

RESUMEN

En el mundo actual tanto empresas como consumidores deben garantizar la procedencia de cada producto para evitar posibles fraudes y garantizar que la distribución se realice de manera confiable. La tecnología Blockchain aplicada a la cadena de suministros es una opción tecnológica que permite tener mayor transparencia y descentralización de los datos, lo cual coadyuva a la colaboración entre las partes involucradas y por ende generar mayor confianza al eliminar al grupo intermediario. El presente proyecto, busca implementar la tecnología Blockchain en la cadena de suministro de una empresa textil. Con la finalidad de poder mejorar la trazabilidad de productos desde su punto de elaboración hasta el consumidor final. La implementación de Blockchain en la empresa busca controlar de manera eficiente cada proceso de manufactura a lo largo de la cadena de suministro. Blockchain permite que los diversos actores que se encuentren siendo parte de la red del sistema puedan interactuar de forma dinámica, es decir, que puedan conocer a cada paso como el producto ha ido cambiando de custodio hasta llegar a su destino, esto favorece a que la confianza entre los diferentes participantes aumente. Finalmente, esta tecnología permite asegurar la integridad e inmutabilidad de los datos mediante la utilización de cadenas de bloques que se crean conforme se interactúa con cada participante de la red.

Palabras Clave: cadena de suministro, trazabilidad, blockchain, chaincode, smart contract.

ABSTRACT

Nowadays, both companies and consumers must guarantee the origin of each product, in order to avoid possible fraud and that distribution is carried out reliably. Blockchain technology applied to the supply chain is a technological option that allows greater transparency and decentralization of data, which contributes to mutual collaboration between the parties involved and therefore generates greater trust by eliminating the intermediary group. This project seeks to implement Blockchain technology within the supply chain in a textile company. In order to be able to improve the traceability of products from their point of manufacture to the final consumer. The implementation of Blockchain within the company seeks to efficiently control each manufacturing process throughout the supply chain. Blockchain allow the various actors that are part of the system network to interact dynamically, that is, they can know at each step how the product has been changing custodian until it reaches its destination, this favors the trust between the different participants increases. Finally, this technology ensures the integrity and immutability of the data using blockchains that are created as each participant in the network interacts. Blockchain allow the various actors that are part of the system network to interact dynamically, that is, they can know at each step how the product has been changing custodian until it reaches its destination, this favors the trust between the different participants increases. Finally, this technology ensures the integrity and immutability of the data through the use of blockchains that are created as each participant in the network interacts. Blockchain will allow the various actors that are part of the system network to interact dynamically, that is, they can know at each step how the product has been changing custodian until it reaches its destination, this favors the trust between the different participants increases. Finally, this technology will ensure the integrity and immutability of the data through the use of blockchains that are created as each participant in the network interacts.

Keywords: supply chain, traceability, blockchain, chaincode, smart contract.