**Blockchain Technology Revolution - Hype or Real?**

Many people have viewed blockchain as the next big thing in technology in recent years. To many people, Bitcoin is blockchain, and blockchain is Bitcoin – they are two sides of the same coin! With the price of Bitcoin fluctuating between $4000 and $6000 per coin (at the time of writing), people have grown increasingly concerned, wondering if this technology is still worth investing in. Will it die out like so many other fads, or will it truly revolutionize finance and business transactions?

**Blockchain is more than just cryptocurrency.**

If you only think of blockchain in terms of cryptocurrencies like Bitcoin, you're passing up a huge opportunity. The truth is that, aside from digital currency, blockchain has a wide range of potential applications and can provide advantages over existing systems. Data can be secured and transactions validated using a centralized ledger without the involvement of an intermediary or third party. Because no middleman can be hacked or manipulated, using blockchain removes trust from transactions.

Blockchain has evolved into much more than a cryptocurrency; it is set to transform business models in industries all over the world. IBM believes blockchain could cut banks' infrastructure costs by up to $20 billion per year starting this year (though some analysts believe the figure is closer to $5 billion). And, while it may take years for all of blockchain technology's potential applications to be realized, the technology isn't going away anytime soon.

**So, what exactly is blockchain?**

A blockchain is a digital ledger in which cryptocurrency or other assets transactions are recorded chronologically and publicly. This enables everyone involved in a transaction – whether it's a transfer of money, property, shares, or anything else of value – to see what was done and when. Blockchains do not rely on a single authority figure to verify information (as your bank does), but instead, use cryptography and algorithms to verify each entry – similar technology that keeps online banking secure.

**Blockchain extends beyond cryptocurrencies.**

Blockchain, when properly understood, is one of those technologies that most people have heard of but do not fully comprehend. According to a Statista Research Department report dated March 18, 2022, spending on blockchain solutions will continue to rise in the coming years, reaching nearly 19 billion US dollars by 2024.

Although blockchain has gained popularity in niche industries and cryptocurrencies, it is no longer limited to digital currencies. Blockchain solutions can improve the efficiency and security of a wide range of processes, from real estate to voting systems. As a result, IBM is collaborating with both government agencies and businesses to integrate its enterprise-ready blockchain platform into their operations. They recognize that blockchain is a game-changing technology that has the potential to transform many aspects of our daily lives, including how we trade goods and services, buy cars, and obtain medical prescriptions. No one knows where blockchain will go next!

**Smart Contracts**

The blockchain ledger itself can be thought of as a smart contract in that it has established and enforced rules for negotiating transactions. A blockchain network can also run code (smart contracts) on top of its ledger to automate transactions and rules, or to create an entirely new service. There are two ways to accomplish this: either directly integrate it into a cryptocurrency protocol or create a sidechain with its protocol (of which Ethereum is one). However, one additional advantage of cryptocurrencies with smart contracts is that all data written onto them become publicly accessible, so you don't have to worry about protecting your information from anyone outside your network. If you need to protect sensitive information, a private blockchain may be a better option. For example, Hyperledger Fabric supports a wide range of smart contracts and allows users to choose between public and private blockchains based on their requirements.

**NFTs**

Blockchain is now being used as a decentralized registry for non-fungible tokens (NFT). NFTs are essentially one-of-a-kind digital assets that cannot be duplicated or copied. They can represent anything from tickets to collectibles to cryptocurrency itself. CryptoKitties, NFTYoshi, CryptoPunks, Decentraland, Cryptosomniac are a few examples. There are a lot more!

Anyone can create unique virtual items in games like CryptoKitties that can be sold and traded freely on an open market without going through an intermediary like Amazon or eBay. The most important aspect of these NFTs is that they cannot be replicated by anyone else, making them completely authentic. It also means that you own your assets rather than paying fees every time you use them.

**Conclusion**

According to technology futurist Michael Gartenberg, senior research director at Gartner, and tech analyst Patrick Moorhead, president, and principal analyst at Moor Insights & Strategy, the hype around blockchain will continue, and organizations should start thinking about how they want to use blockchain now—rather than whether they should use it at all. Blockchain isn't going away anytime soon, but there will be some growing pains as people figure out where and how to use it in their organizations. Either they reap the benefits of the first-mover positioning, or they suffer the consequences of arriving late to the party.

While the cost of implementing blockchain in organizational operations will be significant, the author believes that the cost of ignoring blockchain will be greater in terms of organizational profitability, operational efficiency, and new product design and development. So, if you haven't already taken steps to understand how it works and how it can benefit your company, now is probably a good time.