A Technology Company focusing on the Real Estate industry wanted to connect real-world assets through the Blockchain network and make it accessible for micro-investors worldwide to invest in assets in entirety or in fragments.

**Client**
A Technology Company focusing on the Real Estate industry wanted to connect real-world assets through the Blockchain network and make it accessible for micro-investors worldwide to invest in assets in entirety or in fragments.

**Overview**
Given the nature of the real estate business—high upfront capital requirements, high transaction costs associated with brokers, complicated regulatory paperwork etc.—the real estate market has become synonymous with illiquidity. Indium Software’s Blockchain solution:
- Created a platform for an Initial Coin Offering (ICO) using ERC20 tokens.
- Recorded and expedited the real estate investment process in a transparent and immutable way, thereby reducing paperwork.
- Enabled real estate investors to transact in fractions of properties on an online marketplace.

**Key Highlights**
- Close to $6 Million was raised through the Initial Coin Offering.
- Increased liquidity by securitization of illiquid real estate assets.
- Transaction time & costs were considerably lowered and transparency improved owing to the distributed ledger and bypassing real estate agents.

**Engagement:**
Offshore engagement with:
- 1 Blockchain Architect
- 2 Engineers
3 months - Ongoing
1 Challenges

» Real estate investment involves a lot of money, as there is no option to own a fraction of a property, thus making it unaffordable for a vast majority of people.
» High transaction cost being paid to agents and brokers, for the closure of deals, adds to the investment costs.
» A huge amount of paperwork in the current system consumes a considerable amount of time and burden for the related parties.
» There is a severe lack of transparency and difficulty in maintaining the immutability of records in the system.

2 Need For Blockchain

» To record and expedite the real estate investment and operations process, in a transparent and immutable way.
» All parties involved in the process are brought together under the same network.
» Reduced paperwork and back-and-forth communication significantly reduce the time and related costs.

3 Key Requirements

» Create a platform for Initial Coin Offering (ICO) using ERC20 tokens.
» Provide a user interface for buyers and sellers to meet and transact in the same network.
» Transfer of ownership in a secure and transparent manner, using the Blockchain infrastructure.

4 Approach and Implementation

» User registration and dashboard features were implemented in a web application using PHP with MySQL backend database.
» Users register using the Sign Up page into one of the following categories:
  - Buyer
  - Seller
  - Affiliate
  - Investor
» Asset management functionalities for the admin user(s).
» User registrations are backed by KYC verification.
» Investors can buy tokens for assets and are entitled to profit/dividend.
» A buyer can buy a property in its entirety or a portion of it. Tokens will be transferred according to their stake in the property.
» Users will buy and sell their assets through the platform.
» All assets will be managed within the platform and 80% of the profits will be returned to affiliates on pre-defined intervals.
» Smart Contract was written in Solidity for:
  - Token Creation
  - Token Transfers
  - Asset Creation
  - The transaction between Buyer and Seller
  - Processing of Dividend Pay-outs
5 Business Impact

» Close to $6 Million was raised through the Initial Coin Offering.
» Transaction costs were considerably reduced, since the platform provides a direct link between the buyer and the seller, bypassing agents and brokers.
» Faster transaction processing due to distributed technology and data being available quicker.
» The approval process is faster as all the parties are connected to the same platform/ network.
» Transparency and security of transactions were greatly improved as every event is recorded on the Ethereum Blockchain.