

Blockchain in Logistics

Case Study: Tracking Diamonds on the Blockchain



Blockchain

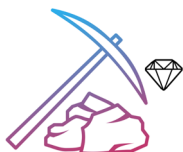
A distributed digital ledger upon which data can be recorded, secured and verified.



Smart Contracts

Self-executing contracts that automate the authentication and enforcement of exchange conditions.

NON-BLOCKCHAIN



Extraction

Diamonds are extracted in order to be cut and polished. Origin is established via paper certification, which is prone to being forged.



Shipping

Diamonds are packaged for shipment but buyers are unable to keep track beyond proof of package.



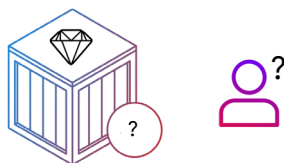
Manual Sorting

Multiple diamonds require manual sign-off from different vendors. If forms and sign-offs are submitted late, diamonds could be delayed.



Status

Once the diamonds arrive further checks are required before drivers can depart. This information is relayed via third party applications.



Shipped - Delayed?

Shipments arrive delayed and incomplete. Lack of transparency leaves customers dissatisfied!



Extraction

Authentication of provenance is established concurrently with mining, stored on a distributed ledger at the point of origin that cannot be modified.



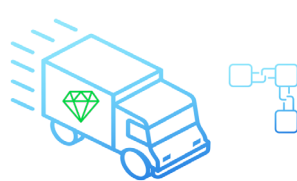
Shipping

Diamond information can be pre-entered onto the blockchain from any location, creating a digital twin in a secure vault that can be accessed by shippers and carriers.



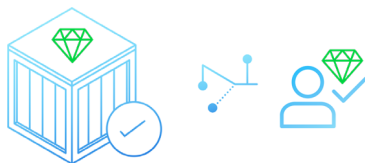
Digital Sorting

Each diamond is registered on a shared decentralized database, individually registered and assigned to their destination, allowing for efficient sorting and preventing delays.



Status

Form submitted and smart contract is executed, diamonds are on their way and trackable by everyone involved. Full transparency in the delivery process.



Shipped - On Time!

Package arrives at destination and buyer signs off electronically, verifying proof of delivery. Customer is satisfied thanks to end-to-end visibility.