Blockchain

Student's Name

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Date

**Introduction**

Blockchain is like a database, but it stores chained data in blocks. It is also a secure and trustworthy way. The difference between blockchain and standard databases is data organization. Blockchain forms the foundation for other cryptocurrencies like bitcoin, commonly used in the United States and the European countries. Although many people use blockchain with cryptocurrency bitcoin, there are different blockchains uses like Ethereum and litecoin.

**Ethereum**

It is an open-source cryptocurrency type with blockchain technology platforms. Application developers use Ethereum blockchain in paying through their networks and the transaction fees by running the program codes. It also helps in tracking digital currency transaction ownership. Ethereum has several features such as the ether, its cryptocurrency, smart contracts, which allow its development and deployment. The ethereum virtual machine provides the underlying software and architecture, allowing people to use it ("What is Ethereum: Understanding Its Features and Applications," 2021). It also allows the developers to create decentralized applications and decentralized autonomous organizations for decision-making democracy creation. The ether acts as the fuel that enables computational transactions.

In contrast, the intelligent contract allows value exchange between two parties through a program software, under specific terms and conditions mutually agreed by those involved. Once the intellectual agreement gets executed, it cannot get edited and is permanently registered. Additionally, the process is anonymously verified though it is trustworthy and transparent. After completion, the accounts get updated accordingly (Gemici & Polat, 2021). The ethereum virtual machine compiles and deploys ethereum contracts only. The feature works by validating the transaction and checking whether the sender and the receiver exist, then uses the ethereum network and algorithms in sending the finances to their correct destination. The application is decentralized because the users must validate the transactions within the network. Ethereum is applicable in voting systems to ensure transparency and avoid malpractices in banking systems to prevent hackers from getting unauthorized systems, keep track of shipping cargo, and is used in recording agreements and transactions made (Impact of Blockchain on IT Audit (n.d).

**Litecoin**

It is an open-source, decentralized, and supports global payment network. The litecoin uses blockchain as the underlying software, enhancing fast transaction rates. It also uses computing power in transaction processing. The miners in their networks confirm the transaction.

**Similarities**

Both have fast transactions than bitcoin. The buyers buy the cryptocurrencies during significant exchanges. They are also open source for verification from both sender and receiver and peer-to-peer support networks. Lastly, they use work mining proof.

**Differences**

Litecoin transaction is a bit faster than the ethereum transactions. Also, litecoin deals with exchanging coins, while ethereum deals with monetary value and asset value exchange under specific contracts. Litecoin supports peer-to-peer transactions, meaning that it has no central authority. However, the ethereum transaction fee is higher than the litecoin. Ethereum is new in the market, while litecoin is a bitcoin's invention. Ethereum is a platform, while bitcoin is a cryptocurrency. Smart contracts enable natural transactions, while litecoin is not that smart. However, litecoin got eighty-four million tokens as a limit, while ether got no limit. Although they all use work mining proof, sometimes ethereum uses stake proof. Litecoin users incur transaction fees, while in ethereum, they do not incur them.

**Conclusion**

In conclusion, I have not yet had an experience with cryptocurrencies, but hoping to experience one soon after college. Both litecoin and ethereum use blockchain as the underlying application. The blockchain application has become the underlying software for most cryptocurrency applications in the market. However, these applications have drawn people's attention due to their secure and fast transactions.

Reference

Gemici, E., & Polat, M. (2021). Causality-in-mean and causality-in-variance among Bitcoin, Litecoin, and Ethereum. *Studies In Economics And Finance*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/sef-07-2020-0251

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*What is Ethereum: Understanding Its Features and Applications*. Simplilearn.com. (2021). Retrieved 12 May 2021, from <https://www.simplilearn.com/tutorials/blockchain-tutorial/what-is-ethereum>.