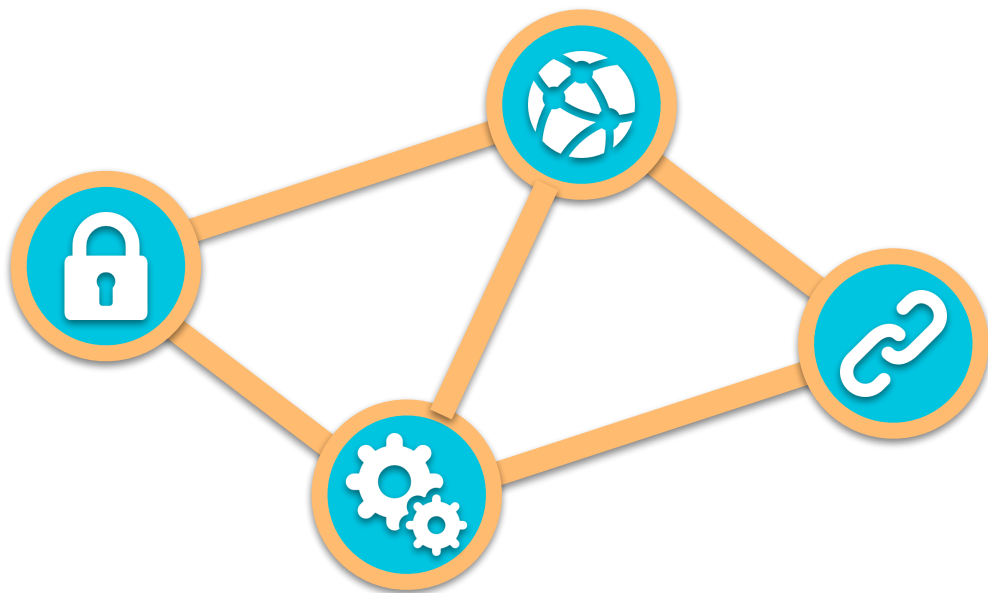


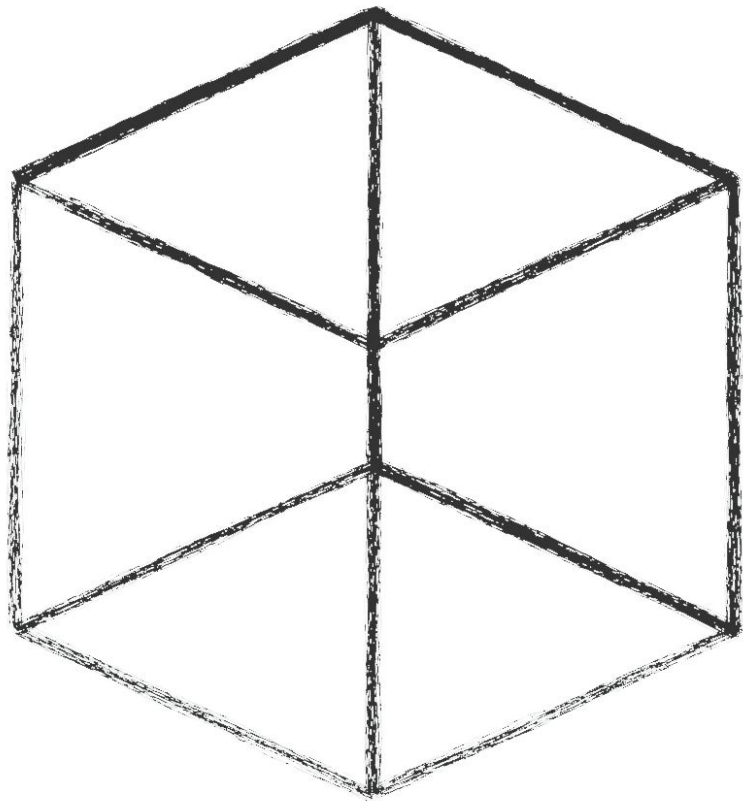
# Blockchains, Smart Contracts, and OpenLaw

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Director of Cardozo Blockchain Project  
October 20, 2018



## BLOCKCHAINS MANAGE ASSETS AND EXCEL AT TRACKING

A new data structure that creates a persistent record of who owns what at what time, including natively digital assets (bitcoin, ether, ERC-20/721 tokens) and other classes that are increasingly represented on a blockchain

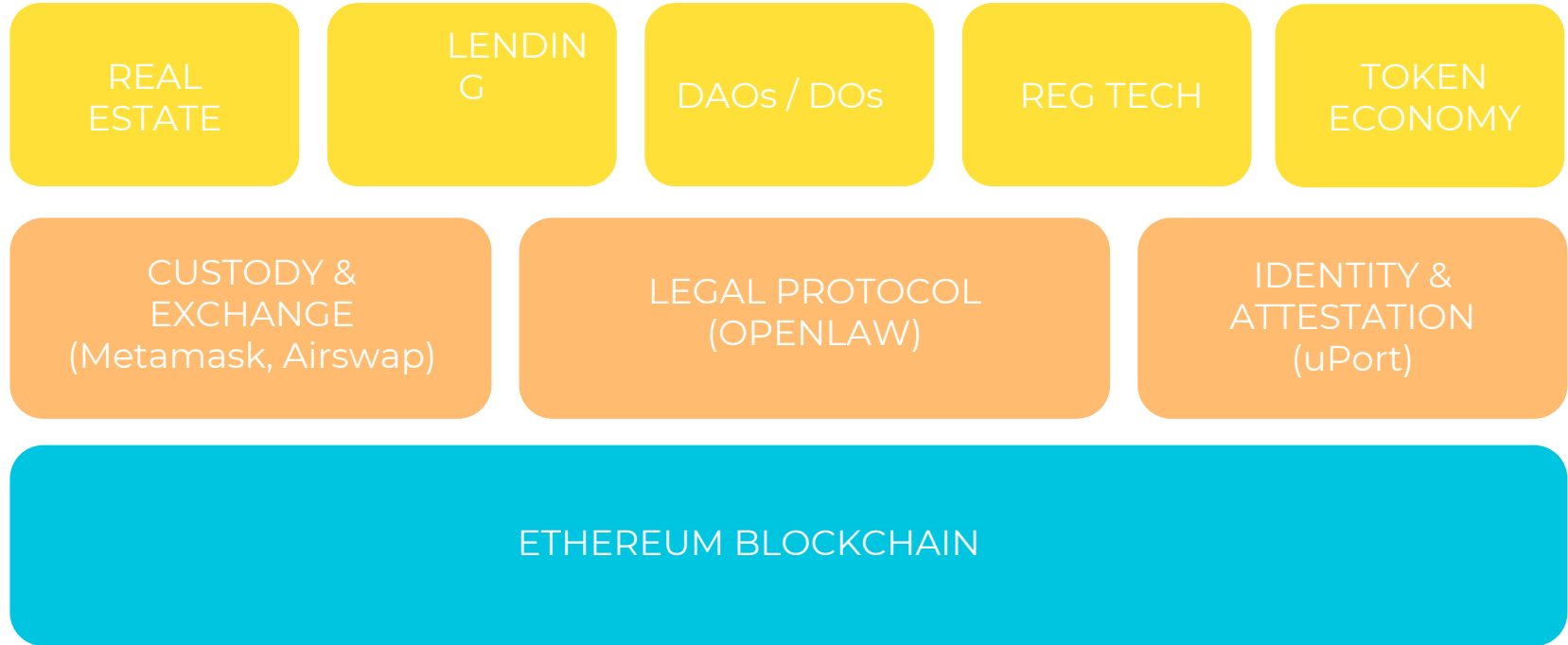


# SMART CONTRACTS MOVE BLOCKCHAIN-BASED ASSETS

These trustworthy computer scripts enable assets to be transferred in a matter of seconds and in complex ways.

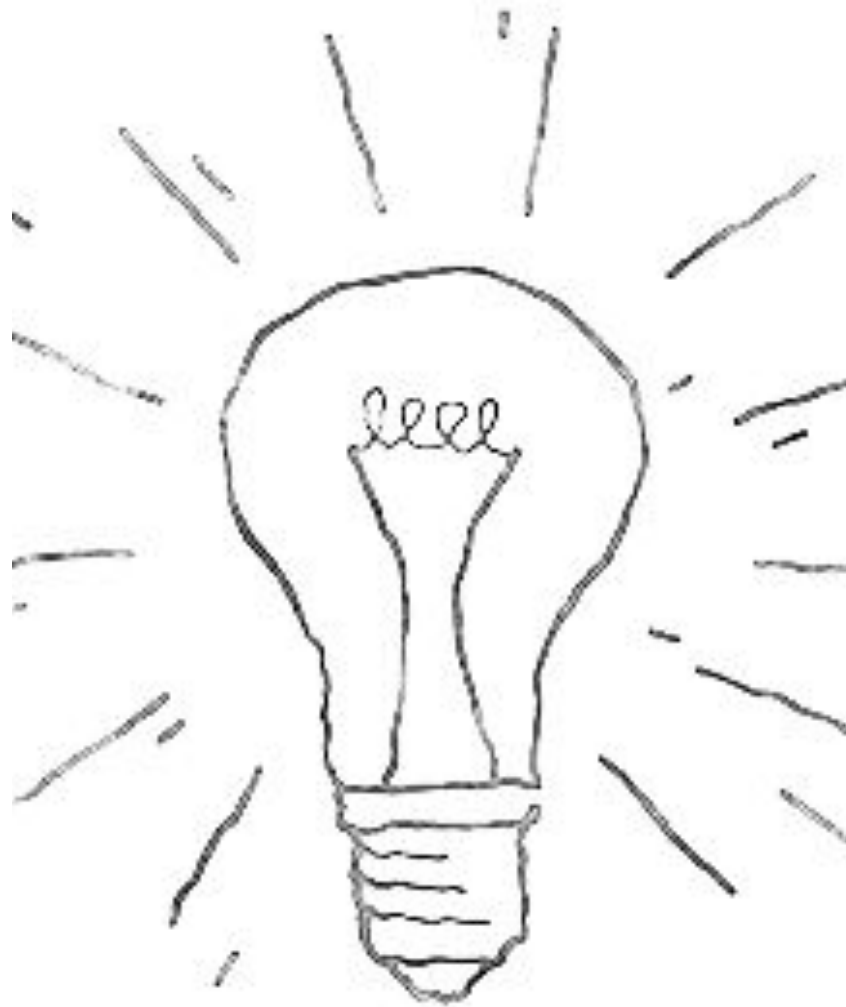
# THE EMERGING BLOCKCHAIN STACK

4



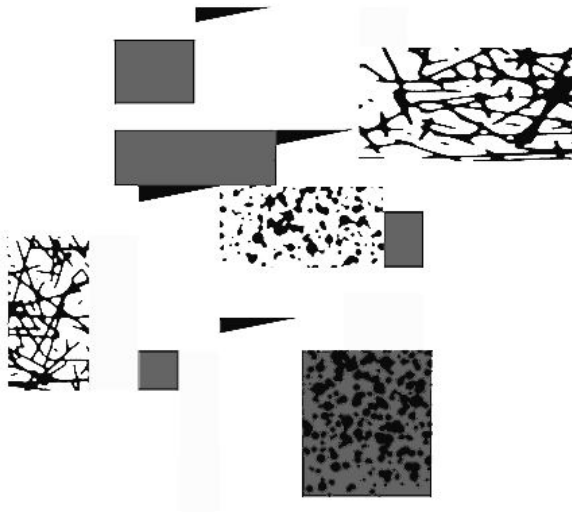
# BLOCKCHAINS STREAMLINE LEGAL OPERATIONS

- ⑤ Document Automation
- ⑤ Contract Management
- ⑤ E-Signatures
- ⑤ Automated Compliance
- ⑤ Transferring blockchain-based assets



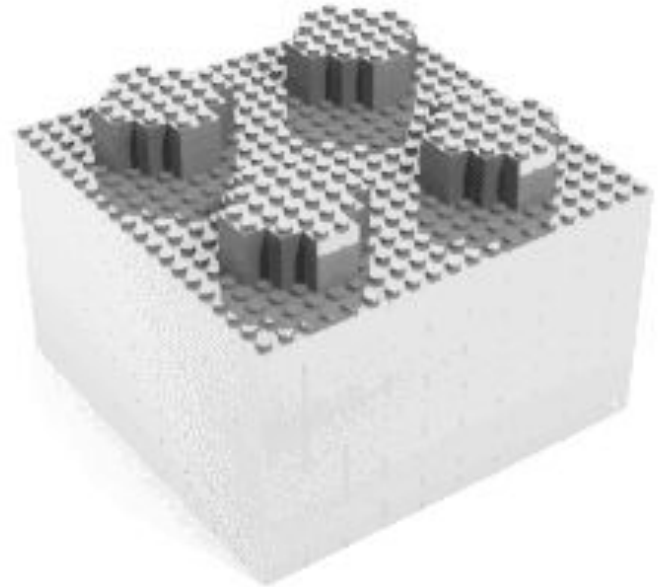
# FINANCIAL & LEGAL PRIMITIVES

- ⑤ Property Rights Modelled in Code
- ⑤ Payment & Tax
- ⑤ Escrow
- ⑤ Alternative Dispute Resolution
- ⑤ Options / Vesting
- ⑤ Voting / Governance



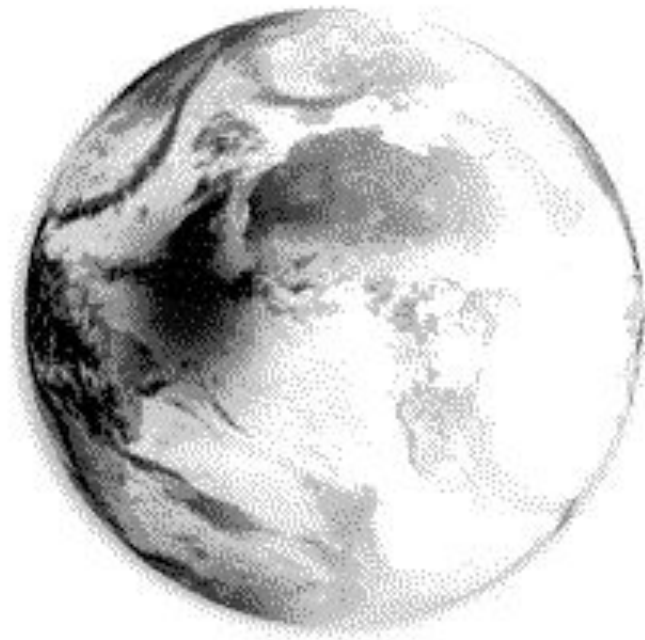
# AGREEMENTS ASSEMBLED LIKE LEGO BLOCKS

- ⑤ Financial Primitives
- ⑤ Legal Primitives
- ⑤ Encoded natural language provisions



# GLOBAL ASSET AND LEGAL STACK

- ⑤ Code-based standards
- ⑤ Auditable & Automated Compliance
- ⑤ Tamper-Resistant & Resilient
- ⑤ Harder to regulate -- jurisdictional competition, thinner intermediaries



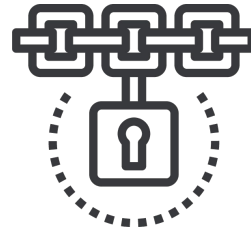


# SMART CONTRACTS HAVE LIMITATIONS



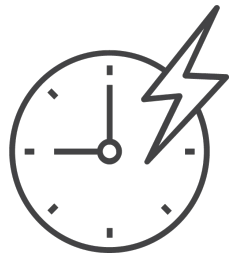
## PRIVACY

Blockchains leak information, enabling the deanonymization of commercial activity facilitated through smart contracts



## LIMITATIONS OF CODE

Smart contract's can't represent every contractual promise, particularly those that are not objectively verifiable



## SELF-EXECUTION

Smart contracts can be designed to be autonomous, creating commercial risks



## USABILITY

Blockchain-based applications are still difficult to create and manage and incorporate natural language provisions



**OPENLAW**

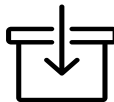


# OPENLAW PROTOCOL



## MARKUP

Legal agreements are marked-up using our domain specific markup-language, turning contracts into computable objects.



## STORAGE & SIGNATURE

Evidence of “state” of agreement and electronic signatures are stored on the Ethereum blockchain.



## EXECUTION & REASONING

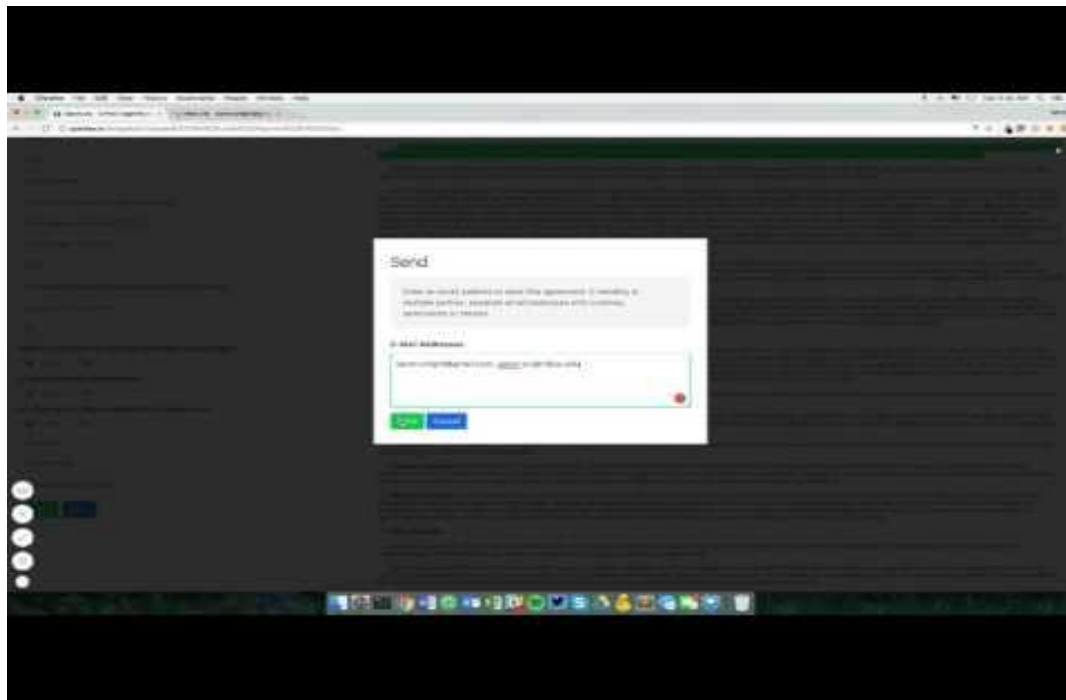
Once signed, agreements trigger smart contracts in secure and private execution environment and users retain the ability to halt / stop smart contracts



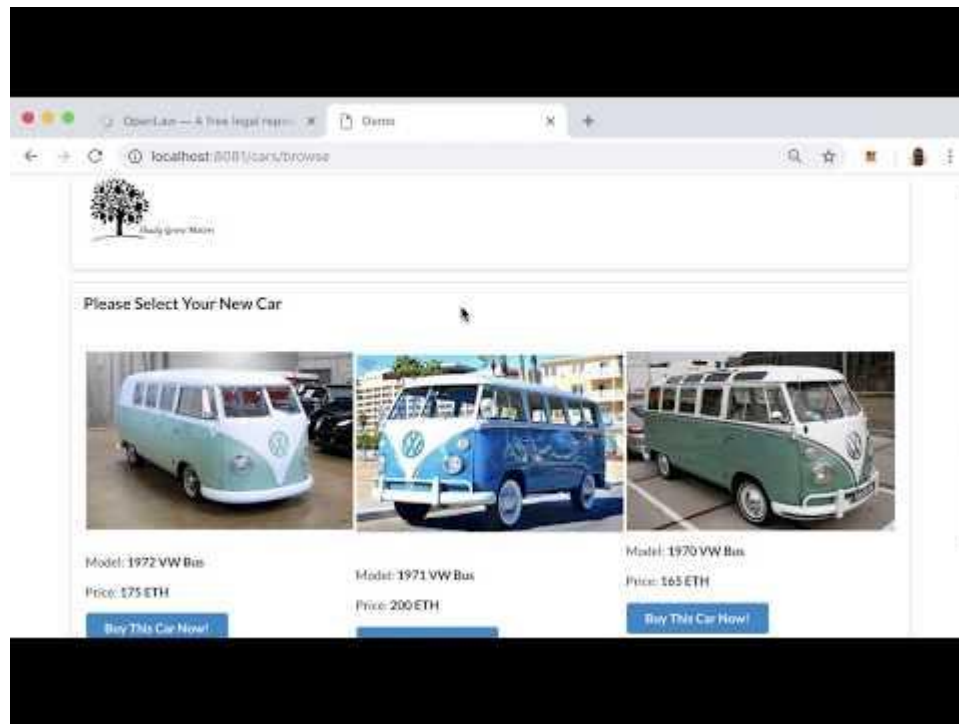
## APPLICATION & API

Public and private APIs allow third parties to integrate OpenLaw Protocol into their respective systems and build blockchain-based applications.

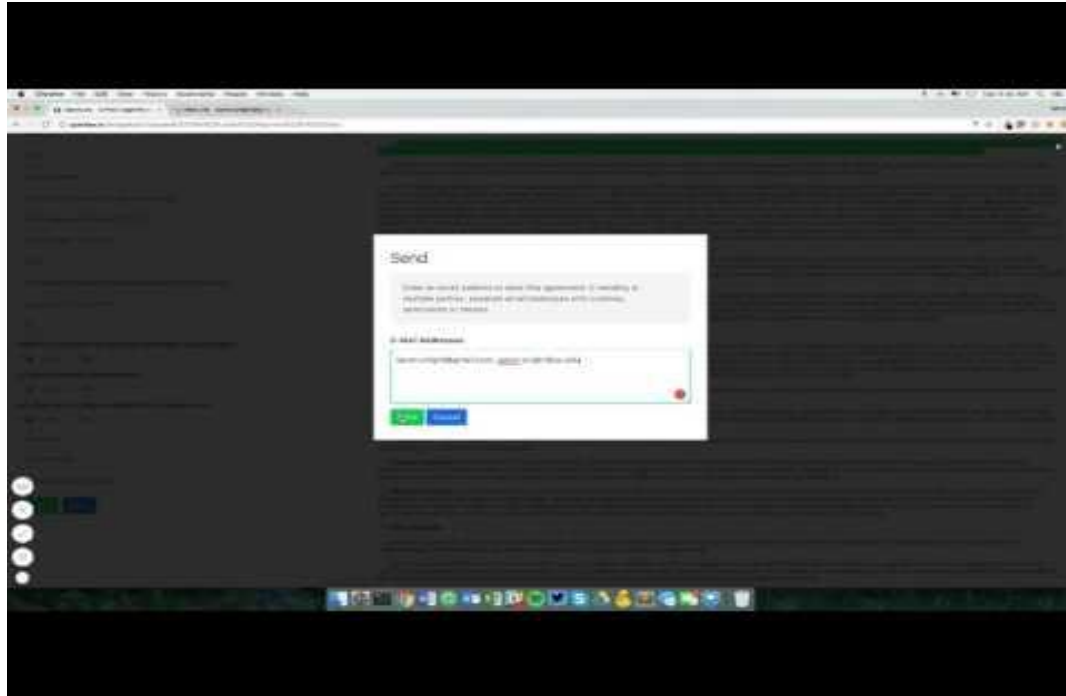
# OPENLAW DEMO: EMPLOYEE OFFER LETTER



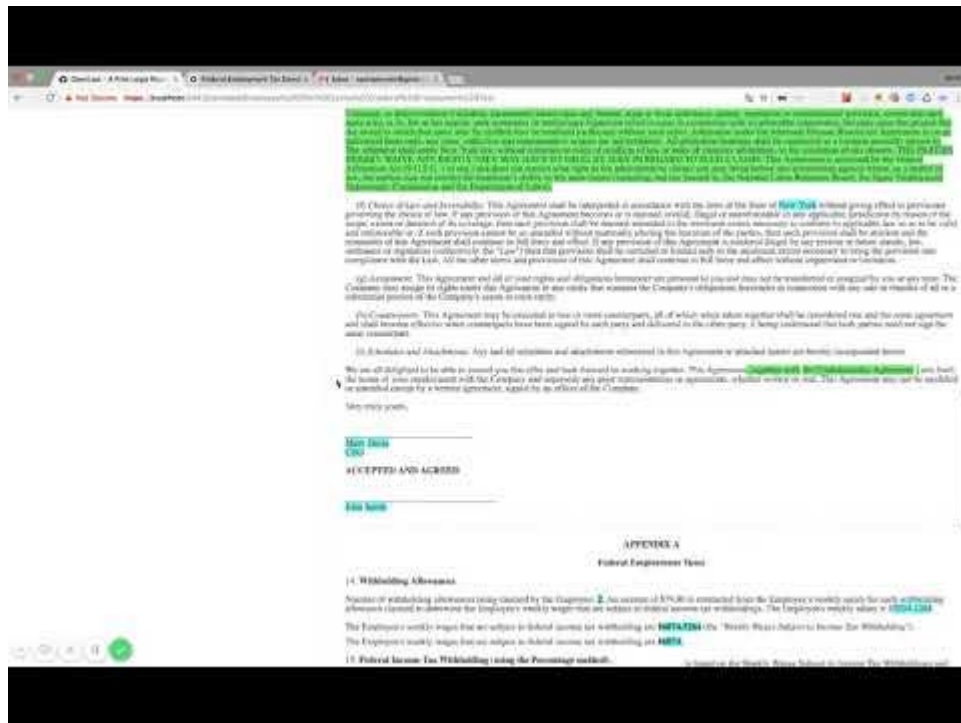
# OPENLAW DEMO: DECENTRALIZED DISPUTE RESOLUTION



# OPENLAW DEMO: EMPLOYEE OFFER LETTER



# OPENLAW DEMO: CODE AS LAW - TAX COMPLIANCE

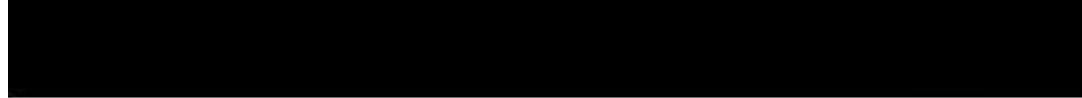


# OPENLAW DEMO: SALE OF LAND REAL ESTATE DEMO





# OPENLAW DEMO: LOAN AGREEMENT DEMO



**July 15, 2018**



# CONTRACT MANAGEMENT

## ➤ **Public Library & Private “Instances”**

We host a public repository and create private contract repositories

## ➤ **Contract Conversion**

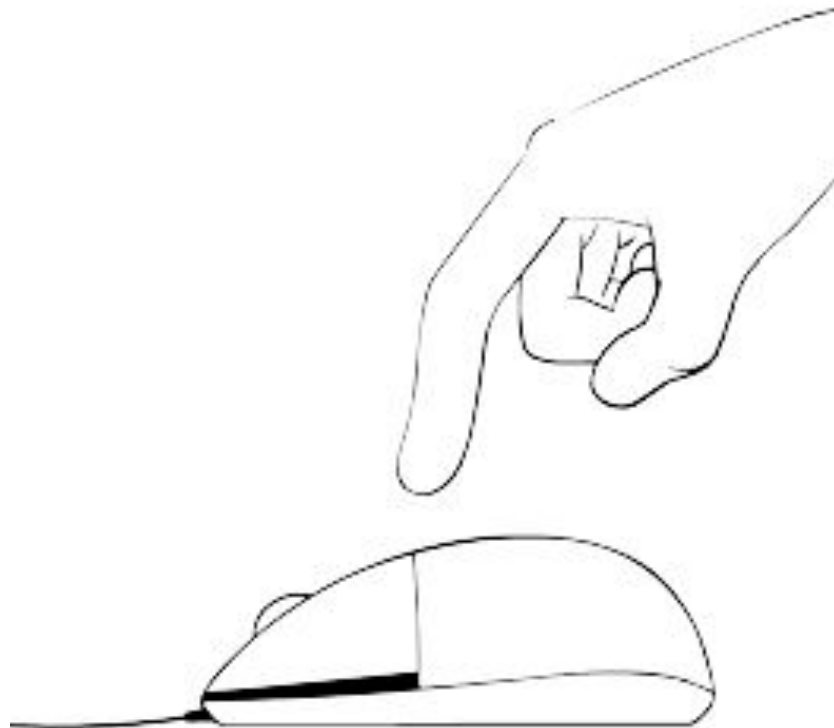
We can ingest any agreement / set of agreements (i.e., deals) and have built tools to convert existing agreements.

## ➤ **Contract Management Tools**

Our tools enable you to keep track of agreements executed through the system and track contract signatures.

## ➤ **Private API**

Agreements, work flows, and contract management tools accessible through private API so that it can be integrated with internal systems or support novel stand alone applications.



# CODING COMPLIANCE

## ➤ **Smart Contracts Designed to Enforce Internal Controls**

Agreements can incorporate smart contracts to enforce internal controls

## ➤ **Automatic Legal Compliance**

Smart contracts can be used to model out and enforce legal compliance, so long as rules objectively verifiable (i.e., tax compliance).

