OB*AD*A

the **O**pen **B**lockchain for **A**sset **D**isposition **A**rchitecture

A standard for representing
Physical Assets as Digital Assets.

An open platform that allows IT Resellers and Service Providers to track your stuff, so that you can offer chain-of-custody services to your customers.

Built and run by stakeholders in the asset disposition sector.
Based on an open data standard stewarded by **the OBADA Foundation**, a 501c(6) nonprofit.
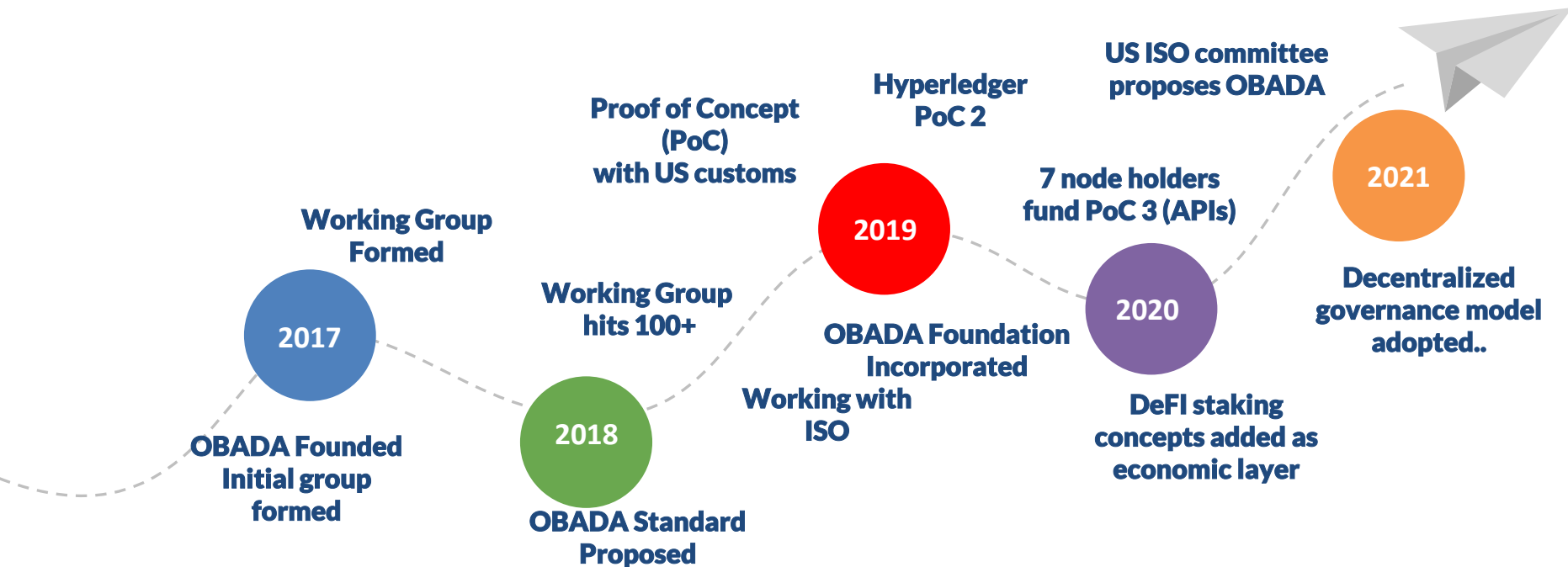
ASCDI Webinar

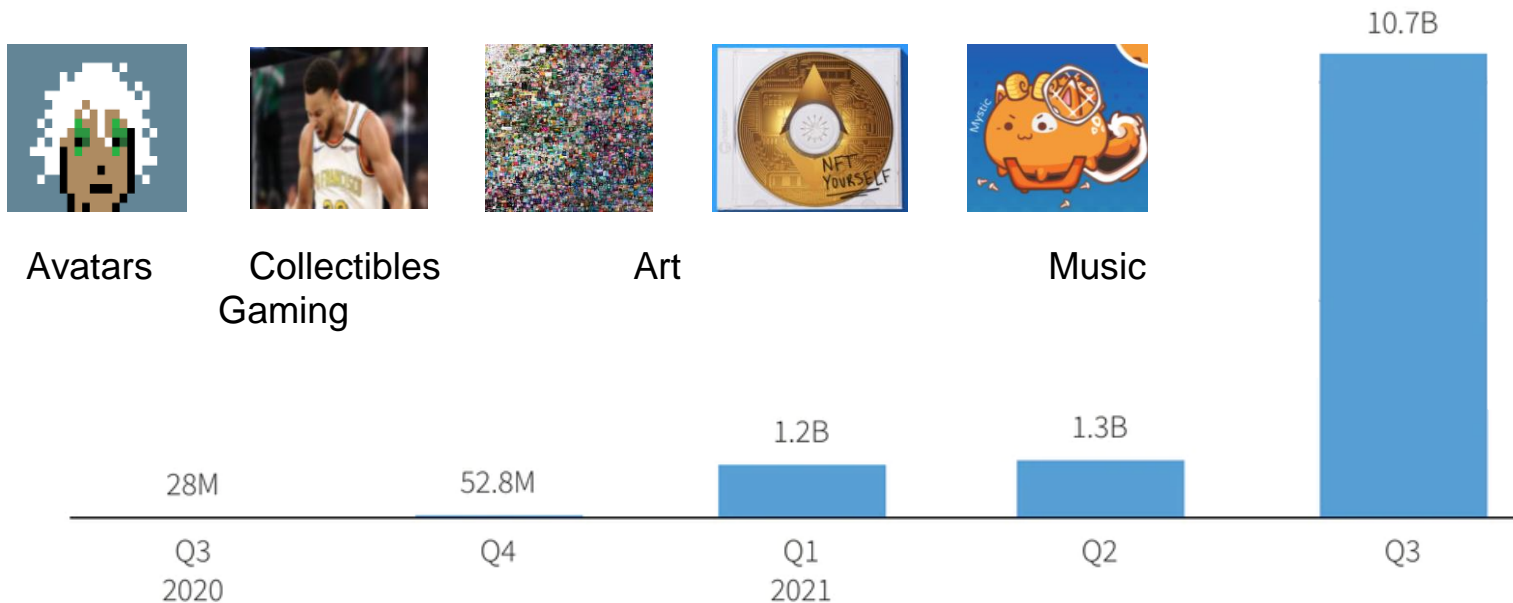November 2021

Introductions

Rohi Sukhia

- Founder, OBADA Foundation
- Founder & CEO Tradeloop Corp.
- Repair.org BOD Member
- ISO TC 307 "Blockchain and Electronic Digital Ledger Technologies" Committee

OBADA's History

Working Group Formed

2017

OBADA Founded Initial group formed

Working Group hits 100+

2018

OBADA Standard Proposed

Proof of Concept (PoC) with US customs

2019

OBADA Foundation Incorporated Working with ISO

Hyperledger PoC 2

7 node holders fund PoC 3 (APIs)

2020

DeFI staking concepts added as economic layer

US ISO committee proposes OBADA

2021

Decentralized governance model adopted..

3

NFT sales surge to $10.7 billion in Q3 - DappRadar

Avatars

Collectibles
Gaming

Art

Music

10.7B
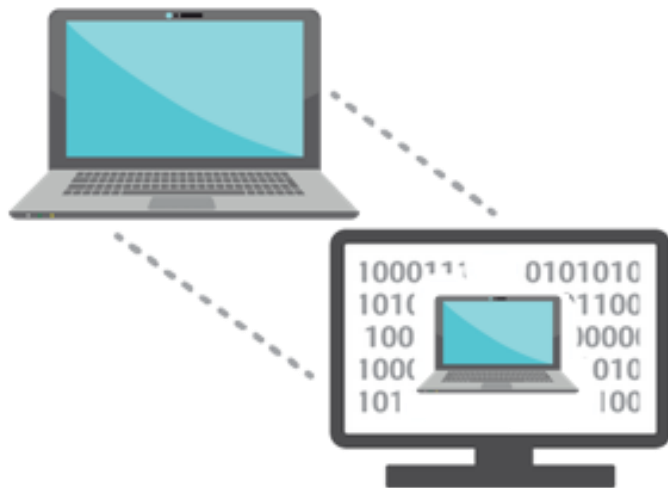
1.2B

1.3B

28M

52.8M

Q3
2020

Q4

Q1
2021

Q2

Q3

Note: DappRadar is a company which tracks on-chain NFT sales across multiple blockchains including Ethereum, Flow, Wax, and BSC.
Source: DappRadar

Physical NFTs (pNFTs): "Digital Twins"
Each of your products will be represented by an NFT

All Documents
- Purchase Receipt (Ownership)
- Diagnostic Reports
- Warranty Information
- Service Records
- etc..

IOT Endpoint
- Talk to the device

The NFT is a "Carfax" for every device.

This "Carfax" is a <u>NFT</u>.
- a non-fungible token

A "**digital twin**" of the physical asset, permanently "tied" to the physical device.

It includes a **digital certificate of ownership.**

It's like a digital logbook of the devices' history.

It creates an universal address for connected **IOT devices.**

OBIT NFT *Digital Twin*   **USN**: **1V3Z-JwPg**

OBIT ID: 0f89...c43e
Physical Asset: Dell model 2714h, SN# CN0NV2C46418045H1CBS
Owner: 9De6....A69j
Asset Status: Functional, Authentic
Disposition Events: view

Data Root Hash: d9b97a2fcace15764057d06f4d47ca754760235e3a5f6684bcff961bb07e80f6

Service History & Proofs

Authenticity: **Genuine** (ZKP) - proof from Dell
Warranty: **Active** - proof from Dell
Data Status: **Sanitized** (ZKP) - proof from TechSpec
Functionality: **Functional** (ZKP) - USODY Diagnostic Report
Operating System: **Valid COA** (ZKP) - proof from Microsoft

Pre-paid CoC Orders
- $3 for Drive Wipe
- $2 for Recycling Report

Send reports to: happyguy72@hotmail.com

No central authority. You create and own the NFT.
All data is encrypted.   Only the NFT owner/manager can see it.

These "Carfax" NFTs are stored in an open <u>Registry</u>.

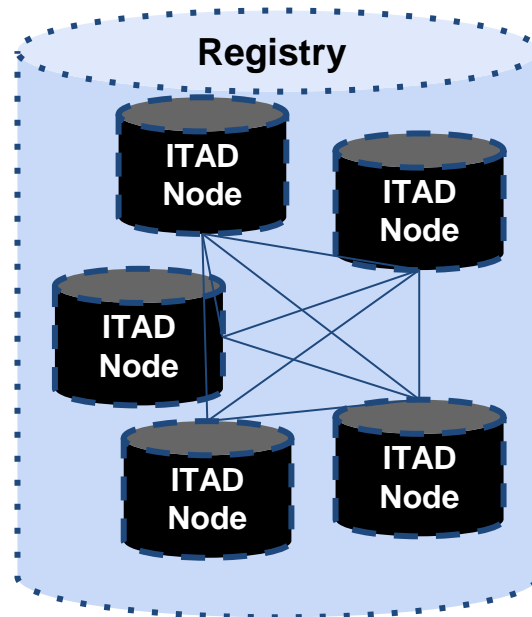## Like a cloud database

But it's decentralized.

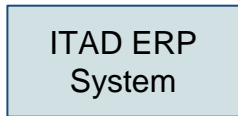It's really just a collection of synchronized database "**nodes**".

ITADs run the nodes. ITADs vote on changes. ITADs set the fees. ITADs share the platform profits.

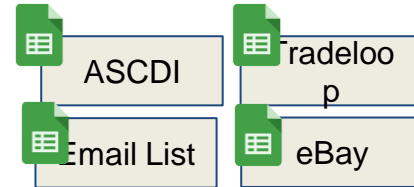These ITAD **Node Holders** are in effect the "owners" of this **decentralized business**.
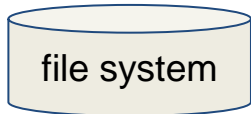
How the ITAD sector manages asset info today

Inventory copies are sent around <u>manually</u>.

ITAD ERP System

- Something sold? Update each site.
- None are "in synch" with the current stock.
- These sites are in "control" of your data.

ASCDI

Tradeloop

Email List

eBay

Device documentation is sent <u>manually.</u>

file system

- Functionality Reports
- Cert of Data Destruction
- Other device info

Collate & Organize

Payment processing is done <u>manually</u>.

- PO, Invoices, etc..
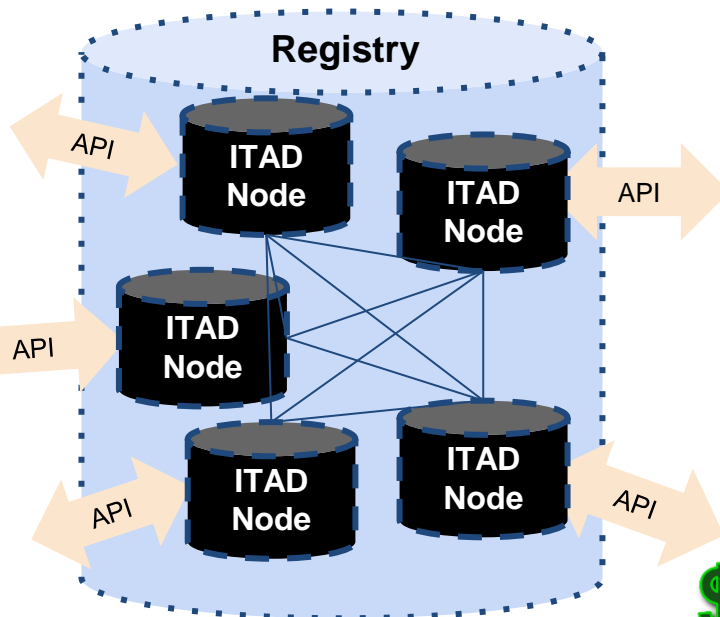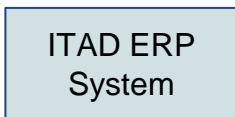- "the check is in the mail"
- etc..

Buyer

Syniching the Inventory of Resellers, ITADs, Recyclers.
And maybe even End User and Manufacturers.

Inventory <u>syncs</u>

and **you control** who sees it**.**

All documents sync.

Docs are **provable**. All changes are **transparent**.

Services are provable

Drive wipes, functionality reports, and proof of recycling are all recorded to the blockchain.

ITAD ERP System

API

API

API

Registry

ITAD Node

ITAD Node

ITAD Node

ITAD Node

ITAD Node

API

API

All parties see the **same synced devices.**

Tradeloop

ASCDI

TBS

eBay

Payments are digital

The go directly from user to user. **No middleman. No bank.**

OBADA

Open Blockchain for *Asset Disposition* **Architecture**

Governments (and end users) are starting to demand traceability.
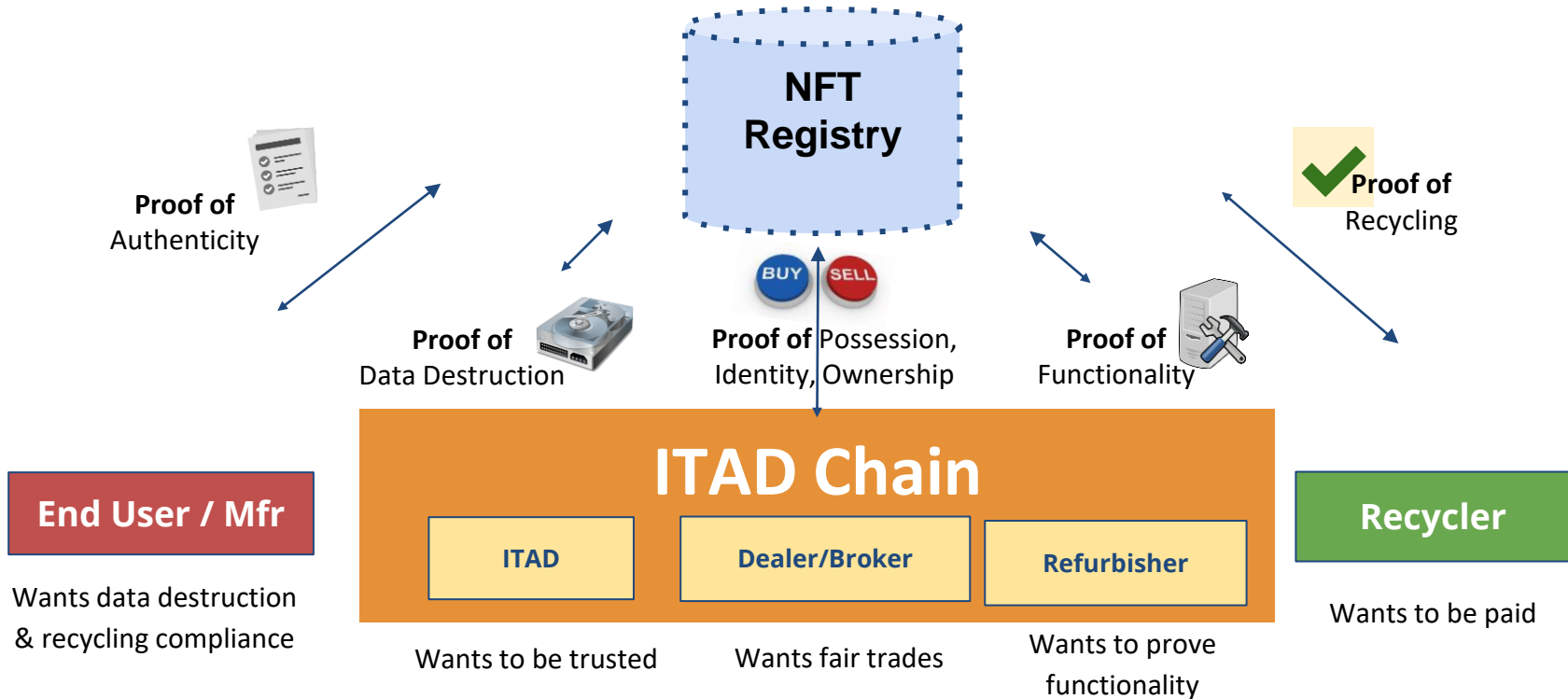### They want to track what you do with their devices.

NFT Registry

Proof of Authenticity

Proof of Data Destruction

Proof of Possession, Identity, Ownership

Proof of Functionality

Proof of Recycling

ITAD Chain

End User / Mfr

Wants data destruction & recycling compliance

ITAD

Wants to be trusted

Dealer/Broker

Wants fair trades

Refurbisher

Wants to prove functionality

Recycler

Wants to be paid

How ITADs can make NFTS

Refurbisher uses software to capture specs and wipe the drive.
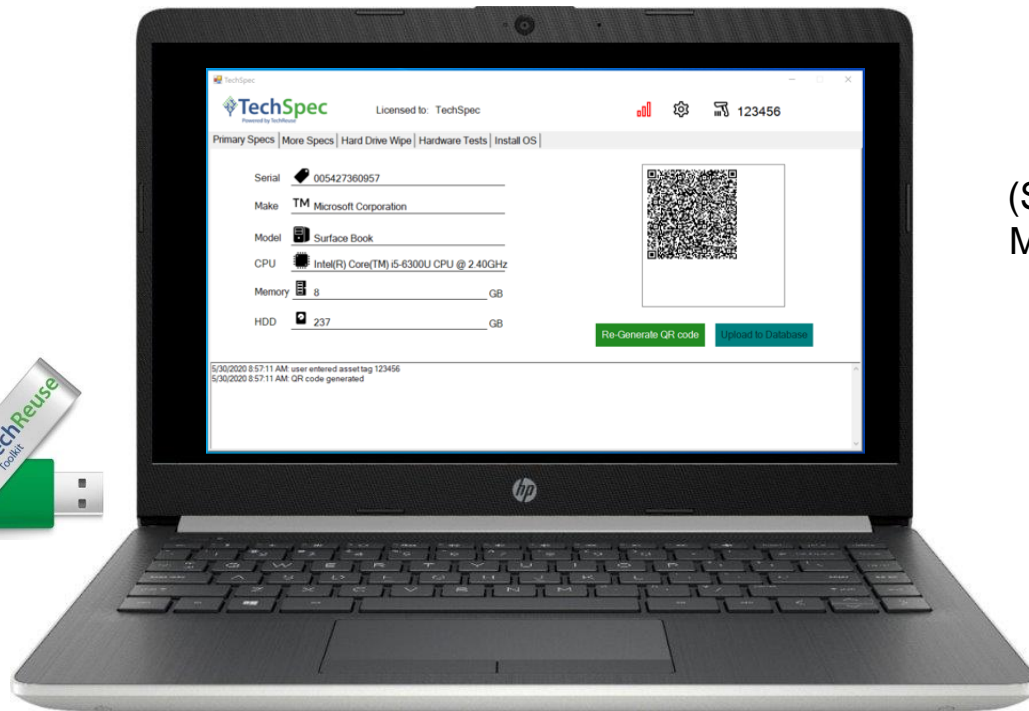
(Serial Number hash + Make + Model) hash = NFT

Wipe Report Event
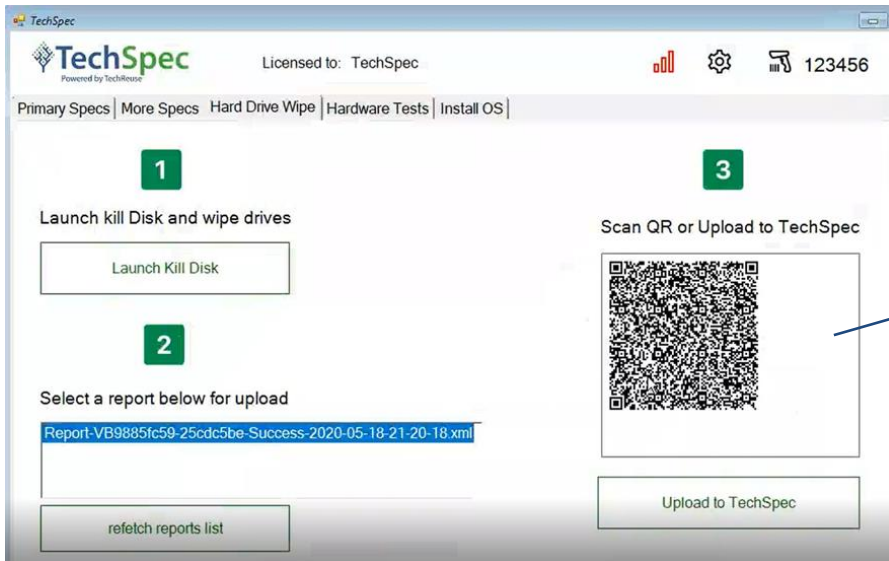
Specs and Proof of Wipe are posted to the blockchain.

Verify on Blockchain (Proof)

NFT:
35987A0F9AE77012A5146A982966661B75CDEA
A4161D1D62B1E18D39438E7396

Wipe Report Event Hash
8DFE551D193396A2AA71D95F22F105B7E34684
7D919A9255163F370F5690CC85

Hardware Test Event Hash
2E69FE54A73D42E86376E0AF02F8C873A3B1D3
551F578ED0D84A5323F1E18490

Platform Economics

"Gas" (the platform fee)
"Rewards" (the network incentive)
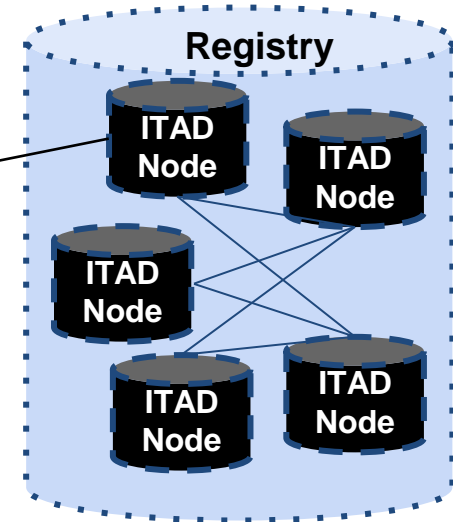
Dr. Ron Lembke

The system is paid for with "Gas"

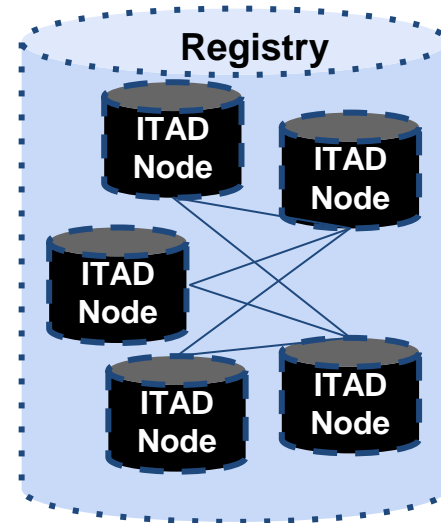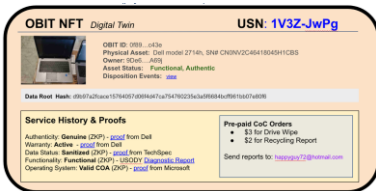**Users buy "Utility Tokens" from their favorite Nodeholder.**

Tokens are "credits", akin to casino chips or video arcade tokens.

A Gas payment is required for Registry updates

A small payment via the Utility Token is required to update the registry.
Reading the registry is free.

Collected Gas fees pay the Nodeholders

The Utility Tokens collected as gas are distributed back to the Nodeholders
...to compensate them for their computer power.

There is no middleman.

gas

Registry

ITAD Node
ITAD Node
ITAD Node
ITAD Node
ITAD Node

OBIT NFT *Digital Twin*   USN: **1V3Z-JwPg**
OBIT ID: 0f89...c43e
Physical Asset: Dell model 2714h, SN# CN3NV2C46418045H1CBS
Owner: 9De6...A69j
Asset Status: Functional, Authentic
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Service History & Proofs
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Send reports to: happyguy72@hotmail.com

Utility Tokens can be swapped back to dollars.

Platform users can convert their Utility Tokens back into dollars via a "buyback pool".
Or they can just use their tokens again.
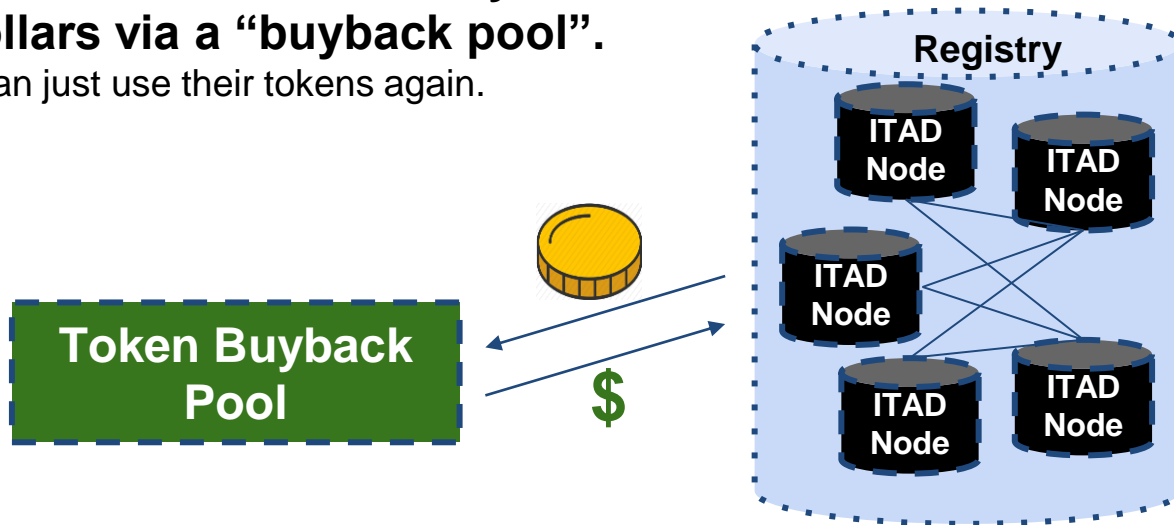
Registry

ITAD Node
ITAD Node
ITAD Node
ITAD Node
ITAD Node

Token Buyback Pool

$

A "Recycling Reward" for ordering chain-of-custody reports

"Staking" an NFT with a Utility Token enables chain-of-custody reporting.
When the device is recycled, the Staked Utility Token is returned, and a reward is issued.

End users make a deposit

The industry makes smaller deposits

Recyclers receive devices with money attached.

End User / Mfr

ITAD Chain

| ITAD | Dealer/Broker | Refurbisher |

Recycler / Reuse

OBADA
Open Blockchain for *Asset Disposition* **Architecture**
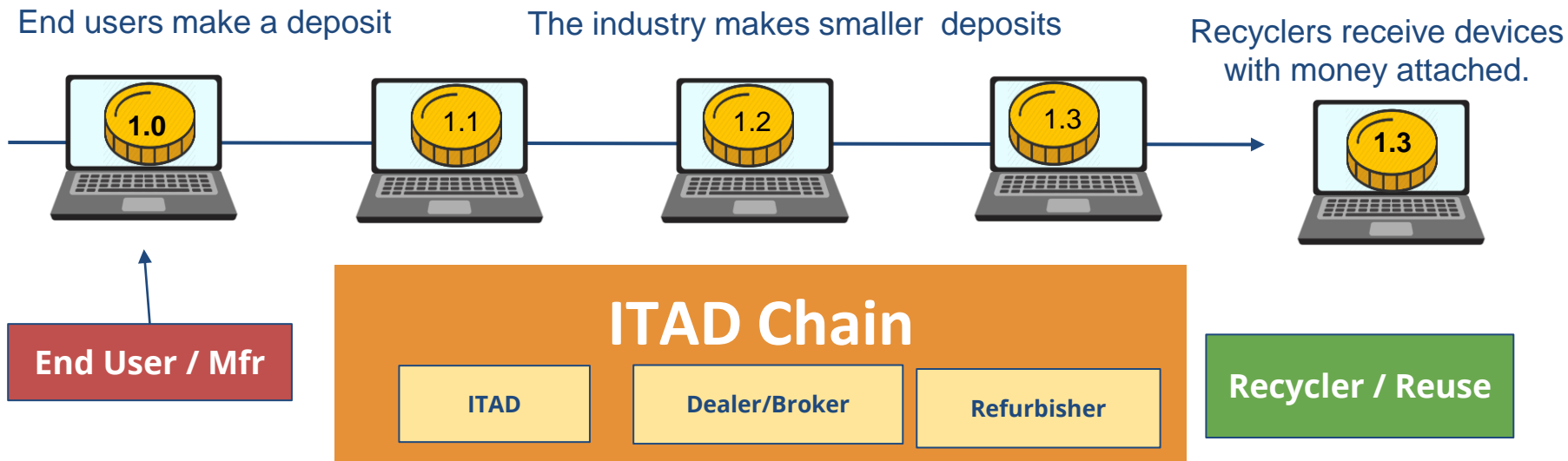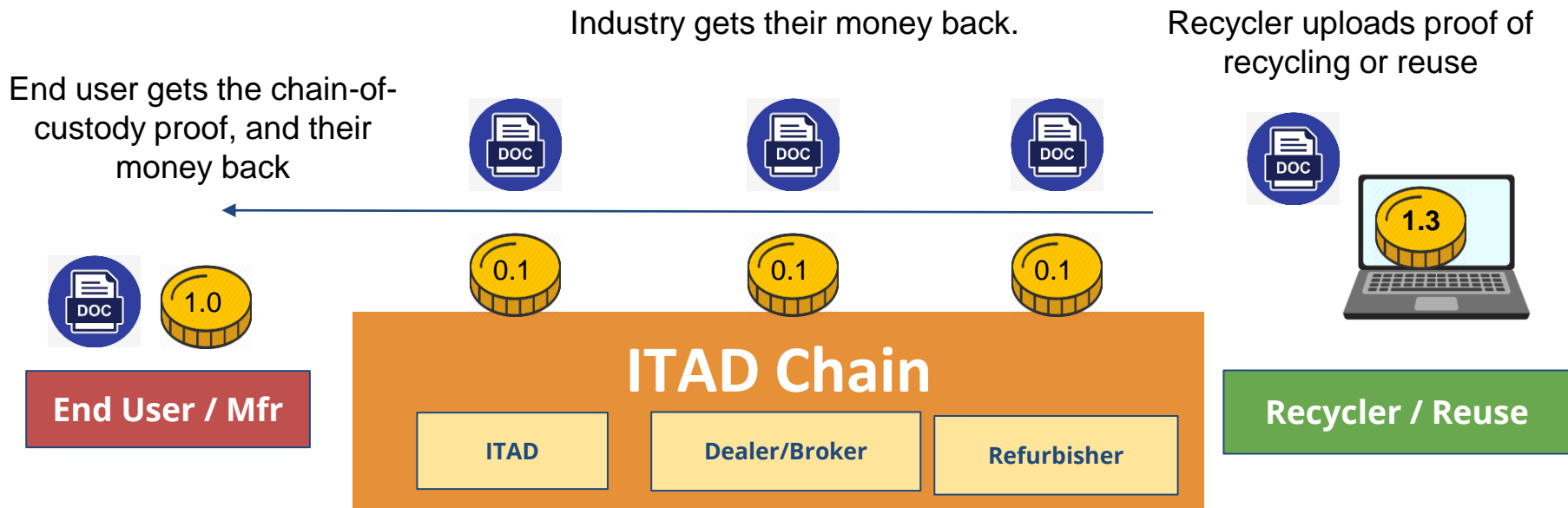
"Proof of Recycling" is generated and the Stakes are returned

Industry gets their money back.

Recycler uploads proof of recycling or reuse

End user gets the chain-of-custody proof, and their money back

1.0

0.1

0.1

0.1

1.3

ITAD Chain

End User / Mfr

| ITAD | Dealer/Broker | Refurbisher |

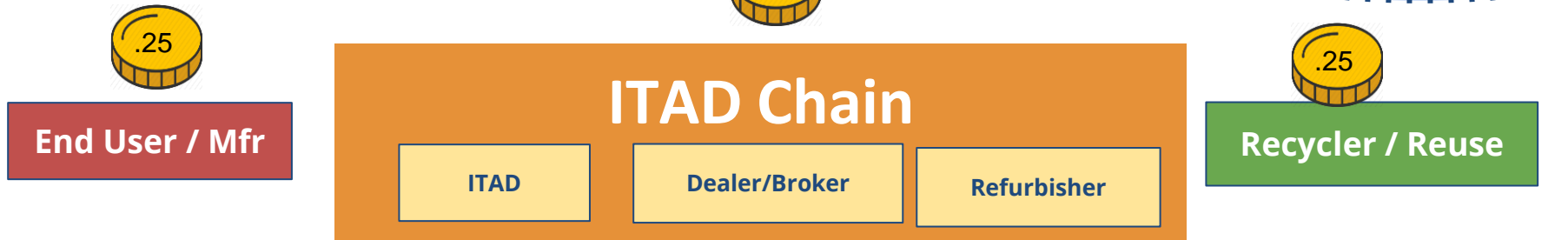**Recycler / Reuse**

A "Recycling Reward" is issued upon Proof of Recycling / Reuse.

Each set of participants receives a financial reward.
- A new Utility Token is "mined".

The rewards is a "network incentive"
- to use the platform
- and to properly recycle.

Registry

.25

.25

.25

.25

ITAD Chain

| ITAD | Dealer/Broker | Refurbisher |

End User / Mfr

Recycler / Reuse

How is the Reward paid for?

Some of the Utility Tokens will be "lost"
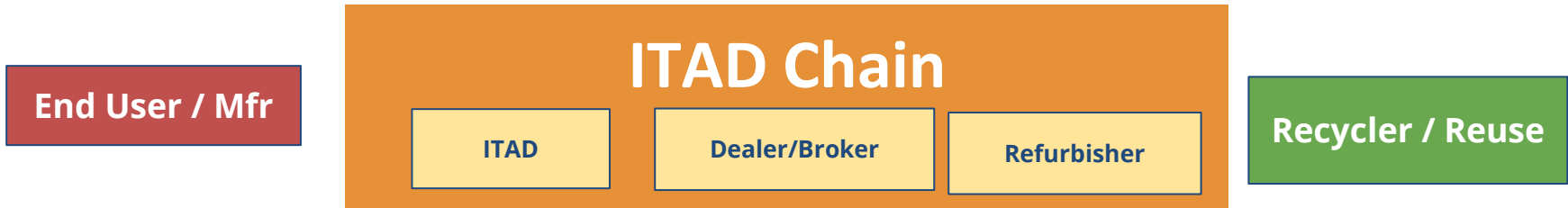- Sold off-chain, stuck in a warehouse, or just lost.

The Rewards System replaces lost Utility Tokens
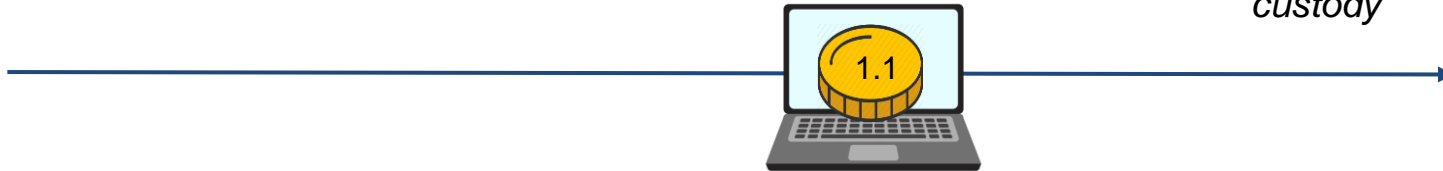- to maintain a constant supply

The Reward is a Network Incentive
- To use the platform.
- To properly recycle / reuse
- *It pays end users, ITADs, and recyclers to maintain chain-of-custody*

1.1

1.1

ITAD Chain

End User / Mfr

| ITAD | Dealer/Broker | Refurbisher |

Recycler / Reuse

The OBADA DAO
Decentralized Autonomous Organization

Rohi Sukhia

Members own" and run this "distributed business"

The "OBADA DAO" is a Wyoming DAO LLC

- An agreement to jointly operate the software.
- Limited to the asset disposition sector.
- 100 Members total

Member Requirements

- Members must run a node.
  - OBADA can run it for for you.
- Members can delegate this responsibility.

Member Benefits

- Governance Rights
  - There is no BOD.
  - Anyone can make a proposal.   Members vote.
  - One vote per Member

- Operational Rights
  - Get paid for running the node
  - Members can sell access to the blockchain.
  - Rights to offer other services.

- Utility Tokens Rights
  - Members receive an allocation of the initial Utility Tokens supply.
  - Earlier Members receive more tokens.

Current Members

Currently at ~~22~~ 27 of 100 total.   Starting Round B.

DAO Members - Seed Round

	Recipient	c/o	# Tokens	Status
1	Network Commerce International	Joseph Marion	2,285,714	closed
2	Robin Ingenthron	GPR	2,285,714	closed
3	Rhapsody Ventures	Vincent Liu	2,285,714	closed
4	Tech Reuse	Charles Brennick	2,285,714	closed
5	University of Nevada	Ron Lembke	2,285,714	closed
6	USODY	David Franquesa	2,285,714	closed
7	Tradeloop Corporation	Rohi Sukhia	2,285,714	closed
			16,000,000	closed

DAO Members - Round A1

	Recipient	c/o	# Tokens	Status
8	World Data Products	Neil Vill	1,500,000	closed
9	The Broker Site	Mario Beimans	1,500,000	closed
			3,000,000	closed

DAO Members - Round A2

	Recipient	c/o	# Tokens	Status
10	ASCDI	Joe Marion	1,000,000	closed
11	CELX Advisory, LLC	Guennael Delorme	1,000,000	*waitlist 12/1/21*
12	Dynamic Lifecycle Innovations	Bobbie Suhr	1,000,000	*waitlist 12/1/21*
13	E-Reuse Services Inc.	Sarah Kim	1,000,000	*waitlist 12/1/21*
14	JT Environmental Consulting, Inc.	Jason Teliszczak	1,000,000	*waitlist 12/1/21*
15	KATLAS Technology Ltd	Edward Cole	1,000,000	*waitlist 12/1/21*
16	Non-Profit Computing, Inc.	John L. German	1,000,000	*waitlist 12/1/21*
17	SEKANGI International Ventures Limited	Seth Munyambu	1,000,000	*waitlist 12/1/21*
18	The Repair Association	Gay Gordon-Byrne	1,000,000	*waitlist 12/1/21*
19	Towards Zero Waste	Jakob Lennartsson	1,000,000	*waitlist 12/1/21*
20	Unduit	Omar Javed	1,000,000	*waitlist 12/1/21*
21	VIG Computers	Vince Bettencourt	1,000,000	*waitlist 12/1/21*
22	XS International, Inc.	Todd A Bone	1,000,000	*waitlist 12/1/21*
			13,000,000	

How to Get Involved

DAO Membership Interest

- The Round B waitlist is starting for the next 28 DAO Members.
- Contact us and we'll send you the OBADA DAO Operating Agreement
- **Email Mark Schaffer at bizops@obada.io**

To learn more or get involved.

- The monthly Working Group meets the 1st Thursday of every month (since 2018)
  - **12pm ET on https://meet.jit.si/obada**
- Or visit our website at www.obada.io