

Tools and Methods:

Downloaded data from glassnode, cleaned the data in excel and used jupyter notebook with pandas, numpy, and matplotlib to make data visualizations. Committed to GitHub repo.

Questions for EDA:

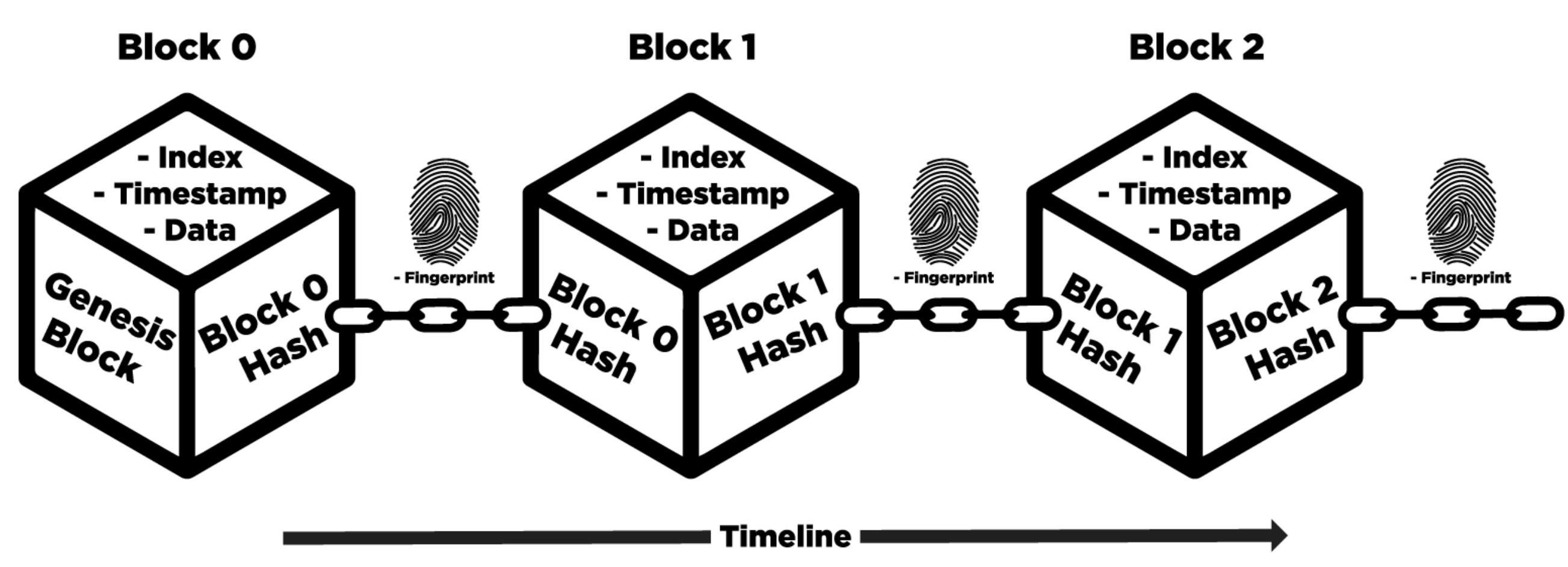
- 1)What is blockchain?
- 2)Why is blockchain important?
- 3)What are examples of major blockchain use cases?

Project Description:

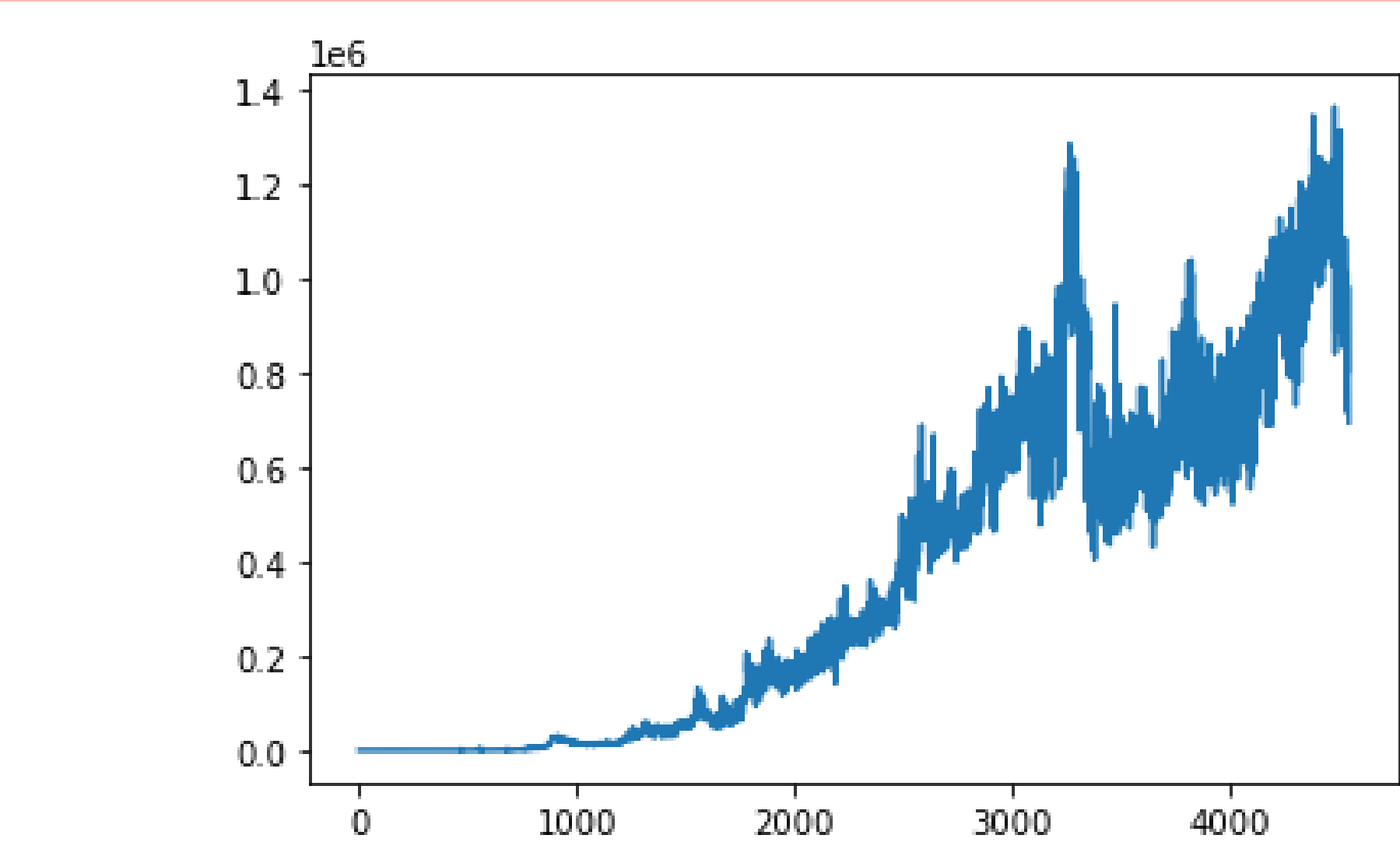
Digital timestamps and blockchain technology was first created in January of 2009. The bitcoin network started by the pseudonymous Satoshi Nakamoto who mined the first genesis block of bitcoin (block number 0). Bitcoin has become an essential medium of exchange and store of value for millions around the world. Mainstream adoption is continuing to accelerate and the number of users are growing exponentially. This analysis will use on chain data to show how the new revolutionary tech is disrupting future industries.

Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust-based model... What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Blockchain - The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. https://bitcoin.org/en/

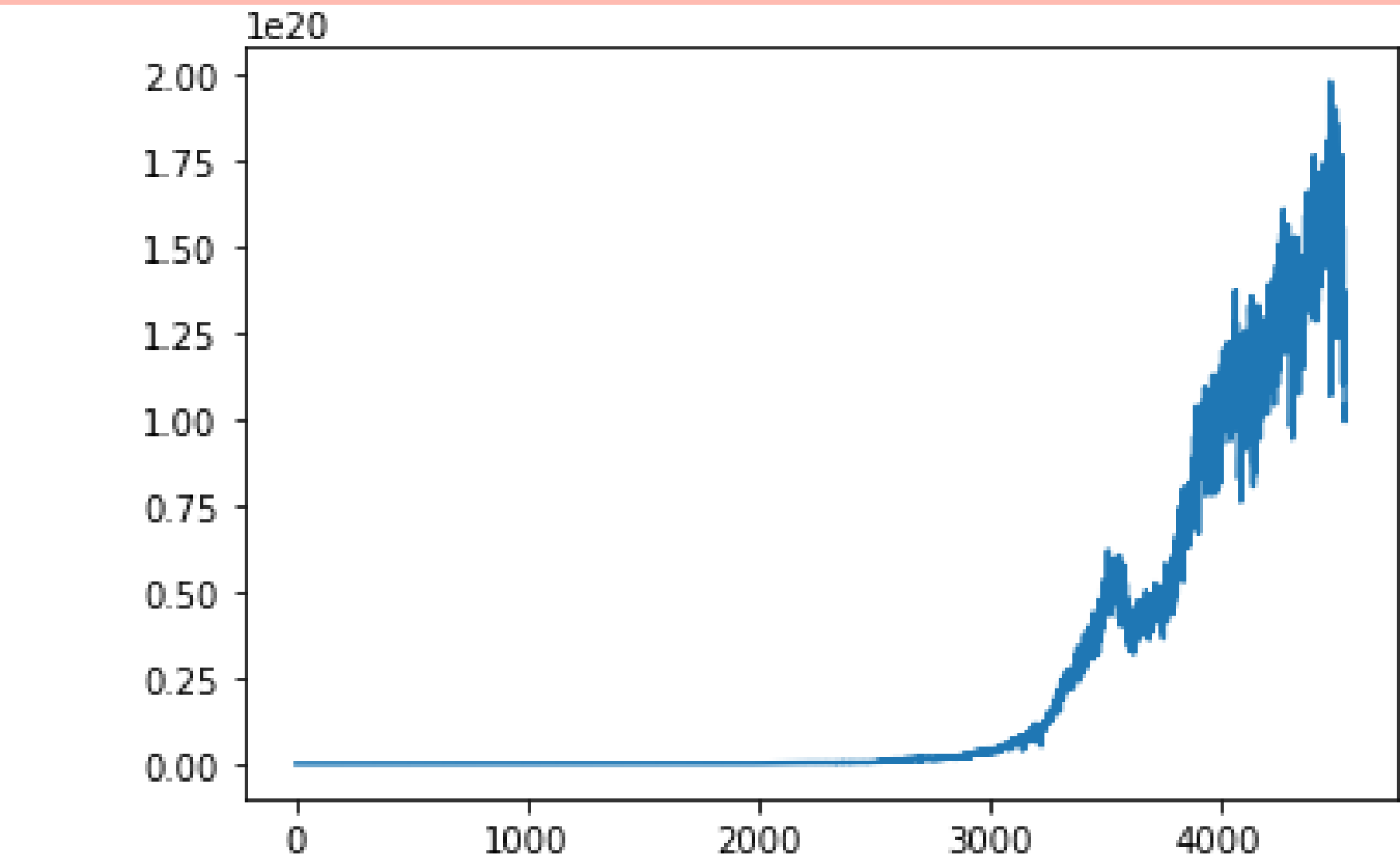
A **blockchain** is a growing list of records, called blocks, that are linked together using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a Merkle tree). The timestamp proves that the transaction data existed when the block was published in order to get into its hash. As blocks each contain information about the block previous to it, they form a chain, with each additional block reinforcing the ones before it. Therefore, blockchains are resistant to modification of their data because once recorded, the data in any given block cannot be altered retroactively without altering all subsequent blocks. https://en.wikipedia.org/wiki/Bitcoin



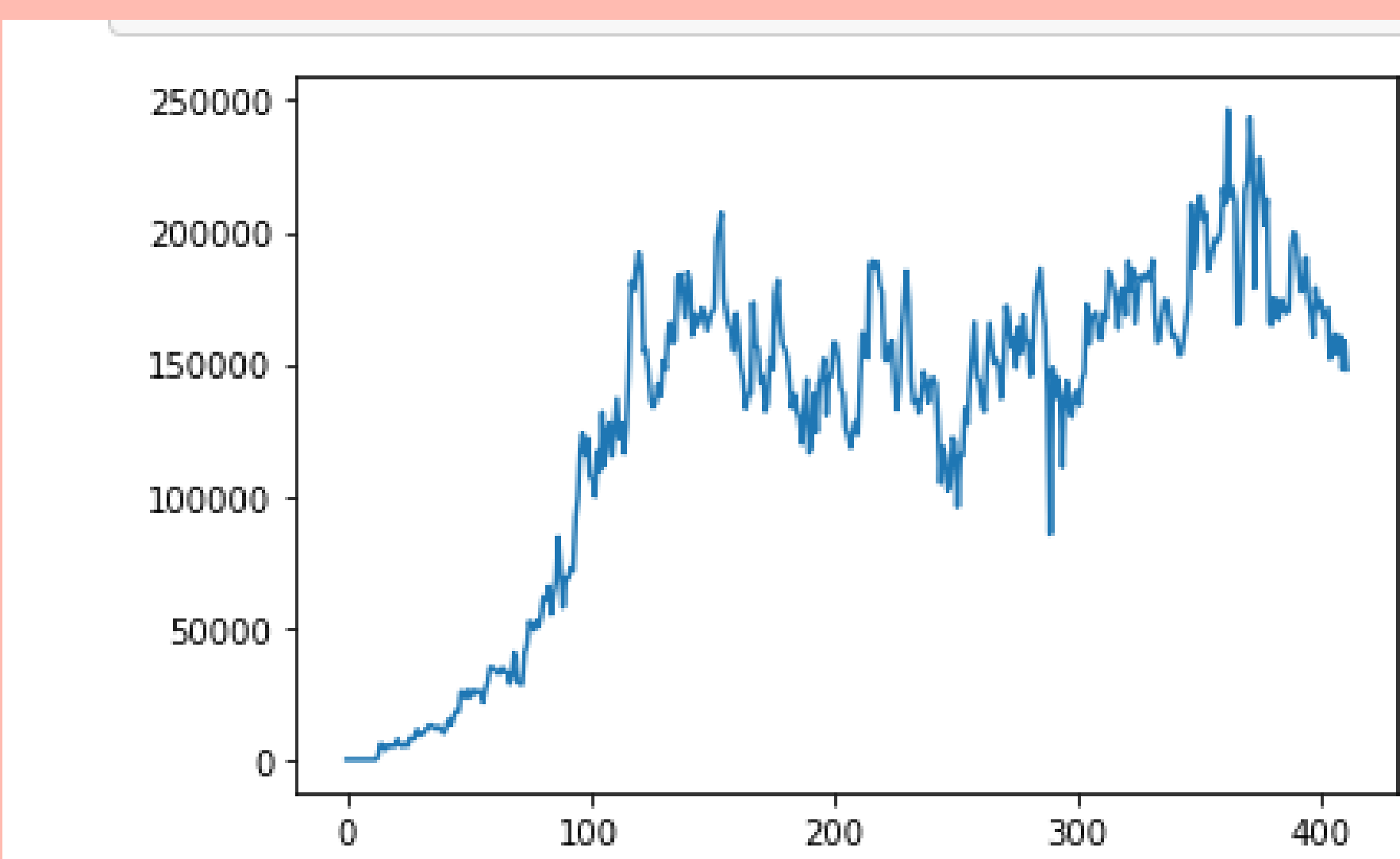
w3bt.io



active btc users



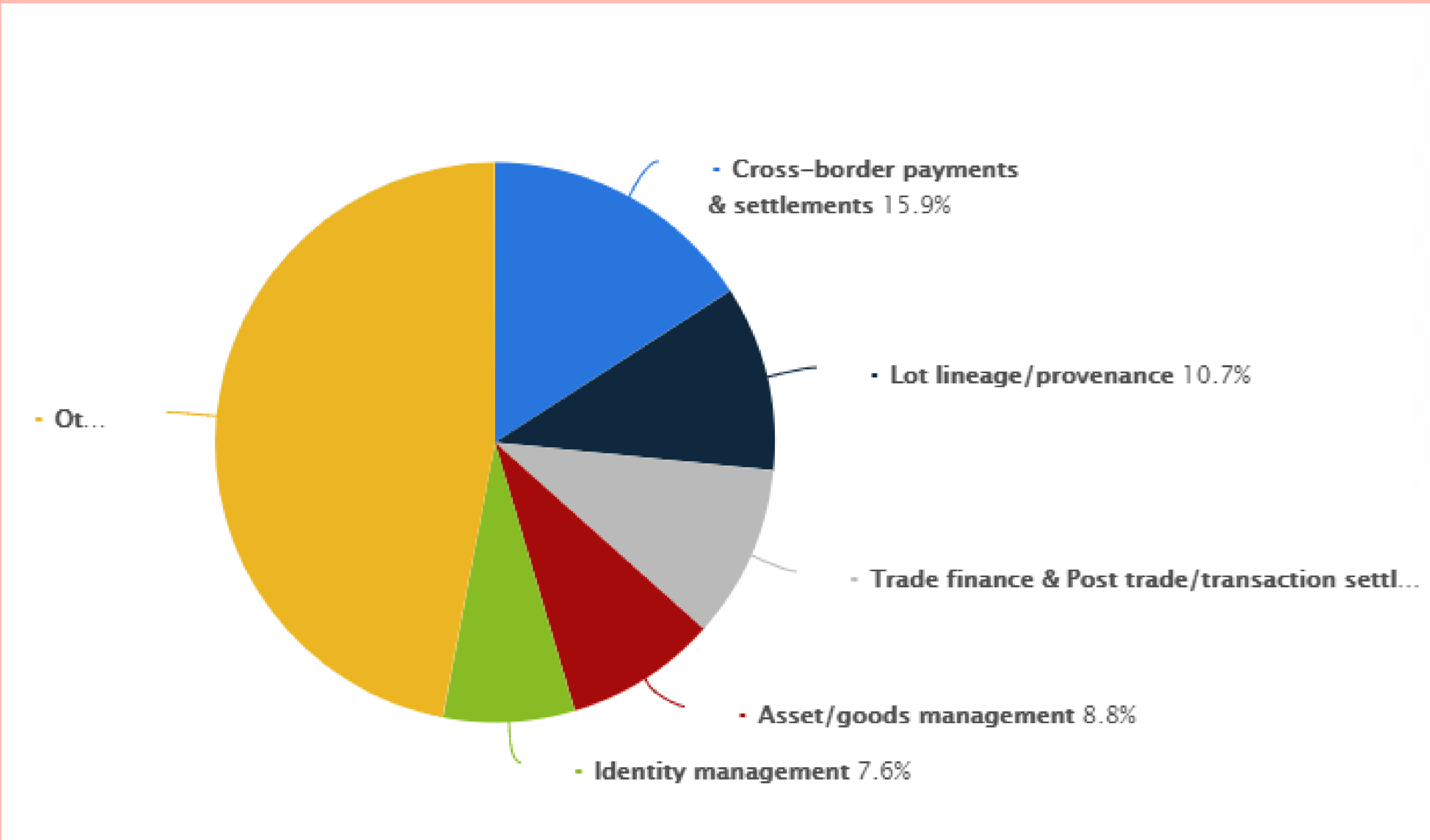
btc hash rate



uniswap transactions

Interpreting your results:

- 1) Active bitcoin users have been growing since the inception of BTC and at it's peak had a market capitalization over one trillion dollars.
- 2) The Bitcoin hash rate has been growing at an exponential rate climbing to an all time high of 179.4 exahashes per second,. This is important to maintain decentralization and network security.
- 3)The sharp rise in decentralized finance protocol use on Ethereum (uniswap) over the past year was followed by stable, rangebound movement, signaling increased adoption for defi protocols. The future is bright for this sector, with new usecases including player-owned gaming economies, lending and borrowing, and decentralized autonomous organizations.



statista.com

Conclusion:

Blockchain technology is a new asset class that enables censorship resistant, trustless, sovereignty to billions of people around the world including the 1.7B adults that are unbanked. While prices and hashrates fluctuate, we have and I expect continue to have mass adoption globally. More dollarized nation states will aim to reclaim their monetary sovereignty and distance themselves from the reckless fiscal policy of the United States.

Work Cited

include the work you are citing:

- 1) The Future of blockchain
 - 2) The name of the course (DH 100)
 - 3) Instructor: Dr Anderson
 - 4) Student: JohnMatthew Garcia
 - 5) Jupyter Notebooks
 - 6) https://bitcoin.org/en/
 - 7)https://glassnode.com/
 - 8)https://en.wikipedia.org/wiki/Bitcoin
 - 9)https://github.com/johnmgarcia
- JPEG - statista.com, w3bt.io, worldfinancialreview.com



worldfinancialreview.com