

IBM Blockchain



Making sense of digital assets



Bitcoin, tokens, Ethereum, and stable coins – oh my! These are a few names and phrases you may frequently hear when attempting to understand the emerging digital asset class. CNBC now lists the price of Bitcoin on its ticker but what does it all mean? And what are the differences?

Finding clear-cut answers on definitions and capabilities of each nuanced digital asset is trickier than it should be. Whether you are a college student wanting to understand the craze, or a seasoned member of the c-suite, more questions than answers often arise from independent research. As my team and I spearhead multiple digital asset initiatives, we saw an opportunity to provide education to the public and our clients on the key definitions and understandings of digital assets.

Who is using digital assets?

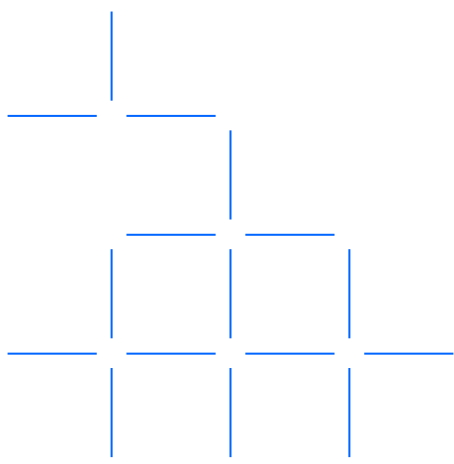


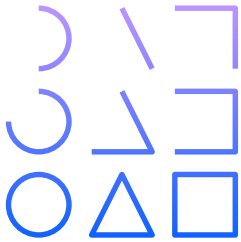
One of the most confusing aspects of “virtual money” is the different terms. The broad term we use to describe all digital assets that relate to the financial industry is digital currency. The functionality of digital currencies is similar to that of physical currencies. However, there are advantages to utilizing digital over physical currency. One such benefit is the ability to instantaneously transact and transfer money across borders with reduced cost and time. Digital currencies come in various forms, including virtual currencies, cryptocurrencies, and central bank digital currency, which we will address next.

Whether you have followed cryptocurrencies since their [emergence](#) in 2009, or caught onto the trend by developing a fascination with Dogecoin, it's important to understand the value and importance of digital assets as we move towards decentralized finance.

Cryptocurrencies are a form of payment that can be exchanged online for goods and services. Many companies have issued their own currencies, often called tokens, and these can be traded specifically for the good or service that the company provides.

An analogy is arcade tokens or casino chips. You'll need to exchange real currency for the cryptocurrency in order to access the good or service. The attraction to leveraging cryptocurrency lies in its ability to function as a security that is indexed to a specific product or service. In addition, several investors are using this as a store of value opening up new investment opportunities for institutional and retail investors alike.





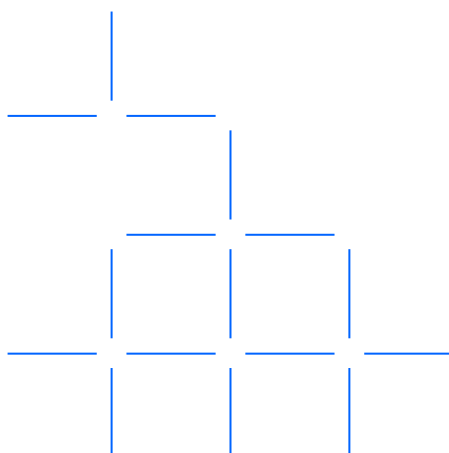
How digital assets have evolved

So let's go back to where it all began. Bitcoin was the first cryptocurrency that emerged in 2008. The token is decentralized, meaning there is no central bank or administrator that governs the token. The revolutionary feature of Bitcoin and other cryptos is the ability to send currency from peer to peer without the need for intermediaries. This has the potential to significantly reduce time and costs of any payment transaction.

One of the arguments against the adoption of cryptocurrencies in mainstream society and organizations is that their volatility could be of harm to investors and the health of a firm's balance sheet. In order to mitigate the risk of volatility while still benefiting from the new capabilities of the technology, stable coins were [introduced in 2014](#) and specifically designed to address the issue of volatility in cryptos.

Stable coins hold the same functionality of crypto assets, but volatility is reduced as the coin is backed by either the U.S. dollar or another fiat currency. As you can see, the digital assets space is maturing and can now bring significant value to enterprise applications across industries.

Not only is the private sector looking to leverage this emerging asset class, but governments around the world have also expressed interest in exploring the possibility of implementing a Central Bank Digital Currency (CBDC).





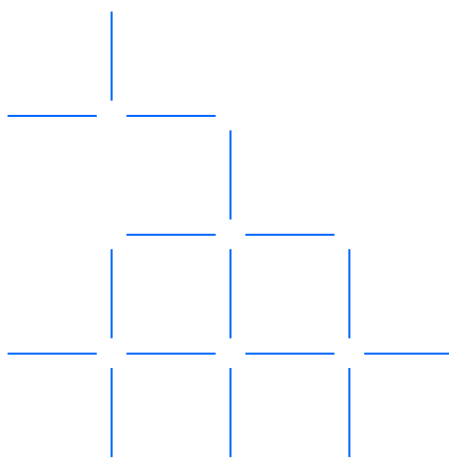
Digital assets sentiment

Talks of digital currency have dated back to well before 2008.

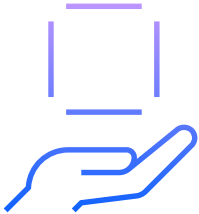
However, Bitcoin was the first recognized digital currency. With the market cap of digital currencies having [recently climbed](#) to over USD 2 trillion, central banks are starting to understand what this could mean for them, and the financial infrastructure of their countries.

Digital money is drawing stronger interest as the future of an increasingly cashless society. We've seen adoption in countries from China to the Bahamas — [86% of the world's central banks](#) are exploring digital currencies. The adoption of a CBDC could mean widespread use of a regulated digital currency. Adoption will significantly increase the speed of various processes carried out by central banks and the US Department of Treasury.

Allowing money to be deposited directly into an individual's digital wallet will allow for near instantaneous transfer of tax refunds, stimulus checks, and government aid. Utilizing a digital currency would also eliminate the cost of minting money. [Currently](#), it costs 2.06 cents to make a penny and 7.53 cents to make a nickel, an economically inefficient process. Lastly, the ability to configure digital currencies by limiting supply, burning tokens, and other methods, will give central banks new capabilities for monetary and fiscal policy.



Where digital assets are going

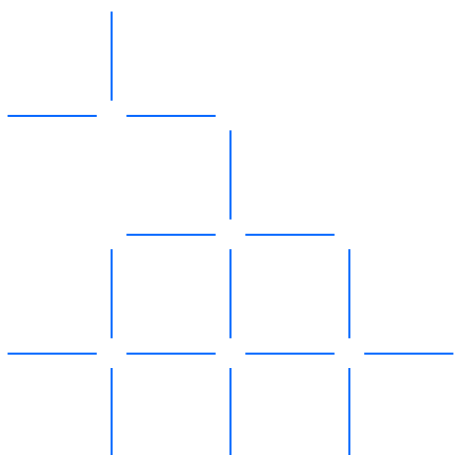


The interest in digital assets, from both private and public sectors, is a display of growing confidence from government and industry leaders. Recently, the Fed released [a proposal](#) where novel banks could potentially have direct access to the Fed Payment Rails.

In addition, in March 2021, US congressmen Stephen Lynch and Patrick McHenry put forth [bipartisan legislation](#) that called for the formation of a working group to evaluate the current legal and regulatory framework around U.S. digital assets. The introduction of this legislation is paramount in the journey to mass adoption of digital assets.

Furthermore, it is a reflection that an increasing number of government officials understand that regulation and a deeper understanding of the technology is needed to solidify the United States as leaders in innovation.

This is an exciting time in the digital assets space and having government interest in this technology means we are at the cusp of every citizen and organization utilizing digital currency.



Author Bio



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Ryan is currently a Partner at IBM responsible for the America's blockchain team, helping to enhance clients' solutions and capabilities for building digital ecosystems. She provides strategic guidance for operational and governance considerations, technology roadmaps, and services infrastructure to help clients. In Ryan's prior role she was the Global Head of the Industry business unit at the enterprise software firm, R3, where she sat at the forefront of blockchain innovation across multiple industries, working closely with several Fortune 500 companies to help build and scale their solutions. In addition, Ryan has extensive financial services experience spending 14 years on Wall Street working at Lehman Brothers, Morgan Stanley and JPMorgan Chase.