

Counterfeit Product Identification using Blockchain

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Introduction



- Virgin olive oil, generic medicines, 100% authentic automobile parts!!!! No compromise on quality!!!
- We sure have heard these terms on various products assuring the quality.
- How do we trust them that they supply the best quality products to us?



FAKE FAKE FAKE!!

- How do we identify if the product is fake?
- There are a lot of ways in a single product can be tested by the end consumer for its authenticity by scientific ways and other stuff.
- In case of medicines and cosmetics, a consumer would never want a fake product which poses a risk to its health and sometimes even its life!
- The Company/Manufacturer can assure the consumer of its authenticity through digital means.



Our Vision

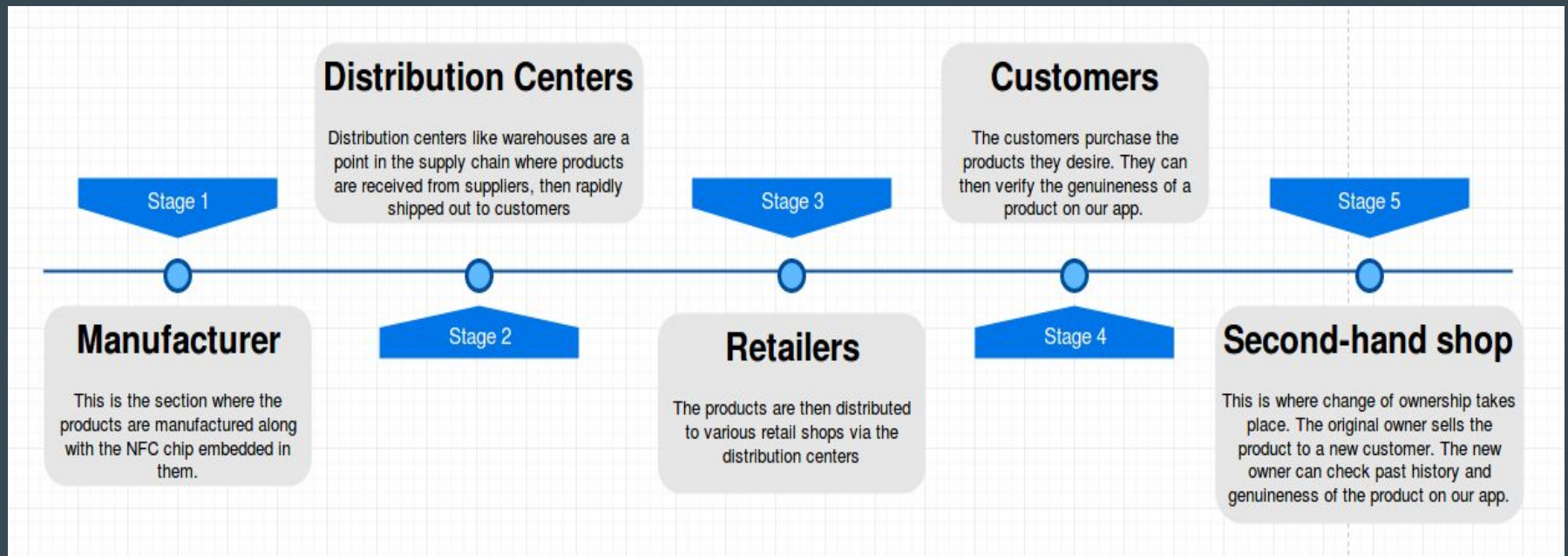
- To create a system where the original products are identified using QR codes that contains information processed in a blockchain from each step of the process
- To eradicate the billion dollar industry of counterfeit products and medicines, and minimize the losses incurred to the reputed companies.



Why Blockchain?

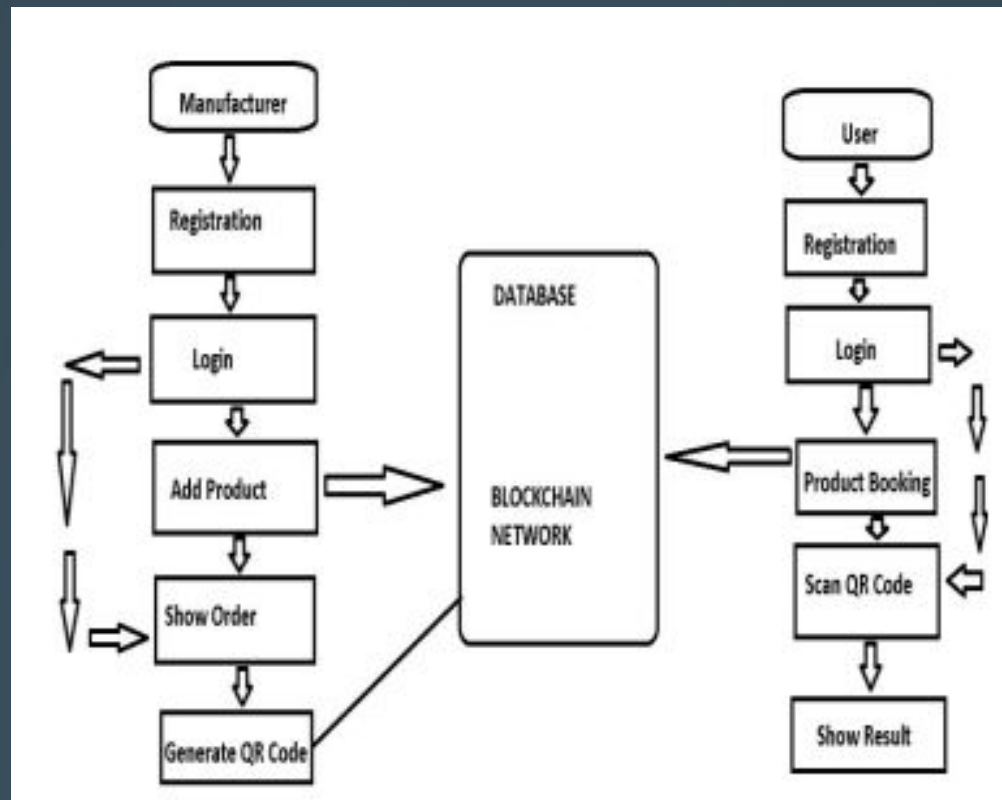
- Blockchain has an immutable way to track data changes over time.
- As the data size is too huge, a decentralised system of nodes to eliminate tampering
- Transparent nature of the Blockchain helps avoid parallel trade.
- Using Blockchain, authenticity can be checked and ownership of a product can be transferred *decades* from now, even if the product is discontinued.

How do we intend to do it?



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The proposed model for this system:





How do we intend to do it?

- We use the blockchain technology and the SHA-256 Algorithm which produces a unique hash number for every product manufactured.
- The QR code on the product can be scanned through a smartphone or a scanner which displays the details of the product at each and every step of processing
- This way, the original product can be tracked from any stage. And if the details don't match, we can conclude that the product is a counterfeit.



**THANK
YOU!**