ProcessLab

Impact of Blockchain
Tokenization in Financial Services

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The Rise of Cryptos – Volatility and Value

$60,000+ Per Bitcoin

$3000+ USD Per ETH

Bitcoin / U.S. Dollar · 1M · INDEX O61359.06 H64311.50 L59484.82 C63056.71 +1698.45 (+2.77%)
63058.67 0.00 63058.67
Vol 44.241K

More than **6,500** cryptocurrencies exist today !!!

The global volume of all stable coins is now **$77+ Billion***

Notwithstanding volatility, value growth, opportunity

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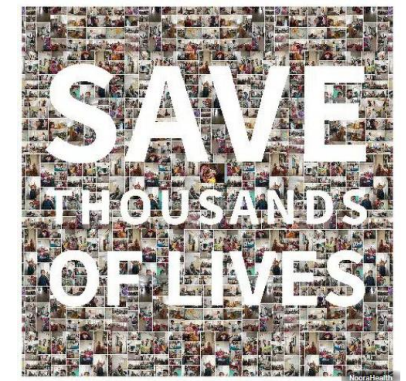# But there are Non-crypto Transactions as well

SOLD FOR $69.3 MILLION

Mike Beeple's Everydays: The First 5000 Days

SOLD FOR $532.4 MILLION

CryptoPunk :#9998

SOLD FOR $5.23 MILLION

Save Thousands of Lives

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Now imagine the largest Art sale in History

SALVATOR MUNDI - LEONARDO DA VINCI
$450 MILLION

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Examples in Non-Digitized World – Real Estate

INX LIST **$329 MILLION** TOKEN IN REAL ESTATE

RED SWAN TOKENIZED OVER **$2.2 BILLION** IN REAL ESTATE ASSETS

Red Swan, together with Polymath issued tokens for mid-rise and high-rise apartments

GERMAN STARTUP FUNDAMENTAL GROUP CREATED REAL ESTATE TOKENS FOR **280 MILLION**

New Processing investment classes

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Examples in Financial World

Key Developments

39/100 top banks pioneering tokens and blockchain

83 countries are testing CBDC

Decentralised blockchain gaining momentum

BANKING

- **Deutsche Bank.** Dbond, Tokenised Bond
- **CommerzBank.** Machine-to-machine payments on BC
- **UBS**. We.trade,BC based trade finance platform
- **CS.** Paxos settlement service. US equities. Ethereum

- **Beenest**. Decentralised home sharing. Bee token. Damage insurance
- **FidentiaX**. Marketplace tradeable insurance. Cash out, second hand
- **B3I.** Blockchain Insurance Industry initiative. DLT. Reinsurance
- **Dynamis**. P2P insurance on Ethereum BC. Unemployment insurance
- **Lemonade.** Renters/homeowners. Smart contracts. Verify losses & 3s payment

INSURANCE

Key Developments

- Register High value items/warranty
- Evaluating KYC/AML Procedures
- Parametric Index propositions
- Reinsurance/Claim process on Blockchain
- P2P models

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WHAT ARE THEY CALLED ?

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Tokens – Fungible or Non-Fungible (NFT)

Fungible Tokens

Fungible is something that can be replaced with something else of the same value.

Non-Fungible Tokens (NFT)

Non-Fungible Tokens (NFT)

Non-Fungible is something unique, one-of-a-kind, no two are similar

SOLD FOR $532.4 MILLION

CryptoPunk :#9998

WHAT IS RUNNING UNDERNEATH THESE TOKENS ?

| Technology for the Next Decade, Today.

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Blockchain
A distributed cryptographic ledger technology

Distributed

Transactions are 'shared' between participants, computations are distributed across participating nodes on the network

Common Ledger

No central 'point of control'. Decision making (ex. acceptance of 'valid' transactions) is through a 'Consensus' mechanism between participating nodes. Each node has their own copy of records through replication

Secure

Transaction records are cryptographically secured

Forward Looking and Immutable

Blocks of transactions added to Blockchain in a chronological (timestamped) sequence. Retrospective editing to 'accepted' transactions practically impossible

Permissioned v/s Public

Different implementations with varying degree of access control – Public (everybody sees everything) to Permissioned (offer access control mechanisms)

Smart Contracts

Different Blockchain implementations enable 'definition' and 'programmatic execution' of Smart Contracts between Parties on the Blockchain Network

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UNDERSTANDING TOKENIZATION BENEFITS

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Tokenization Benefits

Rights Management

01100001 01100010 01110011 01110100
01110010 01100001 01100011 **01110100**
00100000 **01100110** 01101111 01110010
01101101 00101100 00100000 01110100
01101111 01101011 **01100101** 01101110
01101001 01111010 01100001 01110100

Fractional Ownership

01100001 01100010 01110011 01110100
01110010 01100001 01100011 **01110100**
00100000 **01100110** 01101111 01110010
01101101 00101100 00100000 01110100
01101111 01101011 **01100101** 01101110
01101001 01111010 01100001 01110100

Liquidity

01100001 01100010 01110011 01110100
01110010 01100001 01100011 **01110100**
00100000 **01100110** 01101111 01110010
01101101 00101100 00100000 01110100
01101111 01101011 **01100101** 01101110
01101001 01111010 01100001 01110100

Single source of truth without Middlemen

01100001 01100010 01110011 01110100
01110010 01100001 01100011 **01110100**
00100000 **01100110** 01101111 01110010
01101101 00101100 00100000 01110100
01101111 01101011 **01100101** 01101110
01101001 01111010 01100001 01110100

Transparency

01100001 01100010 01110011 01110100
01110010 01100001 01100011 **01110100**
00100000 **01100110** 01101111 01110010
01101101 00101100 00100000 01110100
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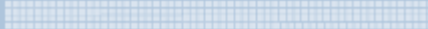01101001 01111010 01100001 01110100

Digitization of Volume of Virtual Assets

01100001 01100010 01110011 01110100
01110010 01100001 01100011 **01110100**
00100000 **01100110** 01101111 01110010
01101101 00101100 00100000 01110100
01101111 01101011 **01100101** 01101110
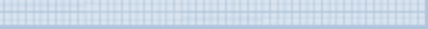01101001 01111010 01100001 01110100

Finding opportunities to monetize on benefits

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TOKENIZATION USE CASES IN FINANCE

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How Tokenization can Change Finance

Besides decentralised currencies, tokenisation has various other use cases that impacts the traditional world of finance

Decentralized Exchanges

$22,484,472,032

Loans outstanding

P2P lending & borrowing with crypto & NFT collateral

Total Value Locked (USD) in DeFi

TVL (USD) | ETH | BTC   All | 1 Year | 90 Day | 30 Day

Asset management

Legal, Governance and Regulatory Considerations in Tokenization

- Regulation and taxation of cryptocurrencies is still crystallizing out worldwide
- Basel Committee capital allocation
- Central Bank Digital Currency
- Tax Income / Capital gains

ORSCRYPTOHOUND™

Cryptocurrency Taxation Around the World (2019)

- Taxed as income (personal, corporate)
- Taxed as capital gains
- Zero tax
- No taxation yet

www.cryptohound.ai

Developing environment with balanced approaches : De-Central

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HCL CASE STUDY ON TOKENIZATION

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Art Tokenization for Ownership and Provenance

ART CONDITION REPORT HANDLING **ARTWORK LENDING & LOGISTICS** **ART STORAGE & INSURANCE**

KEY PARTICIPANTS
Private art Collector | Museums | Galleries | Art Handler | Logistics Provider Art Warehouse | Insurance Companies/ Banks

KEY   OUTCOMES

- Art NFT for provenance and ownership mapping
- Bidding for Art on art marketplace and NFT transfer
- Art NFT as investment asset

BASE USE CASE
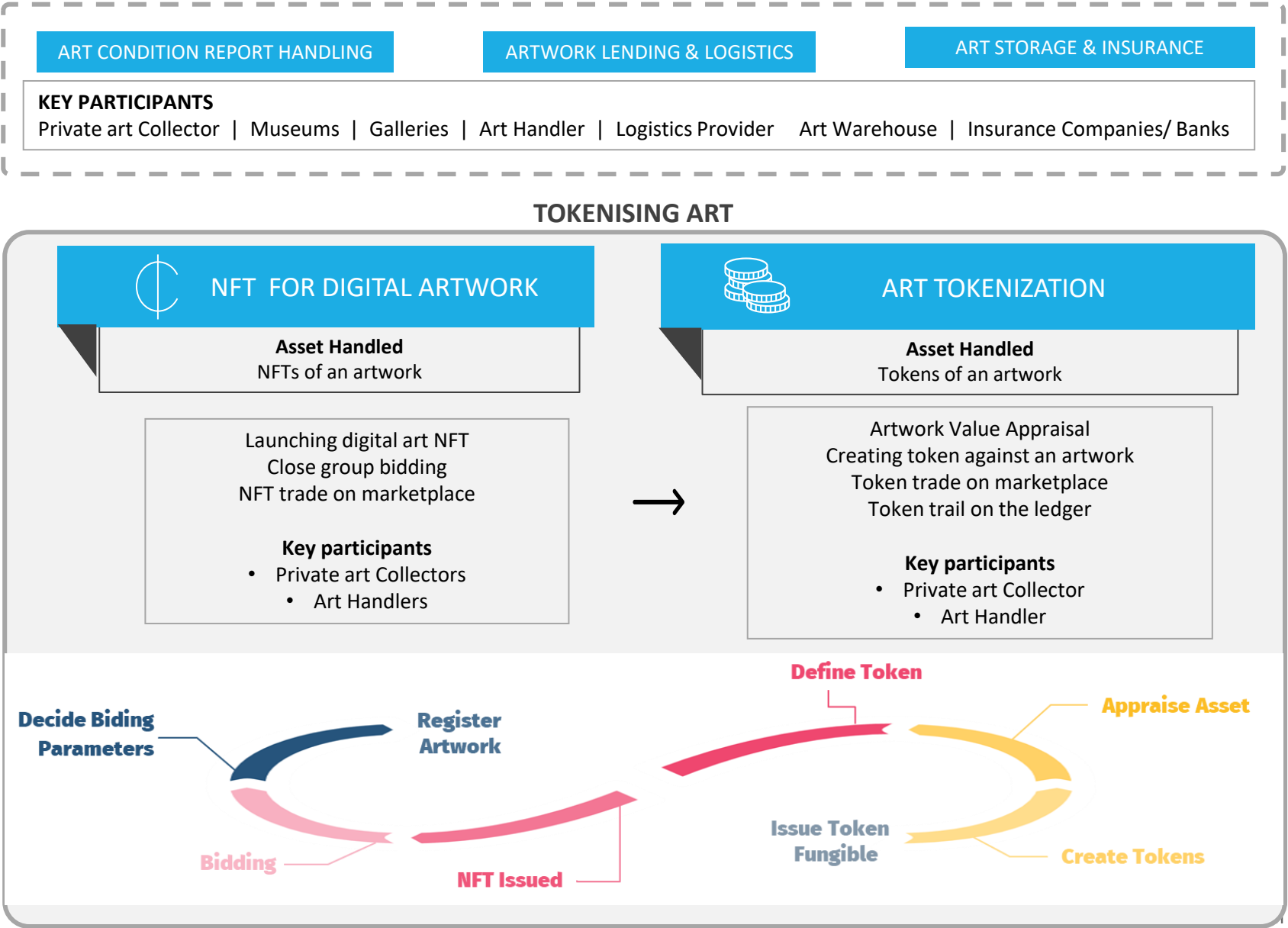
ARTWORK OWNERSHIP REGISTER

Asset Handled
Serialized Artwork

Registration of Artwork
Transfer of Custody
Ownership provenance

TOKENISING ART

NFT FOR DIGITAL ARTWORK

Asset Handled
NFTs of an artwork

Launching digital art NFT
Close group bidding
NFT trade on marketplace

Key participants
- Private art Collectors
  - Art Handlers

ART TOKENIZATION

Asset Handled
Tokens of an artwork

Artwork Value Appraisal
Creating token against an artwork
Token trade on marketplace
Token trail on the ledger

Key participants
- Private art Collector
  - Art Handler

Decide Biding Parameters → **Register Artwork**

Bidding

NFT Issued

Define Token

Appraise Asset

Create Tokens

Issue Token Fungible

HCL TOKENIZATION SOLUTION – OBOL
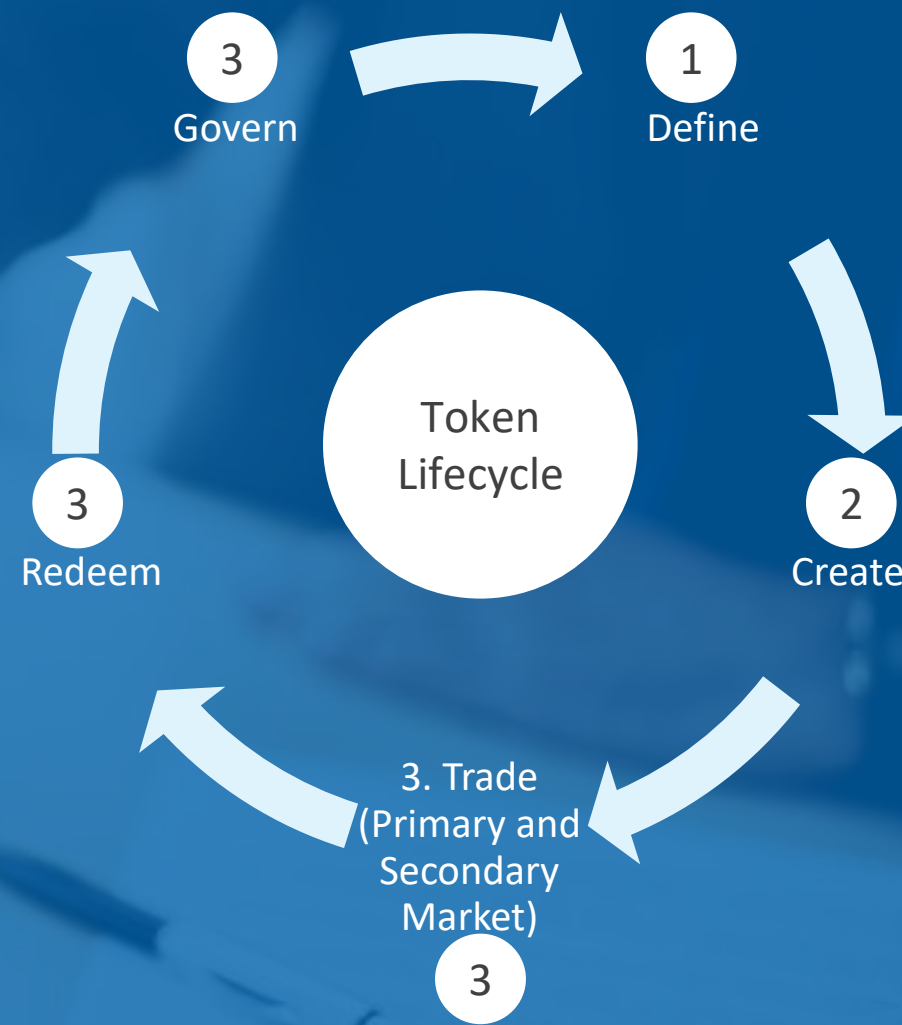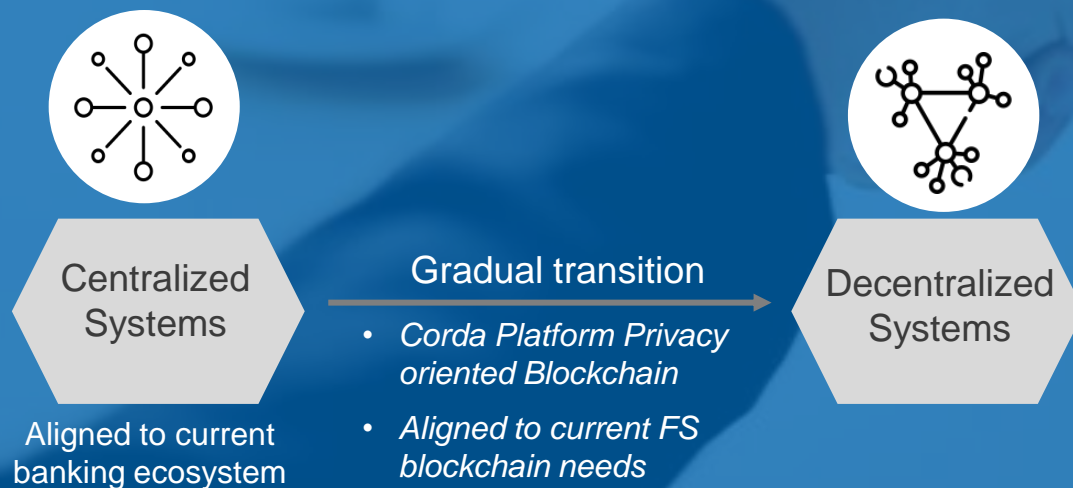
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OBOL
Solution Thought Process

Simplified and fast tokenization journey

Enabling businesses to accelerate their Go-to-Market step via a business centric no-code tokenization framework

A leap towards digitalization

One step more from traditional to digital journey, providing customers the power of fractionalization and democratization via tokenization

Blockchain Based Solution

Centralized Systems

Aligned to current banking ecosystem

Gradual transition

- *Corda Platform Privacy oriented Blockchain*
- *Aligned to current FS blockchain needs*

Decentralized Systems

Token Lifecycle

3 Govern

1 Define

2 Create

3. Trade (Primary and Secondary Market)

3 Redeem

3

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OBOL Framework

Obol

Obol tokenization solution provides the asset owners a framework to convert their asset into multiple tokens and trade those tokens to achieve liquidity

Supports NFTs and FTs	No Code Solution	Easily Customizable	Smart Validation Handling	Easy Integration
Designed for fungible and non fungible tokens	User can tokenize their assets without writing any piece of code	Business can easily define digital asset attributes and customize as per their use case	Pick and choose contract validation from the list of pre-defined validation templates	Can be easily integrated with other applications

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OBOL DEMO

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WHAT YOU WILL SEE

- Token definition
- Token creation
- Token issuance
- Token Transfer (FOP)
- Governance

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Q&A

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THANK YOU!

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www.hcltech.com

$10.82 BILLION | 187,000+ IDEAPRENEURS | 50 COUNTRIES