# Part 1: "Sound Money"

#### Aristotle's "Sound Money"

Around 350 BCE, Aristotle defined Sound Money as:

- (1) Durable
- (2) Transferrable
- (3) Divisible
- Must provide Intrinsic Value, i.e. "value independent and contained in the money itself."
  - (4) Scarce
  - (5) Recognizable
  - (6) Fungible

#### Properties of "Sound Money"

#### Durable

physically stable, does not rot or rust, or melt

#### Transferrable

easy to transfer ownership from one person to another

#### Divisible

can be subdivided into smaller units of money

#### Scarce

limited quantity available for use

### Recognizable

easy to recognize and verify authenticity

## Fungible

one unit of money can be substituted for another

# Part 2: Money through the ages

### Early forms of currency

The earliest known currencies were receipts for grain storage found in Mesopotamia.

In the bronze age, ingots were used for trade, but currency didn't really take off until coinage was introduced in the Iron age

#### Marco Polo

Marco notoriously came back from the Far East with detailed description of exotic currencies such as banknotes, salt and cowry shells.

#### Tobacco as Currency?

Many more "limited" economies found no use for rare metals, and instead relied on goods as currency.

The "pound-of-tobacco" was an official currency unit in Virginia during the colonial era.

Rice could be used in South Carolina.

Pelts were used as currency by the Hudson Bay Company.

#### Western Union and The Dematerialization Of Money

The telegraph company opened in 1851. By 1861, it had linked both coasts. By 1871, it allowed money transfer over its lines, taking the first step in the fundamental virtualization of money.

#### Virtual Scarcity: Nonces & Hashes

All currencies rely on scarcity. If there is an unlimited amount of money, none of it is valuable. Sometime the scarcity is enforced by a natural authority (i.e. limited amounts of copper or gold on Earth). Sometimes, it is enforced by humans (i.e. Central Banks). Bitcoin solves this problem with a novel approach, based on mathematics.

A hash function generates a "signature" for the data. If the data changes, the hash changes. Hash functions are not reversible.

Bitcoin takes advantage of it by requiring miners to compute hashes for ledger blocks that fall below a certain number (difficulty target). Miners do this by trying various "nonces" until they find one that generates a satisfying signature. The difficulty target is adjusted to keep bitcoin from being mined too quickly, creating a satisfying level of artificial scarcity.

hash("Satan, prince of this world" + "some nonce") = 99e9ba071ac7040f04ea8d8f303b1a3c349a6e0b

hash("Satan, prince of this world" + "other nonce") = 278ceb29e11cb9e9c8d37af74730fb6faa185757

hash("Satan, prince of this world" + ???????) < 00000000000000000000000001231231 # Very difficult

Part 3: Bitcoin

#### Who is Satoshi Nakamoto?

The name or pseudonym "Satoshi Nakamoto" is listed as the author of the Bitcoin whitepaper (2008). This person/persons also created a message board called bitcointalk in 2009, leaving several messages.

Several real people have been linked to Satoshi, inconclusively.

In 2017, Elon Musk denied being Satoshi.

#### The Blockchain

Transactions are recorded in blocks. Each block contains the signature of the previous block, linking them together in a chain. As transactions get administered in a distributed, totally decentralized way, we see the rise of a new way to store and exchange information, not unlike that of a new internet.



### Mining

Miners compete by trying to find nonces that generate a signature that falls below the current difficulty target. This is computationally expensive, but financially lucrative as miners get rewarded in Bitcoin. This has led to the rise of mining operations where electricity is cheap (to power & cool server farms), as well as specialized mining equipment.

## Part 4: The Implications of Cryptocurrency

#### Implications for the Banked

As public distrust of our financial institutions (finally) increases, so does the demand for a more open credit system.

- Banks exploit us by charging deposit and withdrawal fees, foreign transaction fees, lost card fees, membership and service fees, overdraft fees, ATM fees, account closing fees, and many more. These thieves of economic justice steal as much money as they store.
- Cryptocurrency have <u>no middlemen</u> to charge transaction tolls.
- Say you need to get cash across the northern border fast: Would you trust your local teller to deliver it in a few "business days" working banker's hours? Or would you trust the most secure and sophisticated digital distribution highway ever created?
- There has never been a cheaper and faster channel to send and receive funds.

#### Implications for the Unbanked

Two billion people don't have bank accounts. Cryptocurrencies could change their lives.

- Large amounts of the unbanked live in developing nations where their capital is unprotected. These people typically live in oppressive regimes that manipulate local currencies through taxation and inflation.
- Crypto is the only truly global currency, free from any one entity's influence.
- Without complex banking bureaucracies, cryptocurrencies give the unbanked a chance to securely save and transfer money, access credit and even make international transfers.
- In other words: have you read any headline from Venezuela lately?

#### Implications on Ecommerce

Today's online payment infrastructure allows mega-corporations to collect data on our purchases. No more.

- All transactions on the blockchain are SNARK-y, and therefore pseudonymous.
- Decentralized apps will be unable to monitor user activity, other than basic non-identifying metrics to keep their systems stable.
- Users will be able to verify the validity of a transaction on their own, without being serfs of Hooli or their banks.

#### **Implications for Anarchists**

Gone are the days of "relying" on "trusted" intermediaries and here is the utopian future of the ability to transact entirely on immutable public ledgers.

- No one authority governs blockchains. They're run by the netizens.
- Netizens should be able to pay for any good they want. In any way they want. Without any government looking in. Some call that money laundering, others call it smart shopping.
- Next up for disruption: the constitutions of world governments. Anarchy may finally take its proper throne as the political system of choice.

# Part 5: Why We Need PiedPiperCoin

#### Why does Pied Piper need PiedPiperCoin?

#### To Catalyze PiperNet User Adoption

- Even though our decentralized internet will be technically and ideologically superior to the feudalistic collection of hypertext protocols we call today's Web, we're not going to succeed if we don't incentivize users to try us out.
- PiedPiperCoin (PPC) will be our incentivization mechanism. Users will earn it just for signing up, contributing their device resources, or using our developers' apps.
- Then, they can sell PPC for fiat money, lambos, or spend it on services offered by our developers.

#### Why will users hodl PiedPiperCoin?

# PPC's price will rise as users get hooked on the technical and financial benefits of PiperNet.

Common traits of Web users:

Benefits of Pied Piper Internet:

| Impatient: users often show symptoms typically associated with severe ADHD  | <b><u>Faster</u>:</b> by distributing data, all our internet's content will be more accessible                         |
|---|--|
| Stingy: the proliferation of piracy has decreased users' willingness to pay for anything                                    | <b><u>Cheaper</u></b> : user spends accumulated PPC rather than USD, cutting down costs                                |
| Afraid: Frequent use of features like "Incognito mode" and "Clear browsing history" indicate most users have things to hide | More private / secure: Because users will own their data, only they will know the sites they visit late into the night |

**All ships rise**: As more developers join, there will be more ways to spend PPC, increasing its velocity and valuation.

#### So, when does PiedPiperCoin succeed? (in other words, when moon?)

#### There is a 98.745% chance of making a 100x profit

- It's only a matter of time before a whale comes. PiedPiperCoin's market cap will then rise exponentially with all our new users. We'll go from being a fringe altcoin to a major player in crypto.
- But true investors know it's not just about our coin or just about buying lambos, it's about a decentralized economy.
- The Pied Piper economy pays its creators and contributors fairly and won't let their data be siphoned by the Hoolis of the world.
- Personal politics not aside, Richard -- this is the economy conceived in an anarchist's dream.
  It's fair, ubiquitous, and thus, unstoppable.