

# 6 Real World Blockchain Use Cases

Jonmichael Hands, Chia Network



# Are blockchains inherently good?

## Inclusive and Permissionless Network

Controlling your wealth is a human right

## Censorship Resistant

Difficult or impossible to block participants

## Independent Monetary Policy

Trust math instead of people

## Unstoppable Applications

A program developed for, and run on, a secure blockchain can never be changed or stopped

## Global Standards

Collaboration, fully open source, and available for free

## Secure and Decentralized

Decentralization, consensus, and physical assets (capex) secure the network

## Programmable Money

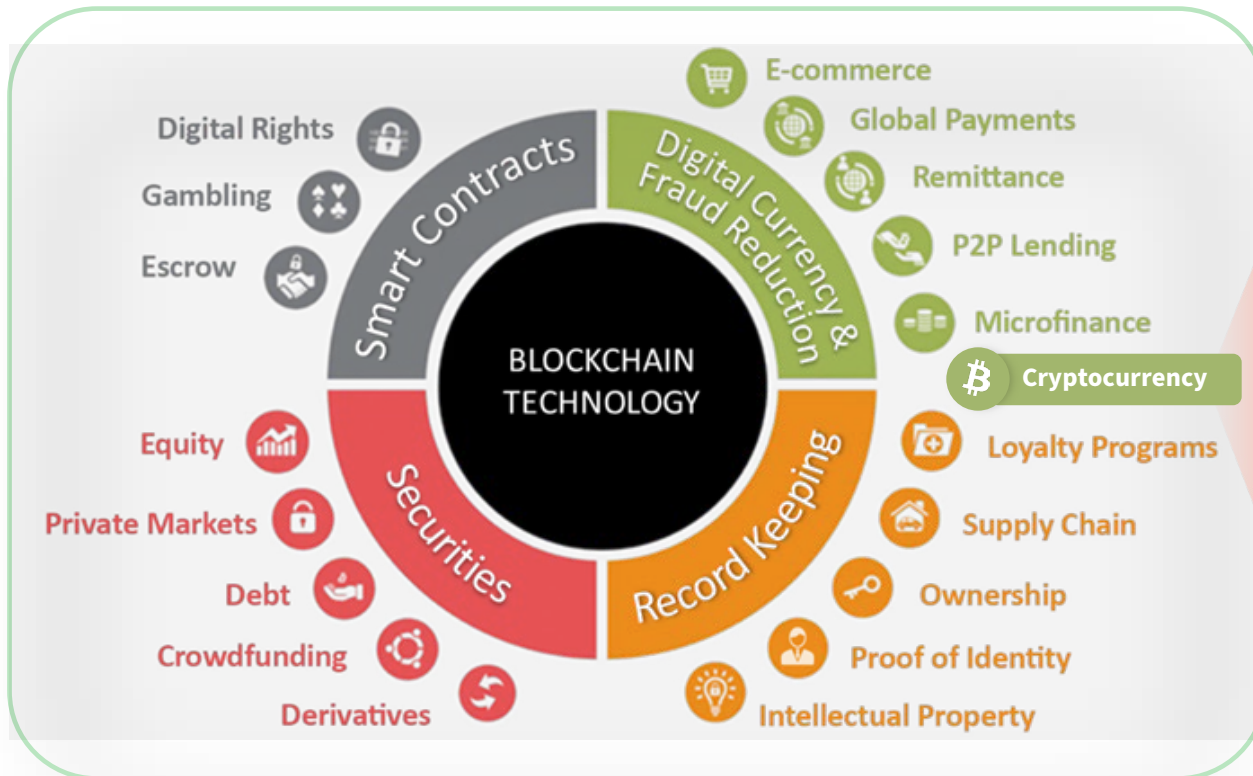
Cryptocurrency should be easier to use than cash and harder to steal



# Blockchain ≠ Crypto

Rails for Internet of Markets™

Proven Infrastructure Technology



The **crypto casino** is not a real-world use case

Speculative FOMO-Driven Investment



# 6 Real-World Blockchain Use Cases



## MARKETS

Trustworthy, Inclusive, and  
Global Trading



## PROCESS INTEGRITY

Transparent, Trustless Tracking



## IDENTITY

Digital Identification and  
Credentialing



## CUSTODY

Security and Control



## PAYMENTS

Democratizing Remittances





## RANDOMNESS & GAMING

Predictable Unpredictability

# Trustworthy, Inclusive Global Trading

## Tokenization

-  Asset Tokens (CATs)
-  NFTs

## Governance

DAOs

## DeFi

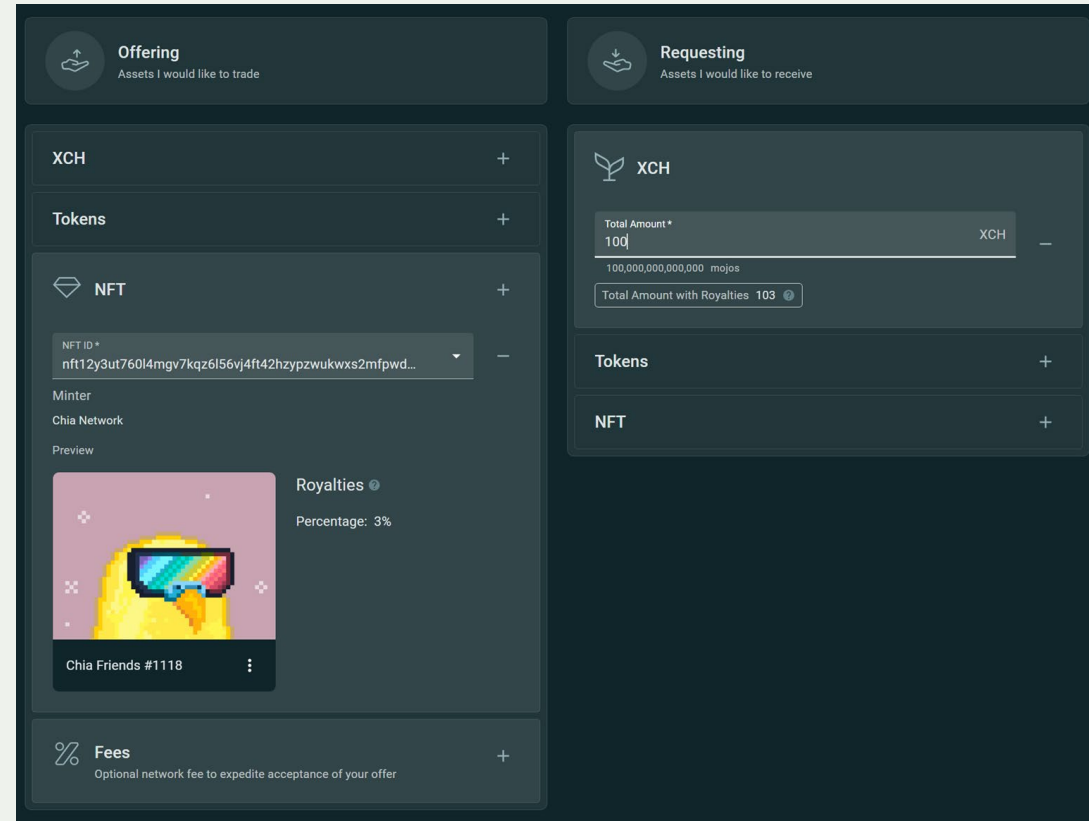
Decentralized Finance open-source protocols, exchanges, lending, prediction

## 24/7 Trading

Efficient markets  
Unlimited Trading Pairs

## Offers

Peer-to-peer trading



The screenshot displays the 'Offering' form in the Chia interface, designed for peer-to-peer trading. The form is divided into two main sections: 'Offering' (Assets I would like to trade) and 'Requesting' (Assets I would like to receive).

**Offering Section:**

- XCH:** A field for the amount of XCH to be offered, currently set to 100.
- Tokens:** A field for the amount of Tokens to be offered, currently set to 100.
- NFT:** A field for the amount of NFTs to be offered, currently set to 100.
- NFT ID:** A dropdown menu showing the selected NFT ID: nft12y3ut760l4mgv7kqz6l56vj4ft42hzypzwukwxs2mfpwd...
- Minter:** A dropdown menu showing the selected minter: Chia Network.
- Preview:** A preview of the NFT being offered, showing a pixelated bird wearing sunglasses. The NFT is titled 'Chia Friends #1118'.
- Royalties:** A field for the percentage of royalties, currently set to 3%.
- Fees:** A field for the optional network fee to expedite acceptance of the offer, currently set to 0%.

**Requesting Section:**

- XCH:** A field for the amount of XCH to be requested, currently set to 100.
- Total Amount with Royalties:** A field showing the total amount with royalties, currently set to 103.
- Tokens:** A field for the amount of Tokens to be requested, currently set to 100.
- NFT:** A field for the amount of NFTs to be requested, currently set to 100.

# Transparent, Trustless Tracking

IDEAL FOR

Supply Chain

Healthcare

Intellectual Property

Consortia

Financial Markets

Real Estate

CHIA'S DATALAYER™

## Data Sharing

Build trust by safely sharing important data across parties

- Powering Secure Data Sharing
- Accountability

## Data Transparency

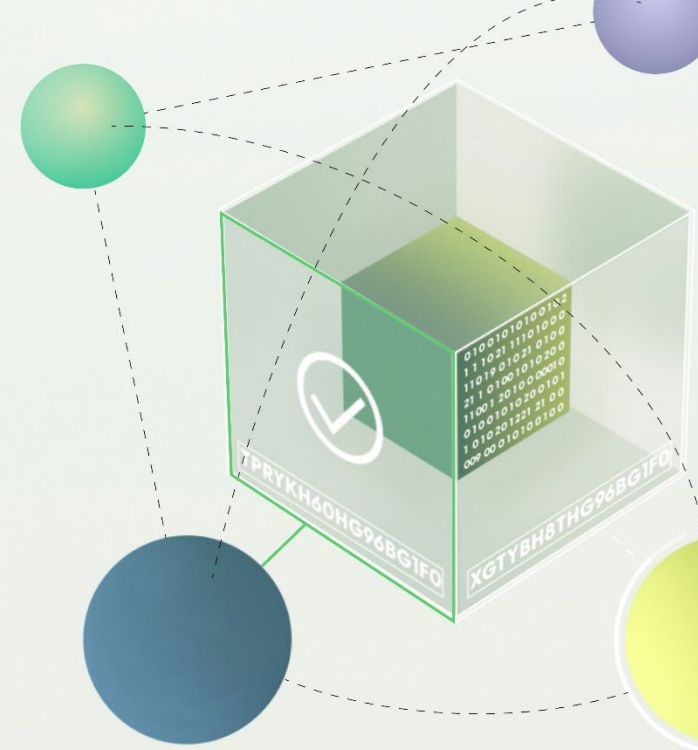
Enhance data visibility while maintaining control

- Audit Data & Avoid Liability
- Public Disclosures

## Data Provability

Make your data permanent and verify validity of any data stored

- Proof-able
- Data Durability



CHIA FOR CLIMATE: IMMUTABLE TRANSPARENCY

# Building a *Standardized* Digital Infrastructure

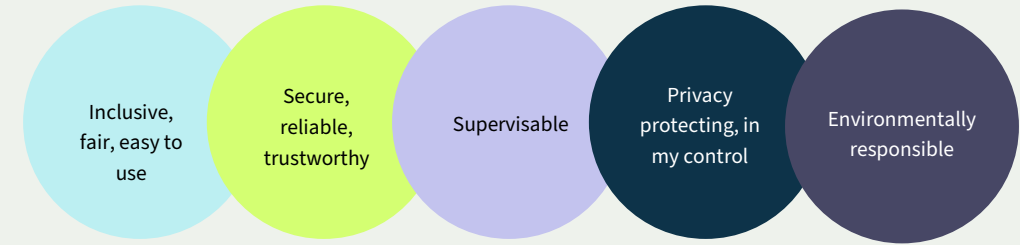
The Climate Action Data Trust (CADT) is a decentralized metadata platform that harmonizes all major carbon registry data to enhance transparent accounting in line with Article 6 of the Paris Agreement.

The platform is built on Chia's open-source distributed ledger technology to create a decentralized record of carbon market activity with the aim to develop a standardized platform, increasing trust in carbon credit data, and building confidence in carbon markets.





# Digital Identity





# Security and Control - Vaults

**Multiple Signers:** Wallet setup allows for multiple signers; a certain number from a group is required for a valid transaction.

**Payment Clawback:** Time for transaction to settle, sender can reverse, preventing mistakes

**Transaction Timelock:** A set time period must pass before initiating the next transaction.

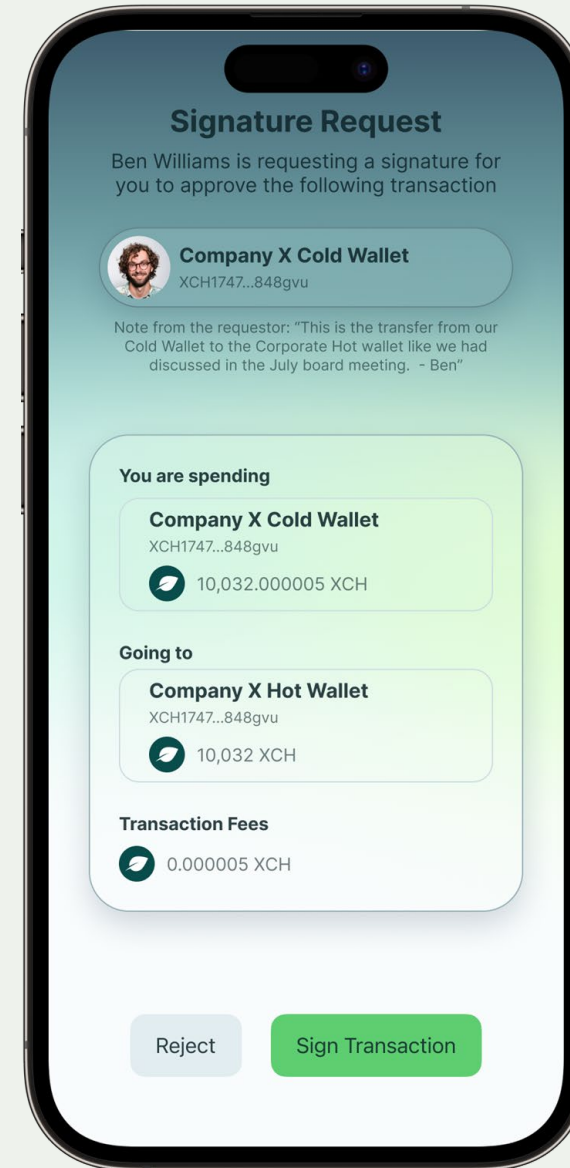
**Re-key Capabilities:** Allows key holders to increase security by requiring more signatures or adding new signers when key security is compromised.

**Hardware Security Module Support:** Supports offline signing key generation, enterprise custody



# Key Management

- **Secure element:** Tamper proof, physical access
- **Isolated:** Keys never leave the secure element
- **Biometric authentication:** use Face ID or Touch ID to unlock
- User friendly & wide adoption
- Self custody – not backed up in the cloud
- Regulatory compliance



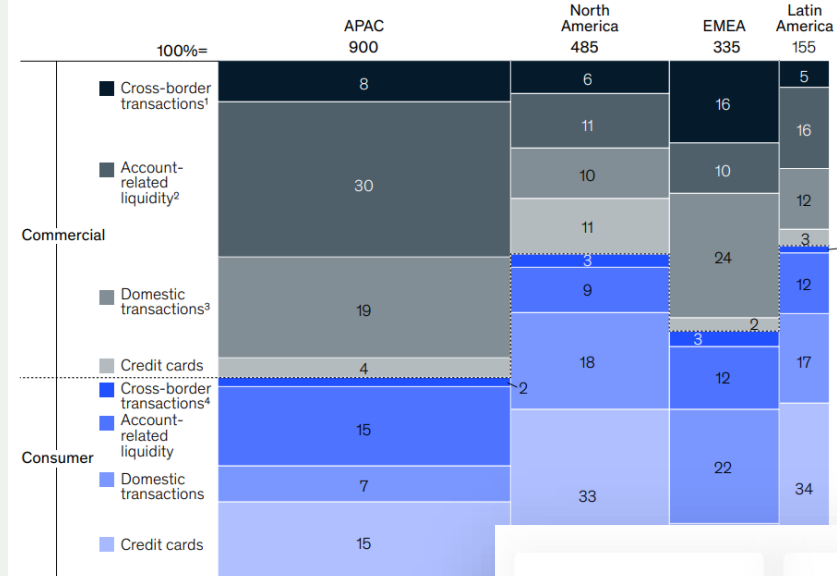
# Payments

- Democratizing remittances
- Some portion of the roughly \$1 trillion in fees paid globally each year to just move money
- The Blockchain Trilemma - A blockchain can be any two of: secure, decentralized, or fast (high transactions per second).

Exhibit 2

Asia-Pacific dominates the global payments revenue pool.

Payments revenue, 2020, % (100% = \$ billion)



<sup>1</sup>Cross-border payment services (B2B, B2C).  
<sup>2</sup>Net interest income on current accounts and overdrafts.  
<sup>3</sup>Fee revenue on domestic payments transactions and account maintenance (excluding credit remittance services and C2B cross-border payment services).  
<sup>4</sup>Remittance services and C2B cross-border payment services.  
 Source: McKinsey Global Payments Map  
 Note: Figures may not sum to 100%, because of rounding.

Global payments 2021: Transformation amid turbulent undercurrents

The 2021 McKinsey Global Payments Report

**\$ 915 Billion**

Total Global Transaction Fee Revenue

Total Gross Transaction Fee Revenue

915 Billion

(Default value is derived by removing interest revenue from the \$2tn in payments fees annually per the McKinsey 2021 Payments Report)

Time Horizon For Model



Over what time period do you expect this scenario to play out - Year X below.

**\$ 192.10**

Total Blockchain Annual Payment Market Size (\$bn)

% Fee Reduction in Blockchain Adoption



How much do payment fees need to reduce to move payments to Blockchains?



# Enabling an Open Metaverse

## Enhanced Protection

Encouraging creators to engage with increased protection and on-chain enforced licensing and royalties

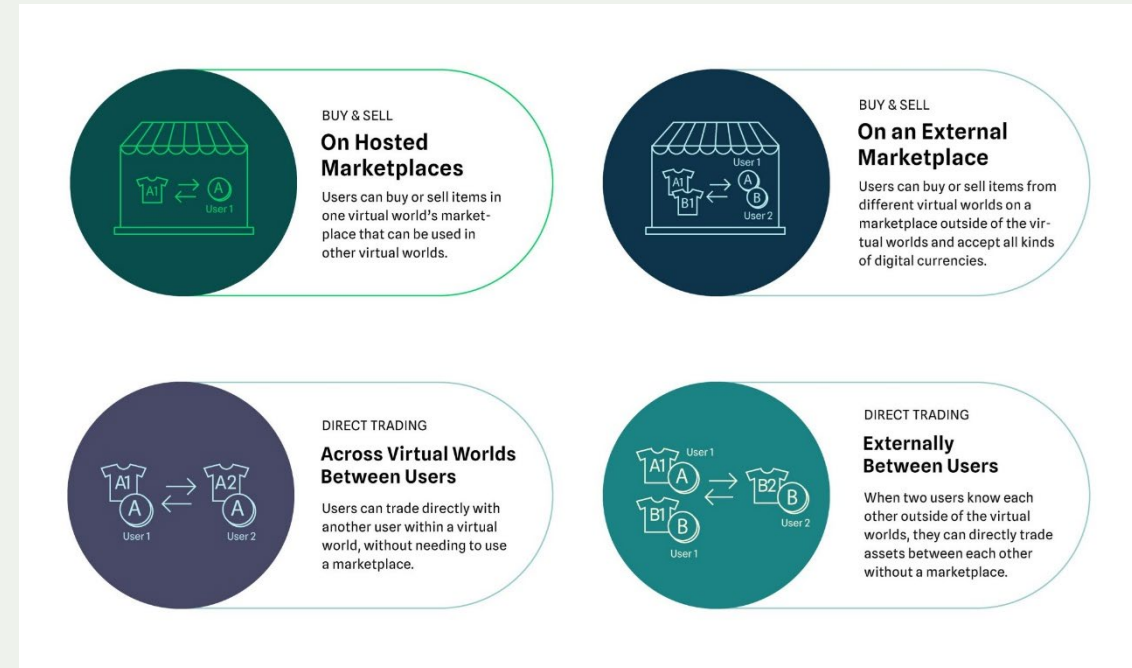
## Increased Interoperability

Increased interoperability of digital assets between virtual economies enabled by the public Chia blockchain infrastructure

## Broader Connectivity

Empowering and supporting connections and access between unique ecosystems

**Random Numbers:** Chia's blockchain provides a source of publicly verifiable random numbers, which can be used for various types of games



# Backup



# The Value of W3C Decentralized Identifiers (DIDs)

## Decentralization

Eliminates the need for centralized authorities or single point failure in identifier management.

## Control

Gives entities the power to directly control their digital identifiers without reliance on external authorities.

## Privacy

Enables entities to control their information privacy, including minimal, selective, and progressive disclosure of data.

## Security

Provides sufficient security for parties to depend on DID documents for their required assurance level.

## Proof-based

Enables DID controllers to provide cryptographic proof when interacting with other entities.

## Discoverability

Makes it possible for entities to discover DIDs for other entities.

## Interoperability

Uses interoperable standards so DID infrastructure can leverage existing tools and software libraries.

## Portability

System- and network-independent, enabling entities to use their DIDs with any system that supports DIDs and DID methods.