

CELEBRATING

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1978-2018

BLOCKCHAIN 101



What it is and How it May Impact the Multifamily Industry



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BLOCKCHAIN & REAL ESTATE



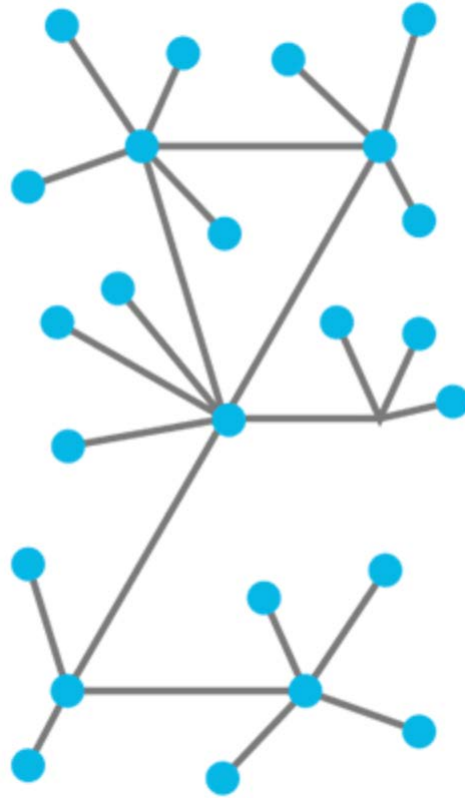
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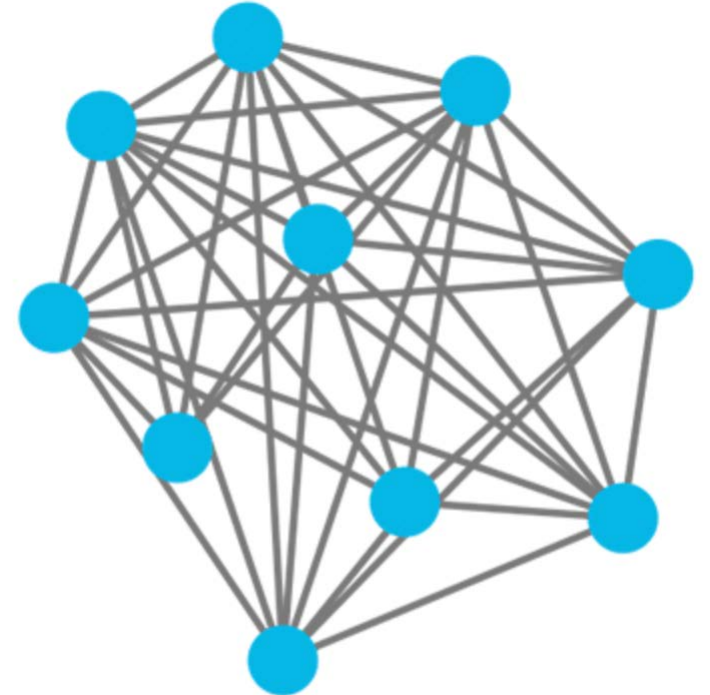
A CASE FOR BLOCKCHAIN



CENTRALIZED



DECENTRALIZED



DISTRIBUTED

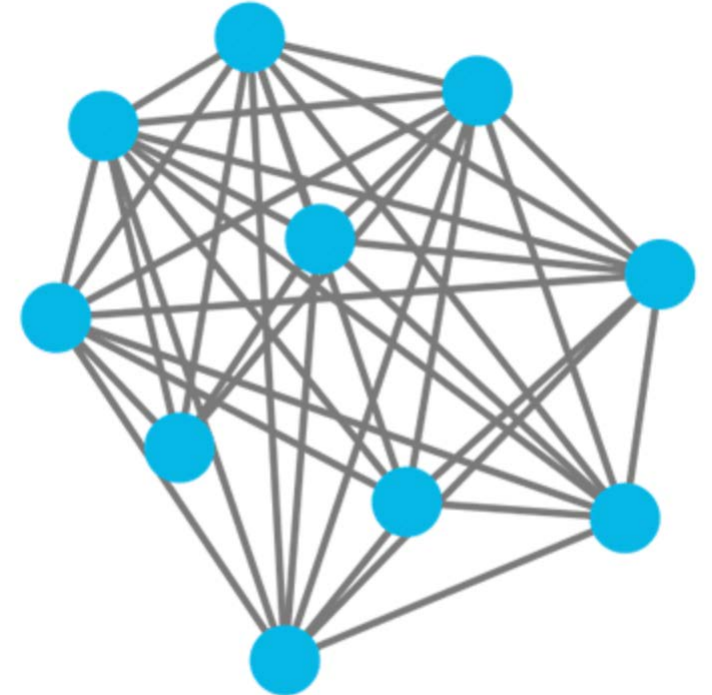


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A CASE FOR BLOCKCHAIN

- Blockchain is **bleeding edge technology**, still high on the 'hype cycle'
- Blockchain is the technology used to power Bitcoin
- Digital information is **distributed but not copied**
- Blockchain enables **standardization** and **process integration** in business networks
- Blockchain fits to the **digital transformation paradigm**; technological means to redesign business models and processes



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PUBLIC BLOCKCHAIN & CRYPTOCURRENCY

Public Blockchains:

- ***Anonymous***
- Peer to Peer
- ***High Immutability***
- Trustless Environment
- Access to cryptocurrency controlled by private keys



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ENTERPRISE & DISTRIBUTED TECHNOLOGY

An integrated network, updated in real-time with always-consistent data

Ability to set rules for each blockchain enforces compliance

Tracing data from provenance to present to reduce disputes or discourage fraudulent activity

Increased efficiency of industry processes, reduced auditing costs

Consent, protection, and control of consumer/customer data

High level of trust in repository of transactional data

Blockchains for business are generally *permissioned and private*, and prioritize:

- **Identity** over anonymity
- **Selective endorsement** over proof of work
- **Assets** over cryptocurrency



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DISINTERMEDIATION OPPORTUNITY



Property search -
blockchain-
enabled MLS



Agentless
Property
Tour
Capabilities



Pricing,
Availability &
Unit Selection



Identity
Screening &
Online Leasing



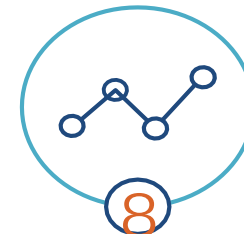
Lease
Execution &
Document
Storage



Lease
agreement
using smart
contracts



Automated
payments and
cash flow
management
using smart
contracts



Real-time data
analysis



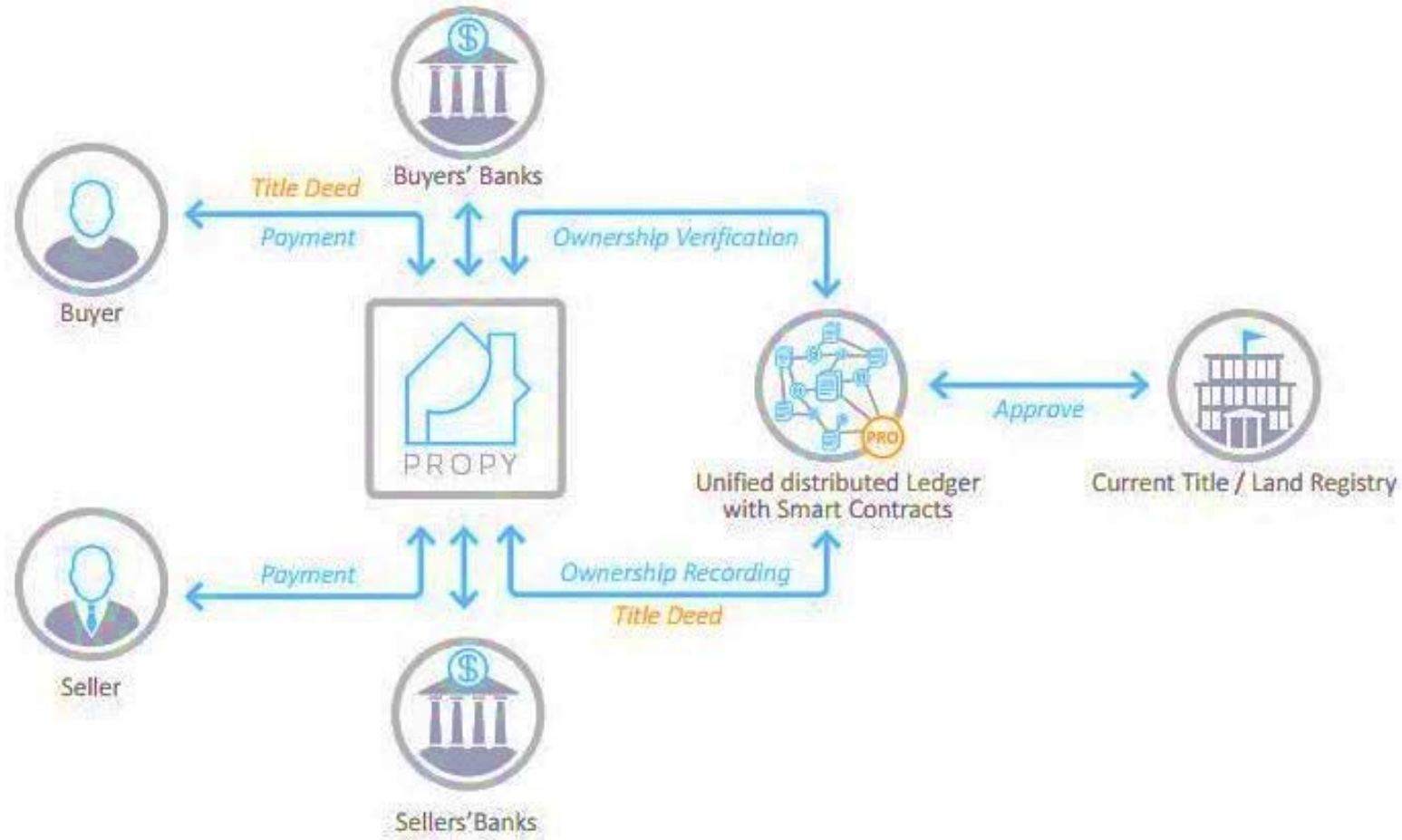
Connected
Building
Centric



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GEOPOLITICAL ECONOMIC LANDSCAPE



DISINTERMEDIATION OPPORTUNITY - OUTCOMES



Instant settlement and management of cash flows



Simplified property management



Legally enforceable contracts



Faster reconciliation of payments



Immutable record of land titles



Reduced transaction times



Increased security and transparency



Lower costs and less title fraud



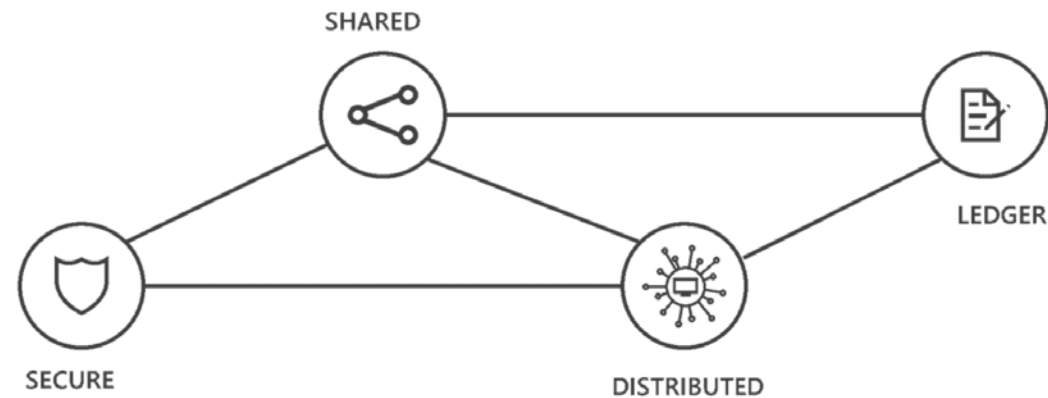
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SUMMARY

BLOCKCHAIN IS A DISTRIBUTED LEDGER THAT CREATES A PERMANENT AND SHARED RECORD OF TRANSACTIONS ... *WITH CONSENSUS, PROVENANCE, IMMUTABILITY AND FINALITY.*

“At its core, blockchain is a shared ledger that allows participants in a **business network to transact assets where everyone has control but no one person is in control.**”



Efficient search process due to fragmented listings & sales data

Real-time rich data affects management decision making

Streamlines global management of lease agreements, contracts and PSA's

Source: IBV C-Suite study - Three ways blockchain Explorers chart a new direction - May 2017



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