Lack of Trust in Current System of Records - Supply Chain

Issue of trustworthiness in the supply chain industry and how blockchain can solve this problem.
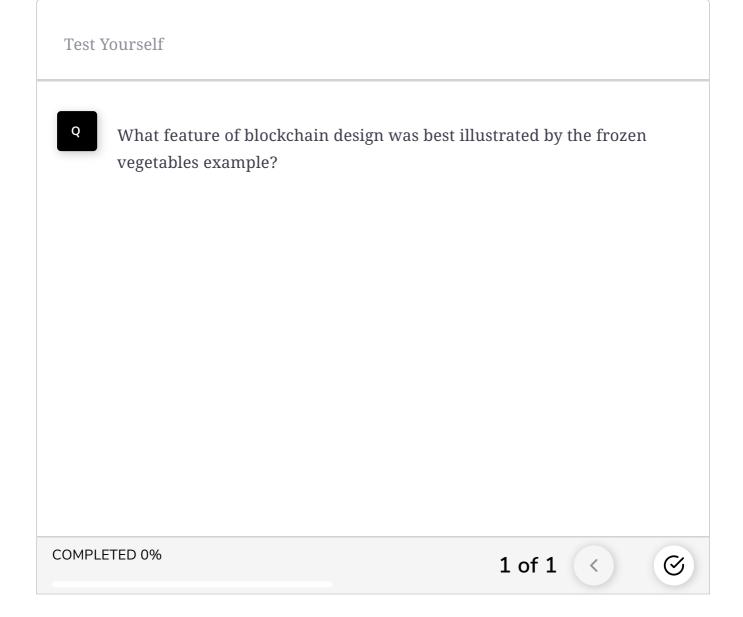
Lets take a very simple example without cryptocurrency.

Let's imagine you are going to buy a pack of frozen vegetables from your grocery store. Lets also imagine you are in a third-world-country where food regulations by a central authority are weak. How well do you trust that the pack of vegetables has been kept in the required temperature range from the time it was cut and preserved to today? You ensure you are buying from a big, well-reputed grocery store. You ensure that the vegetable pack comes from a good trusted brand. But do you fully trust any of this, given there are numerous instances where big companies like Nestle have screwed this up?

Would you trust them if they simply showed you a record of temperature readings in their 'own database' to show that the temperature guideline has been met? Would you trust the database admin, the IT team, the maintainers of the data?

Lets imagine another scenario. The vegetables are cut and packaged and a record is added on the blockchain and written on hundreds of peers. Once that package is stored an IoT device repeatedly logs the timestamped temperature entries on the blockchain(on distributed peers). When the item is shipped, the shipping container's are fitted with IoT logging the timestamped temperature readings on blockchain. At all points of the supply-chain data is read by sensors and put on blockchain - signed and timestamped.

Since you can access the data from blockchain for your vegetable pack and see that it has always remained in the safe zone you can feel safer. You can trust the data coming out of blockchain, without needing a food regulation authority.

Q What feature of blockchain design was best illustrated by the frozen vegetables example?

In the next lesson, we will explain the different terminologies used so far.