REAL WORLD ASSET TOKENIZATION ONE PAGER

A TALE OF TWO TRENDS

Tokenization of RWAs serves as a driver for the next leg of these two trends:

Digitalization of assets
The transformation of physical assets into digital formats or the migration of digital assets onto new infrastructure.Tokenization examples - inventory, supply chain assets, financial products,...

Financialization of assets
The process of turning any asset into a financialinstrument. Tokenization examples - Data, intellectual property, in-game assets,...

	REAL ASSETS	FINANCIAL ASSETS
INTANGIBLE ASSETS	Examples • Patents • Goodwill • Trademarks • Copyrights	Examples • Money-Market Instruments • Equity • Derivatives • Bonds
TANGIBLE ASSETS	Examples • Machinery • Inventory • Art • Collectibles	Examples • Real Estate • Precious metals • Commodities

DIGITALIZATION

FINANCIALIZATION

BENEFITS

We believe through leveraging features of blockchain technology, **tokenization unlock three key benefits:**

Efficiency
Improves transparency, traceability, programmability... of the asset
Examples - Inventory management, trade finance, healthcare records

Liquidity
Allows assets to change ownership in a transparent and structured
Examples - Venture capital, fine art, collectibles, music, carbon credits

Decentralization of Ownership
Allows distribution of asset ownership in a transparent and structured way. Examples - Decentralized Physical Infrastructure, IoT.

BENEFITS		APPLICATIONS
Efficiency		Financial Markets, Digital Identity, Public Sector, ESG reporting,...
Liquidity	Tradability	Carbon Certificates, Collectibles, Art,...
	Segregation	Intellectual Property, Trademarks, Digital Asset Rights,...
Decentralization of Ownership	Financial Assets	Private Markets, Property,...
	Real Assets	DePIN, Maas, AI, IoT

WHY NOW?

Almost five years after its initial hype, tokenization of RWAs is looking different. We identified three key reasons that give us confidence that it's different this time around.

1 **More mindshare & activity -** We see more mindshare and activity from a larger set of players who are actively trying out the technology.

2 **Tech stack & developer tooling -** We see improvement in the infrastructure and tooling required for tokenization of RWA.

3 **Legal & regulatory clarity -** We have seen regulatory improvement to cater for tokenization of RWA over the past years and only expect this to accelerate as more stakeholders openly express interest.

ADOPTION

We see adoption playing out in the following sequence

MATURITY

1 **Efficiency**
Finoncial Markets, Digital Identity, ESC reporting.-

2 **Tradability**
Carbon Cerliticoles, Collectibles, Ar,...

3 **Decentralization of Financial Asset Ownership**
Privote Morkets, Property.

4 **Segregation**
Intellectual Property. Tradomarks, Digital Assot Rights...

5 **Decentralization of Real Asset Ownership**
DoPIN, MadS, AI, IoT

WHY FINANCIAL ASSETS

We think there are **four main reasons** why the tokenized RWA narrative is so fixated on financial markets:

1 **Like a glove -** There is a strong fit for tokenization that facilitates and improves existing (i) processes, (ii) liquidity and (iii) the decentralization of ownership of financial assets.

2 **Lingo & founders-market fit -** Financial professionals looking for solutions, see above average value in tokenization because they are familiar with the concept of liquidity and deal with assets that are by definition decentralized of ownership.

3 **Digital representation -** Financial instruments are already largely digital, making them easier to tokenize.

4 **Massive value -** Financial assets make up 2/3rd of all assets globally.

CHALLENGES

The Oracle Problem is the most critical challenge for tokenized RWA. It relates to blockchains inability to access external data securely, hindering their decentralized nature.

We see two trends that are solving the oracle problem.

Innovation & Game Theory - We see evidence that innovative solutions with embedded game theory can align incentives between stakeholders to incentivize updated & correctly reflected tokenized RWAs.

Digitalization - We see digital transformation driving the shift from tangible to intangible assets. We believe over time, more and more tangible assets will be represented as intangible assets.

Outlier Ventures

LESSONS FOR BUILDERS POCKET GUIDE

We hope that this boiled down one-pager can serve as a pocket guide which founders can use along their journey as they build out applications and infrastructure for real world asset tokenization

3 KEY BENEFITS

One of the key objectives of our work is to encourage aspiring Web3 founders working across traditional industries to look around at the existing infrastructure and status quo and ask the question "Is there possible room for improvement or disruption of the industry through the implementation of tokenizing assets?"

As blockchain technology matures, founders need to pivot away from simply selling the technology. **For the next leg of adoption, founders need to sell the solution, not the technology. Having a deeper understanding of the real value of tokenization is the first step in creating a high value solution.**

EFFICIENCY

Improves transparency, transaction costs, execution, reporting... of the asset across the value chain

Unlocking efficiency is the first step in the journey to put all assets on the blockchain. It will serve as the gateway for asset holders to migrate from centralized databases onto the blockchain.

- **The gateway** - We believe that efficiency will be the gateway driver that will incentivize asset holders to tokenize RWAs onto the blockchain.
- **Weave efficiency into the product** - If the product is dependant on RWAs that still need to move on-chain, we recommend embedding efficiency gains as a value proposition into the product. Efficiency is easily quantifiable and creates a tangible argument for asset holders to move on-chain.
- **Start with the inefficiency** - It is trivial but starting with what is most inefficient is a great way to find adoption. The opportunity cost of moving is low for an asset that is plagued with inefficiencies. There's less net benefits for asset holders already efficiently managing assets on chain.
- **Go more granular** - Efficiency is an all-encompassing term. A more granular understanding is needed of what can be made more efficient within the value chain.

Conclusion - We believe that efficiency is currently the main driver behind tokenization. It provides tangible evidence of the benefits of blockchain based assets. Efficiency needs to be woven into the product architecture. even if it's not the core value proposition.

LIQUIDITY

Improves transparency, transaction costs, execution, reporting... of the asset across the value chain

Creating liquidity around an asset unlock hidden value of the asset. An asset is worth the most when it sits in the hands of those who want it the most Creating liquidity on a tokenized RWA marketplace is notoriously difficult. The following factors make it easier to bootstrap liquidity onto the platform:

- **Pent up demand from both sides** - there is a pent up demand from both sellers and buyers of the underlying asset to trade and create liquidity in the asset. It requires at least two parties to trade, so both sides need to be willing to step into the market.
- **Solving for more than just liquidity** - Liquidity itself is a difficult value proposition for tokenized products. We recommend combining liquidity with improvements in efficiency or potential decentralization of ownership of the asset. in the asset. It requires at least two parties to trade, so both sides need to be willing to step into the market.
- **Tokenizing existing vs creating entirely new market** - There are generally two types of tokenized RWA marketplaces that are created.
  - **Existing market** - Tokenizing RWAs that were already traded in other (non-tokenized) market places. Businesses need to solve more than liquidity problems. Efficiency gains or decentralized ownership need to sit at the centre of the strategy.
  - **New markets** - Tokenizing RWAs that were not traded in liquid markets. In case there is a pent up demand from both sides of the market to trade the asset, liquidity standalone is a great value prop. If not, efficiency gains or decentralized ownership need to sit at the centre of the strategy. If it is a completely new asset class created through tokenization (segregation), understand who demand and supply sides flow.
- **Move beyond price speculation** - We agree that asset price speculation is a great way to bootstrap trading volumes for the platform. However speculator interest is always short lived. In the long term the demand to be sustainable and based on something else than pure price speculation.

Conclusion - We believe that marketplaces purely aiming to create liquidity around specific assets are winner-takes-all models where the profitability model quickly turns into a race to the bottom as players compete to create their network effect. We recommend adding additional utility to the platform to create a stronger economic moat.

DOO

Decentralization Of Ownership

Allows distribution of asset ownership in a transparent and structured wayT

Decentralization of asset ownership is the true end-game in which ownership, participation and investment into all assets get democratized.

Understand the network effects - Businesses created around BoO rely heavily on network effects (nfx) and incentivization of participation of users who need to buy into the network and help support it. Nfx are notoriously difficult to create but create the strongest economic moat possible. Founders need to understand the dynamics at play and have a vision on how to build out their own network.

Why is decentralization needed - We are still discovering the true potential of decentralization of ownership but at the moment a lot of it has to do with either (i) capital formation or (ii) democratization of infrastructure.