TOKENIZATION OF FUNGIBLE ASSETS

Project Proposal

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INTRODUCTION

The tokenization of assets refers to the process of issuing a blockchain token that digitally represents a real traceable asset. These blockchain tokens can then be traded on a secondary market.

These digital tokens can include unique hash values which could represent

- Share in a company
- Ownership of a piece of real estate
- Precious metals, stones etc.
- Financial instruments, equity, bonds, fund units, etc.
- Gift cards, vouchers etc.

Fungible vs. Non-Fungible Assets

There are two types of assets:

1. Fungible assets
   - **Interchangeable** - each unit of the asset is exactly the same holding the same value
   - **Divisible** - each unit can be divided
   - Example - fiat currency like Indian Rupee, each Rs.100/- note has the same value and can divided into further units
2. Non-fungible assets:
   - **Unique and not necessarily interchangeable** - each unit is unique and the values will be different
   - **Non-divisible** - cannot be divided into further units
   - Example - a piece of art like Mona Lisa which has a unique value and cannot be divided

THE PROBLEM

Tangible items have been difficult to subdivide or physically transfer. Investors have manually traded these assets on paper, often through layers

of intermediaries, which is slow, complicated and expensive. These trades are also more difficult to track due to the regulatory nature of paper transactions, especially when it involves cross-border legislation.

THE SOLUTION

By switching to a digital token system, asset owners and investors can create new efficiencies like making assets more liquid by automating what was previously a cumbersome, manual process — while retaining the real-world characteristics of the underlying asset itself.

THE CURRENT SYSTEM

As already mentioned, the physical assets are often traded manually which has the following limitations:

1. **Intermediaries**: Trade is conducted with the help of third-party brokers . This slows down the process, making it inefficient and more expensive while adding the risk of additional error in any transaction.
2. **Territorial barriers**: These trades are also more difficult to track due to the regulatory nature of paper transactions, especially when it involves cross-border legislation.
3. **Less transparency**: It is often difficult to trace the legal ownership of an asset during these trades.

NEED FOR ETHEREUM

Ethereum based tracking of assets has attributes that solves a lot of problems associated with management and trading of assets. This is appealing to both asset issuers and investors.

1. **Immutable**: once someone buys tokens, nobody can erase or change the record of ownership.
2. **Accessible:** blockchain tokens can be accessed from any place.

3. **Divisible:** tokens represent the promise of greater liquidity, which increases the expected value from trade and eliminates the need for minimum investments.
4. **Cost-effective :** tokens eliminate the middlemen, which often limit investment accessibility by restricting investments to accredited investors only, demanding high fees and requiring an access to stock-trading accounts.
5. **Transparent** : tokens eliminate discrepancies in information present during the transfer of ownership.