RFID and Blockchain Are Changing Supply Chains

Blockchain is the technology best-known for powering cryptocurrencies, used to make safe and secure transactions from one person to another. Rather than having to rely on a third party such as a bank to make such transfers, this offers a trusted and cheaper method to do so. Now, blockchain technology is being incorporated into other industries, such has been its success and popularity. In the logistics sector, blockchain and RFID concepts are being developed together to improve various areas of the industry.

Use of a Single Ledger

AP Moller-Maersk and IBM began working on a joint venture at the start of 2018 to improve the safety and efficiency of supply chains through using blockchain technology. Already the platform has gained interest from multinational companies, such as General Motors, such is its promise.

The idea is to form an unchangeable record of transactions throughout a supply chain that can be shared with all companies involved along the way. Through blockchain technology, the distributed ledger technology would allow information about each transaction across the process to be viewed and not changed. This could highlight where any issues are and help businesses involved make changes to improve efficiencies.

Pallet and Parcel Deliveries

RFID tags are being incorporated into supply chains and delivery processes as well. One vision is for pallets to have an RFID tag attached to them, which are used to communicate their need to get from one place to another by a certain time.

Carriers which best meet a shipper's price and service requirements will be awarded the business. Blockchain technology will then continue to track the shipment. This can help to reduce factoring and delivery costs, while for the likes of food and pharmaceutical deliveries it improves traceability as well.

Logistics Sensors

In Germany, the Fraunhofer Institute for Photonic Microsystems (IPMS) is developing blockchain concepts alongside RFID sensor systems specifically for the logistics sector. Decentralized storage of data will be generated by RFID sensors, offering individual hardware and software solutions for a wide range of clients based on their specific requirements.

The passive RFID sensor transponders will measure physical data, such as humidity, vibration and temperature, for deliveries when they are in transit. This information will then be transmitted wirelessly to a reader that provides the energy, presumably so it ca adapt where necessary. It is hoped that such developments will help to automate and speed up deliveries, reduce errors and costs, and make deliveries more efficient overall.

The Wider Effect

Should RFID and blockchain technologies successfully work together and improve cost efficiencies in the logistics industry, then they could lead to better performance from individual companies on the stock market. For traders and investors, this may be a good area to investigate.

If blockchain improves, forex traders could be affected, and some brokers have already introduced cryptocurrencies to their

roster, so they can be traded in the same way as forex. Forex demo trading accounts are a good tool to use for any beginners interested in practicing cryptocurrency trading first.

RFID and blockchain technologies are only just beginning to work together, but they could have a positive impact on the logistics industry in the future.

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