

Discussion – Some applications of block chains

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IEEE Spectrum

Special Report: Blockchain World

*“**When Bitcoin was** unleashed on the world, it filled a specific need. But it wasn’t long before people realized the technology behind Bitcoin—the blockchain—could do much more than record monetary transactions. That realization has lately blossomed into a dazzling and often bewildering array of startup companies, initiatives, corporate alliances, and research projects. Billions of dollars will hinge on what they come up with. So you should understand how blockchains work—and what could happen if they don’t.”*

<https://spectrum.ieee.org/static/special-report-blockchain-world>

Some examples of Blockchain articles from the IEEE Spectrum Special Report

- “Blockchains: how they work and why they’ll change the world”
- “The ridiculous amount of energy it takes to run Bitcoin”
- “Blockchains will allow rooftop solar energy trading for fun and profit”
- “Illinois vs. Dubai – two experiments to bring blockchains to government”
- “Wall Street to move trillions to blockchains in 2018”

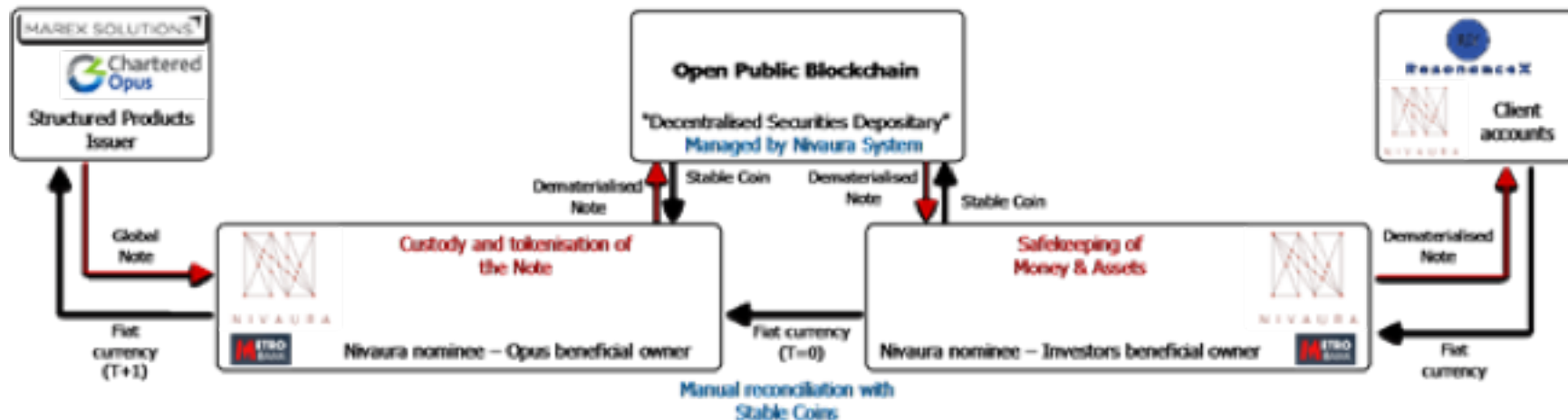
Some headlines from the legal / financial world

- **“World’s first blockchain structured product”** (March 2018)
<http://www.allenoverly.com/news/en-gb/articles/Pages/World's-first-blockchain-structured-product.aspx>
- **“Project to make smart contracts mainstream grows, as top firms burnish tech credentials”** (April 2018)
<https://www.legalfutures.co.uk/latest-news/project-to-make-smart-contracts-mainstream-grows-as-top-firms-burnish-tech-credentials>
- **“Santander launches blockchain-based foreign exchange service” / “Santander uses Ripple technology to offer international payments”** (April 2018)
<https://www.computerweekly.com/news/252439085/Santander-uses-Ripple-technology-to-offer-international-payments>
- **“HSBC and ING execute groundbreaking live trade finance transaction on R3’s Corda Blockchain platform”** (May 2018)
<https://www.hsbc.com/news-and-insight/media-resources/media-releases/2018/hsbc-trade-blockchain-transaction-press-release>

Incumbent process:



With Blockchain infrastructure:



<http://www.allenoverly.com/news/en-gb/articles/Pages/World's-first-blockchain-structured-product.aspx>

Smart contracts – lawyers vs. computer scientists

- *“There are many competing conceptions [...]*
- *Two distinct schools:*
 - *Smart legal contracts*
 - *Smart contract code*
- *These distinctions can cause confusion [...] there is a risk that lawyers and computer scientists simply talk at cross purposes.”*



<https://www.scribd.com/document/355538705/Smart-Contracts-and-Distributed-Ledger-a-Legal-Perspective-1>

A unified view

- *“A smart contract is an automatable and enforceable agreement. Automatable by computer, although some parts may require human input and control. Enforceable either by legal enforcement of rights and obligations or via tamper-proof execution of computer code.”*
- Clack, C., Bakshi, V. & Braine, L. (2016, revised March 2017). Smart Contract Templates: foundations, design landscape and research directions



“[...] most definitely not just a question of the specification of cladding systems...”

<https://www.gov.uk/government/collections/independent-review-of-building-regulations-and-fire-safety-hackitt-review>



Building a Safer Future
Independent Review of Building
Regulations and
Fire Safety: Final Report

Presented to Parliament
by the Secretary of State for Housing, Communities and Local Government
by Command of Her Majesty

May 2018

Cm 9607

Golden thread of information

- ***“Obligating the creation of a digital record for new HRRBs from initial design intent through to construction and including any changes that occur throughout occupation. This package of building information will be used by the dutyholders to demonstrate to the regulator the safety of the building throughout its life cycle.”***