



La blockchain e il futuro del mondo digitale

Andrea Bellacicca, PhD

a.bellacicca@nexid.it



About me

- **PhD in physics, astrophysics and applied physics**

I developed smart materials taking inspiration from living beings (biomimetic), both animals and plants, with application in Soft Robotics, Stretchable Electronics, Paper Electronics and 4D Printings

- **Crypto-trader**

I run a small quant fund that I own since one year (and it pays for my expenses)

- **Post-doc researcher at Humanitas**

I'm developing a model to study the ictus damages on human brain that aim to improve people's lives after the stroke

- **Blockchain Product Leader for Blockchain360**

I develop solutions to exploit blockchain and cryptovalues in real world applications



AndreBitFox



andrea-bellacicca

“A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it.”

Max Planck

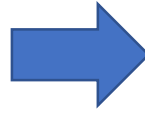
KRAKEN:XBTEUR, 1W 7363.6 ▼ -206.4 (-2.73%) O:8015.2 H:8026.2 L:7275.2 C:7363.6



Historically, the barter economy has been the first viable way to exchange good and services, but due to its limited efficiency, it was surpassed by the trade economy using money as medium of exchange [1]



Barter economy



Trading economy

Money needs to fulfill three requirements [1]

- **Medium of exchange:** something that can be reliably swapped for something else. Its virtues should include fungibility, transportability, divisibility, recognisability, and resistance to counterfeiting;
- **Unit of account:** other goods, services, and assets are priced in terms of money. Money is the unit of measurement of relative worth, so it should have stable value allowing for stable comparison of prices. In order to constrain money value its supply must be limited in some way, and controlled to match up demand;
- **Store of value:** something that can be reliably saved, stored, and retrieved while retaining its usefulness over time. It should be non-perishable or with a low preservation cost. Often the store of value property is also presented as the ability to retain constant value over time, but this ability is instead related to being a good, i.e. stable, unit of account

Gold has been the *commodity money* standard for thousands of years, and its supremacy has not required any kind of centrally planned endorsement.



Central authority

✓ Certification of gold purity

- ✓ Resistance to corrosion and oxidation
- ✓ High malleability
- ✓ Ease of purity assessment
- ✓ Pleasant color
- ✓ Hard to transport
- ✓ Security problems

In the 17th century merchants started to use the goldsmiths of London as custodians of their gold, obtaining in return non-assignable receipts.



Nowadays we currently use *fiat money*, that is, money deriving its value only from government regulation or law



Central banks' intrinsic objective is to safeguard the value of their currency

Internet completely changed the way we live.
We can keep in touch with people halfway
around the world instantly. But send them
money it's not so easy



Texting



Calling



Sharing



Banking



Third parties are required to verify the monetary transactions to avoid any problems. Are they?



Digital identities

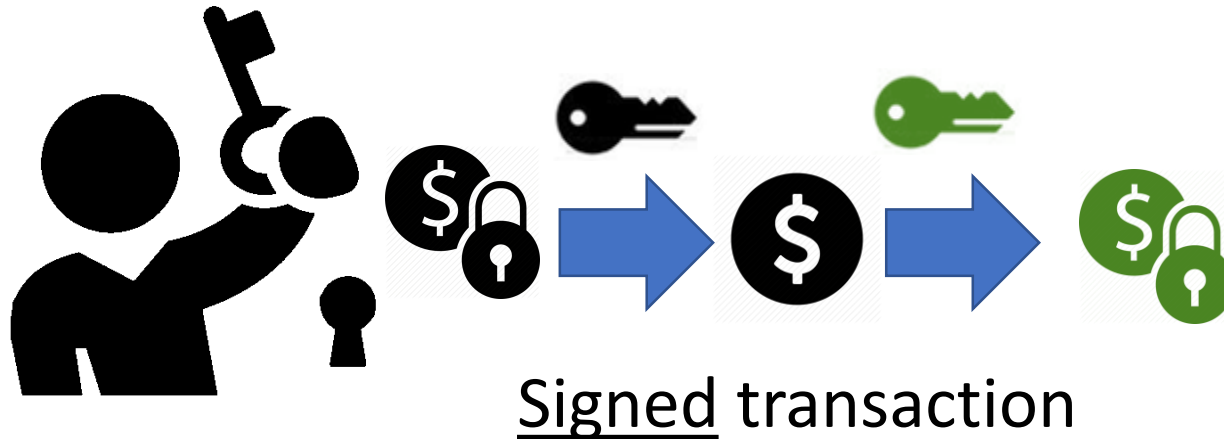


Double spending

Cryptography establishes the concept of digital identity and digital ownership



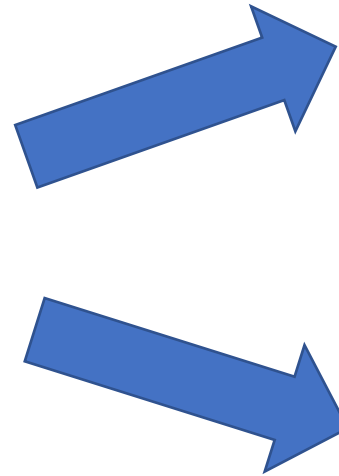
Cryptography establishes the concept of digital identity and digital ownership







Every bitcoin owner
till December, 15th

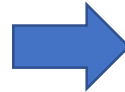





Cryptography establishes the concept
of digital identity and digital
ownership but cannot avoid double
spending



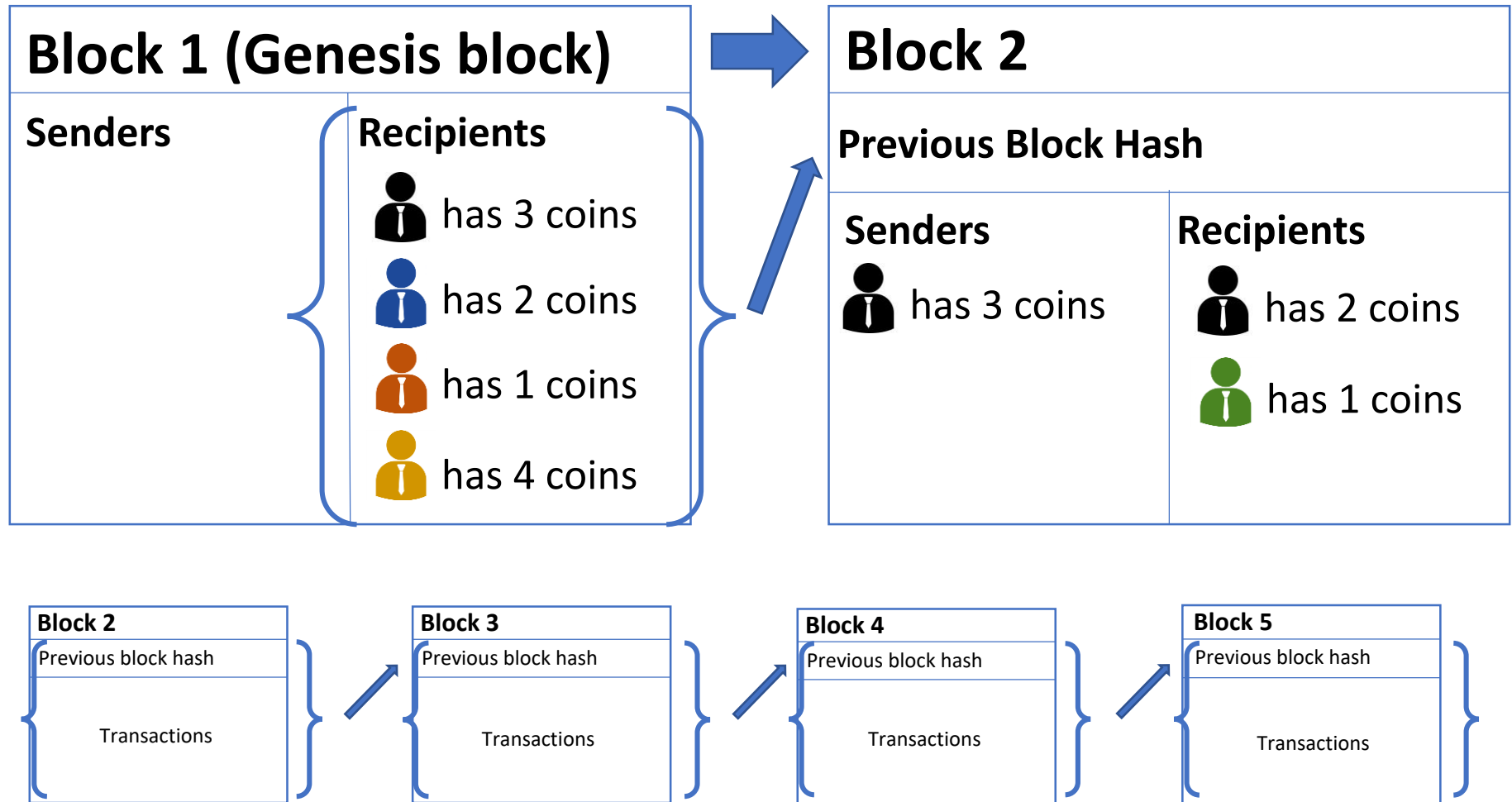
Double spending can be avoided grouping all the transactions in blocks

Block 1 (Genesis Block)	
Senders	
Recipients	
 has 3 coins	
 has 2 coins	
 has 1 coins	
 has 4 coins	

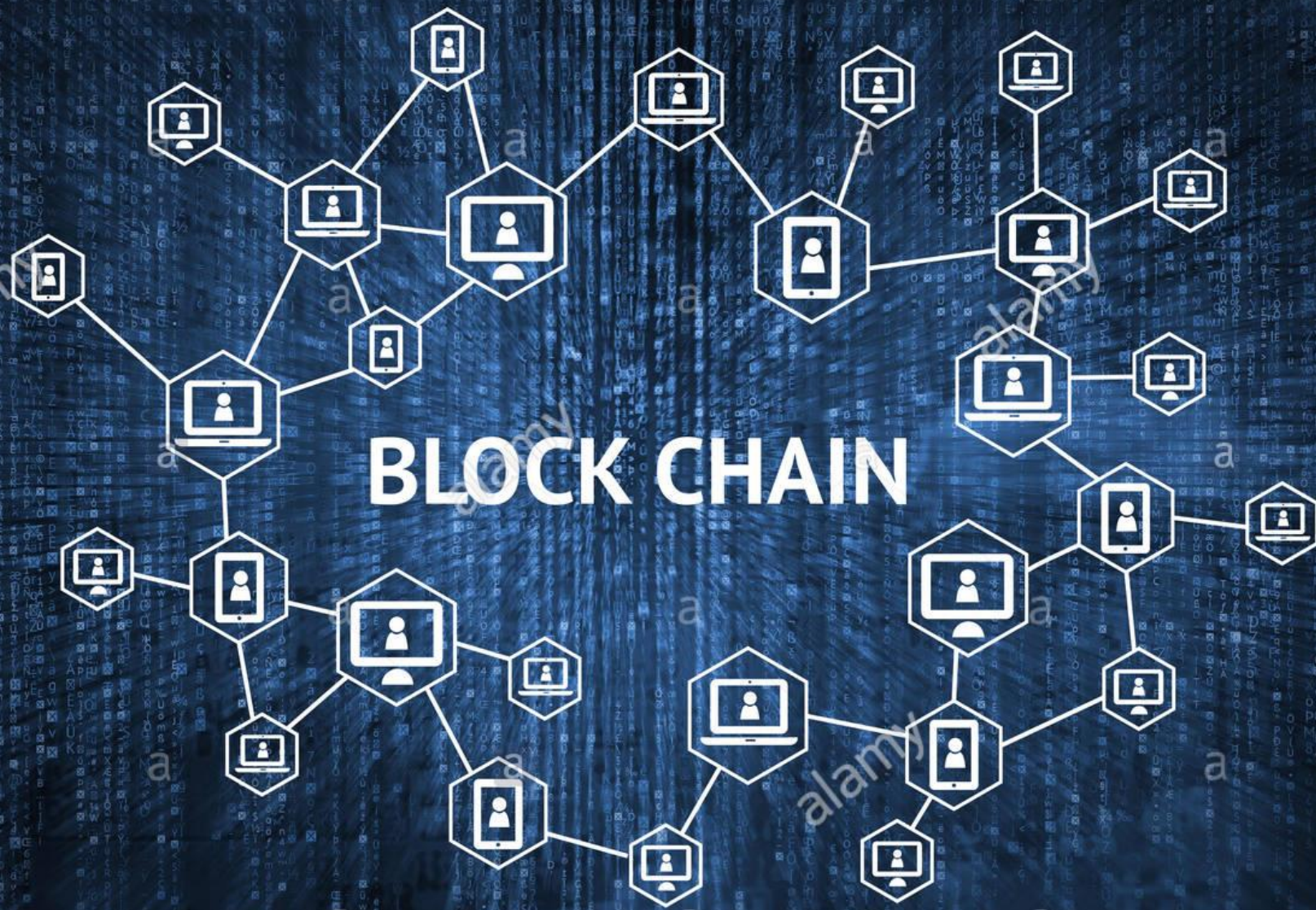


Block 2	
Previous Block Hash	
Senders	
 has 3 coins	
Recipients	
 has 2 coins	
 has 1 coins	

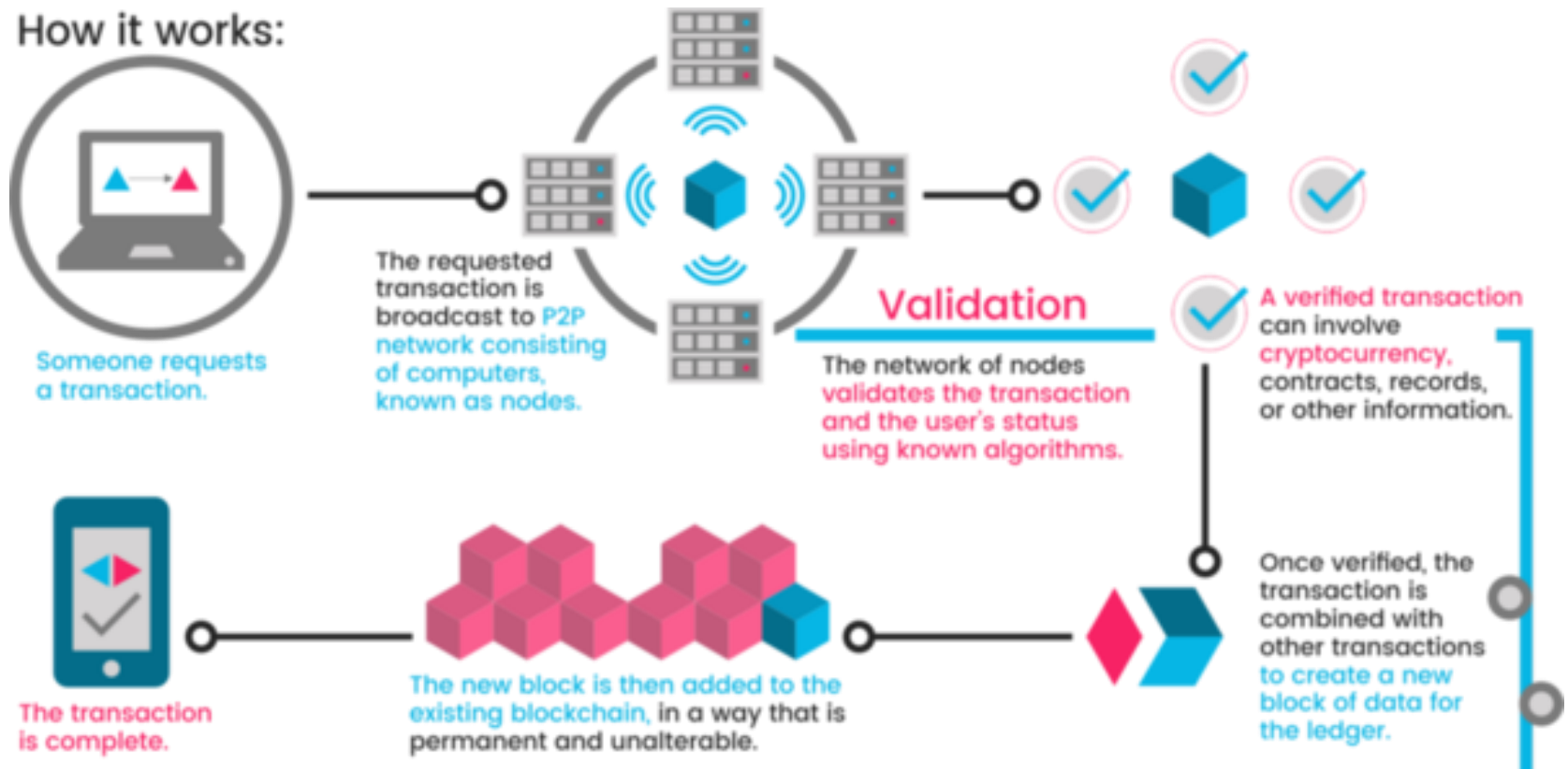
All the blocks are chained together for security sake



BLOCK CHAIN

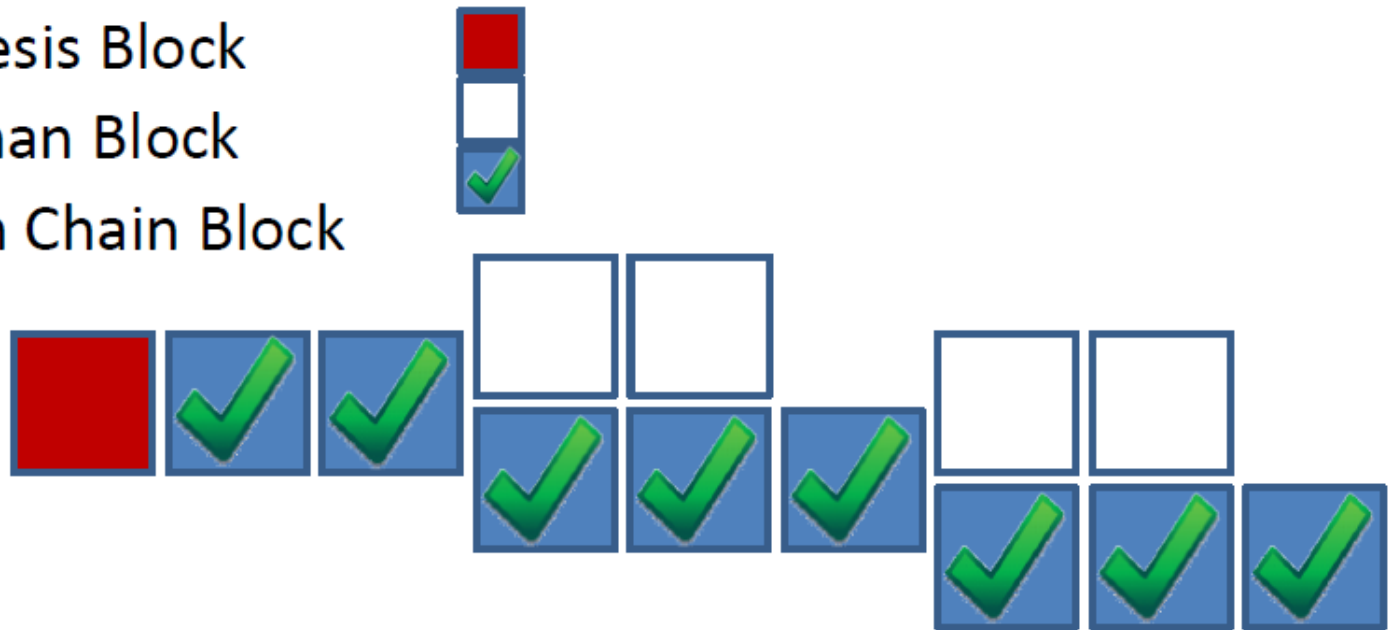


The blockchain is a public decentralized ledger backed by miners that are rewarded for their work



Anytime may exists several different versions of the blockchain. But at the end only one version will be confirmed by all the network

- Genesis Block
- Orphan Block
- Main Chain Block



There is no such a thing like
blockchain without a digital
coin and digital coin without a
blockchain

Summary

We have a coin-blockchain system that:

- can safely transfer money
- can prove the identity of a person
- can prove the ownership of a person's actions
- is completely transparent
- is more secure than current digital systems
- introduce for the first time the concept of scarcity in a digital system

Every coin aim to address a specific
problem: Payment systems



Every coin aim to address a specific problem: Smart Contracts and Decentralized App (DApp)



Every coin aim to address a specific problem: others

- A coin for decentralized storage system (siacoin)
- A coin for decentralized AI advisory system (electroneum)
- A coin for charity actions(Aidcoin)
- A coin for social media platforms (steemit)
-

ETERNITY WALL

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Messages lasting forever ▲

Messages written on the wall are embedded in the blockchain, the public registry underneath [bitcoin](#). There are almost 100 thousands copies of this ledger all around the world and soon it will also be in space. Even if this site goes down or disappears, your message is guaranteed to persist for generations to come.

♥ For love

Publicly declare your love for someone

📅 In memory

Memorialize an event or a person

🗣️ For fun

Just say hello to the entire world

 Write

Search



CRYPTO KITTIES

(and the concept of digital scarcity)

Steph Curry, basketball star and 2x MVP, is shooting 3's with CryptoKitties. Check out these one of a kind licensed digital collectibles and [enter our giveaway](#) to win a CryptoKitty.



CryptoKitties

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Collectible.
Breedable.
Adorable.

Collect and breed digital cats.

Start meow

Kitty 03

Kitty 04

Kitty 05

Kitty 16

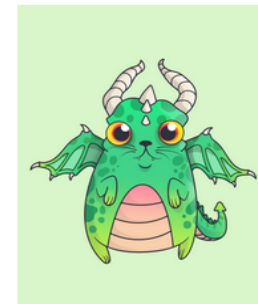
Kitty 06

Kitty 07

Kitty 08

Kitty 09

Kitty 11



Kitty 14

Kitty 15

Kitty 13

Kitty 14

Kitty 15

Kitty 18

Kitty 01

Kitty 02

Kitty 03



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La principale rotta migratoria illegale dall'Etiopia è quella EST per il Medio O...

903 €

DONA



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UN AIUTO PER I VILLAGGI FOLOPA

Fra dicembre 2017 e gennaio 2018 il Circolo Speleologico Romano ha organizzato u...

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DONA



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La nostra Associazione è nata per aiutare i Vigili del Fuoco Volontari Molinella...

102 €

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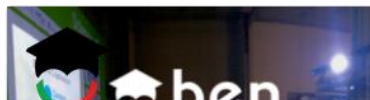
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PROVISION OF CLEAN WATER FOR LOCAL COMMUNITIES I

Nigeria is the most densely inhabited country in Africa with a population of mor...

100 €

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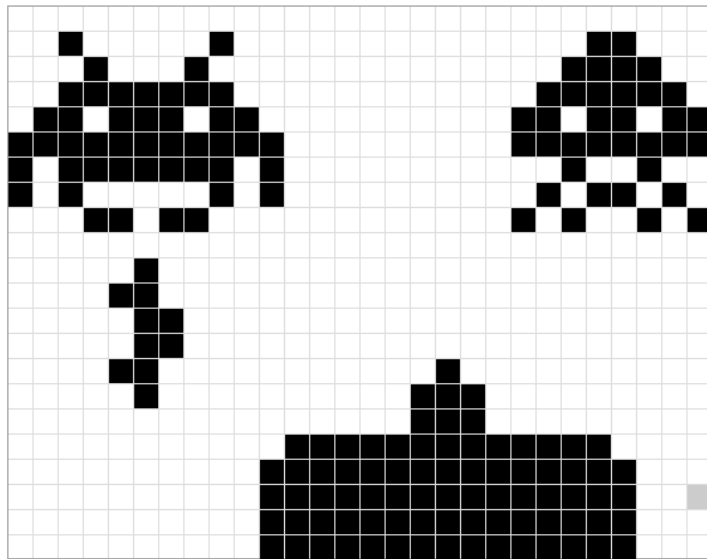
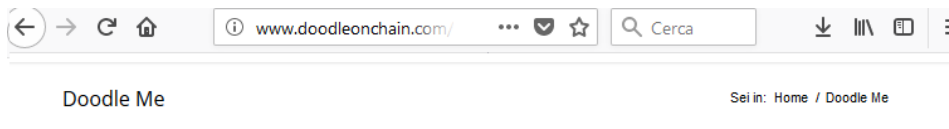
Cloud storage is about to change. Are you ready?

Sia is a decentralized storage platform secured by blockchain technology. The Sia Storage Platform leverages underutilized hard drive capacity around the world to create a data storage marketplace that is more reliable and lower cost than traditional cloud storage providers.

[Get Started](#)

DOODLE ON CHAIN

(thoughts that last forever)



Save doodle reset doodle

Gallery

Sei

Ciao



SENTYMENT

(Evolutionary trading system)

AndreaBellacicca published on TradingView.com, May 11, 2018 10:58 CEST

KRAKEN:XBTEUR, 1D 7369.0 ▼ -201.0 (-2.66%) O:7570.0 H:7570.4 L:7275.2 C:7369.0



Summary

- Blockchain introduces a new paradigm in the digital realm for money transfer and decentralized applications
- A blockchain works only if it is decentralized and the bakers are rewarded with money
- A blockchain is linked with its coin
- Not all coins are really useful: avoid scams
- Avoid people that tell you there exists only one coin
- Avoid people that tell you can be rich in a short amount of time

Questions?