

Blockchain and Disruptive Potential Supply Chains

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What is the problem?

- ❑ **Moving products from point A to point B is already outdated structure of relationships**
- ❑ **A lot of risks can make such process longer, more time and money consuming**
- ❑ **Manipulating are also quite often issue to occur**

- ❑ An increasing tendency to use blockchain technology in supply chain industry
- ❑ Blockchain provides transaction and communication security and the protection of critical infrastructure
- ❑ The paradigm shift represented by blockchain can provide the transparency and auditing

Research results

Next companies and organizations are working on implementing blockchain technology in supply chain industry:

Skuchain,

Kuovola Innovation,

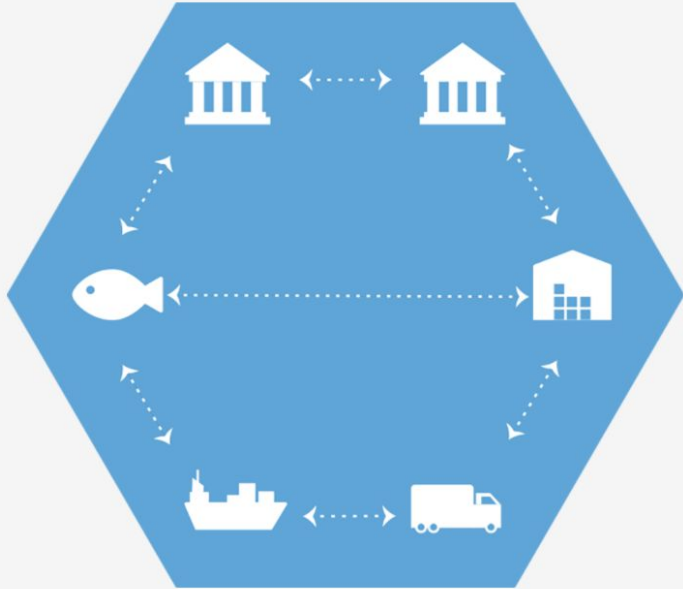
Blockverify,

WAVE,

Walmart, iIBM and Tsinghua 9 University in Beijing.

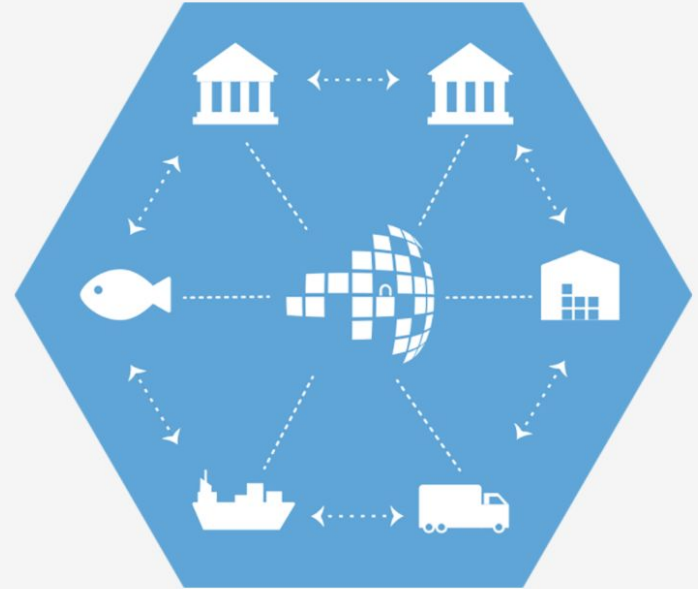
TODAY'S SUPPLY CHAIN

Buyers and sellers have relationships with each other and their bank. Banks have relationships with each other.



TOMORROW'S SUPPLY CHAIN

Maintains the same direct relationships and augments them with trust and visibility into the flow of goods and money.



Skuchain builds blockchain based products for B2B Trade and Supply Chain Finance.

Finnish startup **Kuovola** Innovation is working on a blockchain solution that enables smart tendering across the supply chain.

Blockverify works on improving supply chains by means of blockchain. Company has belief in the potential of blockchain technology to improve anti-counterfeit measures in different industries, also particularly in supply chain.



WAVE connects all members of the supply chain to a decentralized network and allows them a direct exchange of documents

U.S. retail giant, **Walmart**, **iIBM** and **Tsinghua University** in Beijing plan to start a major test of blockchain technology for supply chain management

BHP Billiton, The world's largest mining firm by market value intends to begin using the Ethereum blockchain to improve its supply



**Challenge: Risk of disruptive influence
on industry**

Pros and cons

Global supporters (Walmart, IBM, European Union development fund)

Using of smart contracts which nobody controls and seems everybody can trust

Not centralized

Tracing history, less risk of hacking

Changing of supply chain management

Disruption of the established and for long time functioning system

Risk of put such distributed database network in so called «bad hands»

Lack of understanding of the process for all game players

Concluding Remarks

- Technology can help in overcoming diverse delays and errors
- It can result in more streamlined and efficient supply chain management
- Block chains are being used in closed commercial communities, cannot scale to support supply chains
- Teaching for workers of companies
- Human factor should be taking into account more serious

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THANK YOU