



ITUKALEIDOSCOPE

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Challenges for a data-driven society

THE STANDARDS REVOLUTION: WHO WILL FIRST PUT THIS NEW KID ON THE BLOCKCHAIN?

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Defining “*Blockchained Standards*”

Are those standards developed using blockchain technology, and therefore drafted in a **decentralized, distributed** and **disruptive** way:

- Blockchains are networks of nodes that operate transactions in a **decentralized** way, without having to trust a central authority.
- Blockchains are also **distributed** and the validation of transactions can be done by any node in the network
- Blockchains are **disruptive** since they allow participants to verify everything by themselves, without depending on a middleman or intermediary



Blockchain, in a nutshell

Blockchain is a **peer-to-peer network** that sits on top of the TCP/IP internet protocol. In the early 90's, the TCP/IP unlocked new economic value of connectivity by dramatically lowering the cost of connections.

Today, the blockchain will greatly **reduce the cost of transactions and will make them safer**. Moreover, it will **uncompromise identity since transactions are encrypted through cryptographic keys**.



Additionally,
Blockchains go beyond being a peer-to-peer internet-based mechanism on a ledger. Blockchains present further advantages when compared to internet-based and DLT systems:

	Internet 1990	DLT 1999	Blockchain 2008
Universal [all nodes speak the same language]	✓	✓	✓
Platform [commons with no single point of failure]	⬇	✓	✓
Decentralized [no centralized control of nodes]	⬇	✓	✓
Network [secure and trustful P2P exchanges]	⬇	✓	✓
Distributed [no central permission to post anything]	✓	✓	✓
Ledgered [immutable and integral record keeping]	✗	✓	✓
Disruptive [incentives-based network of trust]	✗	✗	✓



Blockchains solve Internet's Tragedy of the Commons

Privacy and rewards mechanisms native to the technology allow for a safe and remunerated sharing of data that incentivizes proprietary knowledge exchange actions what, in turn, makes information more accessible, trustable and of higher quality.

And this is what *Blockchained Standards* leverage on...



1. *Blockchained Standards* are built on a tokenised common network

Blockchained standards will be developed using a permissionless but tokenised collaboration mechanism allowing for participation of any interested party.

This solves today's standards development "permissioned" participation mechanisms that sometimes limit expert knowledge entrance



2. *Blockchained Standards* use Proof-of-KnowHow to reach consensus

Proof-of-KnowHow is the consensus algorithm specifically designed for blockchain-based standards drafting

The use of an algorithm makes traditional consensus meetings unnecessary meaning that the whole standards development process can go on-line



3. *Blockchained Standards* use the KHnow token to reward participation but also to raise funds

The Khnow is the token that will reward nodes bringing knowledge into the standards development network. It will be also used as vehicle to raise funds to start the development of a standard through an ICO

ICOs (initial coin offerings) can substitute traditional venture capital actions to fund standards development -basically relying on private sponsoring-, what sometimes can lead to biased content of standards



4. *Blockchained Standards* do not go public until at least one round of trialling is completed

In addition to the Proof-of-KnowHow and the Kknow, *Blockchained Standards* reinforce standards' guidance with the inclusion of testing, to reimagine their recommending role as a process of value

Traditional standards drafting does not include use cases to exemplify the usability and showcase the benefits of using the standard, weakening any advice given



5. *Blockchained Standards* use smart contracts to be self-executable

Blockchained Standards are programmable tools that allow for self-compliance assessment by inputting own performance data in meeting the standard

Traditional standards are presented as a report only, not allowing for any interaction with the user. This limits adoption and makes the user dependent on third-party assessments for compliance purposes.



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Thanks for your attention!

Want to know more?

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