

FUTURE OF BLOCKCHAIN TECHNOLOGY IN INDIA

Blockchain technology has taken the world by storm with its unprecedented advancements. As we witness the complete revamping of database creating system and information transaction, methods of secure information exchange are need of the moment. And with features such as immutability and decentralization, blockchain gives the perfect safety lock that ensures the desired confidentiality. As per Statista, it is estimated that “by 2024, the spending on blockchain will reach almost 19 billion U.S. dollars”.

WHAT IS BLOCKCHAIN?

A blockchain is a distributed database or ledger that is shared among the nodes of a computer network, and stores information electronically in digital format which makes it difficult or impossible to change, hack, or cheat. Blockchain is a type of Distributed Ledger Technology (DLT), where the decentralised database is managed by multiple participants. Each block in the chain contains a number of transactions, and every time a new transaction occurs on the blockchain, a record of that transaction is added to every participant's ledger. Blockchain technology enables faster and low-cost processing of transactions.

Many businesses and domains have already started implementing blockchain technology. India is also planning to adopt the blockchain technology across various sectors.

BLOCKCHAIN TECHNOLOGY IN INDIA: WHAT THE FUTURE HOLDS?

➤ *PROMINENT EMERGENCE OF CRYPTOCURRENCY:*

Many businesses today have started accepting cryptocurrency payments, but not everyone is well accustomed with crypto trading. This scenario is going to change, as with the introduction of more digital currencies like Bitcoin and Ethereum, there will be a higher adoption of cryptocurrencies in the coming years.

➤ ***SMART CONTRACTS WILL REDUCE COSTS AND DROP INTERMEDIARIES:***

Smart contracts are self-executing programs or codes on a blockchain. They put in place the terms of an agreement between parties. Smart contracts help in streamlining processes that spread across different databases and ERP systems. They can help confirm loan eligibility and execute transfer pricing agreements between subsidiaries. The use of smart contracts can increase the accuracy and speed of business processes. It can also reduce costs and drop the need for middlemen.

➤ ***CRYPTOCURRENCY WALLET WILL MAKE TRANSACTIONS EASIER:***

In the future, blockchain can make it possible for you to pay for your vehicles with cryptocurrency. It may also allow you to get money back on that payment through tokenized ownership. You will not need to connect with a salesperson or finance dealer. It would be all done based according to your cryptocurrency wallet in a few minutes.

➤ ***IMPROVED TRACEABILITY SYSTEM:***

Blockchain can enable businesses to solve issues with real-time data access, partners' privacy, and traceability. It can help them better track the status updates of the supply chain. It can also help in increasing the security and visibility of the supply chain. Blockchain would also allow businesses and consumers to view how products performed from a quality-control viewpoint as they moved from their place of origin to the destination.

Today, Walmart uses blockchain to set up food traceability systems. The technology enables it to create an automated system for managing invoices and payments related to its third-party freight carriers.

➤ ***BLOCKCHAIN IN BANKING AND FINANCIAL SECTOR:***

Blockchain would completely secure the money exchange process.

Here are some of the benefits of blockchain in banking and finance:

- More transparency
- Improved security
- Lower cost
- Faster payments

➤ **BLOCKCHAIN IN ENERGY SECTOR:**

Blockchain could be a great tool to record and ease transactions between generators and consumers of energy. The use of blockchain in the energy sector could remove the control from the utility companies. This would give more control to consumers over their energy sources. It would allow the consumer to sell excess energy to their neighbours and other network participants through automated smart contracts.

➤ **BLOCKCHAIN IN HEALTHCARE SECTOR:**

Blockchain can help in removing the paper trail in the healthcare system. It would enable making patients' medical history more accurate and accessible. A permanent blockchain record owned by the patient will depict the illnesses, allergies, and lifestyle factors. This would enable doctors to diagnose and treat health problems in a better way. Healthcare providers could also use blockchain to exchange data with each other. It would reduce redundancies and improve the speed of diagnosis. It will also safeguard patient privacy.

Additional benefits:

- Tracking the supply chain
- Improving drug safety
- Putting an end to fake medications
- Lower health insurance premiums

➤ **PROPERTY PROTECTION WITH BLOCKCHAIN:**

Blockchain technology can help you protect your assets such as vehicles, property, and land. It creates an indisputable record of ownership of your assets. When you sell or buy assets, you need to transfer or receive a title.

Blockchain can store the titles on its network. This will give a transparent view of the asset's transfer and ownership.

➤ ***BLOCKCHAIN WILL FACILITATE ONLINE VOTING:***

Today, voters need to go to the polling booth to cast their vote. Blockchain technology can help make digital voting with immutability a reality. It can enable voters to log on to their computer or mobile device, verify their identity, and cast their vote. Thus, the voting process would become easier, faster, and more secure.

➤ ***BLOCKCHAIN AND INTERNET OF THINGS (IOT):***

Internet of Things (IoT) refers to the network of physical objects with sensors. These devices collect and exchange data with other connected devices and systems over the internet. These devices are prone to cyberattacks. Hackers can gain access to the data that IoT devices generate. Blockchain can help address these issues. Blockchain encryption can make it virtually impossible to tamper with existing data records. It adds another layer while storing data. This stops hackers from gaining access to the network.

Blockchain technology offers infinite future prospects and has a huge potential to drive major changes across global businesses. Blockchain helps in saving costs, enhancing efficiency, and developing transparency. It is changing the dynamics for many businesses by making them more efficient and profitable. Although, it has some limitations such as data privacy and scalability, the world will witness the wonders of blockchain technology and its competency in revitalising all the sectors.