Tech Mahindra

Blockchain To Embrace The Future Of **Homo-Robo Sapiens**

BLOG



Blockchain to Embrace the Future of Homo-Robo Sapiens

Tech Mahindra participates in public Blockchains which are relevant to G2C services, large scale Peer to Peer collaborations that mimic MMOG (massively multiple online groups) which are geographically widespread. They are building a new Blockchain protocol called Eleven01/ 1101 which adds to Made in India.

Blockchain has a great potential to foster Peer to Peer collaboration by digitizing the trust which was hitherto provided by intermediaries. This Peer to Peer Collaboration will usher in several new business models and benefits such as greater asset utilization for e.g. cars leading to lower emissions and higher social good.

Last year Tech Mahindra signed an MoU with The Telangana State Information Technology, Electronics and Communication department (ITE&C) to launch India's first Blockchain District, a Center of Excellence for Blockchain, in Telangana. An incubator for technology and process development with infrastructure and facilities to foster growth of Indian Blockchain start-ups and companies.

In a multi planetary machine society, where selfactualization covers machine consciousnesstoo, a Decentralized Autonomous organization run on Blockchain will fulfil the needs. Currently security risks involved in Blockchain are not on its own accord but owing to susceptibility of infrastructure like servers, network elementsthat support Blockchain applicationsto Distributed Denial of Service (DDoS) attacks. Most of thisinfrastructure is centralized in nature which make it vulnerable to DDoS that aim to bring down centralized infrastructure through attacksfrom multiple vectors. Blockchain in contrast promotes decentralized infrastructure. If one point is attacked and brought down, the other points contribute to continuity of services", Rajesh Dhuddu, Global practice leader- Blockchain, Tech Mahindra shares his views on Blockchain disruptionsin an interview with FTCIO

What made Blockchain the go-to potential technology for digital transformation in India?

Offline businesses, especially in an unconnected world, require intermediaries for transaction completeness and trust. These intermediaries over the years have assumed uncontrolled power and perpetuated corruption and opaqueness in transactions and processes like land registration in most countries.

Specific to Government to Citizen (G2C) services, there is a growing trust deficit on account of corruption. Earlier, the IT adopted by Government to stymie and eliminate corruption from manual processes, is now being used to aid corruption. Hence, there is a need for updated, upgraded technology that can pre-empt corruption.

Blockchain, with its key features such as Secure Hash Algorithms, Consensus based decision making, immutable transactions and distributed ledgers, serves as a panacea for growing trust deficit not only in G2C services but also in overall business world. Sectors such as financial services, agriculture, healthcare, real estate and utilities—all crucial for an emerging economy like India—can thus draw tremendous benefits from the application of this technology.

A highly secure infrastructure can be built for digital land records, asset records, bank ATM chains, telecom networks, healthcare systems, insurance claims, KYC using Blockchain.

How Tech Mahindra is driving the Blockchain change?

At Tech Mahindra, we use a framework called Block Ecosystem that comprises of various levers; Block Studio, Block Engage, Block Talks, Block Geeks, Block Accelerate, Block Access & Block Value, which create industry leading applications that are architected on innovation and human excellence to unlock significant value for all stake holders.

We participate in both Public & Private Blockchain areas. In case of Public Blockchains which are relevant to G2C services, large scale Peer to Peer collaborations that mimic MMOG (massively multiple online groups) which are geographically widespread, we are building a new Blockchain protocol called Eleven01/ 1101. The 1101 protocol adds to Made in India.

Specific to Private Blockchain which is relevant to enterprises, we leverage Blockchain to empower our customers drive digital transformation by providing an exceptional experience to their end customers and fulfill the unaddressed needs. We do this through a combination of platforms, system Integration and professional services

Our implementations have helped our clients by providing 'Expected Time of Arrival' with clockwork precision for supply chain orders, enabling access to on demand critical reports that establish regulatory compliance in case of cross border money remittances. The system ensures parts provenance and visibility in supply chains, managing collections in completely opaque downstream lending activities, and empowering several hundred million retail telecom customers to manage their consent and preferences in an immutable fashion to avoid spam calls and text.

How Blockchain fosters a secured environment for data mutation and streamline processes?

Today because of the centralized nature of data transmission networks which is internet at large, a person who creates data has no visibility of how that data is transmitted both upstream and downstream leading to violation of data ownership and data integrity? Individuals are forced to give away Personally Identifiable Information (PII) comprising Date of Birth, Bank / Credit Card Details, Health information, etc. to interact digitally. In essence, a trusted identity layer is missing. This can be addressed by Blockchain as its records information, transactions ensure point-to-point tracking of information from source to completion.

Being a decentralised system, it makes transactions transparent and works by consensus among different participating entities, & actors. No single individual can control the network and any state changes to the Blockchain network are indicated to all the participants. This information cannot be concealed. Thus, the system detects any unauthorized access to data or any illegal activity which may result in loss of data integrity. In fact, there is a significant thrust towards public utility approach to make information and digital identities secure through Self Sovereign Identities (SSI). Sovrin Network empowered by Blockchain is one such good example.

Blockchain is one of the proposed technologies that will drive the world into the fourth industrial revolution, was at first seen as a direct conflict with the age-old banking system; cryptocurrencies posing the biggest threat. What are the security risks associated while leveraging Blockchain?

Blockchain may dis-intermediate Banks in areas of payments and currency applications. However, a number of banks globally are internalizing Blockchain to accomplish benefits like reduce documentation costs, minimize or eliminate reconciliation. collaborate with other banks in the areas of Trade Finance, reduce settlement time between different payments systems, share information pertaining to borrowers to reduce bad debts, and reduce time and costs involved in money remittances. Currently security risks involved in Blockchain are not on its own accord but owing to susceptibility of infrastructure like servers, network elements that support Blockchain applications to Distributed Denial of Service (DDoS) attacks. Most of this infrastructure is centralized in nature which make it vulnerable to DDoS that aim to bring down centralized infrastructure through attacks from multiple vectors. Blockchain in contrast promotes decentralized infrastructure. If one point is attacked and brought down, the other points contribute to continuity of services

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