

Propy

Global Property Store with Decentralized Title Registry

Whitepaper Summary

The summary is subject to change before the release of the full Propy Whitepaper

Full Whitepaper available at: <https://tokensale.propy.com/Propy-White-Paper-17-Jul-2017.pdf>

Introduction

Throughout history, real estate has served as the most stable, illiquid store of value. Before the days of insurance, real estate was considered the only truly safe store of wealth. While one's bank may be robbed, one cannot easily have their land stolen from them. While real estate's illiquidity was crucial for 16th century nobles to find a safe place to store value, real estate's illiquidity now presents significant inefficiencies for real estate investors, especially those buying properties abroad. Between 2009 and 2016, the demand for cross-border real estate transactions grew 334% from \$65 billion to \$340 billion¹. Governments compete internationally to attract this excess capital. To solve the illiquidity problem, Propy has been building a decentralized, global property store. This online store will rely on Propy Registry, built on ethereum blockchain to track global real estate ownership, as well as PRO, a utility token to enable the development of a thriving, self-sustaining ecosystem around this database and token holders.

Problem

When compared to exchange-traded securities such as equities and government bonds, real estate transactions are incredibly slow, with poor price discovery mechanisms. Additionally, the real estate industry is highly centralized and balkanized. There are no international standards or comprehensive technology for electronic property rights transfers. Each country maintains its own registry and establishes national rules for property deed registration and transfers. Legacy land registry systems were developed to handle local investors but are ill equipped to handle international value and ownership transfer. This leads to a less than optimal experience for many people on both sides of the marketplace.

Solution

The problems laid out above could be solved by smart contracts that execute real estate ownership transfer, combined with a sleek user interface to allow for engagement with the blockchain, and a defined protocol to ensure transactions occur in compliance with local regulations.

¹ Savills (2017): Around the World in Dollars and Cents

To this end, Propy is developing Propy Registry: a blockchain endowed with a suite of smart contracts to track and execute real estate transactions according to regional regulations, as well as PRO: a utility token that would be required for asset transfer and other on-chain events.

Propy's development team has designed a real estate transaction tool powered by smart contracts. The propy transaction tool combines solutions from legal, Blockchain and payments industries. By using Ethereum, Propy allows each party including the broker, buyer, seller and title agent/notary - to sign off on a transaction using a private key within the existing legal framework.

The scope of our current prototype is to be narrowed to prioritize for the fast adoption in one of our first markets in the US. It is compliant with the existing legal framework we will further refer to the US legislation and particularly the legacy and flows in California relative to real estate purchases.

Under the Propy "end goal" model, every single step of the transaction, from the initial property reservation through the signing of the purchase agreements to the delivery of the title deeds, is recorded on blockchain and executed with smart contracts.

However, we also recognize the significant limitations of blockchain technology and are building a multi-stage solution to be gradually phased in over time. The Propy team works actively on several fronts to ensure that we are building the correct solution that can solve real problems while also complying with all regulations.

Figure 1 Propy iOS App

Product

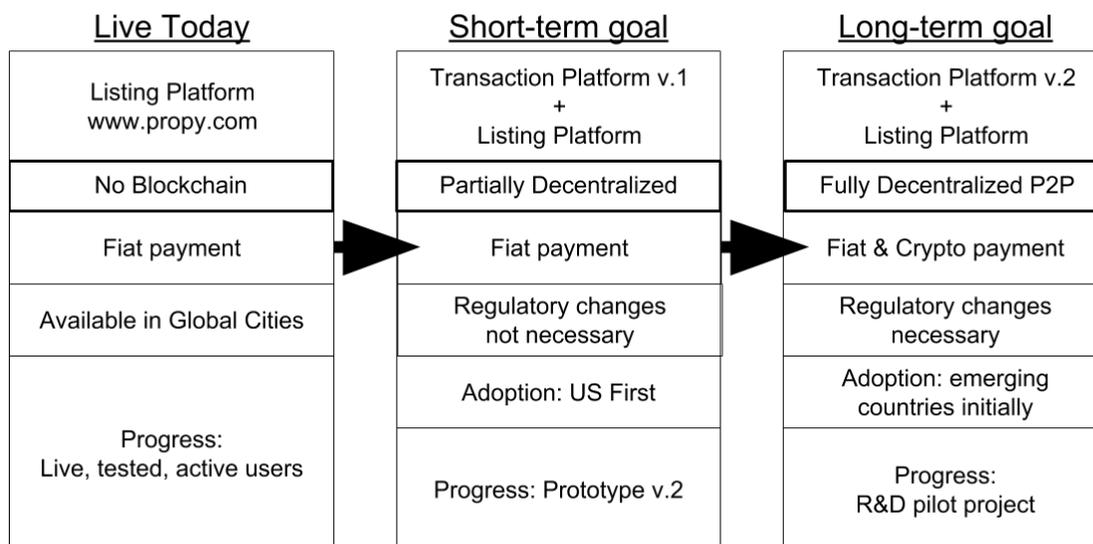
The first iteration of the Propy DApp (which includes a centralized interface and decentralized smart contracts running in the backend) partly decentralizes the existing real estate market (see Short-term Goal at Figure 2). It reduces reliance on a number of intermediaries required for transactions involving US-based properties and eliminates the risk of fraud. Propy aims for a transition over time toward a pure P2P decentralized system (see Long Term Goal at Figure 2). We like to call it P2P2: Peer-to-Peer Property Purchase.



Based on our 12 years of cross-border property transaction experience, we anticipate emerging markets, hungry for investment and less encumbered by entrenched interests, will see the quickest transitions to a pure peer-to-peer framework. Propy has already begun the process of accelerating this transition across multiple metropolitan markets. As a first product development step Propy has released the listing platform in the form of an iOS app and web-site into production and tested it with early adopters (see Figure 1).

We recognize the significant challenges of technology adoption and are building a multi-stage solution to be gradually phased in over time. The Propy team works actively on several fronts to ensure that we are building the correct solution that can solve real problems while also complying with all regulations.

Figure 2 Product development roadmap



Business Model

Propy has a very simple and scalable business model. When a property is purchased, Propy takes a small percentage (starting from 0.2% and averaging 1%) of the final purchase price. Propy charges brokers per transaction. The payment is initially processed in fiat and cryptocurrencies will be phased in for the jurisdictions where possible. With the market for all cross-border real estate deals amounting to \$340bn, the addressable market for Propy is more than \$3.4bn annually.

Propy Token

Propy is introducing PRO: the Propy Utility Token. PRO is built on the ERC20 token standard to allow for both simple integration into users' wallets and ease of use in traditional

cryptocurrency exchanges. During the token sale, a fixed amount of PRO is created. Afterwards, no more shall be minted. The total supply of PRO will slowly decrease over time as tokens are taken out of circulation, for example, from someone with PRO losing their private keys. Therefore, PRO will be effectively deflationary. Additionally, if Propy receives PRO, then a portion of the total amount received is redistributed to Propy users.

PRO is required for interaction with the Propy Registry. Specifically, if a user wants to change ownership of a title or register a new title, then the transaction fee for writing that data to the blockchain must be paid in PRO. Additionally, Propy Utility Token holders receive the right to vote on the price of those transaction fees, and voting power is proportional to the PRO owned.

Propy will sell PRO to governments and similar institutional clients, allowing them to engage with Propy Registry. Tokens paid for writing data to the Propy Registry are stored in a special Rewards smart contract on the Ethereum blockchain. These aggregated amounts of tokens are paid out to the token holders, proportional to the PRO owned.

The rewards contract generates a token distribution snapshot every month and distributes rewards for the quarter according to the snapshot. The snapshot is stored in the blockchain, so anyone can verify that rewards were distributed correctly.

Token Statistics

- Total Supply: 100,000,000
- Initial Sale Price per PRO Token: \$1
- Token Type: Utility Token
- Token sale distribution: 35% - token sale / 35% - network growth / 15% - donations / 15% - development team

Token Functionalities

- Unlocking write-access in Propy Registry
- Rewards for token holders
- Giving voting rights to token holders

35% of the tokens will be distributed over period of time to achieve network growth, particularly to potential homebuyers and brokers so they join Propy as well as to governments to incentivize them to make the first amount of ownership transfers at Propy Registry.

CONCLUSION

Propy is proposing a new decentralized global real estate market with a unified real-time transaction interface approaching the functionality and speed of electronic stock market exchange platforms. It will allow real estate assets to become liquid while providing users with greater control and protection of their property rights to those provided by the government in whose jurisdiction the real estate asset is located.

Propy is building a new ecosystem of token holders, brokers, governments and end users incentivized to support the transition to a seamless, secure and globally recognized P2P transaction ecosystem:

- *Token holders* will be able to grow the ecosystem and obtain PRO from each transaction when the change of ownership is recorded on Propy Registry. The token holders will have the incentive together with the Propy to pursue the changing of regulations in many countries toward a more decentralized real estate market.
- *Brokers* and real estate corporations will use the system to more easily access foreign buyers and to close transactions instantly and securely online.
- *Governmental entities, notaries and title companies* need a system to reliably transfer data between each other and eliminate fraud in regulated markets and reduce corruption in less regulated markets. Governments will be able to use this technology to demonstrate the transparency of their real estate market and enhance their attraction of foreign investors
- *The consumers* – buyers and sellers - will be able to trade real estate assets in real time faster, cheaper and more securely.

Propy's ambition is to help propel real estate into the e-commerce era and revolutionize the industry.

That will take experience, connections, work and resources. We welcome your interest and support.

