

Governance and Solution Design

GOAL

A Land Registry system that creates blockchain records, on which buyers/sellers can sign up and use the platform to view the land, request access, get the land title ownership and can also transfer ownership.

Challenges in the existing land registry process:

- The Role of brokers.

In many countries of the world the method of land registration is still mostly complicated and inefficient. There are currently three major issues related to land registration: time delays, theft, and human error. Buyers and sellers usually contact brokers to know more about the market offerings. This way buyers identify lower/higher prices of marketplace.

- Fraud Cases.

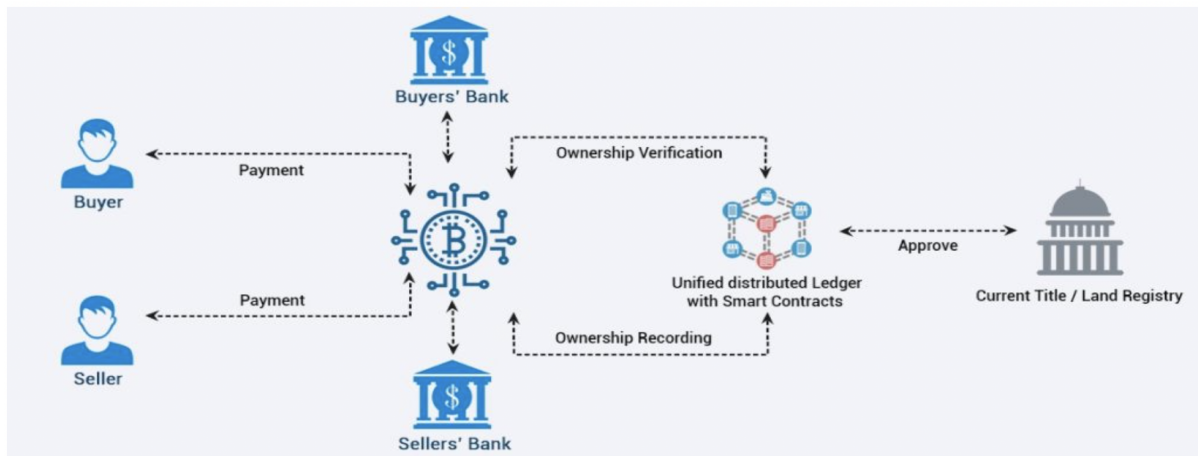
All of the registration process is paper based and relies purely on human actions. This means that the whole process is prone to failure, as humans are not sophisticated as their digital counterparts. Blockchain can solve this problem.

- Time Delays.

It takes a very long time to get the land registry title. Probably will take several months to complete and register. At some stage, this long process can create legal issues.

Solution.

This blockchain platform can provide a distributed database ledger with smart contracts, where every user can review and access the information without the involvement of central authority. This platform shows authenticity, owners can transfer the land ownership legitimately.



Smart Contract

Smart Contracts or chaincode make the process simpler, user creates digital decentralized ID, the nodes validate the transaction, as soon as it gets confirmed the transfer of land title gets updated and smart contract triggers to update the ownership for a new buyer and the record stays on the ledger.

Governance Model

This project aims to be deployed by the govern, who holds the land registry. In order to create a decentralized archive of the land registry, the Land Registry will select partners to run the network and onboard the users to the network.

We decided that banks will be the partners as banks are one active participant during the process of buying and selling properties. In addition, banks usually have holds over the properties as they provide credits to buyers acquire their properties.

Network Members and roles

Govern – Is the entity that owns the Land Registry. All transactions must be endorsed by this entity and it is the only one who can create new registries

Banks – They are the organizations in the network who will onboard the users to the network creating their certificates. Bank's nodes will hold chaincode and endorse the transactions.

Users – Access the services through the user interface. They can assume two roles, as buyer or seller/owner. Owners carry in their wallets their certificates of ownership. Using the platform, Buyers can send a proposal/offer to Owner. Owner approve or not the offer in order to transfer the land title.

Network design

