



Bringing Bitcoin Back to Life

Compelling Components

In order to be an open source project, Bitcoin has 3 unique components that attract the developers in a unique way. They are:

- **Value:** A unit to account the tokens in a transaction. In the Bitcoin Blockchain, the unit is BTC, in Ethereum, the value is measured in terms of ethers or also called ETH.
- **Distribution:** The Bitcoin network follows a distributed infrastructure with nodes around the world in order to maintain the record for the transactions made.
- **Consensus:** The Proof-of-Work consensus uses the validators called miners. The miners are responsible for maintaining the security and the stability of maintaining the transactions record.

Achieving Consensus

- Satoshi Nakamoto, creator of the bitcoin Blockchain, launched the network by creating the first block of the Bitcoin Blockchain by mining 50 bitcoins on January 3, 2009.
- He used the processing power to make transactions, validate, verify and create the first block of the chain called **Genesis Block**.
- Satoshi designed a client application which can be downloaded and run in order to run nodes and mine bitcoin blocks. Satoshi wrote in his post while publishing the software: “If you can keep a node running that accepts incoming connections, you’ll really be helping the network a lot”. The post was titled as “Bitcoin v0.1 released - P2P e-cash”.

Achieving Consensus

- Gaining the trust to note the transactions in the network in other words to generate the new block is called **Achieving Consensus**. It is a process that miners follow for powering up the network that is used for the following purposes:
 - Block Discovery
 - Validation of Blocks
- **Generating transactions**
 - The accounting type of Bitcoin is uniquely designed for saving transactions. It is called Unspent Transaction Output (UTXO) which is basically a set of inputs and outputs.

An Early Vulnerability

- As working with a new protocol, bitcoin also had its share of troubles in early stages. It wasn't easy to work with the Bitcoin client. As a result, not a lot of people downloaded it.
- A major flaw in the bitcoin network was detected. On August 6, 2010, a member of the bitcoin community noticed a strange transaction with a huge amount of bitcoins and posted it online as "The value out in the block #74638 is quite strange".
- The vulnerability was eventually resolved and bitcoin was **forked** to split up the chain. The fork was made so as not to disrupt the mainchain and avoid erroneous transactions.

Adoption

- The unknown identity of Satoshi has also helped in making Bitcoin, a fully decentralized entity. The developers did not follow the creators methodology.
- The successor of Satoshi, Gavin Andersen, a popular computer scientist, created an event called Bitcoin Faucet and gave away small amounts of Bitcoins to the people in the hope of increasing its usage.
- Andersen became the chief scientist of the now-defunct **Bitcoin Foundation**.
- On May 22, 2010, **Laszlo Hanyecz**, a programmer was credited with having the first bitcoin transaction for a good service. The community celebrated that day as **Bitcoin Pizza Day**.
- In July 2010, a platform was named **Mt. Gox** was created by **Jed McCaleb** to host an exchanging event called **Magic: The Gathering**.