

HT BLOCKCHAIN BI-WEEKLY NEWSLETTER

Editor's Note

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Edition 1, Volume 5

Dear Reader,

Our last article on how to create a cryptocurrency wallet, was our most popular article to date! More than 50 people responded to the post article survey! We have just four more articles to go in our special blockchain bi-weekly series. This week's article is also written by Dr.

Bonyuet. The same author as the last popular article. In this new article, he gives insight into decentralized finance (aka DeFi). This is a popular use of blockchain technology mostly done using the Ethereum blockchain. This is the reason many people consider Ethereum to be an

*And The
Winner
is. . .*

*Mr. Joshua
Umoru*

DeFi or Decentralized Finance represents a financial infrastructure based on a peer-to-peer system that is not controlled by any centralized institution

operating system like Microsoft Windows, Android and IOS.

Please remember to complete the post article survey below in this document to let us know how much you enjoyed the article. By completing the survey, you can also win a \$50 gift card.

The winner from the last post-article survey was Mr. Joshua Umoru. He is an undergraduate Computer Science student at Huston-Tillotson University. Congratulations Joshua!

Editor:

*Dr. Abena Primo from the
School of Business &
Technology*



WHAT IS DEFI?

By Dr. Derrick Bonyuet, CFA, CFP, CPA

In this article, we explore pros and cons of decentralized finance. If you have any questions relating to this article, please contact Dr. Bonyuet at dbonyuet1@htu.edu.



OVERVIEW

DeFi or Decentralized Finance can be defined as a financial infrastructure based on a peer-to-peer system that is not controlled by any centralized institution (Harvey, C., Ramachandran, A. & Santoro, J., 2021). As cryptocurrencies have been introduced, the need to trade cryptos in an efficient manner has emerged. So far, centralized platforms, which rely on a centralized entity such as a bank or exchange, have addressed this need. However, there are costs to be incurred as a third party is involved. In addition, there are limitations as to the type of services available which may be imposed by this third party. This is where Decentralized Finance can offer a fair financial system where everybody can participate by building and combining open-source financial building blocks into sophisticated products with reduced friction and increased value to users.

FEATURES OF CEFI

We have lived on a centralized finance structure for many years where money supply is controlled by a central bank and critical economic functions are managed by financial intermediaries. While this system has fulfilled our needs as a society, there are several issues that need to be addressed:

1. Centralized control: Centralization is often associated to efficiency. However, in a centralized financial system, most users deal with a bank, which control interest rates and fees resulting in high financing costs. While users may switch to other banks, the banking sector is highly concentrated.

2. Limited access: According to Harvey, Ramachandran & Santoro (2021), about 1.7 million of people do not do business with a bank globally. As a result, many people often have to contract the services of pay-day lending providers at a hefty interest rate. Even if someone does business with a bank, it would not mean this individual has access to

quality products. For instance, instead of offering a line of credit to a customer, the bank may offer a credit card which comes at higher interest rates and fees for cash advances.

3. Inefficiency: A centralized financial system results in many inefficiencies, including credit card processing fees, remittance fees, brokerage fees, and the 2-day settlement period for stock transactions.

4. Lack of interoperability: Our centralized financial system is characterized by working on siloes which means users can be charged high costs and/or go through a long and complex process if switching to other financial providers.

5. Opacity: Under the current centralized financial system, users often do not have enough information on the financial health of their banks. As a result, users have no choice but to trust the FDIC insurance offered by the government. This lack of transparency is also evident

in the products and services as users often are not aware whether the rates offered are competitive.

Table 1: Shows Key DeFi Attributes

Funds Custody	The user has complete authority over funds' custody
Services Available	Trading, Borrowing, Payments and Lending
Personal Information	Proof of Work
Security	Not accountable for funds
Market Cap	\$16 billion
Customer Service	N/A
Risk Factor	Security relies on the technology you are using

The implications of these issues can be summed up in lower economic growth, due to high interest costs, and inequality, due to lack of access. Fortunately, Decentralized Finance offers some key features that address these issues such as:

1. Permissionless: Under a DeFi system, any user can directly access the services without providing personal information. In addition, apps can be built freely on

top of a decentralized platform.

2. Trustless: Users have no need to trust the service because DeFi services can be authenticated by auditing their code and thus, ensure transactions will be executed as intended.

3. Quick innovation: The DeFi ecosystem includes apps that are built to benefit each other, and new capabilities are being tested and added.

REAL USE CASES OF DEFI

Totle: An aggregator of decentralized liquidity with automatic price optimization.

Augur: A decentralized predictions market.

Nexus Mutual: A decentralized insurance tool.

Kyber: A decentralized exchange.

MakerDAO: A decentralized stablecoin minting and lending tool.

bZx: A decentralized lending and margin trading platform.

CONCLUSIONS

Like CeFi, DeFi's purpose is to increase the popularity of crypto trading by improving the trading volume. However, DeFi also wants to provide an intrusion-free environment to all users so that they don't have to deal with a centralized agent and their personal information is no

required. Therefore, if you are seeking transparency and privacy, then you should explore DeFi platforms.

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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 in 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: Joshua Umoru

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).

