



Introduction to NFTs

Programme

Award- Winning Author, Co-Founder &
Blockchain Historian

Alyze Sam





Programme and concentration

Intro to NFTs

Complete History, Evolution & Why of a “Nifty” Technology

01

02

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05



MODULE ONE

Alyze Sam, Bio, Schedule, Work & Books



Mark your Calendar

- INTRODUCTION TO NFTS & WEB 3 PRIVACY AND SECURITY

DEC						
S	M	T	W	T	F	S
						
						

DEC
7

INTRODUCTION TO NFTS

Yo Newbs! Review the History & Evolution of NFTs

DEC
14

WEB 3 PRIVACY AND SECURITY

Use Protection! Privacy & Security in Web 3

JAN
1

PARTY!

Happy 2023, Let's make it amazing!



Section 01

Many Ask How I got into **Blockchain**.

I Like To Say “*By Accident...*”



Alyze Sam

Course facilitator

About me

Alyze Sam is a refreshing blockchain strategist, a novel educator, a multi-award-winning author, a serial co-founder, and a vehemently driven advocate. Don Tapscott published Sam's eight years of stablecoin research at The Blockchain Research Institute. The Bad Crypto Podcast developed a Blockchain Hero NFT inspired by her work: Mz. Stability. Sam has been ranked top 50 in Blockchain & Top 5 Women in NFTs (HackerNoon, 2022) and released The ABCs of NFTs with the world's youngest author, her 4-year-old son! Sam's five published books have been awarded best sellers and best releases in over 14 science, business, education, and technical categories. Order Sam's latest #1 new release with Alex Tapscott on Amazon now: Digital Asset Revolution and her #1 in Computer Science & Financial Education: Stablecoin Evolution.



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@AlyzeSam



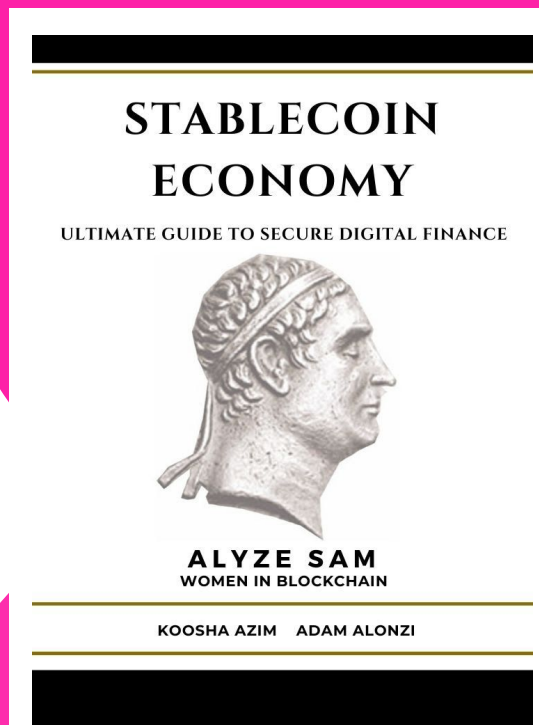
+13165877355



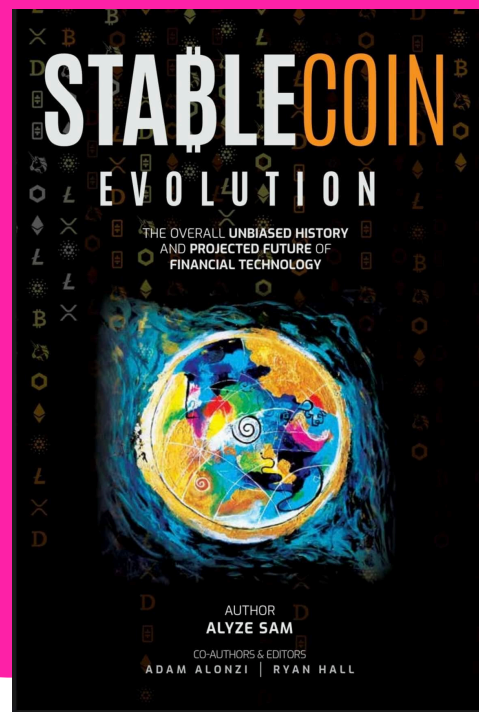
@AlyzeSam

Happy To Share Digital Copies

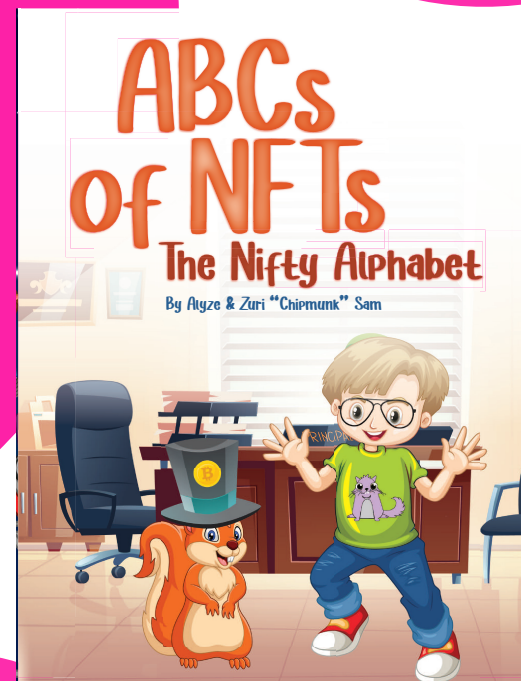
- Award-Winning Technical Copy & Education



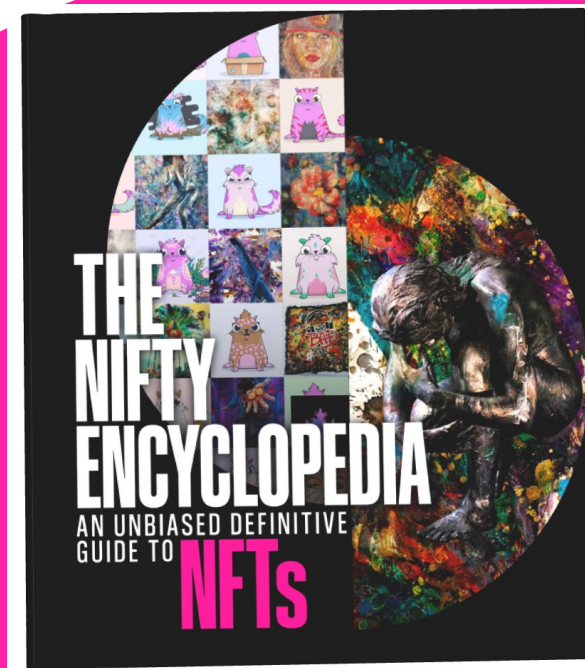
Stablecoin Economy
Link:



Stablecoin Evolution
Link:



ABCs of NFTs
Link:



The Nifty Encyclopedia
Link:

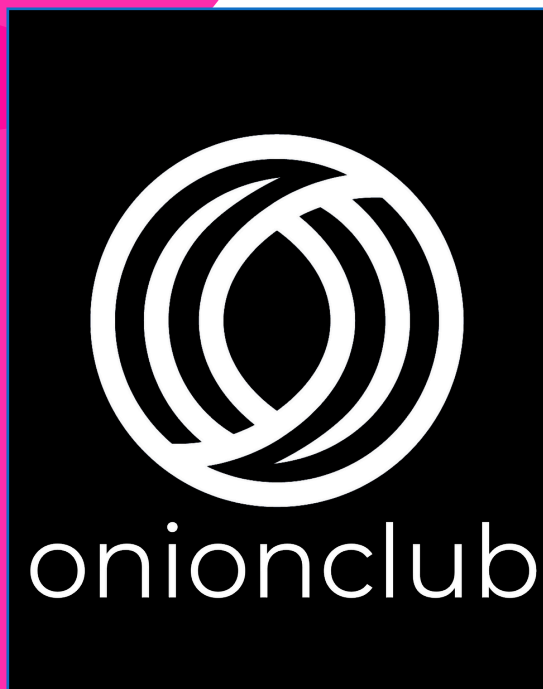
Projects

Sam is a serial Co-Founder and currently launching



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OnionClub

OnionClub.io



Bakeree

<https://bakeree.io/>



One Game Initiative

<https://1lab.network/>

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MODULE 2

Introduction & Basics of NFTs
GAME TIME!
What is an NFT?
Fungibility vs Non-Fungibility





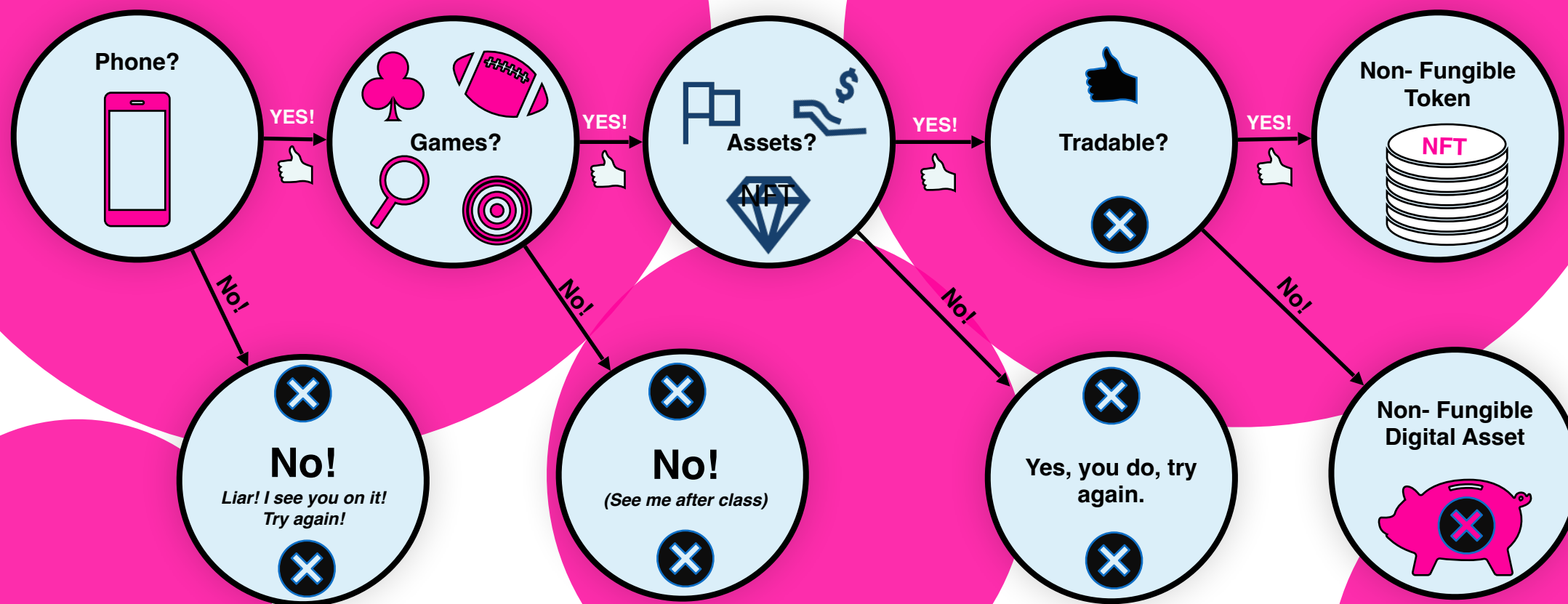
Section 01

Fun Fact: An **NFT** or *non-fungible token* is also termed a ‘**Nifty**’!

You own forms of **NFTS**...

GAME TIME!

Do you own non-fungible digital assets?





What is an NFT?

Shockingly, non-fungible digital assets, in some form, have been creeping around since the dawn of the internet. When non-fungible digital assets include blockchain technology, like [Bitcoin](#), non-fungible tokens can exist.

NFTs are cryptographic tokens that represent a unique asset. NFTs are tokenized versions of digital and, or real-world assets. They function as verifiable proofs of authenticity and ownership within a blockchain ecosystem.

Why are NFTs special? They are not directly interchangeable, introducing scarcity to the digital world....

Introduction

NFTs are currently taking digital art, games and collectibles by storm. But, how and why did everyone become 'non-fungible' fanatics overnight?

The seeds of the NFT revolution were sown by blockchain technology. Blockchain has been refashioning many sectors of society for over a decade. One of the most salient offshoots has been the transformation of the creative industries.

Far from a fad or craze, blockchain is an upgrade for creators and collectors alike.

NFTs were an answer to creatives' prayers for a more democratic means of exposure and a way to gain mass support. The innovators of crypto and cypherpunk bestowed us with the richly diverse web3.0 environment, commonly misrepresented as the *metaverse* currently in development.

The red carpet is not only rolling out for artists and entertainers;

This has been life-altering for many, for various personal reasons, from; the simplicity and comfort of transparency, to accumulating personal wealth and freedom, to solving family readmittance issues, to reducing costly and timely global transfers within date and time parameters for international business transactions.

Among the seemingly endless solutions this technology has bestowed on society, NFTs are one of the most recent victories of the boundless possibilities of blockchain. The unique NFT realms in development are transforming the lives of many artists virtually overnight, ushering in a wave of novel concepts that are rapidly modifying the landscape of civilization, culture, and art.

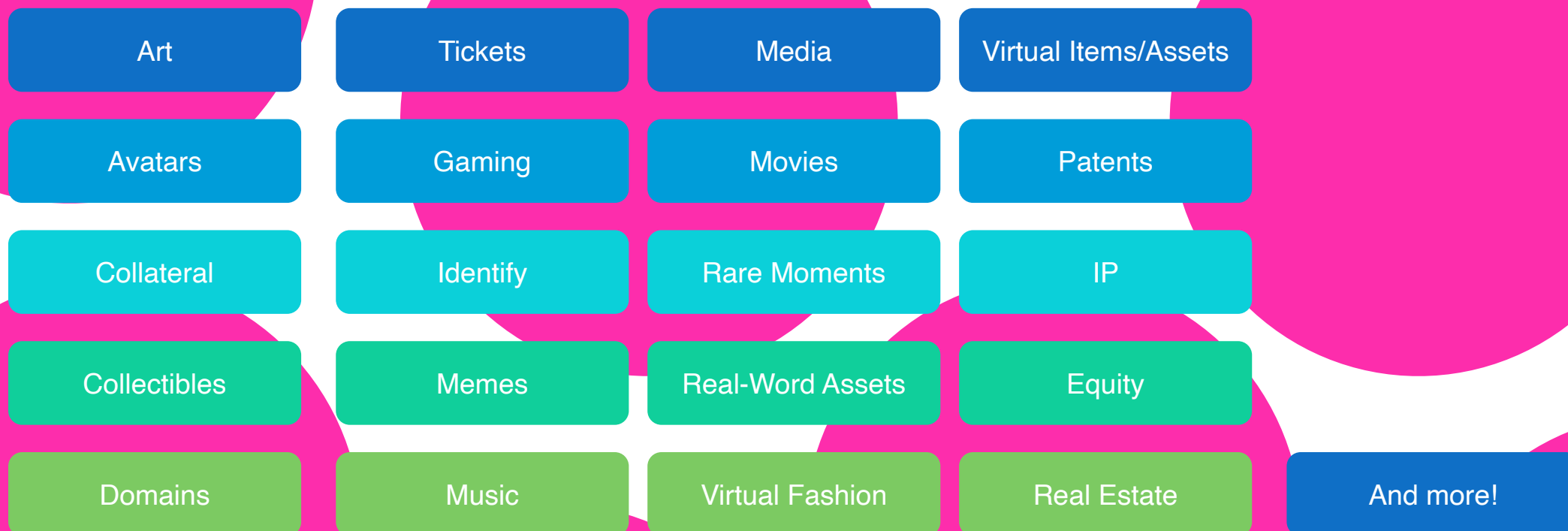
Removing traditional barriers for artists to gain traction enriches us all. However, more benefits to creatives and collectors abound with NFTs, including digital provenance, as they are permanent records of ownership, transparency, accessibility, and often offer generous royalties to artists.

This unbiased guide will help the reader gain a moderate to advanced understanding of NFTs and the breakthrough technologies that stand behind these eternal digital assets.



NFT Use Cases

- The major categories in a non-fungible tokens list could include the following.



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MODULE 3

Understanding Fungibility and Non-Fungibility
Examples





Section 01

Fungible VS Non-Fungible

When discussing cryptocurrencies, those from the blockchain world will often come across the terms '*fungible*' and '*non-fungible*.'

Most dialogues about non-fungible tokens initiate by introducing the idea of *fungibility*, defined as being "*able to replace or be replaced by an identical item.*" It is valuable to gain a profound insight into fungibility and non-fungibility to understand NFTs.



Understanding Fungibility and Non-Fungibility

When discussing cryptocurrencies, those from the blockchain world will often come across the terms 'fungible' and 'non-fungible.'

In standard dialect, it is elementary to consider fungible as defined as "interchangeable," "changeable," "fluid," or "malleable."

Generally speaking, it was a term most often heard in legal contexts until digital assets became a topic of debate.

To fully understand NFTs, one should gain a foundation in fungible assets.

When two commodities are considered fungible, they are identical in specification, or individual units can be mutually substituted. Consider specific grades of commodities in fungibility. No. 2 yellow corn is fungible because it does not matter where it was grown; all corn designated as No. 2 yellow corn is worth the same amount.

Other fungible commodities include company shares, bonds, crude oil, precious metals, and gold. Only the quantity of each unit of the same commodity matters.

Shares listed on multiple global exchanges are fungible. The ownership interest in a share of the New York Stock Exchange.

Cryptocurrencies, like Bitcoin, are considered fungible and non-fungible or NFTs.



Fungible

Interestingly, the word 'fungible' derives from the Latin verb fungi, meaning "to perform."

Dictionary.com describes fungible as an adjective meaning; "being of such nature, or kind as to be freely exchangeable, or replaceable, in whole or in part, for another of like nature or kind."



Understanding Fungibility and Non-Fungibility

When discussing cryptocurrencies, those from the blockchain world will often come across the terms 'fungible' and 'non-fungible.'

When discussing blockchain world fungible' and 'non-fungible'

Non-Fungible

After an established knowledge of fungibility is obtained, it is relatively straightforward to grasp non-fungibility.

Simply, *Non-Fungibility is when returning a borrowed item and replacing it with a different object is **NOT** acceptable.*

In standard dialect, it is elementary to consider fungible as defined as "interchangeable," "changeable," "fluid," or "malleable."

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Other fungible commodities include company shares, bonds, crude oil, precious metals, and even real estate. Each unit of the same commodity is interchangeable.

Invested on the global market, the interest in New York City is high.

non-fungible assets, or NFTs.



Fungible

Non-fungible

[1]



VS



Fungible vs Non-Fungible

Examples

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MODULE 4

History & Evolution of The Nifty

Mastercoin, Namecoin, Bitcoin Colored Coins, Quantum/
Monegraph, Rare Pepes, CryptoKitties - NFT BOOM



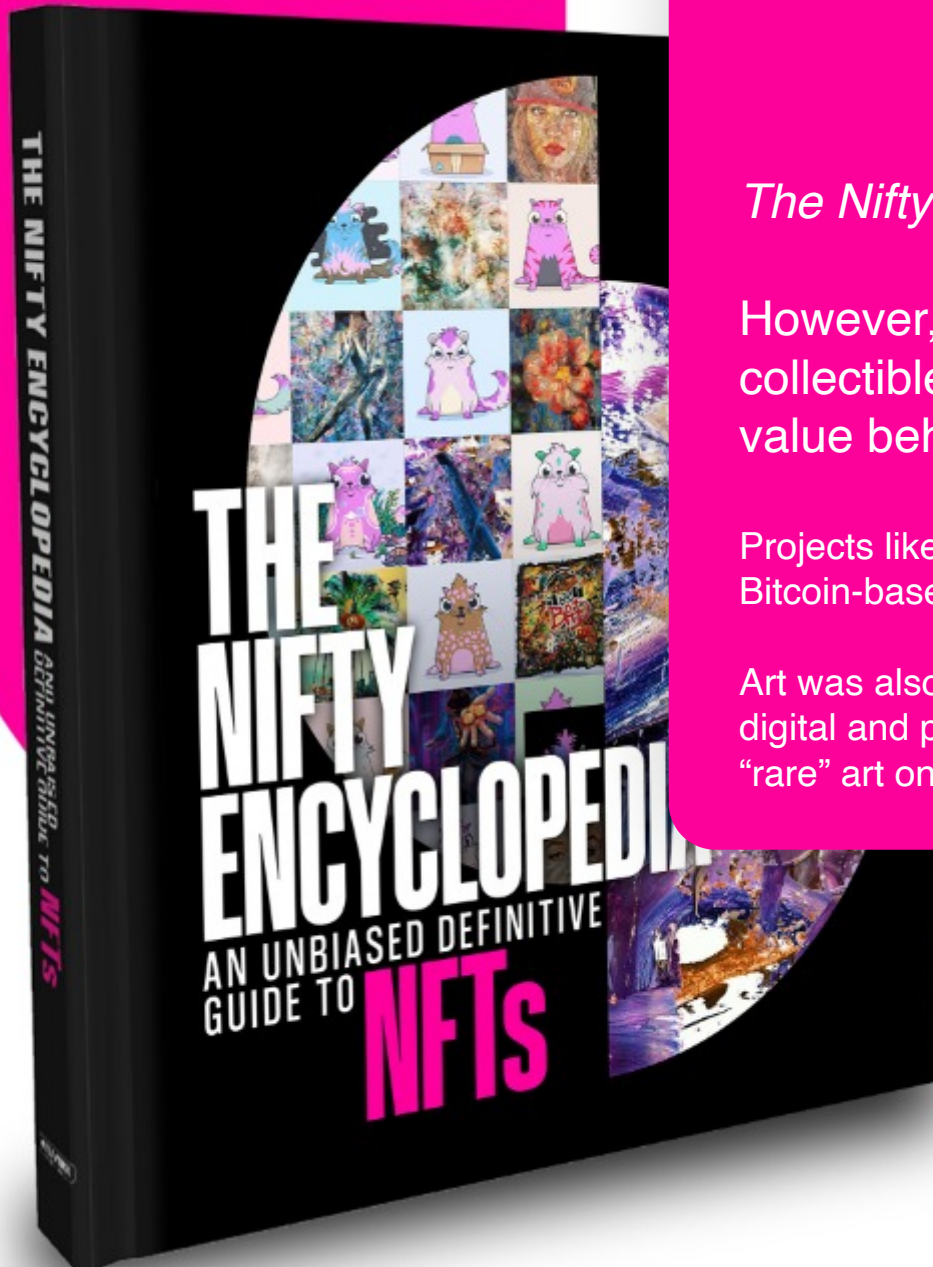
History & Evolution of The Nifty

The Nifty notion blossomed shortly after the inception of Bitcoin.

However, NFTs did not gain much attention until they became crypto-collectible trading card games. Following- more individuals started to see the value behind this technology.

Projects like Age of Chains and Rare Pepes began using the Counterparty protocol to issue Bitcoin-based blockchain trading cards as NFTs in 2016.

Art was also a highly favored use for blockchain fans. NFTs prove authenticity and ownership of digital and physical art or goods. In June 2017, CryptoPunks launched and paved the way for “rare” art on Ethereum.



Nifty Timeline

Bitcoin



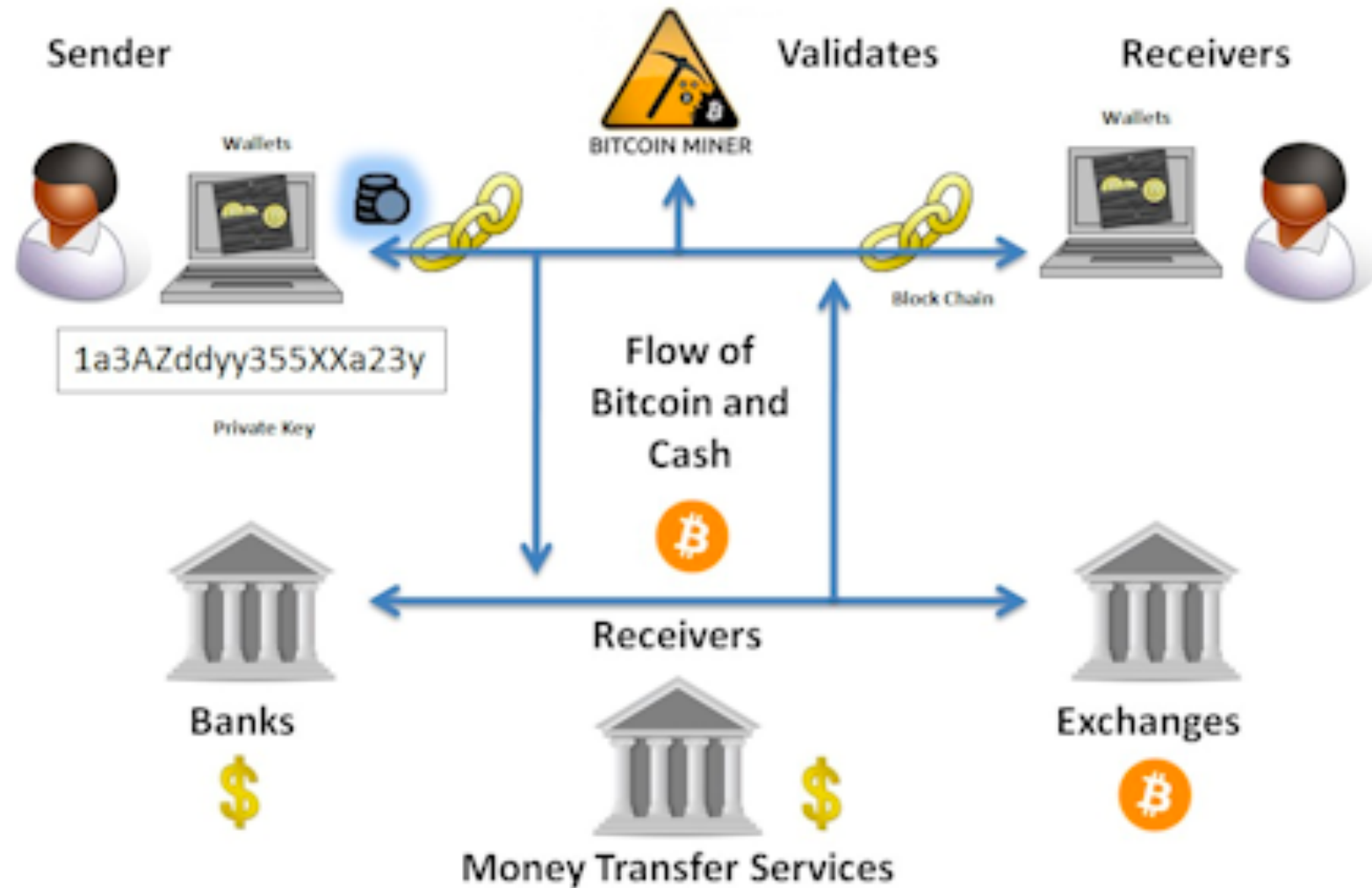
bitcoin



2009 – Bitcoin

- BTC is a cryptocurrency, or virtual currency designed to act as money and a form of payment outside the control of any one person, group, or entity, thus removing the need for third-party involvement in financial transactions.
- It is rewarded to blockchain miners for the work done to verify transactions and can be purchased on several exchanges.
- Bitcoin was introduced to the public in 2009 by an anonymous developer or group of developers using the name Satoshi Nakamoto.
- It has since become the most well-known cryptocurrency in the world. Its popularity has inspired the development of many other cryptocurrencies.
- These competitors either attempt to replace it as a payment system or are used as utility or security tokens in other blockchains and emerging financial technologies.
-

How Does Bitcoin Work?



Bitcoin

Example of Use Case

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Nifty Timeline

Namecoin



2011– Initially introduced as the “**Alternative Bitcoin**,” Namecoin is an alternative digital coin allowed the preservation of the .bit domains registry with the belief that it was viable to maintain a record of data in Bitcoin that was certain to be unique

- The concept of the NFT arrived long before the acronym was attached to the technology.
- NFTs resulted from experiments with Bitcoin and its blockchain protocol. The notion was to construct something rare or extraordinary, and the result was the creation of .bit domain.
- The project BitDNS is known as the core infrastructure of the distributed internet. On the BitDNS network, users are autonomous, and the domain names are decentralized. BitDNS builds distributed domain names through the BitUID infrastructure, wallets, and its routers.
- Further, BitDNS states the ecosystem will connect to most mainstream public chains. BitDNS is the initial project to include key with mainstream technologies like IPFS technology, Ethereum, EOS, Fabric, R3, and IPv8 technologies. The commingled ecosystem will become the Super Hub of distributed Internet-dWeb4.0.
- Data initially embedded in the Namecoin transaction brought awareness to Monegraph, a frontier crypto art undertaking. Consequently, an urge to use Bitcoin as more than just a digital currency took root.



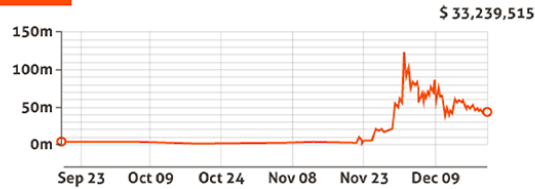
WHAT'S THE DEAL WITH NAMECOIN?

Largely based on Bitcoin, Namecoin merges the advantages of a cryptocurrency with the services of an independent domain name provider.

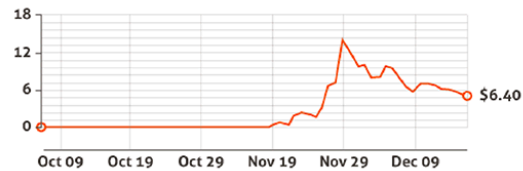


STARTING DATE 18TH APRIL 2011

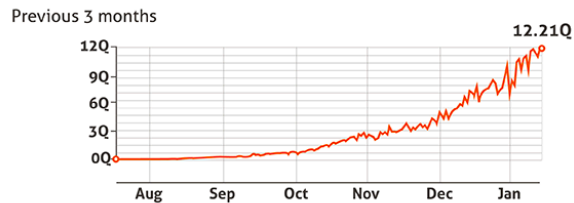
MARKET CAP



PRICE



HASHRATE



DIFFERENCE TO BITCOIN

BLOCK REWARD

50 NMC

DIFFICULTY ADJUSTMENT

2016 blocks

BLOCK CHAIN

Code based on Bitcoin but the block chain is separate.

MERGED MINING

Simultaneous NMC and BTC mining possible with the same rig.



SOURCES

coinmarketcap.org
cryptosource.org
dot-bit.org
namecoin.info

POTENTIAL NUMBER OF COINS

21 million

BLOCK TIME

10 min

ADDITIONAL RPC-COMMANDS

These allow users to authorize special transactions containing specific date.

ADDITIONAL USES

Decentralised name system (DNS) service, TLS encryption and secure identification, timestamping, alias identity, messaging, voting, torrent tracker.



NameCoin

Example of Use Case

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Nifty Timeline

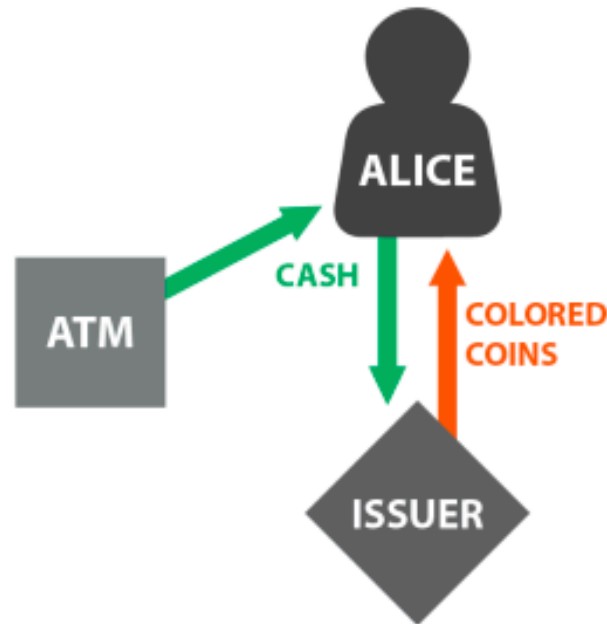
Bitcoin Colored Coins

The logo for Colored Coins, featuring the words "COLORED" and "COINS" in a stylized, blocky font. The "O" in "COINS" is replaced by a colorful circle with a yellow center and a pink ring.

2012 – Bitcoin Colored Coins- Way ahead of their time

- While not well known or ever widely used, one could argue that Bitcoin Colored Coins were the first actual NFT and the beginning of Bitcoin 2.0 as these unique tokens expanded the utility of the Bitcoin blockchain.
- The initial publishing of the notion for Colored Coins materialized from a blog in 2012 by Yoni Assia, "[bitcoin 2.X \(aka Colored Bitcoin\) — initial specs.](#)"
- Assia confers Colored Coins in his publishing, not about the coins representing various assets or use cases. Rather, Assia contends that Colored Coins are Bitcoins that existed as an element of the "*Genesis transaction*," they are distinctive and identifiable over standard Bitcoin transactions.
- The prospect of these assets was not explored until two years later, on December 4, 2012, when [Meni Rosenfeld](#) publicized the composition "[Overview of Colored Coins](#)."





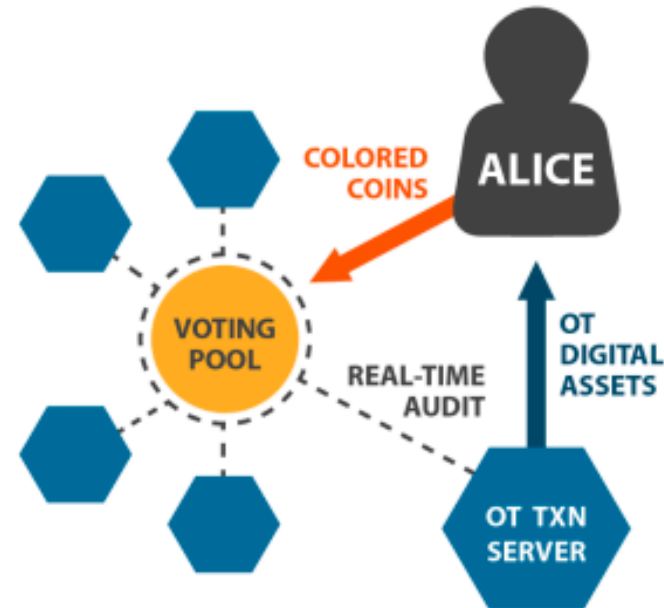
Alice withdraws cash from an ATM using her legacy bank card and uses it to purchase colored coins from the colored coin issuer.

Colored coins are specially marked bitcoins backed by fiat currency or other assets and are visible on the bitcoin blockchain.

The colored coin issuer, likely a bank, is responsible for storing the currency reserves that correspond to the issued colored coins.

After presenting the cash to the issuer, Alice displays her blockchain receiving address as a QR code on her smartphone.

The teller scans the QR code and sends colored coins to that address.



Alice's colored coins are uploaded into an Open Transactions voting pool where they are less vulnerable to theft.

Even if an individual server is hacked or disappears, the colored coins are still recoverable by the remaining servers.

The transaction server is constantly auditing the voting pool in addition to all the other servers.

The server sees Alice's uploaded colored coins and it credits her Open Transactions wallet with a corresponding number of digital promissory notes.

Bitcoin Color Coins

Example of Use Case

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Nifty Timeline



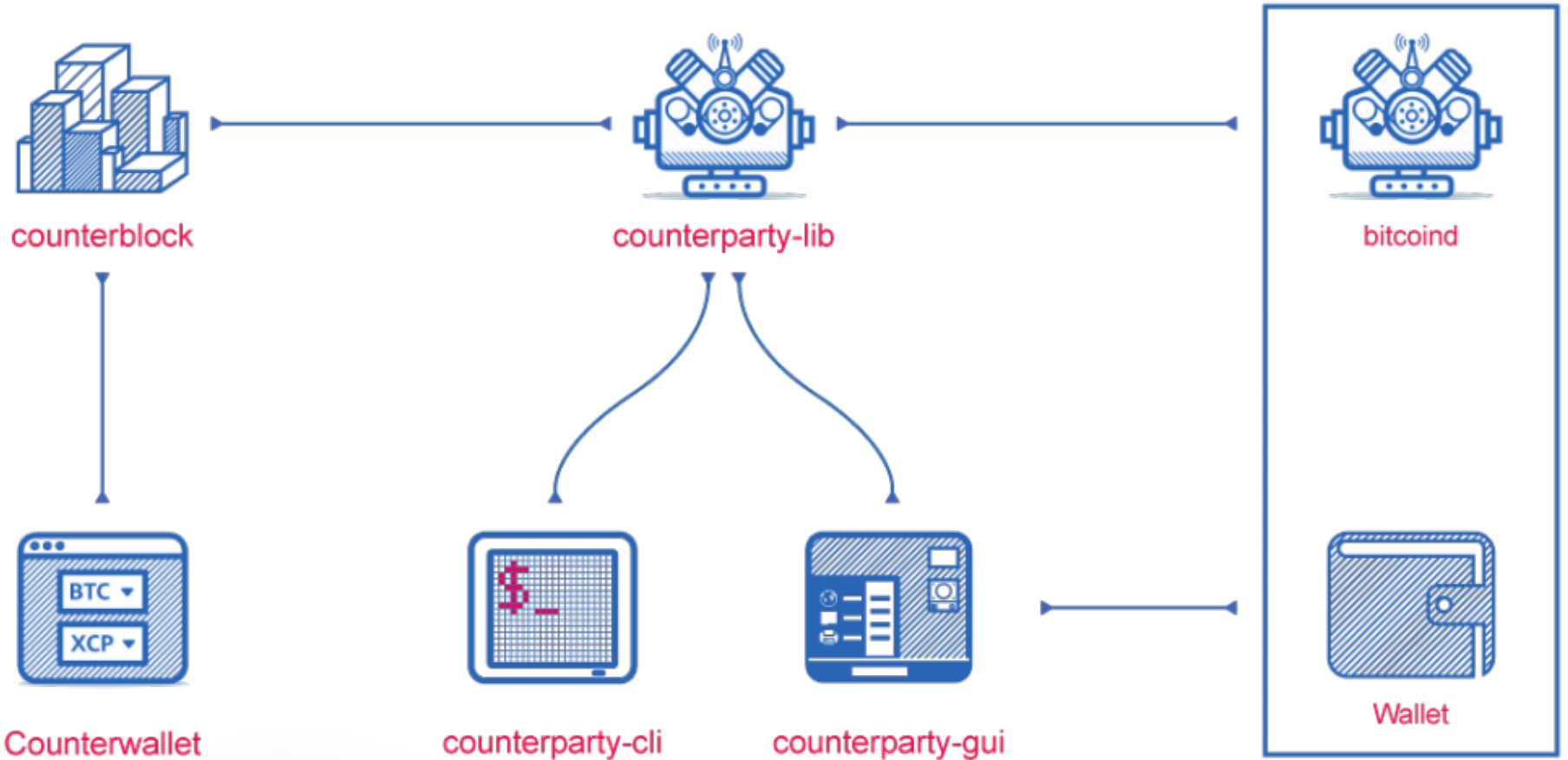
Counterparty



Counterparty

2014 – Counterparty

- Colored Coins piloted many to discover the prospect of managing assets on blockchains.
- Visionaries apprehended that [Bitcoin's](#) current iteration can not enable desired features for revolutionary innovations.
- As a solution, in 2014, [Counterparty](#) was founded by Adam Krellenstein, Evan Wagner, and Robert Dermody. [Counterparty](#) launched as a peer-to-peer, open-source, distributed financial platform with the protocol constructed atop the [Bitcoin](#) blockchain.
- [Counterparty](#) has several elements within. It authorized asset creation and had a decentralized exchange.
- The [Counterparty](#) currency token retained the ticker XCP. [Counterparty](#) had countless projects and assets, and many are still in existence.



Counterparty

Example

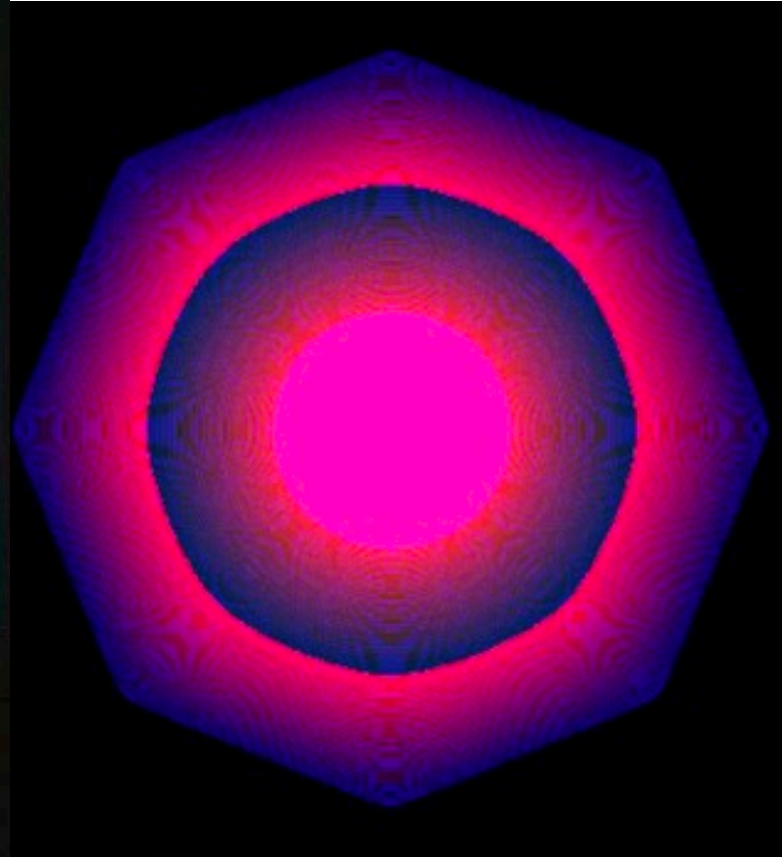
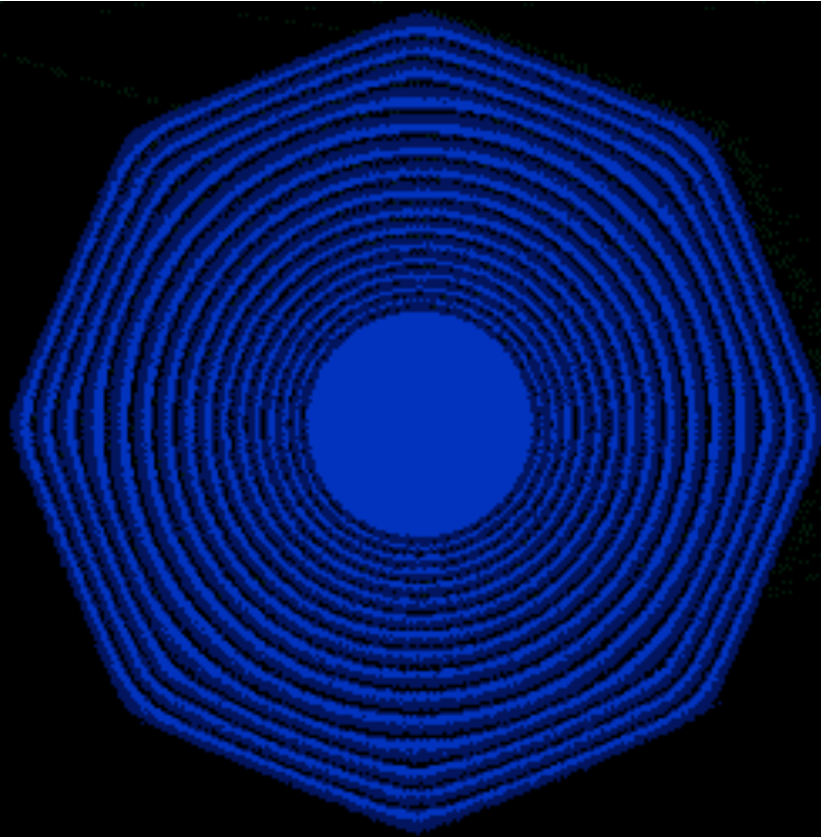
Nifty Timeline

Quantum / Monegraph

The logo for MONEGRAPH, featuring a stylized white 'M' on a dark grey background, followed by the word 'MONEGRAPH' in white capital letters.A blue square icon containing the white number '1' in brackets.

2014 The first Nifty, Quantum, Inspired & launched on Namecoin

- [Kevin McCoy](#) and [Anil Dash](#) originally concocted the first visual NFT on May 3, 2014, live during the [Seven on Seven conference](#) at the New Museum in New York City, New York. On that day, [Dash](#) and [McCoy](#) launched the initial experimentation of a non-fungible token created through on-chain metadata facilitated by Namecoin, attached to a unique piece of art.
- In 2021, on his website, Kevin McCoy shares Quantum in several screenshots and adds, “This code-driven work presents an ongoing, abstract cycle of birth, death, and rebirth. It tells this story through color, line, and movement. In 2014, I had an idea to use blockchain technology to create indelible provenance and ownership of digital images of this kind. Quantum was the first ever to be recorded in this way.”
- “How to picture the moment of creation. A spark, a seed, a particle. We have narratives describing it as an interval of days or a cryptic alphabet that divides the earth from the firmament. Quantum takes its place alongside other original icons replacing their aura and gilding with a pulsating luminous heartbeat. To call this, a mandala would not be an understatement, since what is a mandala if not an allegory for a universe, its revolutions, breath and winking into being out of nothingness?” - [David Geers, art critic, 2021](#)



Quantum by Monegraph

Example

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Nifty Timeline

Non-Fungible Explosion!

2016 – Revolutionary Nifty Ideas Sprung

- Spells of Genesis- SoG was the first blockchain-based mobile game.
- The Emergence of Ethereum & Ethera - 32-Bit digital real estate at its finest
- Vatom - First Patent filed on the notion of NFT Tech-
- POAP - Proof you really showed up!
- Rare Pepes - NFTs Meme interest
- Curio Cards- Digital Collectible Cards
- Crypto Punks- Ode to the OGs-
- Ether Rocks- 1970s -inspired pet rocks
- CryptoKitties- NFT Hype Cycle was created
- Decentraland- Virtual land evolves



Nifty Explosion

Example

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Reach Out To Me!

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Looking for an Ethical
Blockchain Incubator?

My team of experts and I will
build you blockchain solutions at
MassCrypto.io

@MassCryptoio

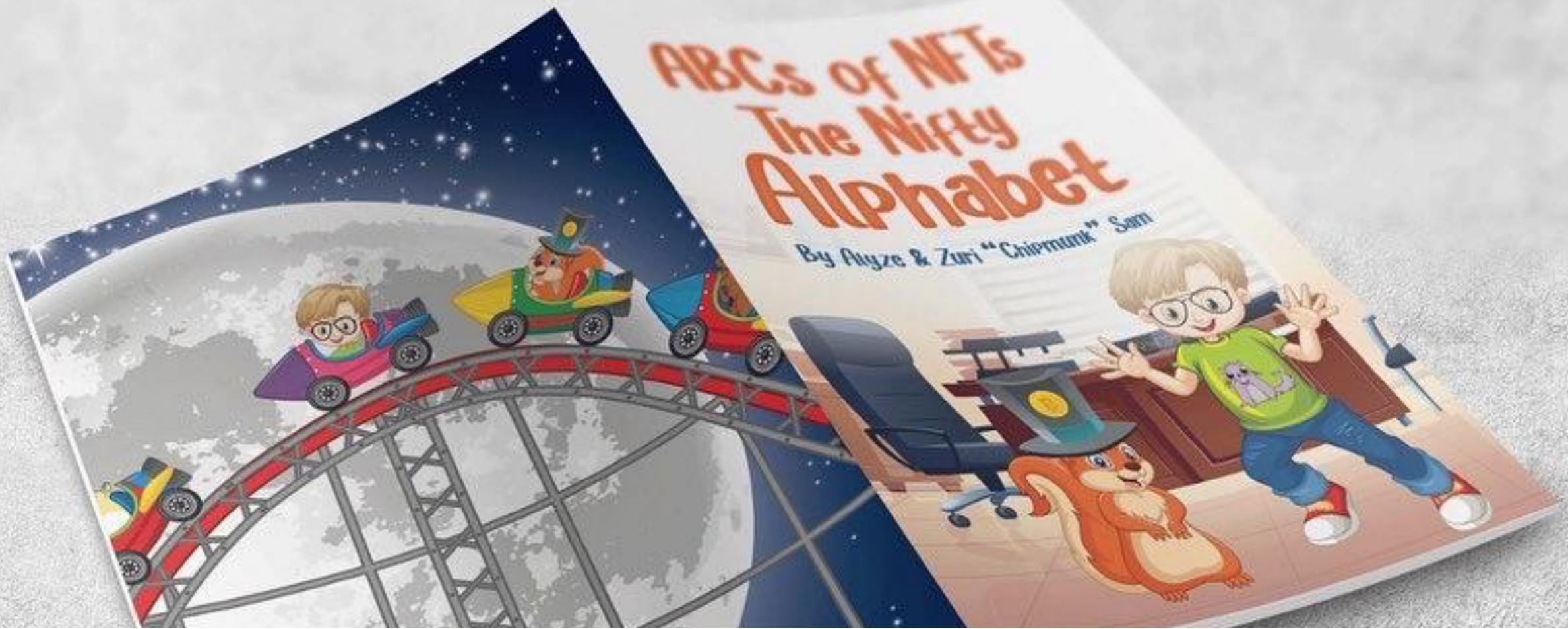


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Intro to Web 3 Privacy & Security

Programme

Award- Winning Author, Co-Founder &
Blockchain Historian

Alyze Sam

