MONEY HISTORY

MOTIVATION

Humans are not self-sufficient. We cannot exist in isolation. In other words, we need things other humans provide, and we provide things other humans need.

EXCHANGE

You give something you have in order to get what you want.

BARTER SYSTEM

exchange goods and services with each other directly.

In trade, barter is a system of exchange in which participants in a transaction directly exchange goods or services for other goods or services without using a medium of exchange, such as money.

BARTER SYSTEM LIMITATIONS

No common measure of value.
The need for double coincidence of wants.
Indivisibility of certain goods.
Lack of standards for deferred payments.
Problems of storage.

COMMODITY MONEY

In order to solve some of the barter system limitations, different places had different commodities that people used as money, some examples being:
Cattle in India, salt in Rome, tobbaco in Virginia, sugar in Brazil, etc.

It is worth noting that just about anything can be “money” as long as enough people accept it in exchange for their goods and services.

COMMODITY MONEY LIMITATIONS

Storage issues.
Difficult to transport over long distances.
No universal acceptability.
Perishability.

METALLIC MONEY

Metals were inherently valuable (since they had value in use), highly durable, divisible (and unitable), fungible, homogeneous, and it was easy to verify their purity by melting them.

Eventually, people started using metals as money. (Note: Metallic money is just a form of commodity money.)

Metals were scarce across the globe and weren't too climate-dependent, so they had universal acceptability.

The downside to metals is that they are heavy.

GOLD BACKED IOUs
(Non-Legal Tender Paper Currency)

Precious metals like gold were very valuable and had to be kept safe from thieves

To prevent theft, people would leave their gold with a goldsmith. The goldsmith accepted gold deposits for a fee and issued I.O.U.s (short for I owe you) for the weight of the gold

As trust in the goldsmith grew, people would accept the IOU as payments as if it was actually gold

This is a form of paper currency and had some of the same problems that paper currencies have today – debasement

Goldsmiths realized that not everybody came to claim their gold at one time, and they always had a healthy balance of people's gold deposited with them. They just started creating fake I.O.U.s that wasn't backed by any gold with them and spent these I.O.U.s.

So the IOU holders would be left holding worthless pieces of paper.

LEGAL TENDER COINAGE

The problem with metallic money was that fraudsters would cheat the public either in purity or weight.

The governments of those times (kings, emperors, etc.) took it upon themselves to solve this problem by taking control of metallic money minting.

This improved trust and helped improve trade and commerce.

The only problem was: It was centralized.

The central authority (kings) were not fair and would debase the currency whenever they needed money (this is a universal problem with centralized money).

Let's say the king fought a war and lost. The war was expensive and had no spoils. The king still needs to pay soldiers 1000 gold coins. But he checks his treasury and discovers that he has only 800 gold coins with him. So what does he do? He melts the 800 gold coins, adds in 200 melted copper coins, and uses that to mint 1000 "gold" coins – which are used to pay off his soldiers.

PAPER MONEY

In China the government currency had a copper coin with a square hole in between, so people could string them together.

Rich merchants found it difficult to use these heavy strings of coins so they would leave their coins with a trusted agent who would record their balance in a ledger and issue paper promissory notes, which could then be used as a currency.

When the final holder of the promissory note returned it to the agent, the agent would give back the coins to the person. (Kind of like the IOUs above)

Paper money was easy to store, easy to transport, easy to carry, easily divisible into small units, and was not perishable.

Once again, the recurring problem of centralized currencies started to show: they printed too much of it.

MONEY AND CURRENCY DIFFERENCE

Money is intrinsically valuable and is a store of value. Currency is a monetary unit used as a medium of exchange and usually refers to banknotes and coins. Currency itself has no intrinsic value.

FIAT MONEY

Fiat money is a currency established as money by government regulation.

It is not backed by any physical commodity, nor is it made of any substance of value, so it does not have intrinsic value

PLASTIC MONEY

Storing all these paper notes in your home is risky so we now have these banks where we can keep our money in.

Moreover, it’s difficult to a lot of carry notes everywhere and have to make change, etc.

Banks then created little plastic cards like debit and credit cards. They make it easier to do day to day transactions, especially online.

DIGITAL CURRENCIES

Ever since computers and the internet became a thing, people have wanted to create a fully digital currency.

There is an inherent difficulty with creating a digital currency that is unique to the digital world: replication.

This is called the double-spending problem.

DOUBLE-SPENDING PROBLEM

The way that early digital currencies were used to solve the double-spending problem was to have a central organization that verifies the legitimacy of transactions.

You could send money to someone else, but that could only be done through the central organization. If you tried to send that same money twice, the central organization wouldn't let you, since it knows that you've already spent the money.

This system works, but it is centralized and has a single point of failure: the central organization.

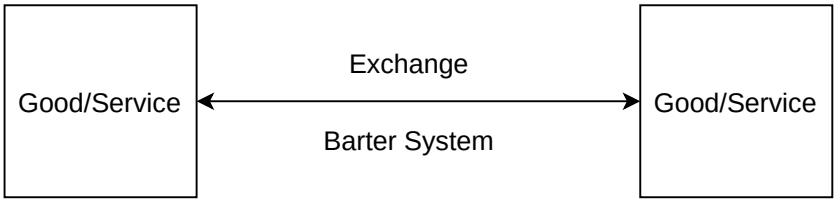
Central organization can be attacked by hackers and the governments could shut the organization down.

What was needed was a *decentralized* system that solved the double-spending problem. A decentralized system could not be targeted by a government (via litigation) or a hacker, and it wouldn't have a parent company by definition.

ENTER BITCOIN

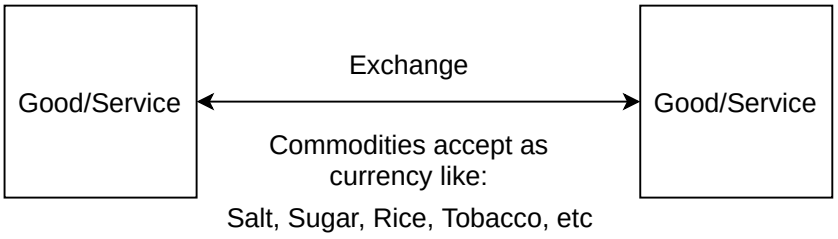
Bitcoin is a decentralized digital currency that solved the double-spending problem using blockchain and proof of work system.

MONEY HISTORY



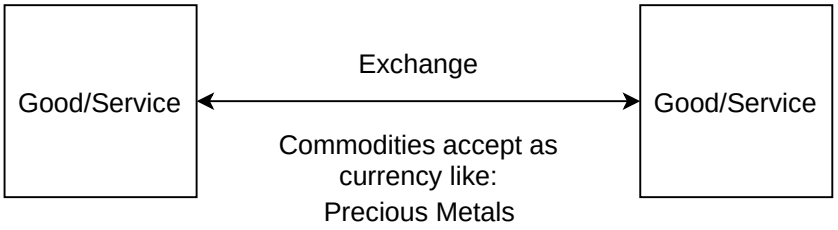
Limitations

Storage, Transportation, Perishable, Deferred Payment, Concidence in Wants, Indivisibility and Measure of Value



Limitations

Storage, Transportation, Perishable, Deferred Payment, Universal Acceptability.



Limitations

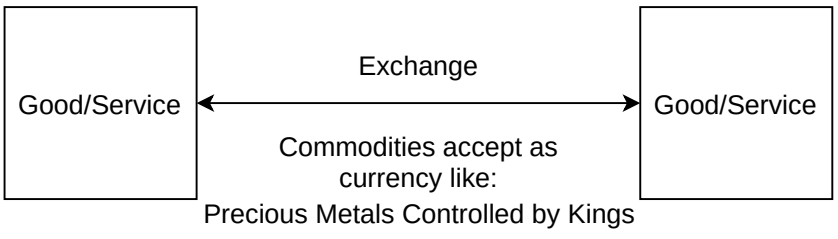
Heavy, Thiefs (in case of gold).

Solution

To prevent theft, people would leave their gold with a goldsmith. The goldsmith accepted gold deposits for a fee and issued I.O.U.s (short for I owe you) for the weight of the gold.

Problem

As trust in the goldsmith grew, people would accept the IOU as payments as if it was actually gold BUT the goldsmits started to create fake IOUS (papers with no value).

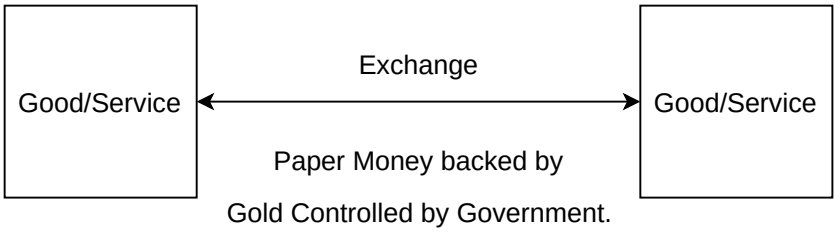


Limitations

Centralized, Debasement.

Problem

The central authority (kings) were not fair and would debase the currency whenever they needed money (this is a universal problem with centralized money).

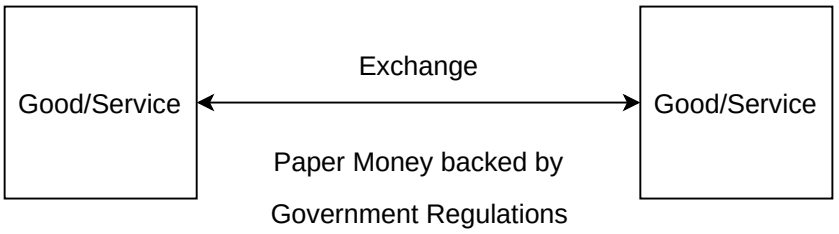


Limitations

Centralized, Debasement.

Problem

Once again, the recurring problem of centralized currencies started to show: they printed too much of it.

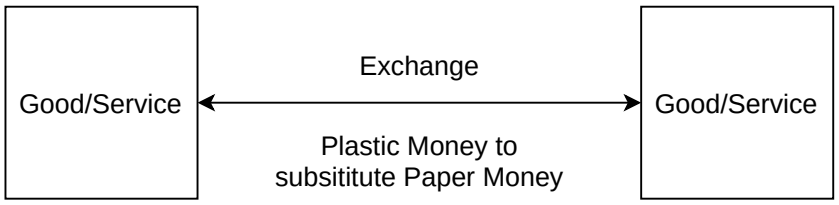


Limitations

Centralized, Debasement and Storage.

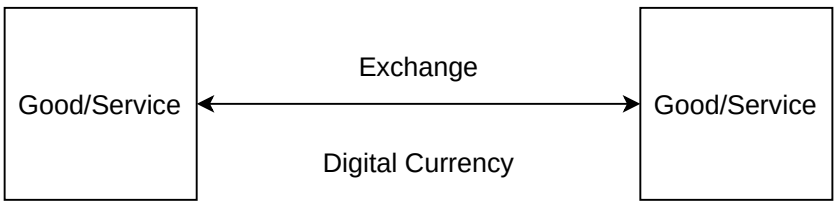
Problem

Storing all these paper notes in your home is risky so we now have these banks where we can keep our money in and again, debasement.



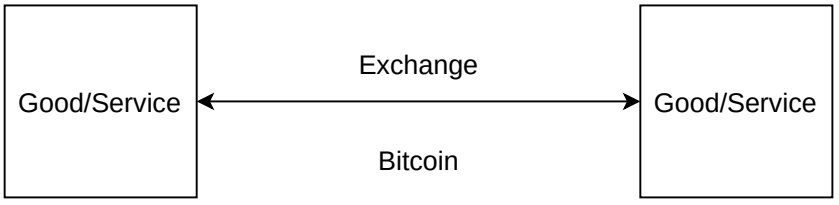
Limitations

Centralized, Debasement.



Limitations

Centralized, Debasement, Hackers and Double-Spending Problem.



Limitations

No limitations.

Bitcoin is a decentralized digital currency that solved the double-spending problem using blockchain and proof of work system.