















simulated virtually leading to the integration of physical processes and enables automation thereby increasing the efficiency of tracking through end to end the transportation of the supply chain resulting in agile cooperation network. In this process, if there are any negative effects on the products, a contractual penalty will be triggered automatically to all the members in the chain.

## **5. Conclusions**

The application of blockchain technology is not limited to cryptocurrencies (finance), supply chain activities are among the ones most likely that the blockchain technology is going to transform. The issues faced by the traditional supply chain management can be counted by the use of blockchain technology because of its speed, transparency, immutability and effective measurement of outcomes and performance. From the case studies, it is evident that the highest impact by the implementation of blockchain technology will be the food industry. The salmonella outbreak in Walmart is a good illustrative to explain the effect of blockchain in the food industry. Looking at the case studies and the scandals related to food and automotive industries, it is clear that, blockchain would have helped in avoiding or at least mitigating the impact, by making the supply chain more transparent and trustworthy. It also has a potential of making the entire chain to be more responsive. Blockchain technology in its initial stage is starting to change the way business is done and if it delivers on its promise of supply-chain transparency and traceability, it will be a great tool to help ensure that industries are doing the right thing. Traceability of goods moving across the supply chain is certainly one of the most important use cases for blockchain. Implementing Blockchain can dramatically reduce time delays, costs and mainly the human error. Apart from this, it can enhance transparency, can give greater scalability and provide better security. Blockchain can also help in achieving robust cybersecurity measure which in turn improves the trust and security at the same time, addressing concerns regarding global supply chain which consumes more time and resource to realize the full potential of the blockchain.

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