**How blockchain is driving social impact and transforming India**

*Reportedly, blockchain adoption in India could clock 46% by 2026*

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Blockchain technology has long been associated with the world of crypto and is the backbone of the entire crypto [industry](https://www.financialexpress.com/business/industry/). Its transformative potential extends far beyond the realm of finance and can be incredibly powerful in developing countries like [India](https://www.financialexpress.com/india-news/). Blockchain adoption in India could reach a staggering 46% by 2026, which indicates vast prospects to boost the local [economy](https://www.financialexpress.com/policy/economy/). By leveraging the power of blockchain, India can drive significant social impact across various sectors, including healthcare and governance.

**India’s National Blockchain Framework**

India has taken a significant step towards adopting blockchain by working towards building a national-level infrastructure for blockchain under the National Blockchain Framework. The framework includes blockchain-as-a-service, geographically distributed nodes, creating awareness and developing human resources, among other initiatives.

The government has also set an ambitious target of enabling ‘Made in India’ blockchain technology for global use within the next five years, focusing on convergence across blockchain, IoT, cloud, and AI, commonly known as the BICA stack. The ultimate goal is to facilitate the development of national-level use cases that harness the full potential of the BICA stack.

The government plans to establish the National Blockchain Portal and geographically distributed blockchain infrastructure as part of this effort. It also aims to onboard [MSMEs](https://financialexpress.com/about/msmes/) and startups, develop cross-border applications, standardise India Stack for blockchain adoption, and integrate blockchain technology with a few national services. The government’s efforts in this regard can have a transformative impact, driving innovation and growth in the country while also addressing critical challenges such as poverty, corruption, and lack of transparency.

**How is Blockchain driving social change in India?**

**Financial inclusion**

One of the significant challenges facing us is financial inclusion. Blockchain is revolutionizing the economic landscape by providing access to banking services for millions of unbanked citizens. With just a smartphone and an internet connection, individuals without bank accounts can now easily open an account and access various financial services. It plays a crucial role by enabling peer-to-peer transactions without the need for intermediaries. With blockchain-based payment systems, individuals can transfer funds in a matter of seconds, without the need for traditional banking infrastructure. Blockchain is also enabling the approval of loans in just a matter of hours, a process that traditionally took weeks or even months. This technology ensures trust, security, and efficiency throughout the lending process, especially in rural areas where access to financial services has traditionally been challenging.

**Supply Chain Management**

Supply chain is the backbone of any business, ensuring smooth and efficient movement of goods and services. However, supply chains in developing countries can be opaque, leading to challenges in tracking products and ensuring ethical sourcing. This is where blockchain comes in. According to the World Economic Forum, streamlining information through blockchain can potentially increase global trade by more than $1 trillion in the next five years.

Blockchain technology has emerged as a game-changer in supply chain management in India, owing to its ability to provide an unalterable and transparent record of every transaction. Companies such as Walmart and IBM have already implemented blockchain in several countries to track the supply chain of products, ensuring ethical sourcing and production of goods from farm to table. As the adoption of blockchain in India continues to grow, supply chain management is poised for a significant transformation, resulting in greater transparency, efficiency, and growth in the sector. With its use, India can undoubtedly expect a substantial boost in its development and prosperity in the years to come.

**Healthcare**

Blockchain is trying to revolutionize the healthcare system in India by addressing various challenges such as transparency, data privacy, and medical record keeping. Currently, the healthcare system in India is fragmented and lacks a unified database, making it challenging to access patient information across different healthcare providers. Blockchain is helping create a decentralized and secure database that can store patients’ medical records, allowing for easy and secure access to patient information across the healthcare system. This helps reduce medical errors, improve patient care, and prevent duplicate testing and treatment.

In addition, blockchain is also helping combat counterfeit drugs, a significant problem in India. Blockchain-based solutions can track the entire supply chain of medicines from the manufacturer to the end consumer, ensuring that patients receive authentic medicines. Blockchain-based solutions can also help improve clinical trials by creating an immutable and transparent record of every step in the process, ensuring the data is accurate and tamper-proof. This can help bring new medicines to [market](https://www.financialexpress.com/market/) faster and more efficiently. Furthermore, blockchain can facilitate secure and fast payment and insurance claims processing, making healthcare more accessible and affordable to patients.

**Identity Management**

In India, identity management is a significant challenge that affects millions of people who lack access to formal identification documents. This not only hinders their ability to access essential services such as healthcare and education but also poses a threat to their privacy and security. To solve this problem, the government has announced plans to leverage new technologies such as [Artificial Intelligence](https://financialexpress.com/about/artificial-intelligence/), blockchain, and machine learning to strengthen Aadhaar, the national identification system, and make it more secure and privacy-oriented.

Furthermore, numerous startups in India recognise the possibilities of blockchain technology to address the issue of identity management. They are developing secure and portable digital identities that can be used across various services, providing a simple and efficient way for people to prove their identity without needing formal identification documents. With the adoption of blockchain in identity management, the future of India’s digital economy looks bright, promising increased security and privacy for all citizens.

**Future outlook**

The country’s adoption of blockchain can change traditional industries and drive greater transparency and accountability. In addition to the areas mentioned earlier, such as finance, supply chain management, and healthcare, Blockchain can potentially transform other industries, such as real estate, agriculture, and education. For instance, the Indian government could use Blockchain to simplify buying and selling property by providing a transparent and immutable record of land ownership. This would increase transparency, reduce fraud, and enhance investor confidence in the real estate industry.

Similarly, using blockchain in agriculture could improve supply chain management, reduce food waste, and increase efficiency by providing real-time crop production and distribution information. In education, blockchain could create a secure and transparent platform for issuing and verifying academic certificates, making it easier for students to prove their qualifications and for employers to verify them. To sum it up, the future impact of blockchain technology on social and economic development in India is immense.