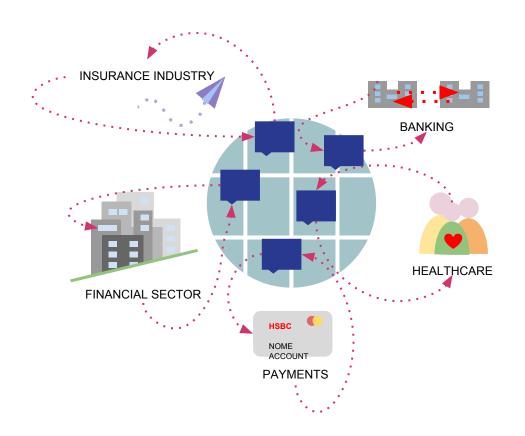


Decentralized solutions for real-world problems

Alice Corsini Decentralized 2017 - November 3rd, 2017

Overview



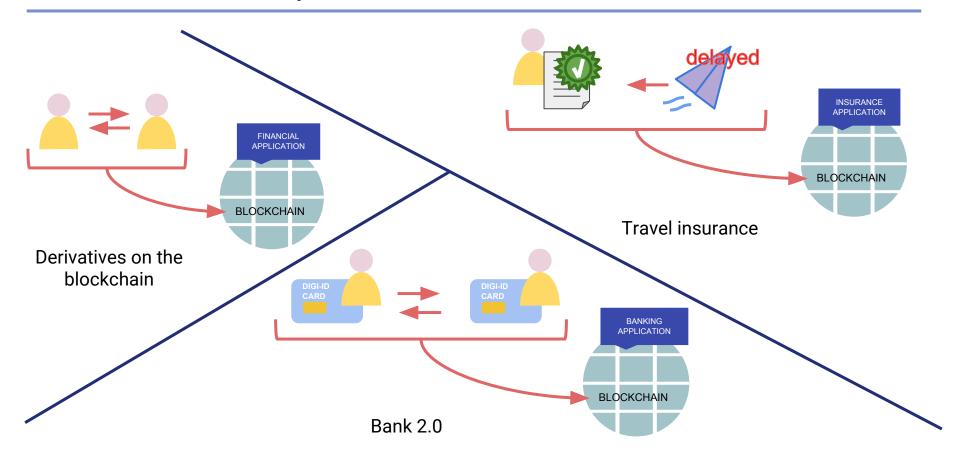
An **horizontal revolution** having an impact on a variety of industries.

The now emerging blockchain technology enables a new generation of applications. Those decentralized applications are innovating business processes thanks to the transparent execution of the so called "smart contracts".

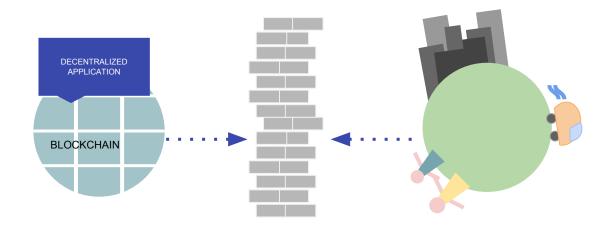
Key features:

- transparency
- automation
- security

Overview: example use-cases



Problem: the "walled garden" limitation

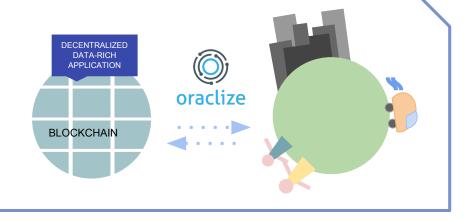


Due to technical limitations, decentralized applications are walled in their own garden and cannot fetch external data directly. Still, data-rich smart contracts are enabling decentralized applications to have a concrete impact on the real-world.

Practically speaking, blockchain oracles provide a connection between blockchain applications and any other context, like the Web.

Oraclize

Oraclize acts as a "data carrier", connecting decentralized applications and Web APIs in a standard, reliable and secure way.





World's most widely adopted blockchain oracle service

Integrated with a variety of blockchain platforms

+300,000 data-requests processed on the Ethereum Mainnet only

Service running since 2015

Presented at 80+ conferences around the world De-facto standard to connect Dapps with the real-world

Warning: security should NOT be compromised



Being security one of the key features of the blockchain, it is important that such security is not compromised when interacting with an external context.

When going from PoC to production, having a reliable technology is essential.

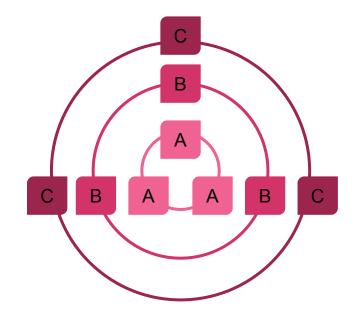
Oraclize implements an high security layer which enables the delivery of data to blockchain applications. Along with data, Oraclize delivers "authenticity proofs" - strong cryptographic guarantees protecting against data tampering.

Oraclize: authenticity proofs

Blockchain capabilities can be extended to have a concrete impact on the real-world thanks to attestation techniques (Trusted Computing).

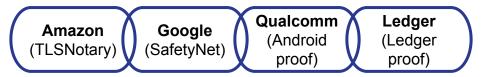
Oraclize leverages those techniques to offer a reliable data-transport-layer connecting the two worlds, where the security is granted by cryptographic guarantees proving the authenticity of data.

Today, Oraclize supports authenticity proofs based on a variety of technologies.



Trust model: the importance of attestators diversity

Chain of claims coming from:



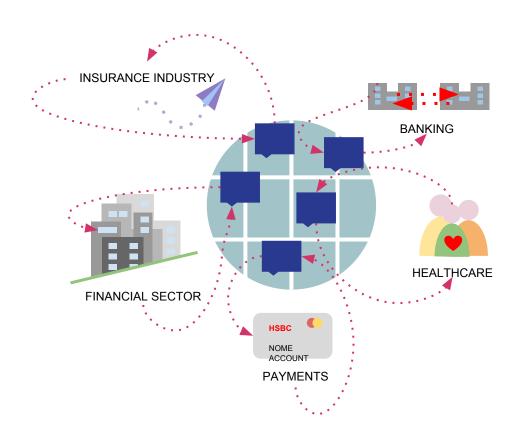
It all comes down to attestation: the authenticated claim of an attestator which moves the trust away from the operator to the attestator.

IF operator == attestator: these techniques overcomplicate things (a signature is enough)

IF attestators come together in a consortium: explicit agreement and intent to cooperate make this diversity weaker

IF independent third party uses these techniques as a service (Oraclize): stronger claims obtained by the chaining of claims

Conclusion



Thanks to the combination of two technologies (blockchain and attestation), Oraclize enables more complex, powerful and secure applications.

A variety of Oraclize-based use-cases are being explored in many industries:

- insurance
- finance/smart payments
- gaming/gambling
- e-procurement
- others



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