**What does is do?**

Blockchain is a new decentralized architecture and distributed computing paradigm that underpins Bitcoin and other cryptocurrencies, and it has recently piqued the interest of governments, financial institutions, high-tech firms, and capital markets. Decentralization, time-series data, collaborative maintenance, programmability, and security are among the fundamental benefits of blockchain, making it particularly ideal for building a programmable monetary system, financial system, and even the macroscopic social system. We offered a fundamental model of the blockchain system in this article, as well as explored the concepts, technologies, methodologies, and applications of blockchain and the linked Bitcoin systems. We also spoke about smart contracts and their applications, as well as the future trends of blockchain-enabled mirrored societies. The purpose of this work is to provide useful recommendations and a reference for future research endeavors. Also, some of the thing that blockchain can be done now are: Secure sharing of medical data, NFT marketplace like cryptocurrencies which allow people to directly transact with one another without having to trust third party like banks and many more.

The year 2021 will go down in history as a watershed moment for cryptocurrencies. But what comes next?

Bitcoin has experienced many new all-time high values, as well as increased institutional buy-in from prominent corporations. Ethereum, the second-largest cryptocurrency, just set a new all-time high as well. Officials in the United States, including the Biden administration, have voiced an increased interest in new cryptocurrency rules.

Meanwhile, people's interest in cryptocurrency has soared this year, making it a hot issue not just among investors but also in popular culture, owing to everyone from long-time investors like Elon Musk to that kid from your high school on Facebook. We may guess on what value cryptocurrencies will have for investors in the future months and years (and many will), but the truth is that it is still a new and speculative investment with no history to make forecasts on. No of what a particular expert believes or says, no one truly knows. That is why it is critical to only invest what you are willing to lose and to stick to more traditional assets for long-term wealth creation.

Also, the potential of blockchain technology are essentially limitless, and recent advancements have brought us one step closer to a decentralized, trustless internet, transaction transparency, and other benefits. Here are a few examples of how blockchain will affect the future:

-**Digital identity:** Passwords and authentication questions are now used to prove who we are online. Blockchain has the potential to replace this system with a digital identity that is safe, secure, and simple to administer.

Rather of establishing your identification by recalling some personal, arbitrary piece of information that may be guessed or stolen, your digital identity is based on a uniquely random set of numbers provided to each user on a blockchain network.

This implies that your identity cannot be hacked or modified without access to your private key, making it far more dependable than our existing system. In fact, the National Institute of Standards and Technology (NIST) is already looking into how blockchain may aid in the protection of digital identities.

-**NFTs And Non-Fungible Tokens:** In an ever-changing world, cryptocurrencies are one of the most significant use cases for blockchain right now, and it is likely to stay so for some time. However, a more interesting future in blockchain technology is emerging non-fungible tokens (NFTs).

NFTs are a game-changing new way to acquire and trade digital assets that reflect real-world goods. All NFTs are one-of-a-kind and cannot be replaced or swapped; they may only be purchased, sold, traded, or given away by the asset's original owner/creator.

NFTs have the potential to fuel a new generation of digital treasures, ranging from rare artwork to one-of-a-kind footwear and accessories. They might also be employed in video games or other virtual environments to replace goods.

The applications for NFTs are limitless, and these tokens will almost certainly have a huge influence on the future of digital ownership. Furthermore, in the next years, NFTs will most likely be used to purchase everything from artwork to automobiles.

**What is the likely impact?**

Blockchain technology has the ability to change all aspects of recordkeeping, including how transactions are originated, processed, approved, recorded, and reported. Back-office functions like as financial reporting and tax preparation may be impacted by changes in company models and procedures. As for cryptocurrency, it offers several benefits to enterprises all around the world. It has made it simpler for enterprises to expand into worldwide markets rather than limiting themselves to domestic markets. This has allowed vendors to build connections and trust with markets that were previously unavailable, which has been excellent for developing countries. Cryptocurrency has not just shaken the banking world. It is also changing the cultural landscape, since blockchain technology has changed conceptions such as ownership. Because data on a blockchain cannot be tampered with, deleted, or faked, people can "possess" a certain set of data. Both of blockchain and cryptocurrency with affected almost everyone based

On the impact that it brings to the world on different jobs and career like:

-**Education**: Blockchain technology is transforming the storage of certificates and student credentials in educational institutions. With blockchain technology, there is no need for a middleman in certifying degrees, certificates, diplomas, and other academic papers.

**How will this affect you?**

There are many ways that blockchain and cryptocurrency can affect my daily life. For example, a blockchain is a huge digital ledger that tracks me and my family financial transactions. It may also be used to securely store essential and valuable documents, preventing them from being altered, stolen, or abused. Property deeds, birth and death certificates, financial transactions, insurance records, legal conflicts, and other sensitive documents may be safely recorded and maintained on the blockchain in encrypted code. Also, Blockchain techniques are being used to combat intellectual and creative property theft and fraud, as well as to create proof of ownership, in fields ranging from high-tech patents to fashion and entertainment. Among the blockchain IP use cases are:

- Provenance verification

- Registration

- Tracking of distribution

- Evidence of initial usage in business or trade

- Management of digital rights

- Smart contracts are being used to enforce intellectual property rights.

- Authentication of real-time payment transfer

- Counterfeit products detection

- Recovery of Stolen Property