

Can Blockchain be used to combat fraud?

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Fraud is diverse



Allocating more subsidies than there's land/animals



Setting up tenders for a particular candidate



Completing the work with low quality with no control



Spending money on hollow consultancy projects



Fraud

Key Strengths of blockchain

Provably
Immutable*

Distributed

Trustless

Hyped 😊

* Conditions apply

Main drawbacks of blockchain

Expensive
(if public)

Volatile

Not scalable

Not mature

Can blockchain address the big problems?



Allocating more subsidies than there's land/animals

No, you have to measure/count



Setting up tenders for a particular candidate

No, you need semantic and pragmatic analysis of the text



Completing the work with low quality with no control

No, blockchain can't do quality control and surprise inspections



Spending money on hollow consultancy projects

No, but you can use machine learning to identify those

So...it's useless?

No. But it's not a silver bullet.
Its strength lies in
guaranteeing data integrity

Can blockchain help solve document problems?



Changing or deleting documents prior to inspection

Yes, it can protect documents



Modifying IoT measurements after collection

Yes, it can guarantee data is not modified



Tampering with random commission assignments

Yes, the original choices can be securely recorded



Changing offers after opening "the envelopes"

Yes, no new documents can be back-dated

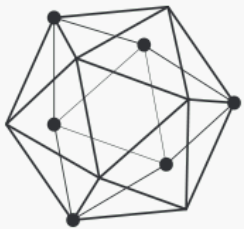
But there are still issues with scalability, volatility
and price...

Two approaches



LogSentinel

(For individual organizations)



HYPERLEDGER

(For multi-organization setups)

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-
- Tamper-evident
 - eIDAS-compliant
 - Fast and scalable
 - Anchored to Ethereum
 - Performs fraud detection
-



Reduced fraud

HyperLedger



HYPERLEDGER



Shared, immutable
database

Decentralized

Relatively fast

Supports smart
contracts

Allows additional
analytics

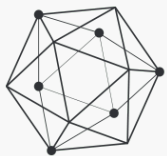


Reduced fraud

Proposed use-cases



- ✓ Proving that documents are not tampered with
- ✓ Preserving the integrity of sensor data in agriculture
- ✓ Improving upon qualified timestamps to prevent deleting offers
- ✓ Automatic detection of anomalous behaviour



HYPERLEDGER

- ✓ Shared database of documents across institutions in multiple EU countries
- ✓ Executing smart contracts when a due date is reached

Other positive effects



Increased public trust
(through verifiability)



Allowing investigators to
focus on physical world fraud



Reluctance to perform fraud



Digital forensic evidence

Blockchain can be the right tool for the job
and help in preventing fraud

Thank you!

- For more information visit: logsentinel.com
- Or contact us at: contact@logsentinel.com

