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Implications of blockchain technology on corporate governance in India

Aashi Shah

aashi.shah25@yahoo.com

Pravin Gandhi College of Law,
Mumbai, Maharashtra

ABSTRACT

With the advent of technology, humans have made it possible to arrive at a place where they can carry out huge transactions all by themselves without the help of any intermediaries. This technology is very famously called the blockchain technology (BCT). The primary focus of this article is to see what implications BCT would have on corporate governance being specific to India. Corporate governance includes the government, big companies, and financial institutions that work through a framework for the smooth functioning of the companies. Although BCT is at a very primitive stage in India, if implemented it can fix the lop-sidedness of corporate governance in India for it provides greater transparency, efficiency, and security. The author through this article has explained the working of blockchain technology. Finally, the author has emphasized the need of adopting BCT for better corporate governance in India.

Keywords: Blockchain technology, corporate governance, India, financial revolution, decentralization

1. INTRODUCTION

Blockchain technology has called for a financial revolution for it has the potential to revamp the currently existing methods of interactions between governments, businesses, and citizens and to unlock decentralized peer-to-peer (P2P) networks. Decentralization is at the very core of blockchain technology has paved way for a more secured, fast, and transparent method to carry out businesses also attracting the eyes of those involved in corporate governance. The adoption of blockchain technology in corporate governance will result in greater liquidity, accurate book-keeping, lower costs, and transparent ownership.

The growing regulation by intermediaries including the government has made it difficult for corporate entities to function freely. Less compliance, as well as less regulatory oversight, makes blockchain technology more preferable for corporate entities. Moreover, the current system of corporate governance is not only full of loopholes but also less transparent. The database provided by blockchain can be a great replacement for financial ledgers as they can be tracked on a peer-to-peer basis. Although the technical stimulation of blockchains can be convoluted for those in decision-making power, blockchain has enabled ease of doing business and ease of living for the citizens by bringing in lucidity both in government and private sector interfaces.

As of now, blockchain technology is at its nascent stage in India. Majorly for Indians, the understanding of blockchain technology has been restricted to cryptocurrencies especially Bitcoin. Moreover, the Reserve Bank of India is on the qui vive of use of cryptocurrencies making it challenging for India to attune with the growing blockchain technology. However, blockchain technology has proven to be beneficial to alter the landscape of corporate governance. And given the scale of complexities involved in the current system of corporate governance in India, blockchains can offer a new medium to address these complexities and improve the same. Primarily, it becomes cardinal to understand the working of blockchain technology to determine its implications on corporate governance in India.

2. WHAT IS BLOCKCHAIN TECHNOLOGY AND HOW DOES IT WORK?

Before demystifying blockchain technology, it is important to know blockchain technology is not cryptocurrency-centric and that cryptocurrencies are mere applications of blockchain. With the internet being the pillar, blockchain is a constitution of three technologies: cryptography, smart contracts, and distributed ledger design.

It works on a peer-to-peer network where the legitimate/verified members can keep a check on their transactions without the interference of any intermediary. These transactions are confirmed by cryptographic algorithms that transform data into a hexadecimal code of fixed length. The transaction gets converted into a smart contract and is written into blocks and chains of such blocks form a ledger. Each block contains a header which has a hash function reflecting the contents of the previous block. The previous block also consists of a hash function obtained from its precursor, and so forth it goes all the way to the first block. These records of ownership are permanently entered in ledgers and there exist as many identical ledgers as the number of related nodes. The inherent feature of blockchain technology is to be a decentralized ledger of transactions which is done through a process called mining. Therefore, the network itself requires verification of each transaction between two or more members in the network without the help of any intermediary. To secure the transactions, the members have the power to negate any block which shows inconsistency and rectify the ledger by forking the chain. Therefore, not only does blockchain technology work in contrast to the traditional centralized network but also helps to secure transactions more efficiently and smoothly.

3. INDIA'S POSITION ON BLOCKCHAIN TECHNOLOGY SO FAR

As far as cryptocurrencies are concerned, the current government of India has made some encouraging moves. The government has plans to regularize cryptocurrency in India by tabling the Cryptocurrency and Regulation of Official Digital Currency Bill, 2021. Despite the ban on cryptocurrencies in 2018 by RBI, the Apex Court in India overturned this decision of the RBI and permitted banks to transact in cryptocurrency from traders and exchanges. After being wary of cryptocurrencies for years, the RBI has recently announced to introduce a central bank digital currency (CDBC) in a phased manner which will substantially help Bitcoin and cryptocurrency investors in India. All in all, positive movements have been observed concerning cryptocurrency.

Blockchain technology is a new-fangled, revolutionary technology, is still at its preliminary stage in India. However, India has maintained a positive outlook towards blockchain technology. According to a report by NASSCOM Blockchain Report of 2019, about half of the Indian states have been involved in blockchain technology's adoption at differing levels. The state of Tamil Nadu has become the first Indian state to introduce blockchain policies. The Tamil Nadu Blockchain Policy of 2020 aims to bring better accountability and transparency and to create an ecosystem involving entrepreneurs and communities. It was reiterated by the Supreme Court in *Amitabha Dasgupta v. United Bank of India* that banks may consider utilizing blockchain technology which is meant for creating digital ledgers for better security and transparency.

In another major move, NITI Aayog – a public policy think tank of the Government of India, introduced a policy paper on blockchain technology called 'Blockchain: The India Strategy — Towards Enabling Ease of Business, Ease of Living and Ease of Governance'. The paper deliberates the need for blockchain technology in corporate governance and sets a road map highlighting the implementation challenges of the same. Therefore, the benefits of blockchain technology have been taken into account by the government authorities. The next requirement is to set a framework for the adoption and implementation of blockchain technology by the government.

4. IMPLICATIONS OF BLOCKCHAIN TECHNOLOGY ON CORPORATE GOVERNANCE IN INDIA

Corporate governance in India means the regulation of policies and procedures of a company's operation and its dealing with different stakeholders such as shareholders, employees, management, government, and industry bodies. However, the framework of these policies should be such that it upholds the principles of transparency, integrity, ethics, and honesty. Thus, corporate governance becomes the soul of an organization and must be complied with to avoid any malpractices.

India has a history of financial scandals, the downfall of companies, and economic breakdowns which made the companies realize the need for concrete steps towards improving corporate governance. The Ministry of Corporate Affairs (MCA) and the Securities and Exchange Board of India (SEBI) are responsible to monitor and regulate the corporate governance of companies in India through an organizational framework. However, the complexity of the corporate chain with the ever-increasing number of intermediaries has rendered the system of corporate governance in India ineffective and inefficient.

- Transparency in supply chain

Since decentralization and elimination of intermediaries is the main feature of blockchain technology it can offer a great opportunity for better corporate governance. This was witnessed in the case of Gujarat Narmada Valley Fertilisers & Chemicals (GNFC) being one of the largest fertilizer manufacturing companies in India. GNFC, having a pan-India presence, operates over a large and complex supply chain. This caused difficulties in receiving subsidies on time and maintaining a unified system of the ledger. However, with the help of a blockchain-based solution, GNFC could attain a transparent and tamper-proof ledger and streamline the supply chain.

Lack of transparency in the supply chain of the pharmaceutical industry caused an increase in substandard and counterfeit drugs according to the National Drug Survey 2014-16. This could be again resolved effectively with the help of blockchain technology as it will provide real-time data and greater visibility of the supply chain starting from manufacturing to sale. This will enable pharma companies to reduce dependency on intermediaries, ensure transparency in stock movement, control quality, and improve the overall reputation of the industry.

- Curb on insider trading

Insider trading is one of India's most common and prominent financial crimes which has been in fashion ever since the existence of stock markets in India. Although stringent laws and regulations have been formulated for the ethical and smooth functioning of the markets, it can be difficult for SEBI to regulate every action happening on the market.

Blockchain entrusts a distributed ledger which means that a copy of each block of a transaction is made visible to all the members of the network. A public listed company on the blockchain can have all its shareholders view the arrangement of ownership at any time and also be notified of the changes. Moreover, the greater visibility of transactions will automatically put up a check on the verified and unverified traders. This will invariably reduce the risk of insider trading happening on a small or large scale.

- Efficiency in voting

The archaic voting system of showing hands presided by a poll if demanded as given under the Companies Act, 2013 can be substituted by blockchain technology. Blockchain technology will allow votes to be quickly and safely recorded restructuring a voting process that has been labour-intensive and time-consuming. In an election through blockchain technology, the eligible voters shall receive a votecoin or token through which they can register their preferences ensuring greater transparency and accuracy. Voting through blockchain will also encourage more shareholders to directly participate in corporate governance.

- Greater liquidity

In India, a stock usually takes three business days for the settlement of a trade. During the period of ownership to move from the seller to the buyer, the funds pass from the National Securities Deposited Limited to the broker and from the broker to the client. In contrast, a trade made on the blockchain is settled more quickly without the need of any middlemen resulting in a reduction of commission charged by brokers. Thus, blockchain provides a greater ability to trade a substantial quantity of security at a low cost in a short time. Greater liquidity can cause greater demand for stocks and positively affect investment and ownership.

5. CONCLUSION

The most challenging aspect of fast-paced advancing technologies is to redefine the whole concept of financial regulation. The current financial system heavily relies on the existence of intermediaries and regulators rely upon these intermediaries for further functioning. Although blockchain technology promises a better future, for a developing country like India, it becomes extremely crucial to incorporate a system without the middlemen. It is difficult to imagine a banking system without the presence of banks.

However, the covid-19 pandemic has exposed the vulnerabilities of the financial markets and halted the smooth functioning of corporate governance in India. At a juncture where corporate digitalization is gaining momentum, blockchain technology can play a vital role in increasing the visibility of business operations as well as ensuring the smooth administration of the companies in India.

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