

DeFi Research 01

INTRODUCTION OF DeFi

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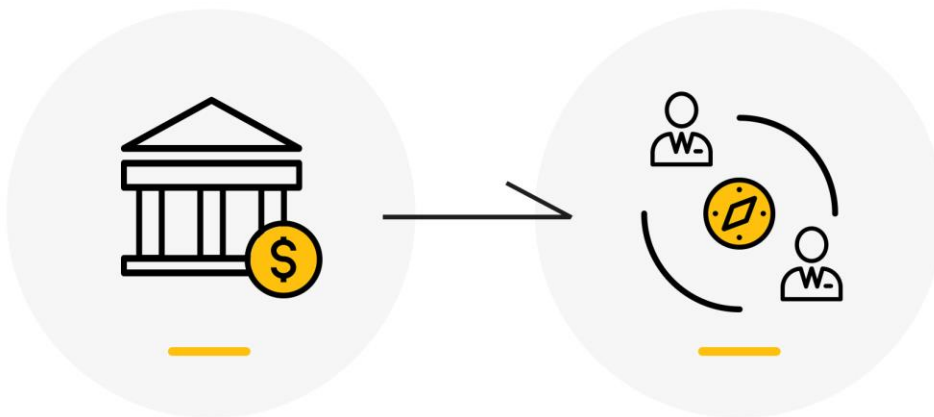
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Introduction

DeFi has emerged as one of the most active sectors in the blockchain space. DeFi refers to an ecosystem of financial applications that are built on top of a blockchain. After these introductory words, DeFi analysis continues with a short recap about What is DeFi [↗](#)chapter 1. This serves as the basis for [↗](#)chapter 2, which explains Types of DeFi .This serves as a basis for [↗](#) chapter 3, which explains why do we require DeFi and their advantage

What is DeFi

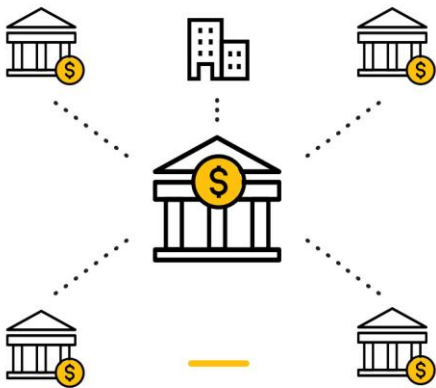
DeFi is short for Decentralized Finance. DeFi, refers to financial services that are built on public blockchains and smart contracts, with the use and control of the system distributed amongst many different parties - Decentralized Finance includes digital assets, protocols, smart contracts, and dApps built on a blockchain. Users of the traditional financial system often wish for a system.



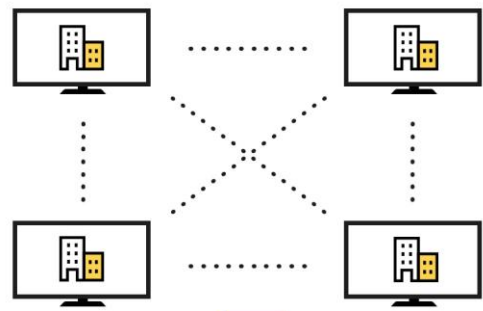
A movement that uses open source and distributed networks to transform traditional financial products into a reliable and transparent protocol without intermediaries.

What is DeFi

that is more accessible and transparent, charges low transaction fees and is less reliant on intermediaries. For such a fairer financial system to emerge, banking, lending, and derivatives have to undergo a radical transformation. DeFi players are attempting to build a decentralized, trust less financial system, offering services such as lending, exchanges, investment, stablecoins, and more, for all financial assets.



TRADITIONAL
FINANCIAL SYSTEM



DECENTRALIZED
FINANCIAL SYSTEM

There are three main types of decentralization:

- 1) architectural decentralization,
- 2) political decentralization.
- 3) logical decentralization

Architectural Decentralization

How many physical computers is a system made up of? How many of those computers can it tolerate breaking down at any single time?

Example. Architectural Decentralization

As a simplified example, the bitcoin network is decentralized because many different nodes work independently to validate the transactions. Nodes also monitor each other to ensure that no collusion is happening

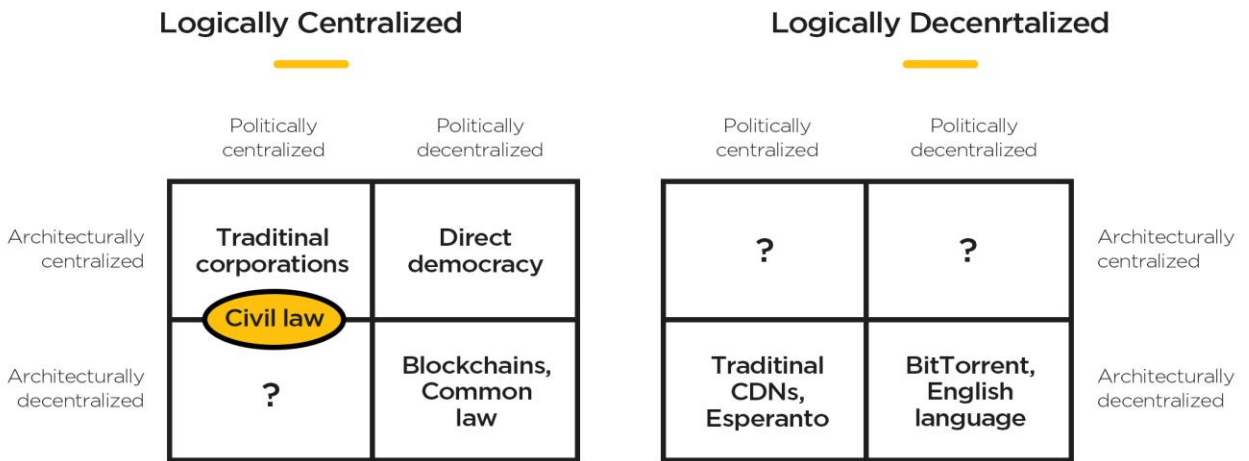
Political Decentralization

Political decentralization refers to how many individual entities control the rules of the system. DeFi protocols today that have achieved full political decentralization are few to none

Example. Political Decentralization

Traditional corporations are politically centralized (one CEO), architecturally centralized (one head office)

In a direct democracy, every person has one vote to directly influence policy changes in that country, so it is highly politically decentralized. This is in contrast to a dictatorship where policy is decided unilaterally by one person or party.




Logical Decentralization

Logical Decentralization means does the interface and data structures that the system presents and maintains look more like a single monolithic object, or an amorphous swarm? One simple heuristic is: if you cut the system in half, including both providers and users, will both halves continue to fully operate as independent units?





Example. Logical Decentralization

Languages are logically decentralized; the English spoken between Alice and Bob and the English spoken between Charlie and David do not need to agree at all. There is no centralized infrastructure required for a language to exist, and the rules of English grammar are not created or controlled by any one single person.

current financial system

-  Nearly 1/4 of the world (1.7b*) remains unbanked, and have limited access to wealth management tools.
-  on average it takes 3 working days and ~6.8%* fee for across-border remittance
-  centralization risks where rogue actors can bring entire systems down- 2008 financial crisis & venezuela hyperinflation
-  censorship / Discrimination from banks freezing accounts, denying access to funds, bank runs.

Decentralized finance

-  wider access to global financial services - Anyone with mobile phones/internet access can be part of it
-  Affordable & swift cross - border payments - on average ETH takes less than \$0.018* and 20 seconds, regardless of location.
-  Low barrier & friction for exposure to different asset classes for all users - better liquidity, options and positions
-  censorship resistance - Every entity is treated equally by the code regardless of social standing, credit history or political beliefs

The core benefit of DeFi is easy access to financial services, especially for those who are isolated from the current financial system. DeFi makes all financial interactions trustless and permissionless. This removes the main downsides of interacting with centralized services: namely, a lack of transparency, accountability, and custody risk.

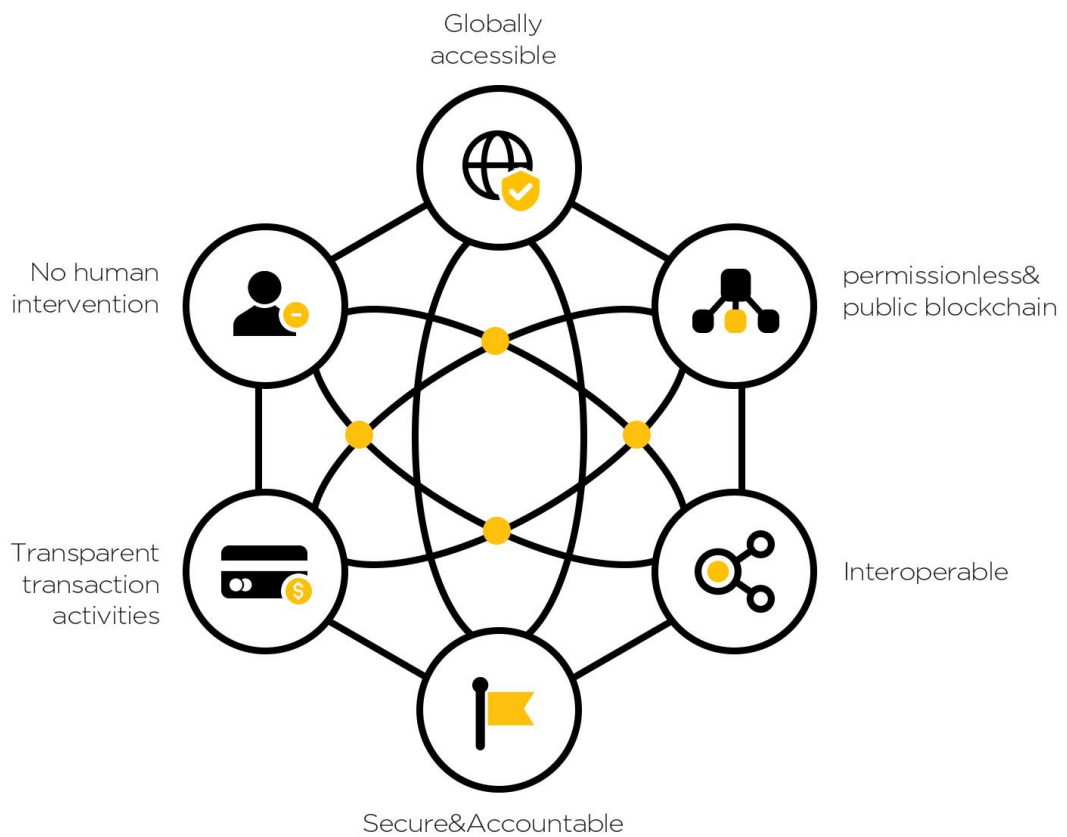
The ability to borrow funds, take out loans, deposit funds into a savings account, or trade complex financial products – all that without asking anyone for permission or opening an account anywhere – is quickly gaining traction.

DeFi, which is built on cryptocurrency platforms such as Ethereum and Cosmos, cuts out human middlemen and paperwork, and replaces them with smart contracts. These are computer programs that run on decentralized blockchains, meaning they're near-impossible to stop or censor. If I borrowed money from someone via a smart contract, the terms built into the contract have to be obeyed – no human can (typically) alter that.

Say you're living in a country whose sovereign fiat currency has a fast-increasing rate of inflation. Instead of saving in that currency and effectively seeing your capital dwindle,

you could turn your money into a U.S. dollar-backed stablecoin and get a decent return rate on top of that. Of course, if U.S. dollars aren't your currency of choice, you can use DeFi to invest into other fiat currencies, and stablecoins that track the value of gold and other assets, etc

The Importance of Decentralization



Benefits of Decentralized Finance

Permissionless and Borderless

Anyone in the world can connect to the network. DeFi protocols are, almost without exception, permissionless – anybody can participate in their governance or use. Since no personal information is required, country and regulatory restrictions cannot be easily enforced by extension. This makes DeFi services much more accessible than centralized financial services, which require potential users to jump through all kinds of hoops before access is granted.

Censorship Resistant and Trustless

As a simplified example, the bitcoin network is decentralized because many different nodes work independently to validate the transactions. Nodes also monitor each other to ensure that no collusion is happening.

Decentralized

Records are kept simultaneously across thousands of computers and since the operation and control of ideal DeFi systems is decentralized, they can be much more censorship resistant than their centralized counterparts. Censorship resistance refers to how difficult it is to tamper with a system's operation for any reason, be it financial or political.

Open Source and Transparent

Core philosophies of DeFi is that everything should be open source. Open source code can be audited to test for security vulnerabilities that may put user funds at risk. It allows anyone to interpret how the system works, letting the user base know what to expect on a consistent basis without arbitrary and hidden changes. All transactions are publicly auditable.

THANK YOU



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