

Getting value out of the **blockchain**: some examples

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About finoryx



THOUGHT LEADERSHIP

finoryx experts are specialized in capital markets, banking and new technologies. They are invited to talk during conferences, working groups or internal brainstorming sessions.



CONSULTING

Growing number of clients trust us for guiding them throughout the complexity of **blockchain**.

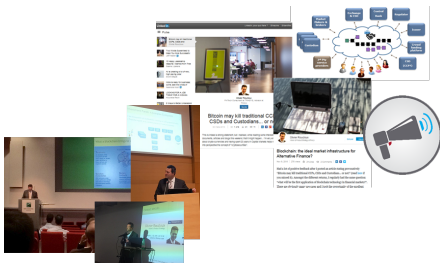
Vision and strategy articulation, awareness sessions and coaching; business case and Functional Specifications are our strengths



SOLUTION

Cryptody leverages the blockchain concept to increase operational efficiency in the capital markets and investment funds industry.

Cryptody Sits at the intersection of the blockchain technology, Custody and fiat money.



**Finoryx is a solution provider
active at the crossroads of business
vision and technology revolution**



Too much talk about Blockchain ?

12th January 2009

First bitcoin transaction



Crypto-currency powered by Blockchain



Q3 RANK	NAME	MARKET CAP	Q1 RANK	PRICE YTD
1	Bitcoin	\$9,578,049,977	Same	41%
2	Ethereum	\$1,093,626,017	Same	904%
3	Ripple	\$262,064,965	Same	2.4%
4	Litecoin	\$181,141,735	Same	-22%
5	Monero	\$136,223,748	+3	11%

- Compare to

- Apple : 600 billion
- Microsoft : 450 billion
- Amazon 360 billion

Total : 113 billion €

Which Blockchain ? There are so many ...



What a blockchain brings to us?

Transparency

All members of the ecosystem can see what's going on. Access rights definition to ensure privacy are crucial to success

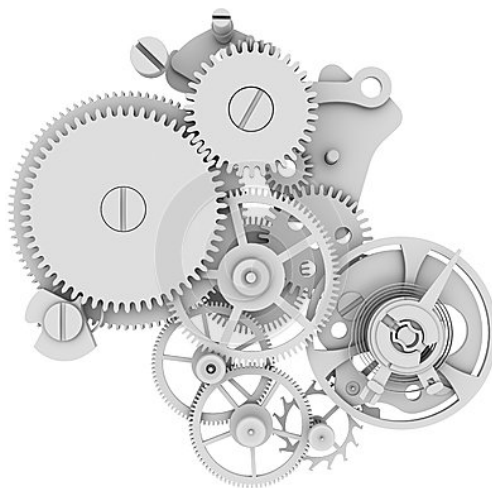
Permanence (Non-repudiation)

All activities logged in a blockchain are permanent and cannot be undone

Collaboration

Heterogeneous users can create, update and distribute data without the need of trusted central authority

A complex mechanism



Security

A combination of proven unbreakable crypto-technology together with a distribution of security enforcement processes at different end-points

Operations Harmonization

Joint processes using smart contracts & similar open source technology at all end points ensures coherence

Business Continuity

Distributed processes ensures continuous processing at nodes, no service discontinuity

Some examples (banking)

Non exhaustive list...

Buzz in finance



HYPERLEDGER

- 81 companies
- Big support of IBM & DAH
- “Hyperledger is the blockchain for banks built by banks”
- Mainly in open source/Linux foundation

Fundchain & Infrachain



BANQUE
INTERNATIONALE
À LUXEMBOURG



BNP PARIBAS

caceis
INVESTOR SERVICES



EFA
Reliable & Independent



PICTET
1805

HSBC



ING



pwc



RBC Investor &
Treasury Services



SOCIÉTÉ
GÉNÉRALE



FUNDCHAIN

Blockchain Research Initiative for the Fund Industry

Some other examples

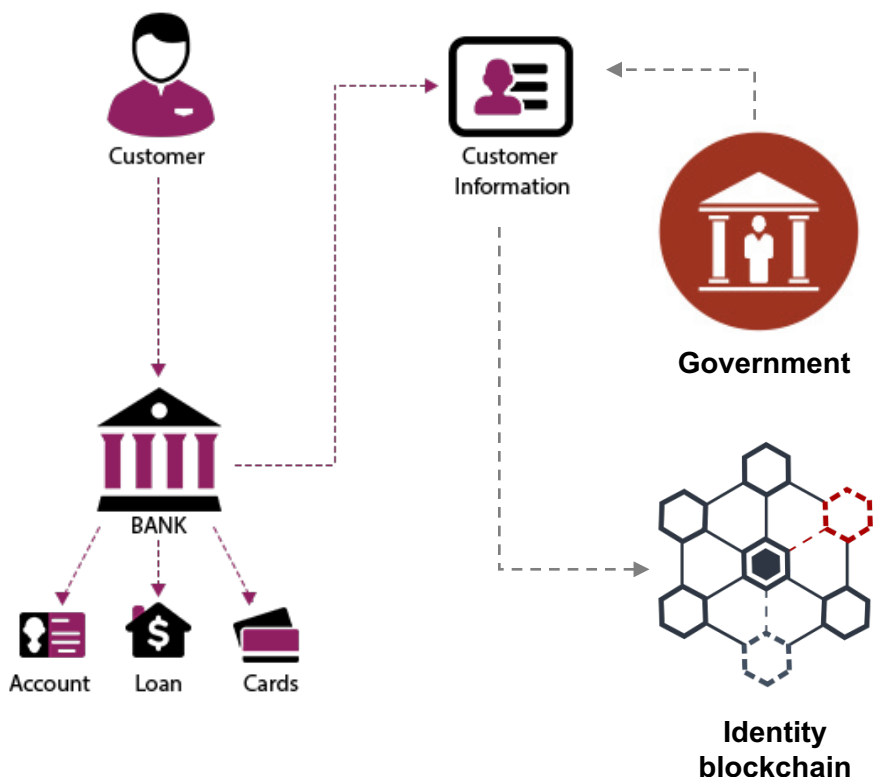
Non exhaustive list...

Isle of Man Digital Revolution

- 2015: The Isle of Man's Department of Economic Development creates a registry of digital currency companies operating on the island (25).
- 2016: 'Bitcoin Island' accept the digital currency for everyday transactions alongside sterling
- 2017: Citizen Digital Identity, physical item digital identity using IoT



Buzz in Digital Identity & KYC



- From **digital identity** to **crypto-identity**
- eg Making your e-ID public?
 - Many open questions
- Impact on GDPR ?
 - General data protection regulation*
 - Right to be forgotten after 10 years?

If the blockchain is implemented correctly into KYC systems, it has the potential to make identity fraud and identity frustration a thing of the past

CEO Signicat, Gunnar Nordseth

- Permanent ledger
 - Diamond certification
 - Transaction history
- Verification
 - Insurances
 - Owners
 - Claimants
 - Law enforcement



INSURANCE FRAUD IS A GLOBAL PROBLEM



£45 BILLION

Lost annually in the U.S. and Europe



65%

Of all fraudulent claims go undetected



£200 MILLION

Spent by insurers each year tackling fraud



£100 MILLION

Paid out each year in relation to jewellery theft

Voting system

- The blockchain removes the need for trust, since the technology can run autonomous without interference from people, and it is at the same time open source and transparent, so that everybody can look under the hood, to take a look at how it functions.

**Danish political party adopts
blockchain-based system for internal voting**

Land registry

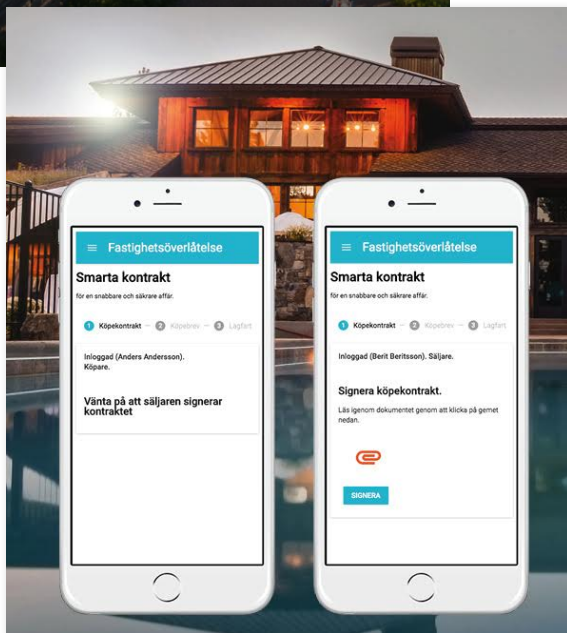
- Is it a “new technology for an old problem” ?



Phase 2:

Add money transactions

Authentication with Digital Fingerprint Technology



Bitland is revolutionising African land registry in partnership with CCEDK

Blockchain-based Bitland is looking to address the unregistered land issue in West Africa.

August 2016

Currently, up to 78% of the land in Ghana is unregistered, and corruption has created significant obstacles to economic development. The Ghanaian Land Commission has been working with the World Bank on the Land Administration Project since 1999, seeking automated solutions for streamlining the land registration process, fighting fraudulent registration, and increasing productivity.



honduras

Republic Of Georgia To Pilot Land Titling On Blockchain With Economist Hernando De Soto, BitFury

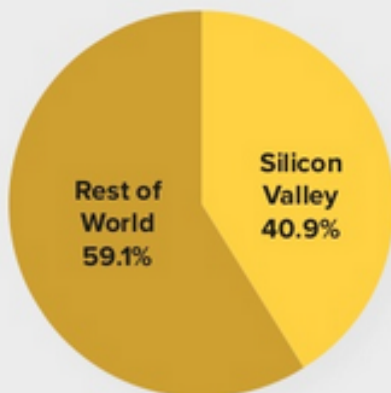
April 2016

Leading to conclusion

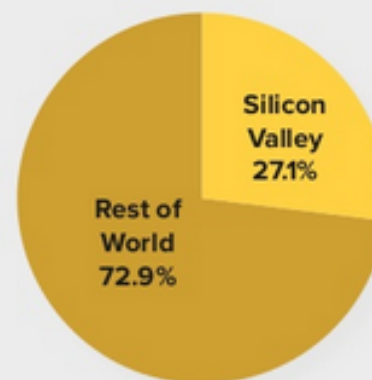


Despite Global Blockchain Interest, Silicon Valley Captures Bulk of Investment Dollars in Q3

\$ Invested



No. of Companies



Location	Value (\$m)	No. of companies
Silicon Valley	542	39
Rest of World	782	105
Total	1324	144

Total number of VC-backed public and private blockchain companies has increased marginally over the past quarter, growing to 144 in Q3 2016 (5% increase), up from 137 in Q2 2016.

Conclusions



- Focus on business processes efficiency and not on technology buzzwords
- There is a need to reduce costs in many industries
- Is blockchain the right solution?
- Forget the hype and focus on real value creation

- Try prototypes, proof of concepts,...
 - You may (will) fail ... but you will learn !
- Ask yourself the question ...
 - Do I want silicon valley guys to reinvent my business and take my job?



Don't let others innovate for you ... be at the driving seat

Your contact



Professional Background (before Finoryx)

- 20+ years in Financial Services
- Worked for Euroclear, SWIFT, Euronext,...
- Was consultant for LCH.Clearnet, AXA,...
- Product Director for Clearing/Settlement solution
- Migrate to ISO 15022, at the outset of ISO 20022
- Securities Market Modernisation strategic consulting
- SEPA Migration expert for a dozen of clients

Blockchain Experience

- Conceived “securities on the blockchain” in 2014
- Imagine the blockchain-centric market model
- Speaker at 20+ conferences
 - Invited by London Fintech week, ALFI, Hyperledger, Ethereum,...
- Building Cryptody prototype
 - Intersection of blockchain, fiat money and Custody
- Participation to two Proof of Concepts (large banks)
- Advising & coaching a growing number of clients
- Invited by ALFI to join ad-hoc working groups