



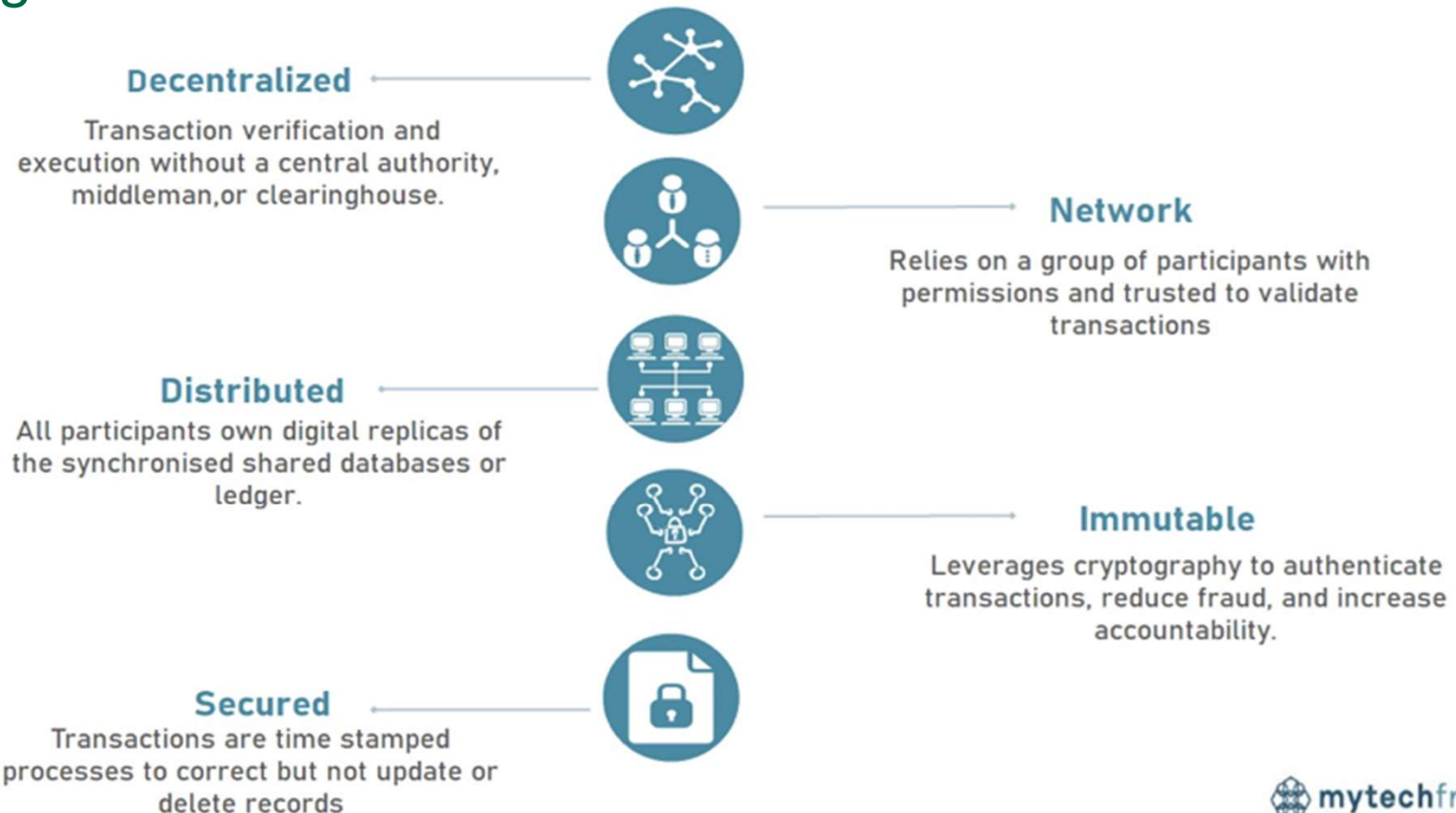
The Business School
for the World®

Blockchains for Supply Chains: Hype versus Reality

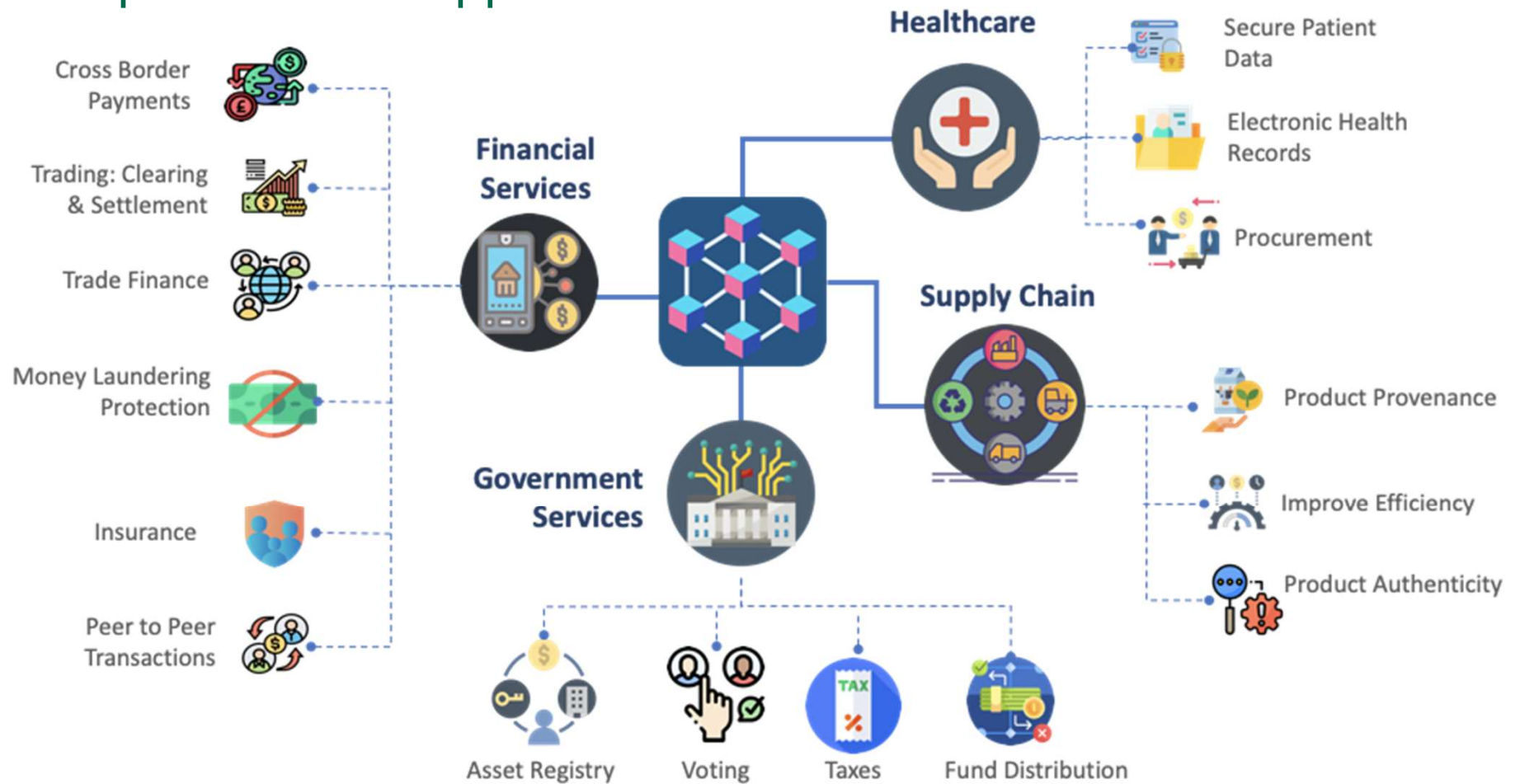
Philippe Blaettchen, Sameer Hasija, Dmitry Sumkin
– Moderated by Aly Madhavji

November 5, 2020

Blockchain for business: shared database with a ledger of transactions



Top blockchain applications



Traceability in practice: Blockchain for diamonds

Forced labor & child labor: 171 mil.

Wages: >1 mil. workers earn 1 dollar a day

Health & safety: respiratory issues, safety



Certification practice



eBay prohibits the sale of diamonds, other gemstones and metals that are sourced from countries with civil conflict or that do not comply with the Kimberley Process Certification Scheme (KPCS). When listing jewelry on eBay you agree that any item you



The Kimberley Process and the Unfulfilled Promise of a Conflict-Free Diamond Industry

Posted on May 7, 2018 by Khaled Fayyad

False Consumer Confidence in Diamonds:

DECLINE OF CREDIBILITY IN THE KIMBERLEY PROCESS

Ethical concerns grow over Kimberley Process diamond charter

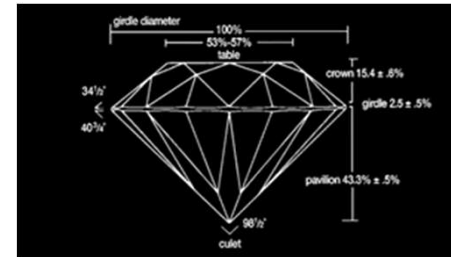
The mining process insufficiently protects human rights, campaigners say



The role of blockchain

Cheap and credible signal of the origin

- Enables traceability
- Secondary trade



Results of our research

Non-blockchain

Blockchain



Results of our research

Non-blockchain



Blockchain



Results of our research

Non-blockchain



Blockchain



Traceability: an issue of adoption

Traceability:

Use of transaction history to establish

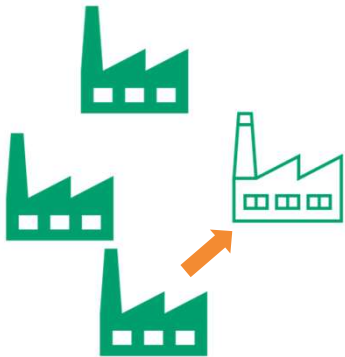
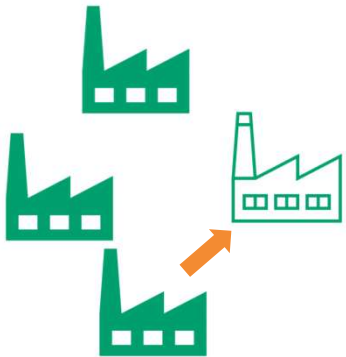
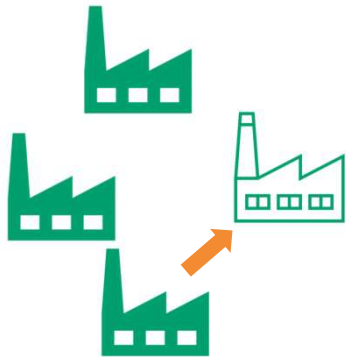
- Where products are from
- How they were handled
- Where they are now



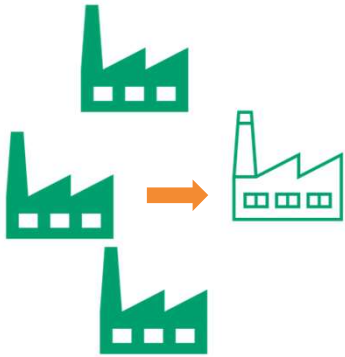
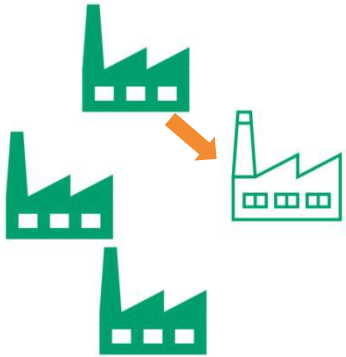
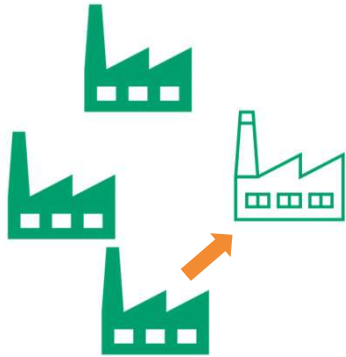
Image source: Oracle

Traceability and commitment

ERPs
and EDI



Blockchain



Time

Applications of blockchain in supply chain management

Key idea:

Use the “truth” of what happened in the supply chain



- Traceability
- Automation
- Tokenization

Automation with “smart contracts”



Image source: Oracle