HT BLOCKCHAIN BI-WEEKLY NEWSLETTER

Editor's Note Date 26th July, 2021 Edition 1, Volume 3

Dear Reader,

In the last article, I introduced you to the concept of cryptography and how it relates to the blockchain. In this article, I will explain more about cryptocurrencies and how they vary.

I am sure some of you may be eager to know my opinion on which cryptocurrency is best, but the truth is what is that "best" depends on your objective in using a particular crypto token. I hope that after reading the article you have an idea of



This Photo by Unknown Author is licensed under CC RY

What is the best cryptocurrency? Bitcoin? Ripple? Dogecoin???

the differences between the available cryptocurrencies or even a design idea for your own cryptocurrency!

The winner of the \$50 gift card from the "What is Blockchain?" article survey is Ms. Gabrielle Whitworth. She is an Adult Degree Program (ADP) Psychology student here at HT.

Congratulations to her! You can win a gift card too by completing the post-article survey in this newsletter.

Thank you all for the continued support!

Editor:

Dr. Abena Primo from the School of Business & Technology



Ms. Gabrielle Whitworth

WHAT ARE CRYPTOCURRENCIES?

By Dr. Abena Primo

In this article, I will summarize some popular cryptocurrencies. I hope you enjoy the article. If you have any questions about this article, please email me at

acprimo@htu.edu.

Cryptocurrencies are digital tokens or software tokens. They are intangible tokens and cannot be touched.

The word "cryptocurrency" has two parts. The first part of the word - "crypto"refers to the security mechanism employed to secure the token. The second part of the word -"currency"- implies the use of the token as a medium of exchange. Hence, a "cryptocurrency" can be described as a cryptographically secured medium of exchange. We know, from the last article, that the most popularly employed mechanism for cryptocurrency security is blockchain.

There are thousands of cryptocurrencies in existence. Needless to say, making the choice of which to buy and store in a cryptocurrency wallet (Think of this like a bank savings account) can be very difficult. Below I will present several popular cryptocurrencies to give you some ideas of your choices. If you want to see the US dollar exchange rates for these tokens.

check out the Coinbase link here:
https://www.coinbase.com
/price

TETHER/USDT

This token is different from the others presented here as it belongs to a new class of cryptocurrency called "Stable Coins". These are tokens pegged to a realworld currency or asset such as the US dollar or gold. Tether is pegged to the US dollar in a 1:1 ratio. The purpose of Tether is to allow for easy conversion among cryptocurrencies. Tether is run by a company. This is not a feature universal to all cryptocurrencies.

A question exists about this cryptocurrency: Will it survive if the US Central Bank institutes a Central Bank Digital Currency (CBDC)? What do you think?

BITCOIN/BTC

This is the most popular cryptocurrency with the largest market capitalization. The maximum supply of this token is set at 21 million of

which 89% has been mined and is currently in existence. Founded on the cryptography principle of "Proof-of-work". Each BTC token needs to be mined. Miners of Bitcoin need to solve a complex mathematical formula to be awarded a new Bitcoin. The last Bitcoin is expected to be mined in the year 2140. This is due to added difficulty introduced with each solving of the mathematical formula.

ETHEREUM/ETH

This token is currently the undisputed platform for Decentralized Finance (DeFi) as most DeFi applications use this token. Examples of some proposed DeFi applications include blockchain based smart contracts for the buying and selling of real estate, the tracking of fruits from farm to store, etc. These applications make Ethereum a very popular cryptocurrency. Some other cryptocurrencies are even built on the Ethereum blockchain such as the stable coin Dai.

A main difference between Ethereum and Bitcoin is that there is no limit on the number of Ethereum tokens that can be created.

RIPPLE/XRP

This token is owned by Ripple Labs. It does not use a "Proof-of-work" protocol but instead "Byzantine fault-tolerant" protocol. Hence, it has a fast transaction processina time of 1,500 transactions per second compared to Bitcoin's 4.6 per second. This token is popular with banks/financial services such as American Express because of the transaction speed and low associated fees.

Note: Ripple Labs is an indirect sponsor of this project as they are the funder of a blockchain Grant received by Morgan State University which funds this project.

DOGECOIN/DOGE

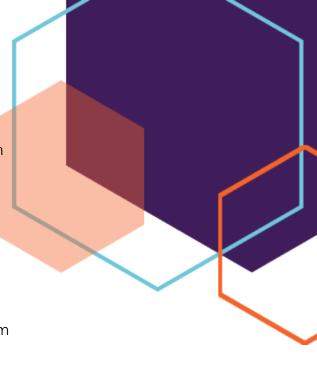
Created in 2013 as a joking commentary on the problems of cryptocurrencies, this token has seen popularity in recent days following the support of popular celebrities like Elon Musk. As I am writing this article, this token now has a market capitalization of \$ 25,525,969,894 US dollars. The token is an offshoot of the Litecoin blockchain. However, Dogecoin offers faster transaction procession compared to Litecoin and Bitcoin.

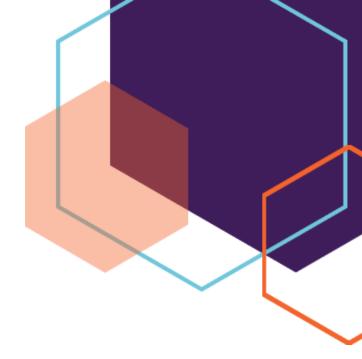
LITECOIN/LTC

Litecoin was designed to be a better version of Bitcoin. It is often called silver to Bitcoin's gold. It has the same principal of Bitcoin such as a maximum supply, but Litecoin's maximum supply is set much higher at 84 million tokens (79% of this figure is currently in circulation). It also has improved transaction processing speed over Bitcoin and developers more focused on making the token a form of everyday payment. For example, in 2019 there were partnerships to use the coin in 39,000 stores.

CONCLUSIONS

Your choice of cryptocurrency is very dependent on where you see cryptocurrencies going in the future or what you want to do with the cryptocurrencies. If you see cryptocurrencies as a payment medium then perhaps Ripple, Litecoin or Dogecoin with their fast transaction processing may look good to you. If you are interested in investing in decentralized finance applications, then perhaps Ethereum will look better. If you are interested in buying the most popular cryptocurrency, then perhaps Bitcoin may suit you!





Did you enjoy this article? Please let us know by following the link below and completing a short survey about this article. Survey participants will be entered on a draw to receive a \$50 gift card. The gift card winner will be announced in this section of the next article.

Survey Link

Previous Winner: Ms. Gabrielle Whitworth

This project was generously sponsored by the FinTech Center at Morgan State University. If you have any questions or concerns, please contact Dr. Abena Primo (email: acprimo@htu.edu).

