Luxury meets Blockchain

Traceability and anti-counterfeiting in the supply chain

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#ALPINEHACK19
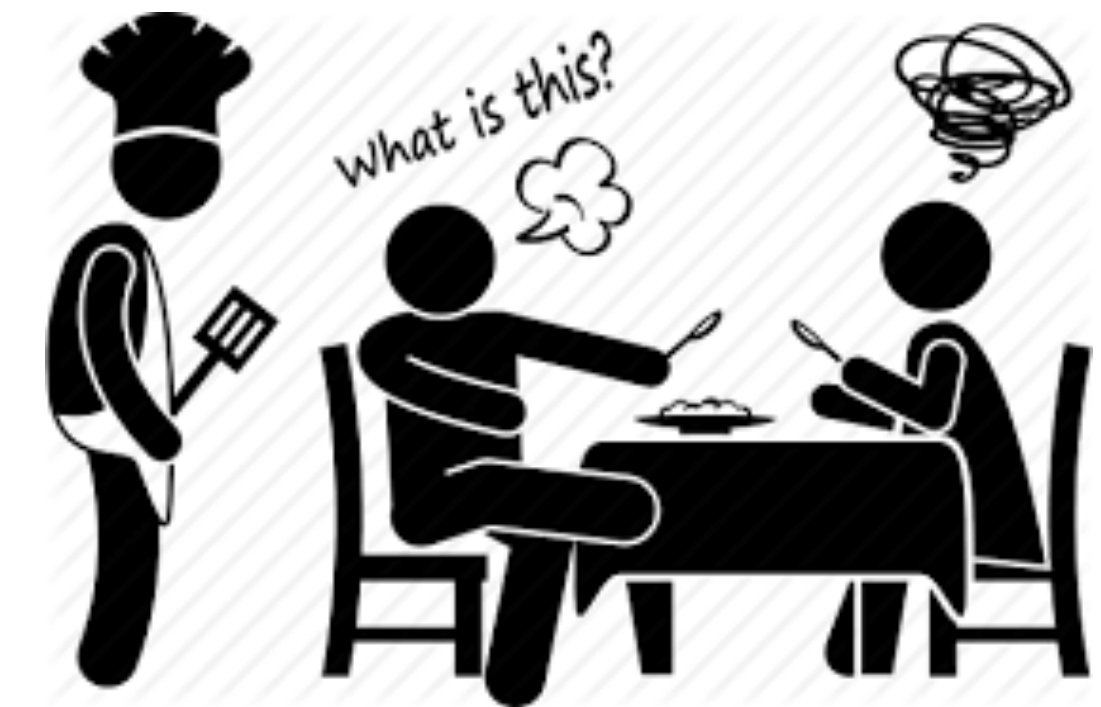
Customer - Facing fake products

Which one is real and which one is fake?

It's too hard.
I don't know!

When you think you bought a real one, and your girlfriend found it is a fake one!

Luxury Manufacturers - Facing fake products

Lost approximately $30 billon in revenues annually due to counterfeits

Damage in the brand image

Customer insatisfaction

•Counterfeit goods overflow

•Difficult to verify original products

•Ineffective paper work and often with errors

•Mutable and invalid source

Problem In Traditional System

Existing Luxury Supply Chain Solutions

| Solutions	Transparency of Data	Logistics Management Efficiency	Track & Trace	Digital Services	Technical maturity	Cost	Compatibility
Traditional Logistics Industry	✘	✘	✓	✘	High	Low	High
Scantrust	✓	✘	✓	✓	Low	High	Low
Vechain	✓	✓	✓	✓	Low	High	Low
LUXCHAIN	✓	✘	✘	✓	Low	High	Low

•<u>Manufacturer</u> - create a distributed ledger supports supply chain with real-time tracking, we cannot only locate the goods but also know what condition they are in.

•<u>Customer</u> - make sure the purchases are original, know exactly where their goods came from.

Build an economical and efficient solution based on blockchain technologies

Our objectives

What is LMB?
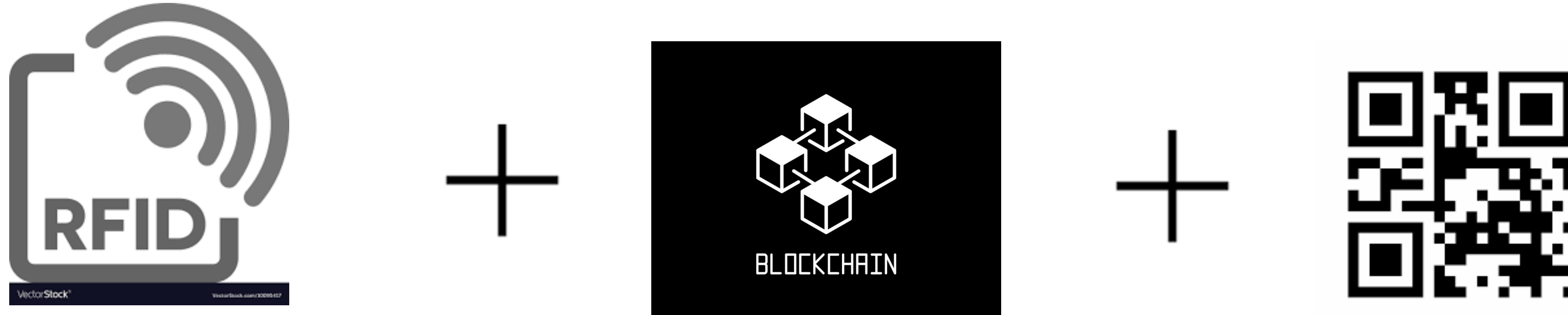
1. Digitalise Your Physical Products

Associate RFID tags with product ID information build in the product and provides QR codes that can be printed on the packaging of individual product offerings.Then, a digital 'identity' is created for each of your products.

2. Set Up Track & Trace

When scans of a product are made by RFID scanner, information could be used to track the product on each stage.

## 3. Secure and Prove Transparency of Your Supply Chain Data

Provide security service to your supply chain data by storing it on the blockchain.

4.Secure and anti-counterfeiting transaction

The buyer makes sure the product is original through identifying the authenticity of a product without the need of identification from expert.
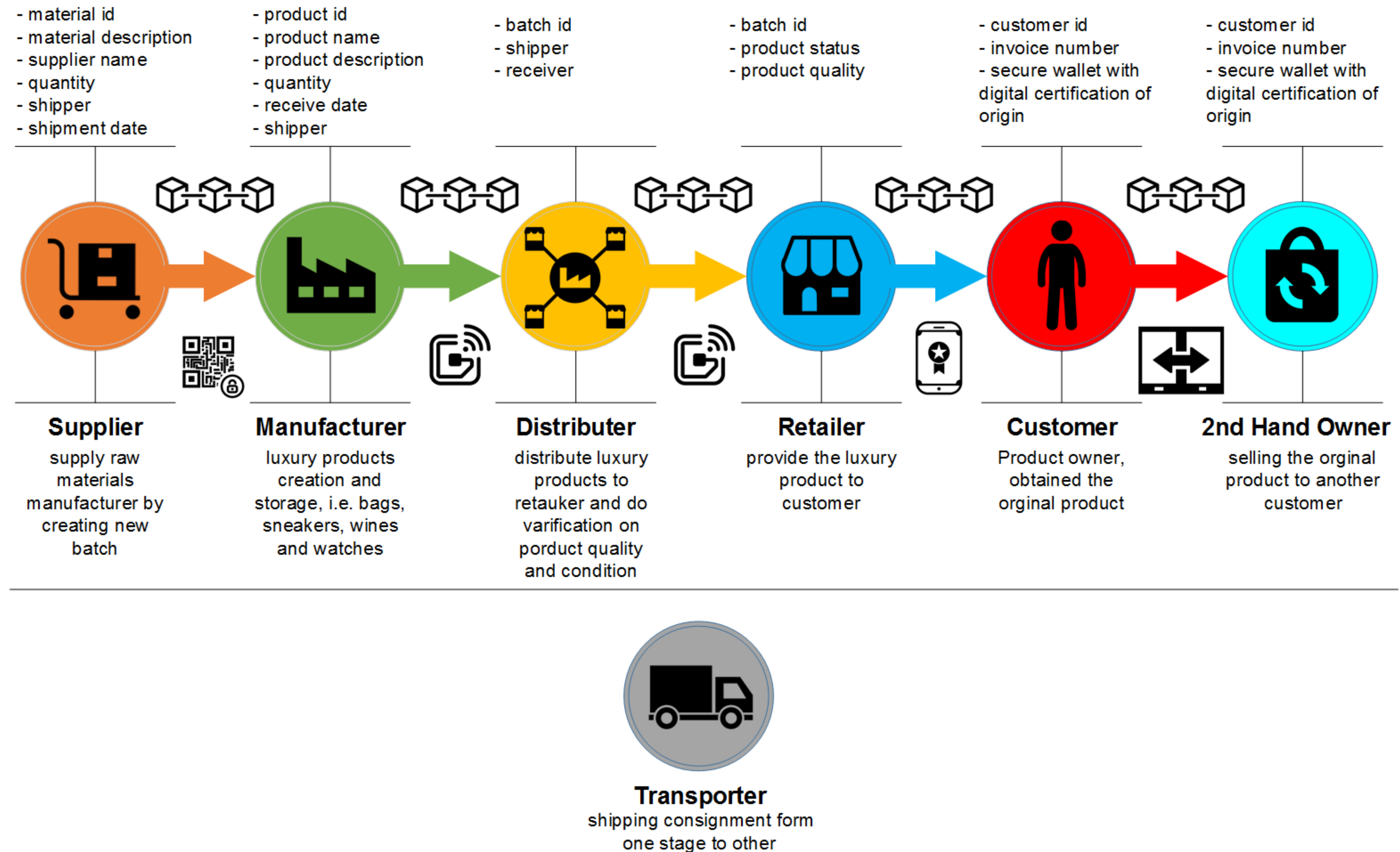
How to Check If A Bag is Genuine
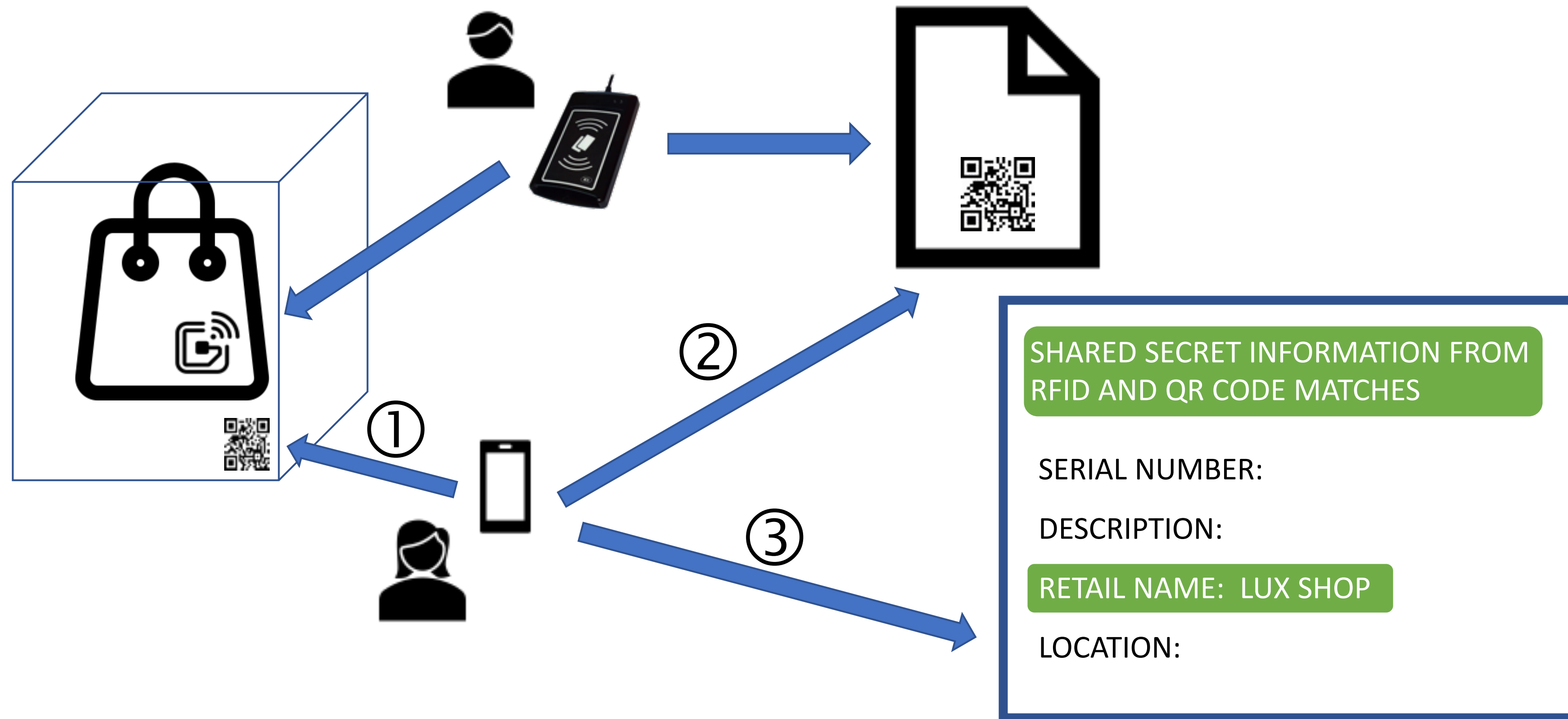
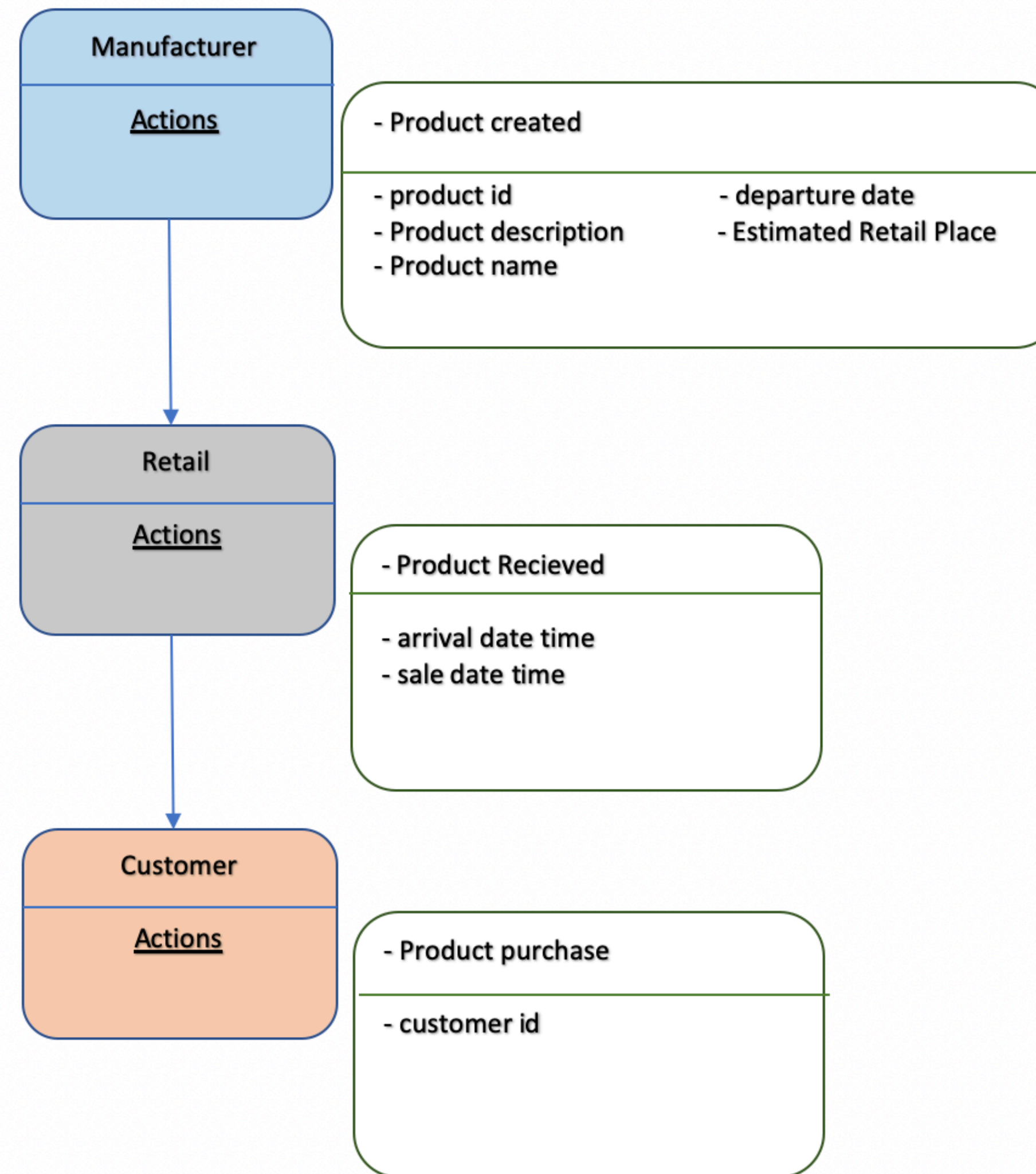# In Case A Malicious Person Makes A Perfect Copy

- Information in the blockchain will show that the product has already been sold.
- A copied product cannot be sold at the same price as that of a genuine product.
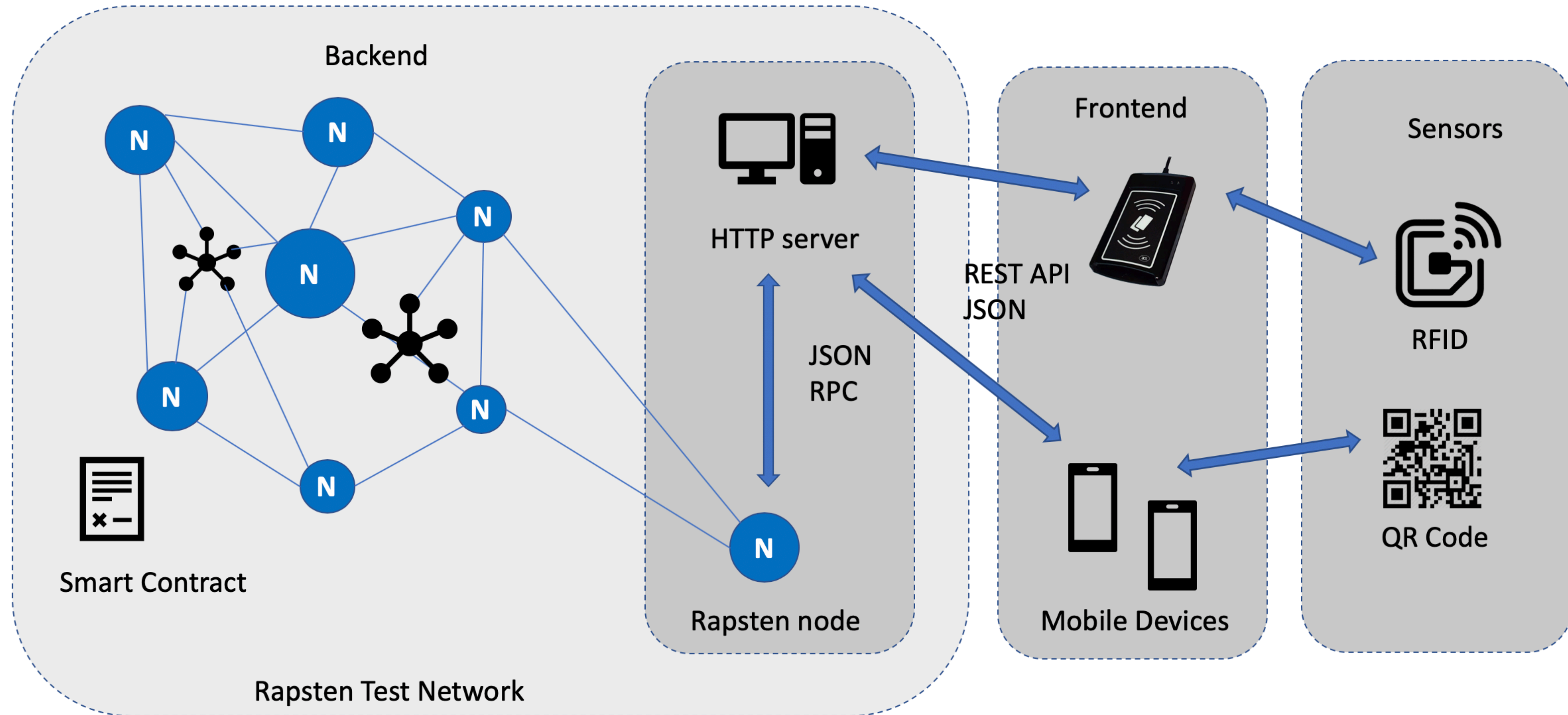
LMB Supply Chain Process

- material id
- material description
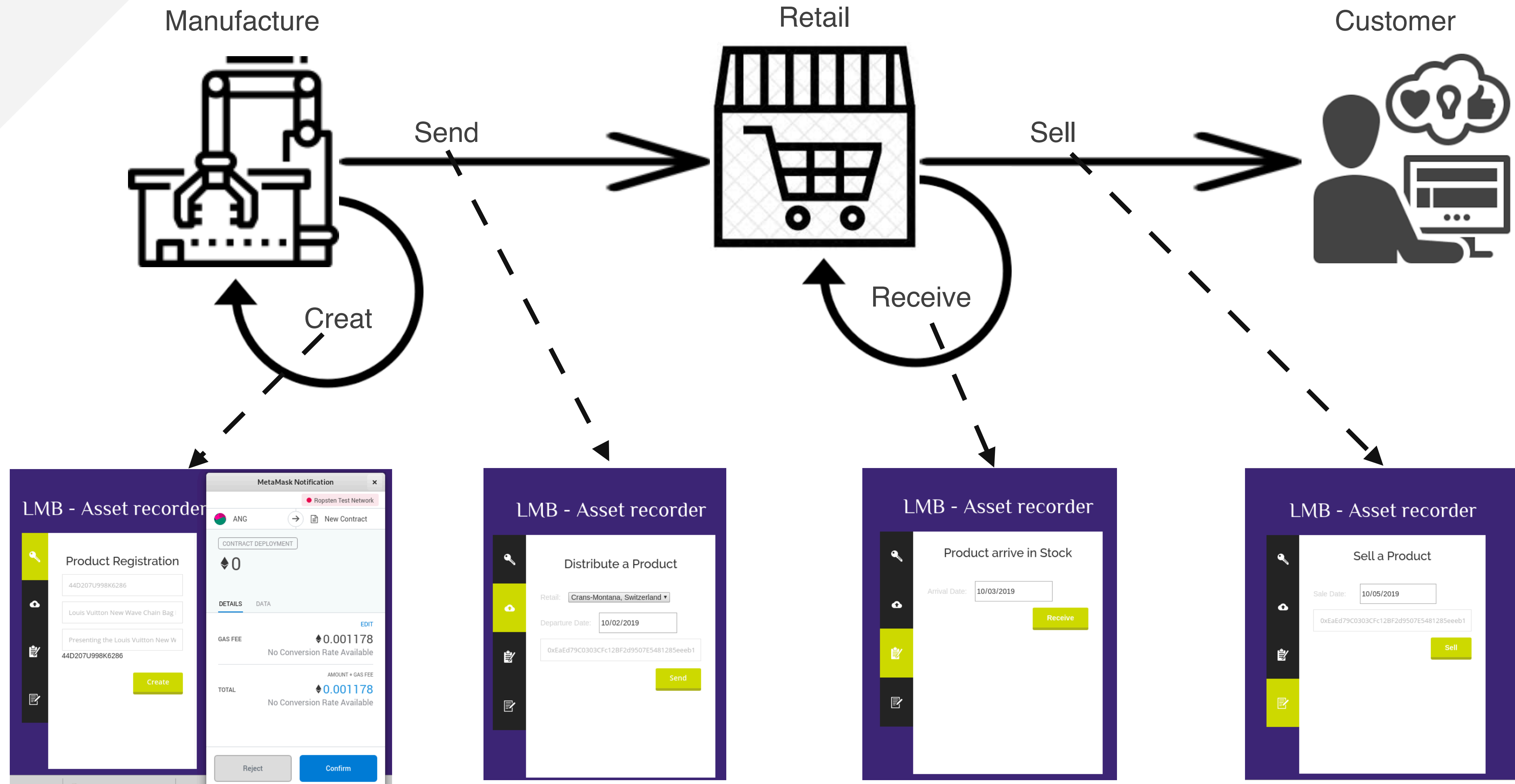- supplier name
- quantity
- shipper
- shipment date

- product id
- product name
- product description
- quantity
- receive date
- shipper

- batch id
- shipper
- receiver

- batch id
- product status
- product quality

- customer id
- invoice number
- secure wallet with digital certification of origin

- customer id
- invoice number
- secure wallet with digital certification of origin

Supplier

supply raw materials manufacturer by creating new batch

Manufacturer

luxury products creation and storage, i.e. bags, sneakers, wines and watches

Distributer

distribute luxury products to retauker and do varification on porduct quality and condition

Retailer

provide the luxury product to customer

Customer

Product owner, obtained the orginal product

2nd Hand Owner

selling the orginal product to another customer

Transporter

shipping consignment form one stage to other

LMB - Blockchain Registration

Manufacturer

Actions

- Product created

- product id   - departure date
- Product description   - Estimated Retail Place
- Product name

Retail

Actions

- Product Recieved

- arrival date time
- sale date time

Customer

Actions

- Product purchase

- customer id

Architecture

User Interfaces

User Interfaces

User Interfaces

Mobile App Interfaces

Luxury meets Blockchain

Blockchain powered luxury product authentication and services platform

focusing on traceability of supply chain and anti-counterfeit measures in the luxury industries

Luxury meets Blockchain

Home   Product Infomation

Product Information

Product Name

Louis Vuitton New Wave Chain Bag PM

Production Place

Paris, France

Production Date

05.2019

Production ID

44D207U998K6286

Production Description

Presenting the Louis Vuitton New Wave Chain Bag PM, a statement piece destined to become a fashionable wardrobe staple.

Estimated Retail Place

Plaza 66, Shanghai, China
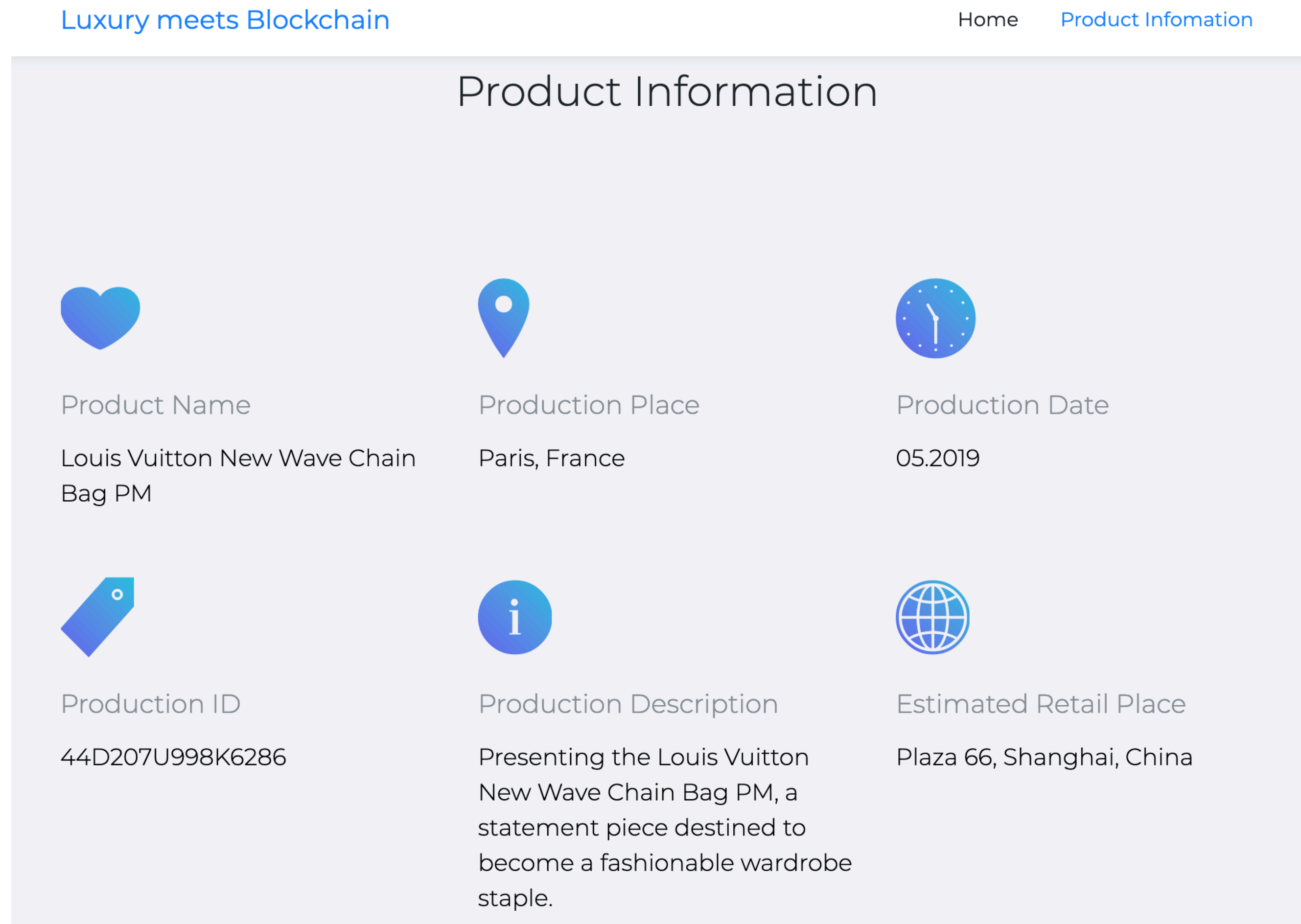
LMB: Make fraudulent more difficult and less profitable

Traditional Logistics Industry

LMB

Counterfeit profit

High

Low

Counterfeit difficulty

Low

High
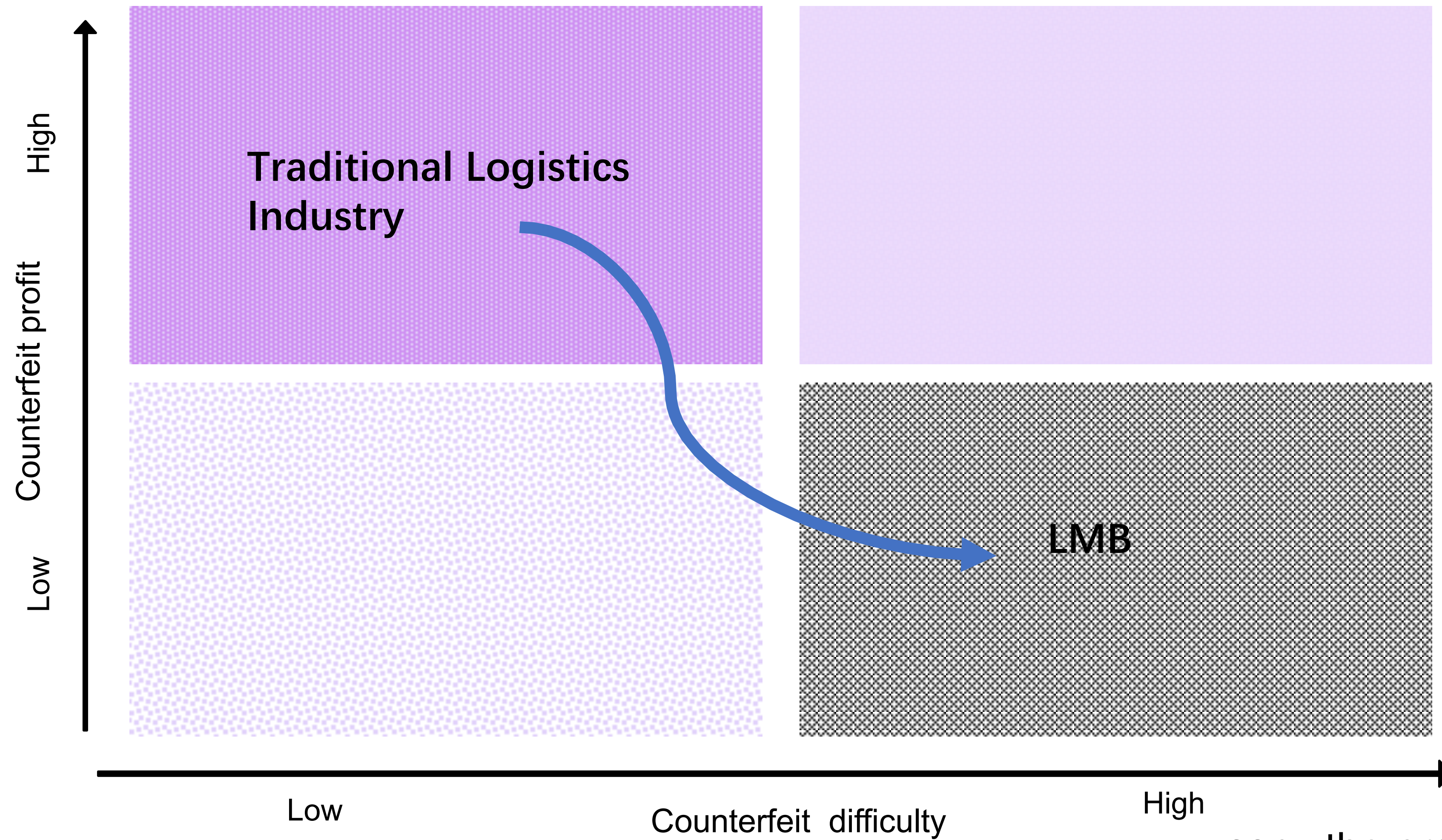
copy the <u>product</u>
copy the <u>RFID</u> perfectly
copy the <u>QR-Code</u>

Business Model

Key partners	Key Activities	Value Propositions	Customer Relationship	Customer Segments
etherscan	Service optimization	Traceability	Trust	Luxury company
Public Chain Providers	Data Mining and Application	Anti-counterfeiting	Partnership	Supply chain providers
RFID product and service providers	**Key Resources** Human resources Knowledge assets	an economical and efficient solution based on block chain technology for supply chain management	**Channels** Official Accounts Mobile App Company website	Insurance company

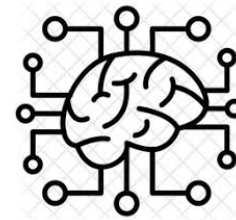| Cost Structure	Revenue Streams
Labor cost Market Development and Promotion Product development	Paid Services for System usage Paid Services for System Development

CONCLUSION

ADD VALUE

- Digitalize Your Physical Assets
- Set Up Track & Trace
- Secure and Prove Transparency of Your Supply Chain Data
- Secure and Anti-counterfeiting Transaction

TECHNOLOGY

- RFID+QR-Code+Blockchain
- Perceived usefulness
- Perceived ease-of-use

MARKET

- Luxury company
- Supply chain providers
- Insurance company