“Blockchain Tech Will Make Banks Disappear in 10 Years”, Says VP of Russia’s Biggest Bank
“You should be taking this technology as seriously as you should have been taking the development of the Internet in the early 1990s,” [Blythe Masters] told a recent audience. “It’s analogous to email for money.”
“Land Registry and Commercial Registers – they will become obsolete.” (Emerce)
INTRODUCTION BLOCKCHAIN
How a blockchain works

1. A wants to send money to B

2. The transaction is represented online as a ‘block’

3. The block is broadcast to every party in the network

4. Those in the network approve the transaction is valid

5. The block then can be added to the chain, which provides an indelible and transparent record of transactions

6. The money moves from A to B

source: ft.com
BLOCKCHAIN WILL BRING …

• INFORMATION SYMMETRY

• IMMUTABILITY

• TRANSPARENCY
POSSIBLE APPLICATIONS...

- TRACKING & TRACING (AUDITTRAIL)
- ARCHIVING
- DATA
- OR
- EARMARKING MONEY
- FINANCIAL AUDITING
- MONITORING/ ENFORCING

Imogen Heap: Decentralising the music industry with blockchain
Through 2018, 85% of blockchain-named projects will deliver business value without using a blockchain.

(source: Gartner)
Land Registers

OBJECT

SUBJECT

RIGHT

IN REM

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Land Registers

- OBJECT
- SUBJECT
- RIGHT IN REM
- OWNERSHIP
- USUFRUCT
- BUILDING RIGHT
- ETC…
Blockchain (1)

- **ARCHIVE**: Yes, hash/pointer
- **REGISTRATION**: No, too complex
- **INFORMATION**: No, data retrieval

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Blockchain (2)

Genesis-block

Who? Quality- issue

Governance?

DAO, indemnity

Smart contracts

Code = law = code

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CONTRACT

source: bitsonblocks.net
Blockchain (3)

- Vendor lock-in?
- Bitcoin-based?
- Complete?
- Who owns data
- PoS & no PoW
- No, data retrieval

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3 Concepts

TRUST - Decentral & transparent

DESIGN - Network & consensus

TECHNOLOGY - Multiple techniques

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Trust as a fairytale?

SECURE DATA

C.I.A.?  D.I.Y.?

IMMATURE

PoW?  PoS?  DAO?

OPEN & TRANSPARANT

Transparant: yes, open?

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In Future?

- VARIOUS INITIATIVES: Redundancy & privatization!
- STANDARDIZATION: ISO/TC307, BIM, etc.
- SMART CONTRACTS: Not all legal aspects

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TRUSTED THIRD PARTIES…

- VALIDATE TRANSACTIONS
- GUIDE A CERTAIN PROCES
- DRAFT CONTRACTS
- IDENTIFY OBJECTS & SUBJECTS
- ARE AN INDEPENDANT WITNESS
- PREVENT FRAUD
INTERNATIONAL
FACTOM HARMONY

Factom Harmony solves for many of the business problems facing the Mortgage industry today. Use the transparency and permanence of Factom blockchain technology to substantially reduce compliance, litigation and documentation expenses.

WATCH VIDEO

Factom Harmony Suite

Digital Vault
Post-closing and quality control

Audit Room
Manage documents for loan reviews
Ghanaian Land Title Registry Problems Solved!
Don’t Waste Time in Court! (or worse)
Secure Your Property Rights HERE TODAY!

Official Ghana non-profit NGO Offering Services for FREE or at Cost-Price

Real Estate Land Title Registration in Ghana

Bitland Real Estate Land Title Registration

Do you Require a Cadastral deed of property (proof of ownership) or perhaps simply genuine
Chicago’s Cook County to Test Bitcoin Blockchain-Based Property Title Transfer
Bitfury, Republic of Georgia Push Ahead With Blockchain Land-Titling Project

In April 2016, the Republic of Georgia’s National Agency of Public Registry (NARP), co-founded by architect economist Hernando De Soto, and Bitfury, signed a memorandum of understanding to implement a blockchain-based land registry project in the country. The project, which is poised to begin this year, aims to digitize the existing land registry and provide an efficient and transparent system for land titling.
Ukrainian Government Partners with The Bitfury Group to Create First Full-Scale Blockchain eGovernance Program for Ukraine

The State Agency for eGovernance’s Blockchain Innovation Program aims to bring to the Ukrainian people cost reduction, improved government efficiency & increased transparency to help reduce corruption

KYIV, UKRAINE – April 13, 2017 – The State Agency for eGovernance of Ukraine signed today a groundbreaking first-ever Memorandum of interaction and cooperation (Memorandum) with The Bitfury Group, the world’s
FUTURE HOUSE SALES

The Swedish Land Registry, ChromaWay, Kairos Future and Telia Company investigate Smart Contracts and Blockchain for the process of selling a house.

TRY THE DEMO
NATIONAL
Hoe werkt het?

Blandlord is een nieuwe vorm van dienstverlening waarbij je deel-eigenaar kunt zijn van verhuurd onroerend goed.

Door het gedeeld eigendom, de huizen, te verhuren worden inkomsten gegenereerd voor de eigenaren. Deze inkomsten worden maandelijks, naar rato van het bezit, verdeeld over alle eigenaren. Alle eigenaren hebben inzicht en inspraak in de beheerafspraken van hun eigendom.
<table>
<thead>
<tr>
<th>Property</th>
<th>User</th>
<th>Fund Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal entity / fund</td>
<td></td>
<td>Crowd</td>
</tr>
<tr>
<td>Legal ownership</td>
<td></td>
<td>Tenant</td>
</tr>
<tr>
<td>Bloq</td>
<td></td>
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</tr>
</tbody>
</table>
ABN AMRO is een pilot gestart om te onderzoeken hoe partijen die betrokken zijn bij vastgoedtransacties informatie kunnen vastleggen en uitwisselen op de blockchainoplossing 'Torch'.

Bij vastgoedtransacties zijn veel partijen betrokken. Denk aan kopers, verkopers, huurders, verhuurders, taxateurs, notarissen, banken, het Kadastraal Gegevensbestand (KvK) en toezichthouders. Torch is een blockchainoplossing waarin betrokkenen op een betrouwbare en efficiënte wijze informatie kunnen vastleggen, inzien en uitwisselen. Met ieder zijn eigen rol.
DUTCH KADASTER DID …

• JOIN THE NATIONAL BC-PILOTS (SHIPS!)
• CONTINUE THIS FEASIBILITY STUDY
• DISCUSS ‘GREENFIELD’ WITH DUTCH NOTARIES
• EXCHANGE VIEWS & KNOWLEDGE
• PILOT A BLOCKCHAIN WITH OPEN DATA
Instead of risking anything new, let's play it safe by continuing our slow decline into obsolescence.
‘INVENTIVE SOLUTION-THINKERS’
THANK YOU

Jacques Vos