths

- Resources opt.
- DLT & GPT
- Transparency
- Intermediaries

Weaknesses

- Scalability
- Last mile
- Trust

BiL

Opportunities

- Platform
- Ecosystem

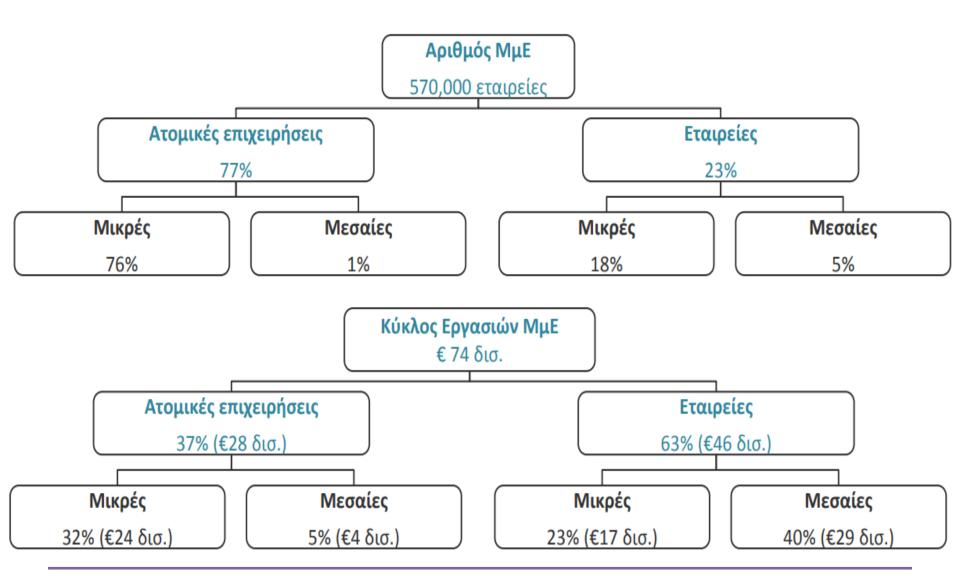
Threats

- Collaboration
- Intermediaries

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A huge ecosystem





What Blockchain is not...

- Bitcoin...
- The solution to (all) your problems
- Adjust it to your case, not vice-versa
- Data ownership?
- Data governance?
- Data privacy?
- Data transparency?
- Did you ask your mom about it?...

SIMPLIFIED BLOCKCHAIN DECISION TREE

