

Role of Block chain Technology in Automobile Industry

Block chain technology, especially in regards to new currencies, has been a hot topic for a long time now. However, with the ability to grow continuously, it is not only limited to just crypto-currencies but has also reached many other sectors too, including the automotive industry.

Automobile companies have uniformly adopted ground-breaking technology to deal with challenges and resolve issues in areas such as manufacturing, logistics, marketing, customer support, supply chain, etc. The automotive industry, intending to achieve its objective of persistent growth, tends to keep track of the rapid advancements and is one of the most active sectors interested in attaining benefits from the advanced technologies, like block chain or others.

By 2025, around 10-15% of connected vehicles are predicted to be on block chain technology.

How Block chain Profits the Automobile Sector?

As block chains are transparent, they enable secure and reliable communications and digital payments amid connected vehicles or vehicles and infrastructures. They are also known for eliminating the risks related to the loss of crucial data over networks. Assuredly, block chains in the automotive industry have gained a lot of momentum. Here are some recent block chain developments in association with autonomous vehicles.

1. Multi-Modal Transport

Block chain technology appears helpful in solving core mobility issues, like sharing of vehicle ownership and integration of multiple mobility stakeholders that can be consumers, transport providers, city and infrastructure providers, OEMs (original equipment manufacturers), etc. A block chain-based mobility platform facilitates the effective usage-based payment system that makes the transactions get automatically settled between vehicle owners, operators, and third parties. The platform also provides access to multiple on-demand mobility solutions.

2. Peer-to-Peer (P2P) Sharing Economy

Block chain-based transportation platform empowers the autonomous vehicles to find out not just each other but also the service providers and the clients around them. Using the peer-to-peer approach, the companies can help the customers to rent their vehicles to others. The technology facilitates the authenticated riders to discover accessible vehicles via mobile apps. Entire data used in this process gets stored in a decentralized manner to ensure that the apps can charge the precise amount while keeping the transaction secure.

3. Smart Contracts

Powered by block chain technology, the new contract-based transactions system assures that every recorded digital transaction can be verified whenever required, even in the future. Block chain-based smart contracts have enabled companies to set up battery charging stations for electric cars.

4. Digital Payments

Block chain technology bestows autonomous vehicles with an ability to make automatic and secure digital payments for tolls, electric vehicle charging, parking, car sharing, and in-vehicle services.

Undoubtedly, all famous crypto currencies from Bit coin to Lit coin, Ethereum, Ripple, and others rely upon block chain technology.

5. Security & Privacy

As the number of vehicles in the automobile industry is growing at a rapid pace, the potential security vulnerabilities are also increasing. In this instance, the block chain-based security systems that let the users transmit messages securely can safeguard the connected and autonomous vehicles from privacy breaches and cyber-attacks.

6. Streamlined Supply Chains

Consisting of numerous sorts of parts, suppliers, distributors, dealers, regulatory agencies, and insurance companies, the automobile supply chain is incredibly



complex and quite arduous to manage. Trusted suppliers need to be selected, checked, and verified for quality, consistency, quality, and reliability. The blockchain that has enabled the development of secure digital data recording products is significantly useful in streamlining supply chain processes.

Block chain technology is an innovative source that has opened up a world of profitable opportunities for the automotive sector. It is not all, there is a lot more that this day-after-day progressive technology will provide to the automotive industry for its self-driving future.