



# Blockchain asset transfer



# Outline

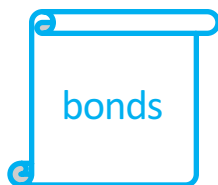
- What's involved?
- Who's involved?
- How do the participants work today?
- How could it be done using blockchain? Exploring roles of:
  - Participants
  - Assets
  - Transfers
- Why blockchain technology could be useful

# Automotive industry asset transfer

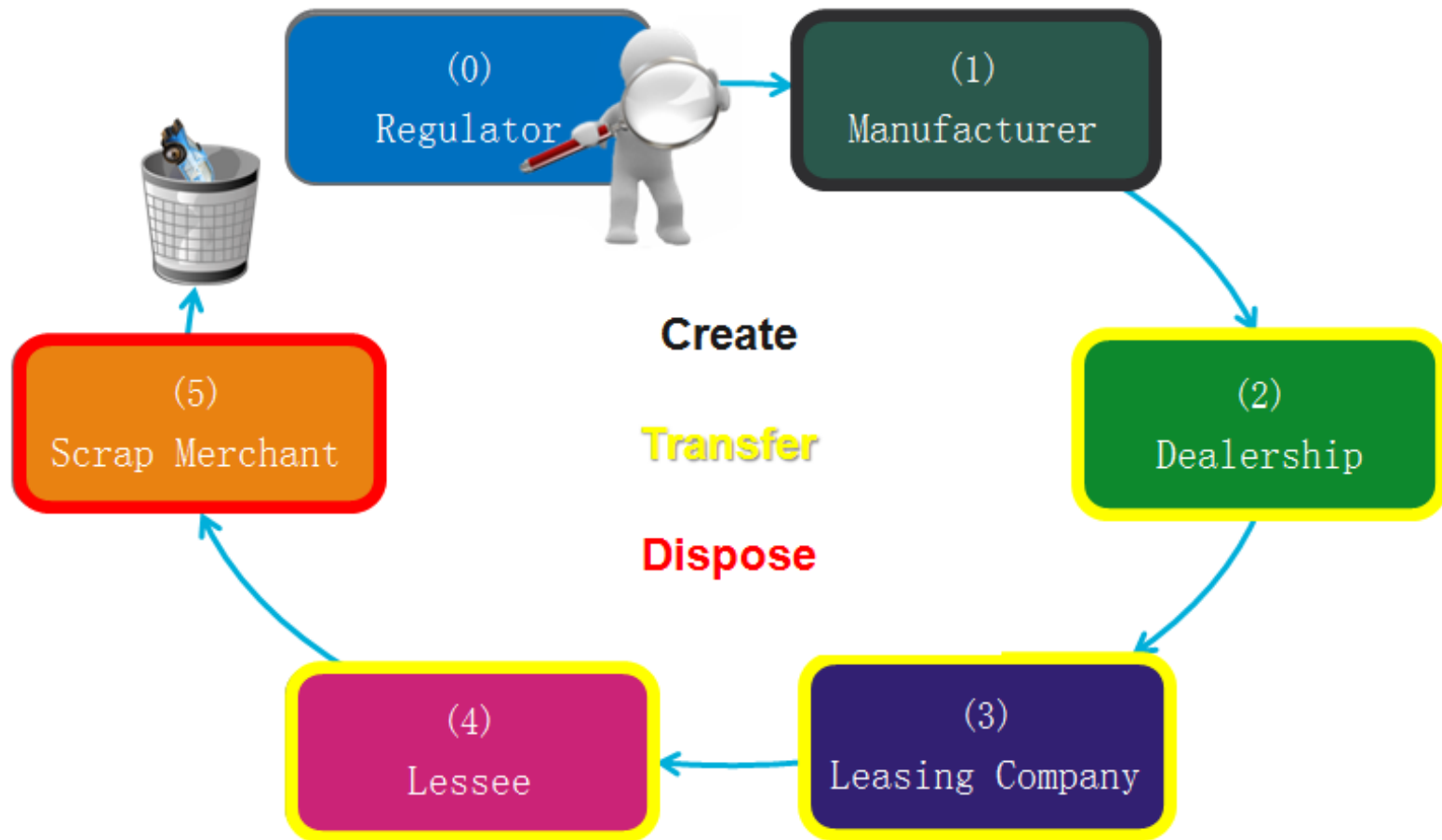
In the Blockchain Asset Transfer Demo, we will be transferring cars,



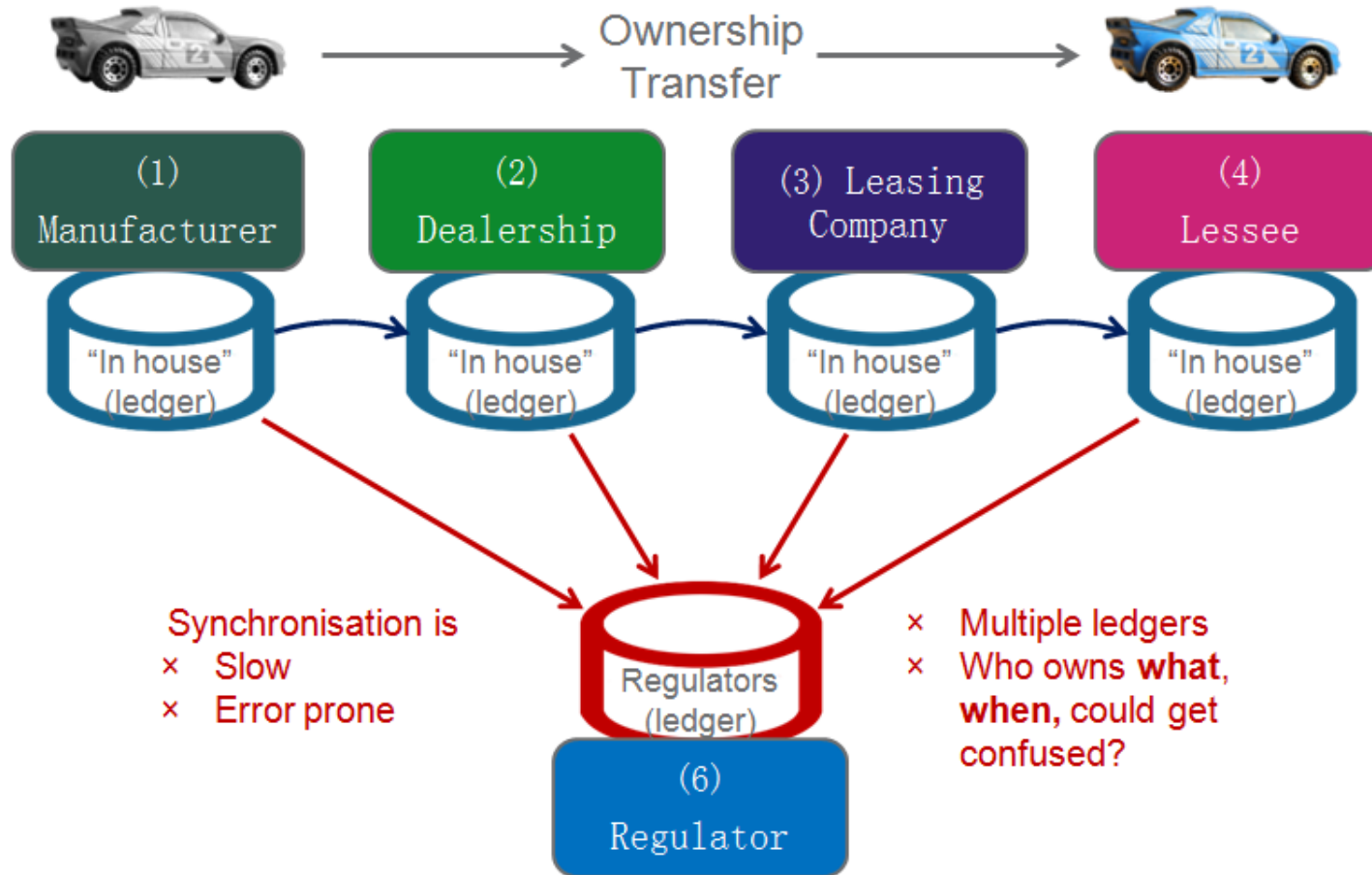
but we could transfer other commodities or instruments.



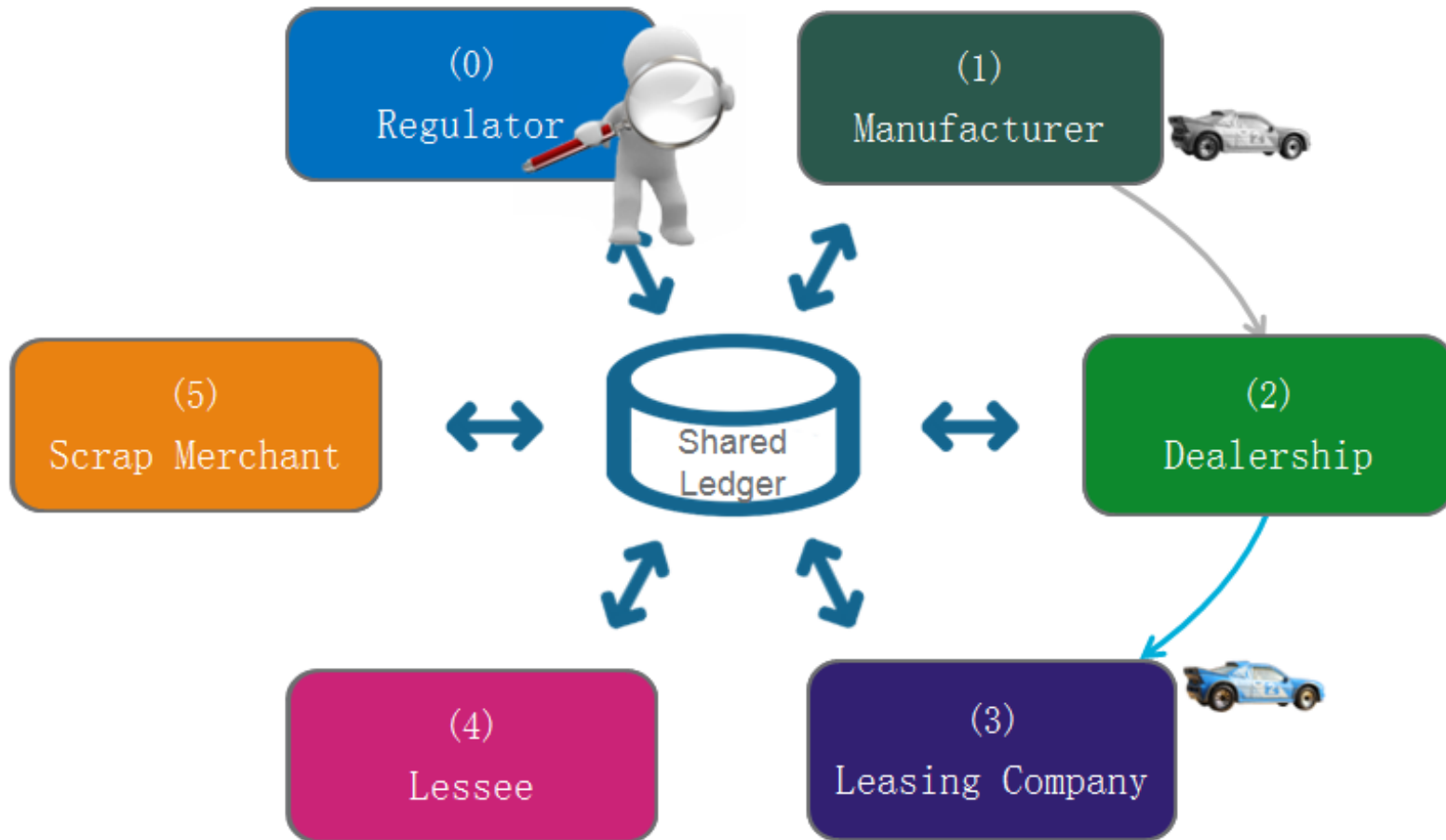
## Who's involved in asset transfer



# How do participants perform the same tasks now?

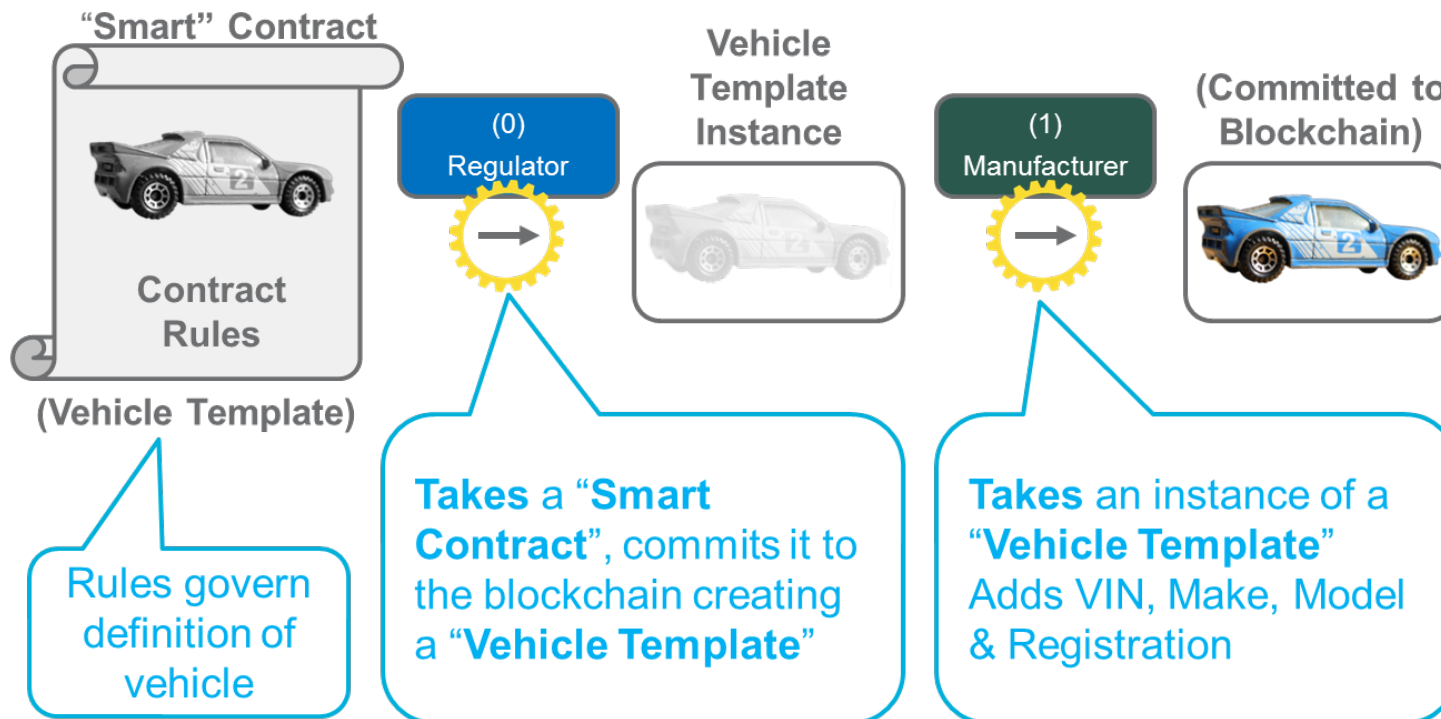


# How can the tasks be done using blockchain?



# Representing a car using blockchain technology

- Blockchain **smart contract** feature is used to define the **Vehicle Template**.
- The Regulator creates an instance of a **Vehicle Template** and commits it to the blockchain.



# Modeling a transfer using blockchain technology

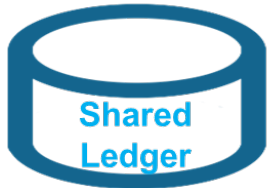
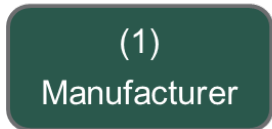
## Example: Manufacturer > Dealership



Vehicle A:

- ✓ Owned by Manufacturer
- ✓ Committed to the blockchain

TRANSFER

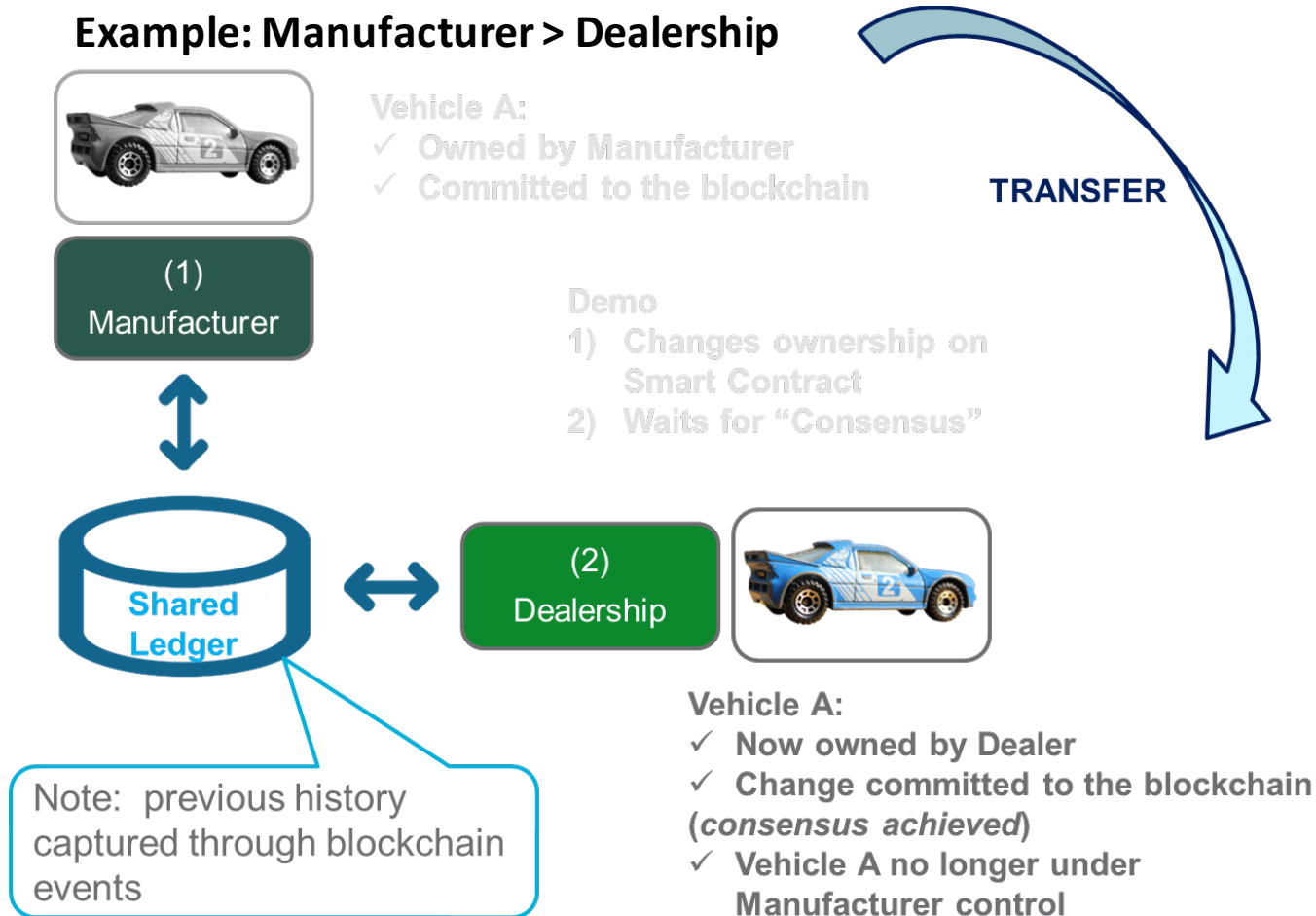




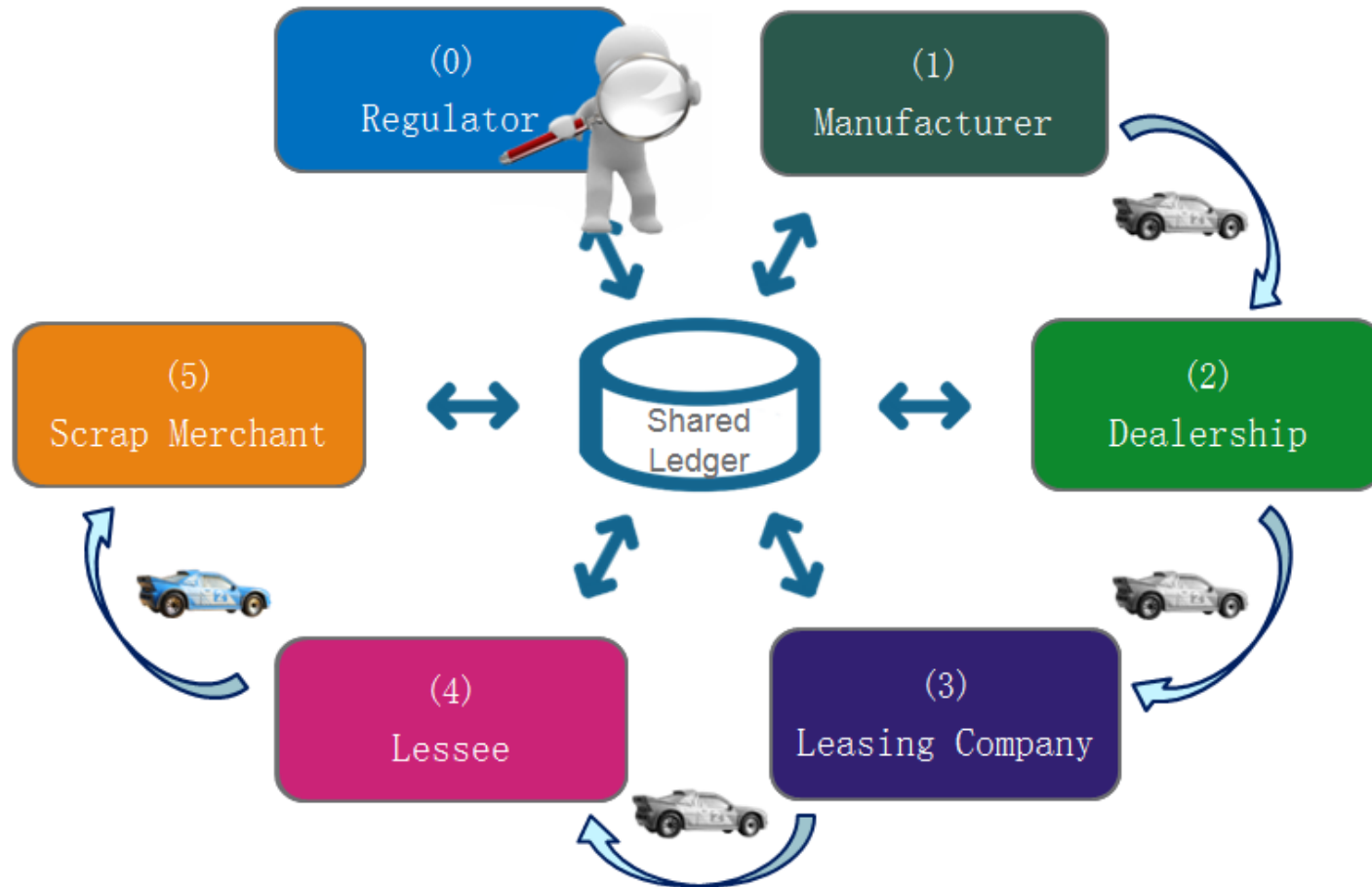
# Modeling a transfer using blockchain technology



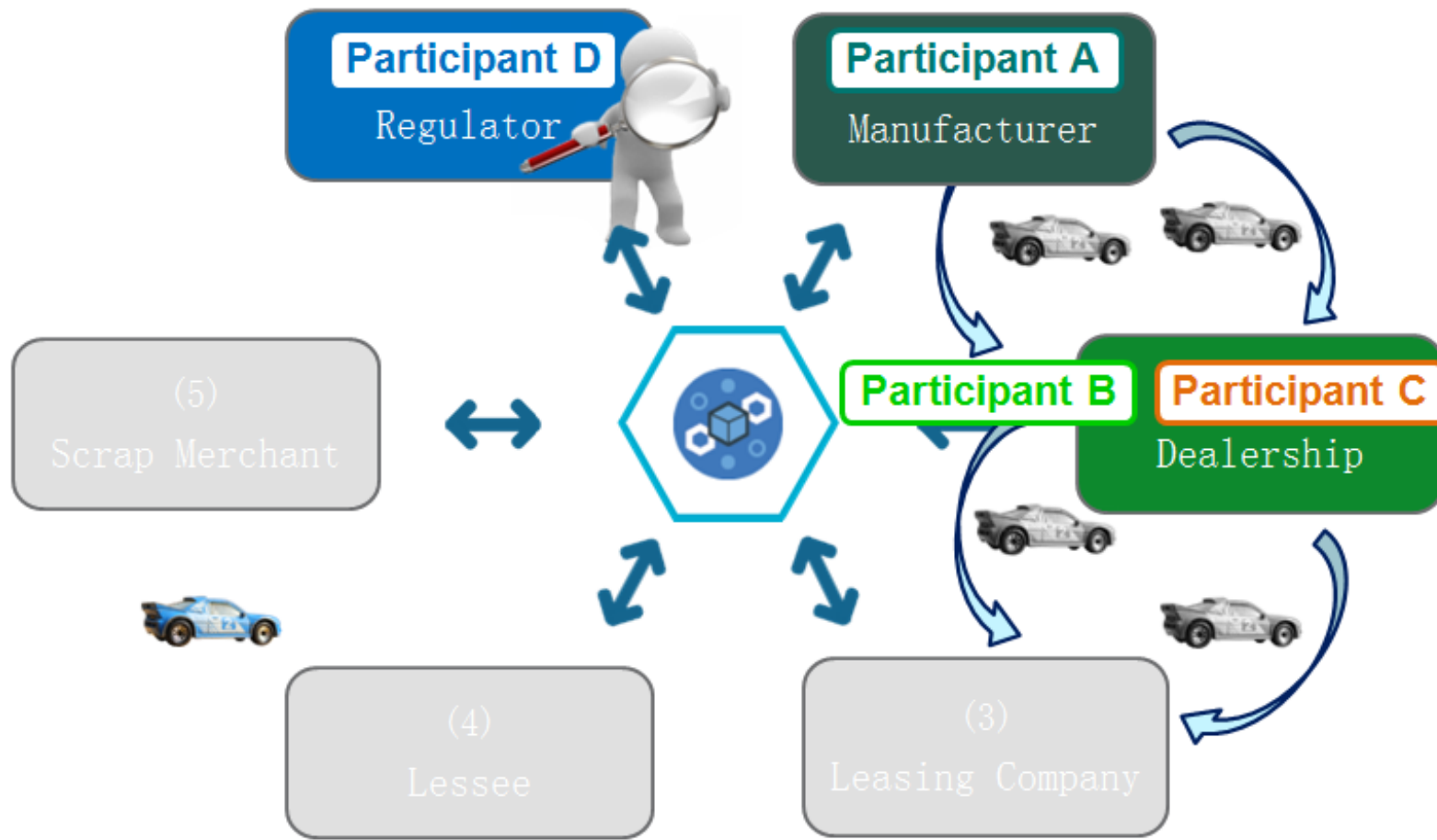
# Modeling a transfer using blockchain technology



# Similar transactions between participants

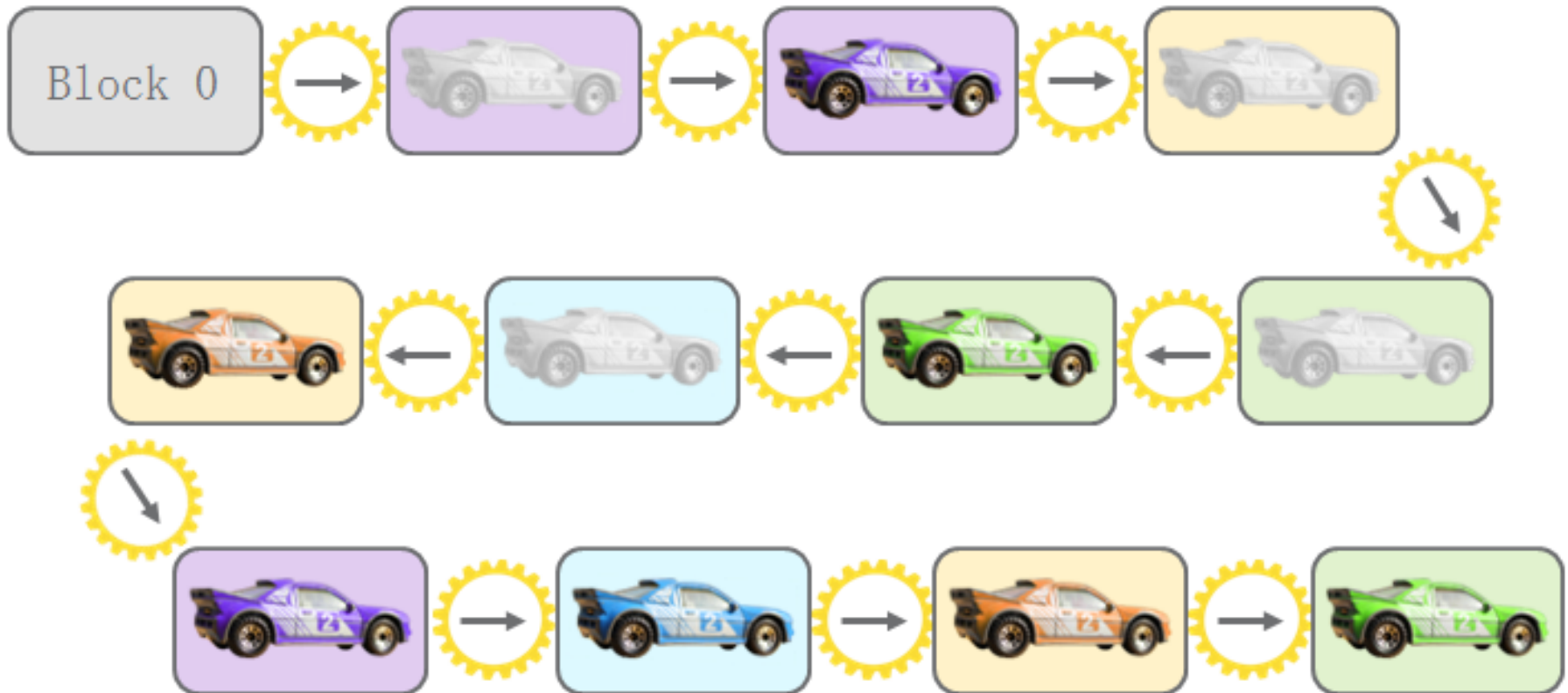


# Transfers between participants on Bluemix



# Why blockchain technology can be useful

A complete copy of the blockchain contains a record of every committed transaction in chronological order.



# Why blockchain technology can be useful

## Blockchain technology:

- Can help prevent fraudulent activity
- Can help provide provenance of an asset
- Offers a “smart contract” feature that can be used to model assets of any description
- Can provide a “shared ledger”