

Crypto Art, Law and Blockchain

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@IPProfEvans #EvansOnTheBlock



Overview

Blockchain 101

The Web 2.0 Problem

Ethereum 101

Fungibility

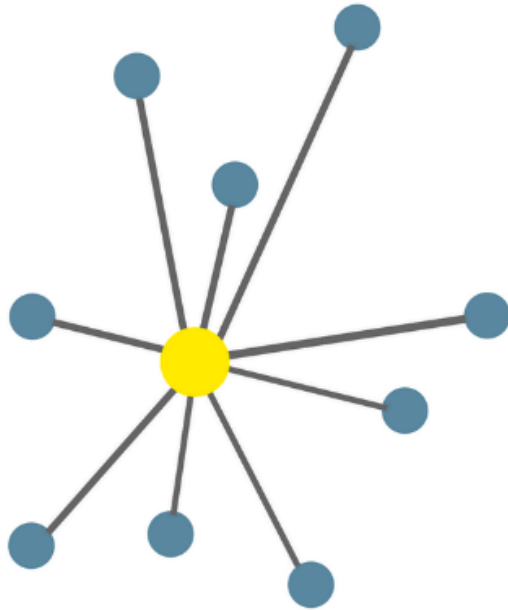
Empowering Creators

Crypto Art

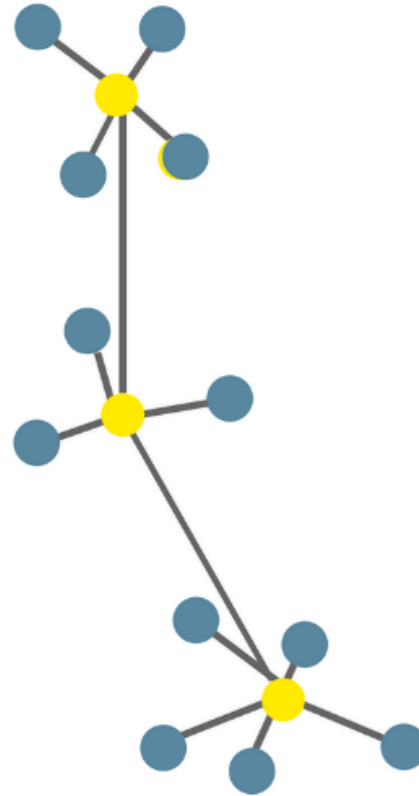
Blockchains Defined

Blockchains are **decentralized databases**, maintained by a **distributed network** of computers that rely on **network effects** and **economic incentives** to secure the network.

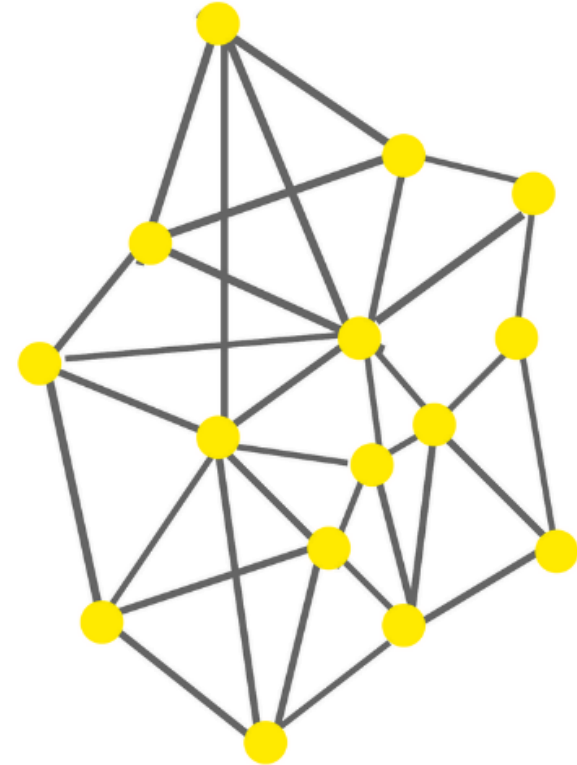
Three Stages of Computer Network Revolution



Centralized



Decentralized



Distributed

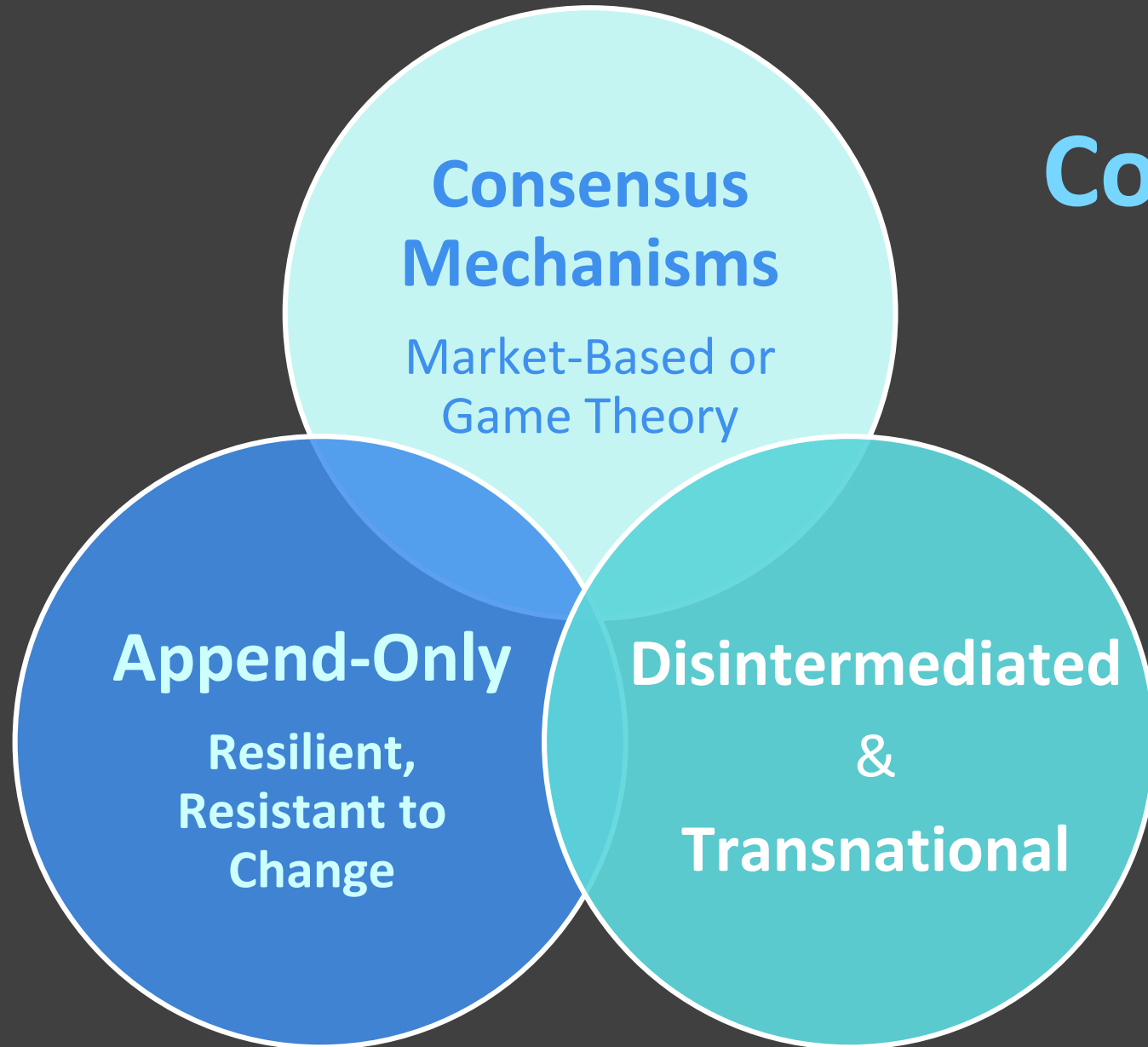
Source: Daxx.com

The Problem: Creators' Rights in Web 2.0

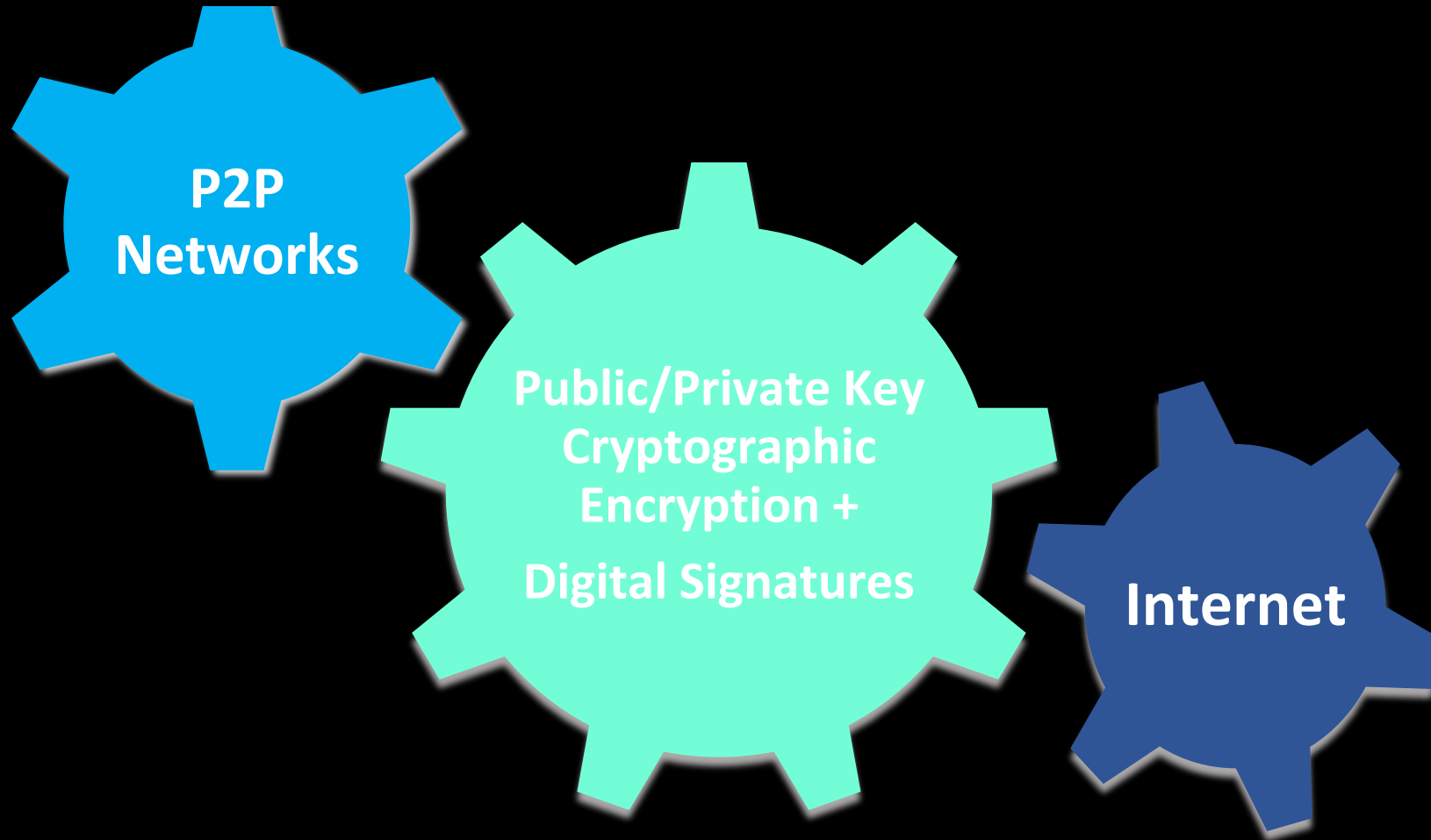
- The “free exchange of ideas” failed to account for digital ownership and property rights
- Easy, low cost, perfect duplication and distribution
- No exhaustion
- Master and copies indistinguishable, negatively impacts demand and value
- Creator unable to participate in secondary market



Core Characteristics

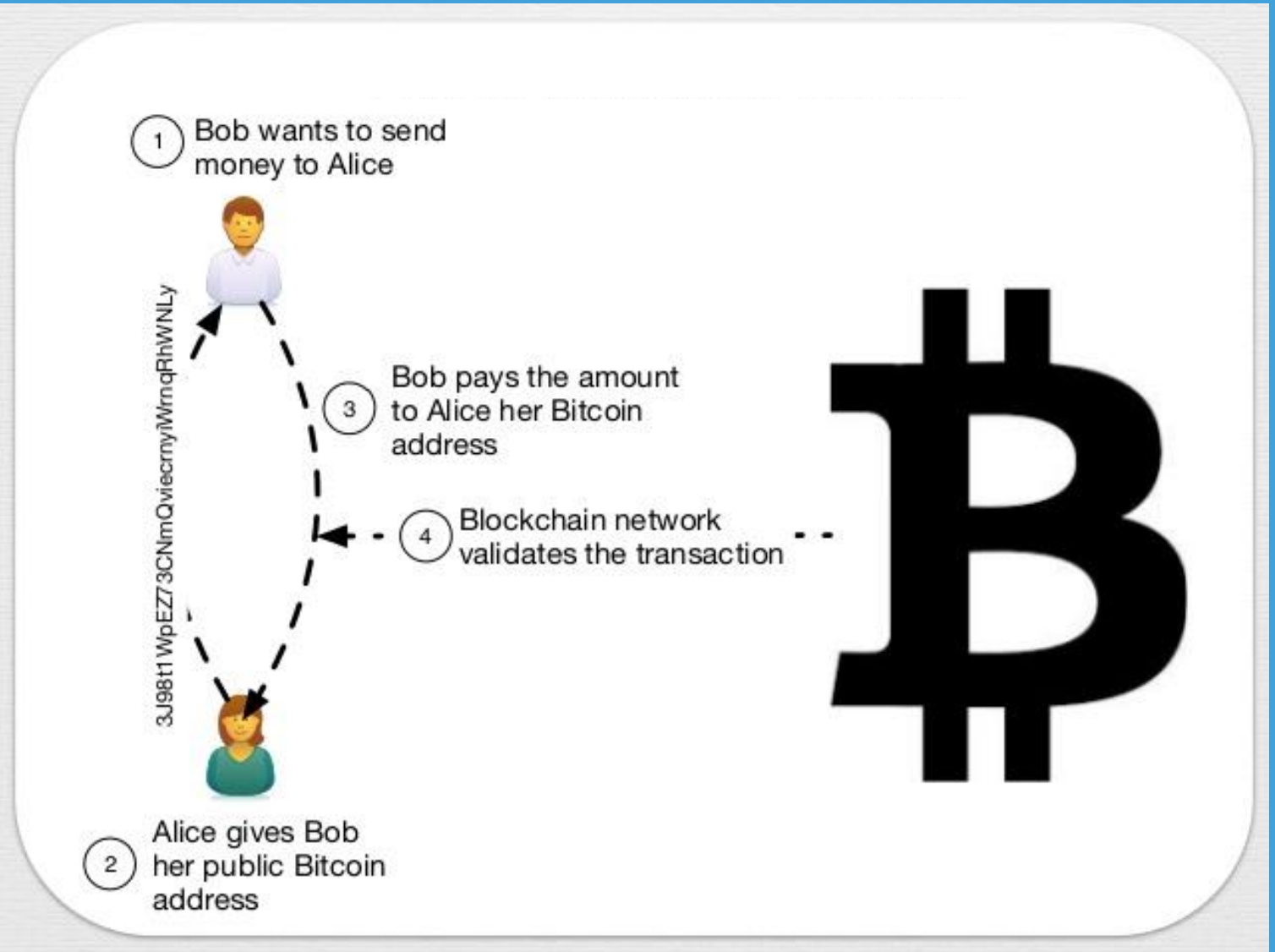


Core Technological Components



Core Technological Components

Bitcoin transaction schema combines decades old technologies in a new way

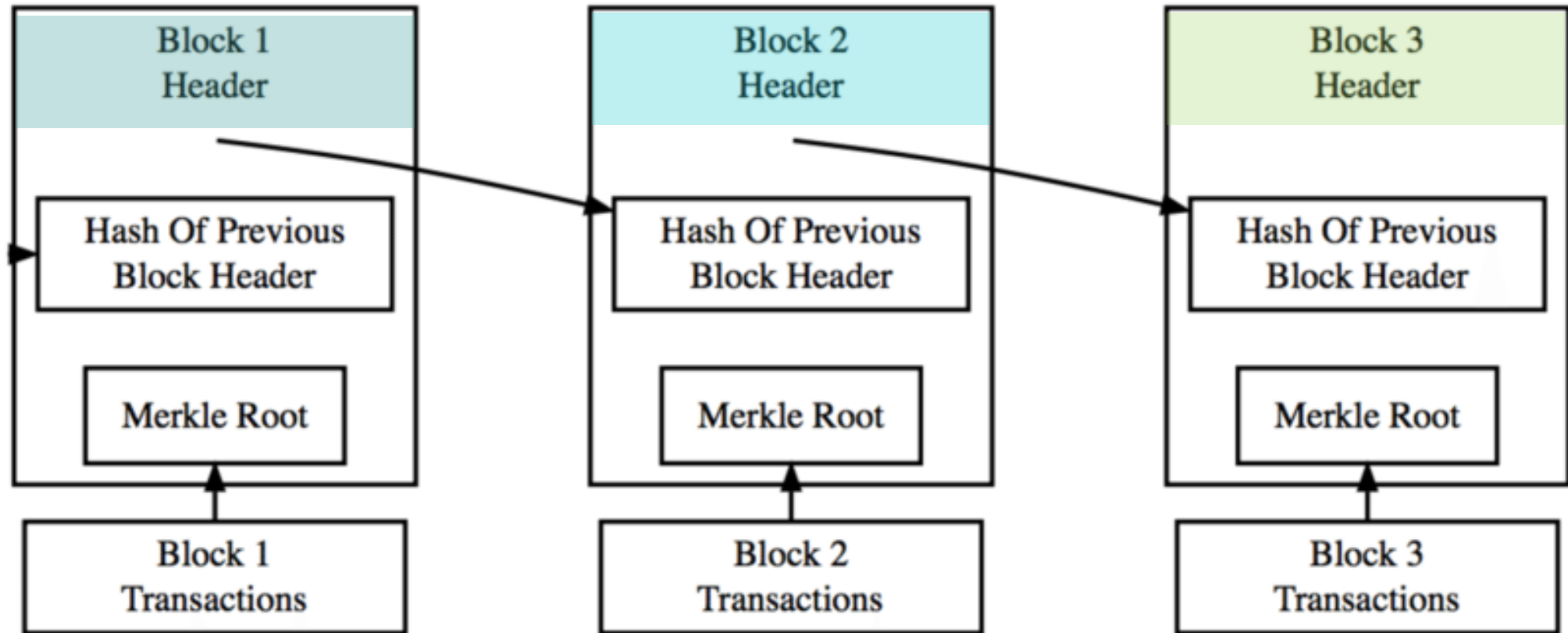


Blockchain Mechanics 101

- A **digital spreadsheet** of transactions shared across a **network** of computers
- Each computer that runs a full version of a blockchain's software is called a **node**
- New transactions are broadcast to the network and verified by each node
- Verified transactions are grouped in regular intervals by network **consensus**
 - Various methods (PoW, PoS etc.)
- A group of verified transactions is called a **block**
- New blocks are added to the **chain** by a special node called a **miner** (PoW)
- Miners compete to solve a mathematical equation
- The winner gets the **block reward** (new bitcoin); new block is added to chain
- Blocks are interrelated because each block contains part of previous block's data

Blockchain

an interrelated chain of blocks



Ethereum in a Nutshell



The world's value is becoming tokenized

The Ethereum blockchain is an open, borderless financial system that represents a wide variety of assets as cryptographic tokens. In the future, most digital assets and goods will be tokenized.



Currency



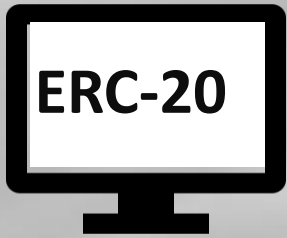
Traditional
assets



Digital
goods

Source: OxProject.org

Fungibility



CLASS OF IDENTICAL TOKENS

Fungible

- **Interchangeable** and of **equal** value
- Ex: currency or commodities
- Smart contracts create tokens, facilitate transactions of tokens, and record balances of tokens in particular account.



CLASS OF UNIQUE TOKENS

Non-fungible

- **Unique** and **value is determined** by scarcity and demand
- Smart contract defines minimum interface a token creator must use to allow unique tokens to be managed, owned, and traded



CryptoArt, defined

3/28/2019

“... art **native to the blockchain** has its own aesthetic and represents a new and important movement within art.”

Jason Bailey, *Artnome.com*

“Arty the Artnome”

Jason Bailey’s purchase from Creeps & Weirdos

The Blockchain Art Market Is Here

December 27, 2017 / Jason Bailey



“Arty the Artnome” from Creeps & Weirdos #89553

Artist [moxarra](#)

Limited Edition: 200 copies

Initial Price: 0.0168730806870718 eth (\$11.833)

NFTs:

- Drive digital art sales through digital scarcity
- Democratize fine art investment
- Improve provenance, reduce forgery
- Create a more ethical, frictionless way to pay artists
- Artists participate in primary and secondary market sales

[[DADA.nyc](#)]

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Non-Fungible Unique Crypto Assets



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