Cryptocurrencies: From the past to the future

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What is money? Economists' answer:

Money's a matter of functions four,

a Medium,
a Measure,
a Standard,
a Store.

What is money? Sometimes cowry shells:

2,800 to 3,600 years-old money from China (Wikipedia Commons)

What is money? Sometimes a brand of cigarettes:

Romania in the 1980s (Wikipedia Commons)

What is money? Sometimes immovable stones:

stone coins of Yap (Wikipedia Commons)

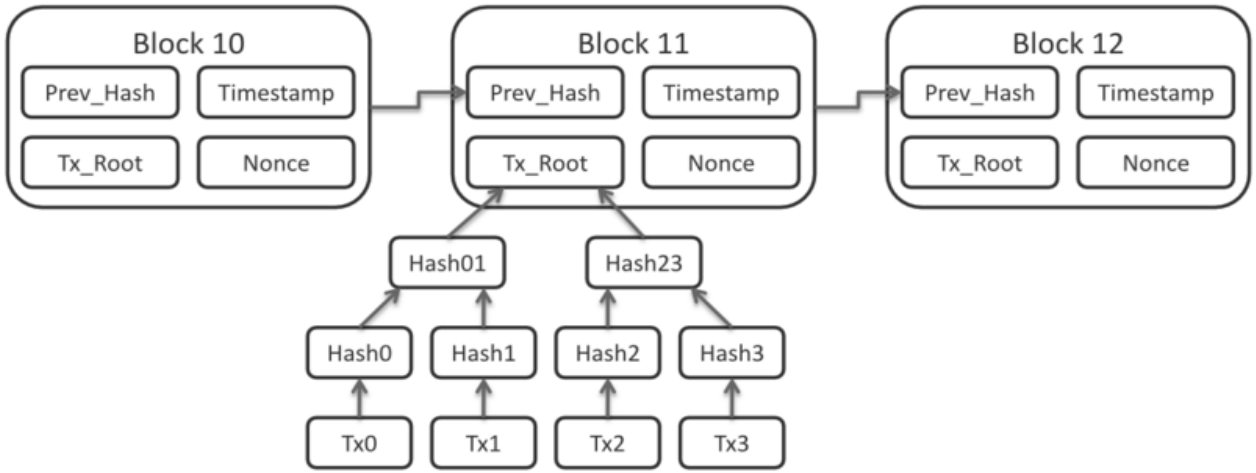
Modern digital currencies

- PayPal

- credit cards: charge John Q. Smith's credit card 1234-5678-9012-3456, expiration 14/14, security code 123, the sum of $123.45

Modern cryptocurrencies: Bitcoin and its rivals

mathematical tools: hash functions, Merkle trees, public key signatures, ...



(Wikipedia Commons)

Bitcoin from 10 miles up: Distributed public record of semi-anonymous transactions

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1413472514173469379 0

4572519835624702707 8 —owner of secret X is paying

2345 satoshis to owner of secret Y

4257115699243175685 5

6746014996342980925 6

7649490103931715610 1

2779202971548797436 7

6614269146988225458 2

...

Third World: A pioneer in advanced payment systems

M-Pesa African wireless payment system (Wikipedia Commons)

The future,
but how big and how soon?

Technologists propose, society disposes!