

Blockchain asset transfer



Outline

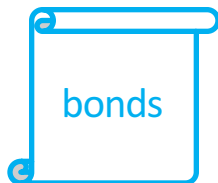
- What's involved?
- Who's involved?
- How do the participants work today?
- How could it be done using blockchain? Exploring roles of:
 - Participants
 - Assets
 - Transfers
- Why blockchain technology could be useful

Automotive industry asset transfer

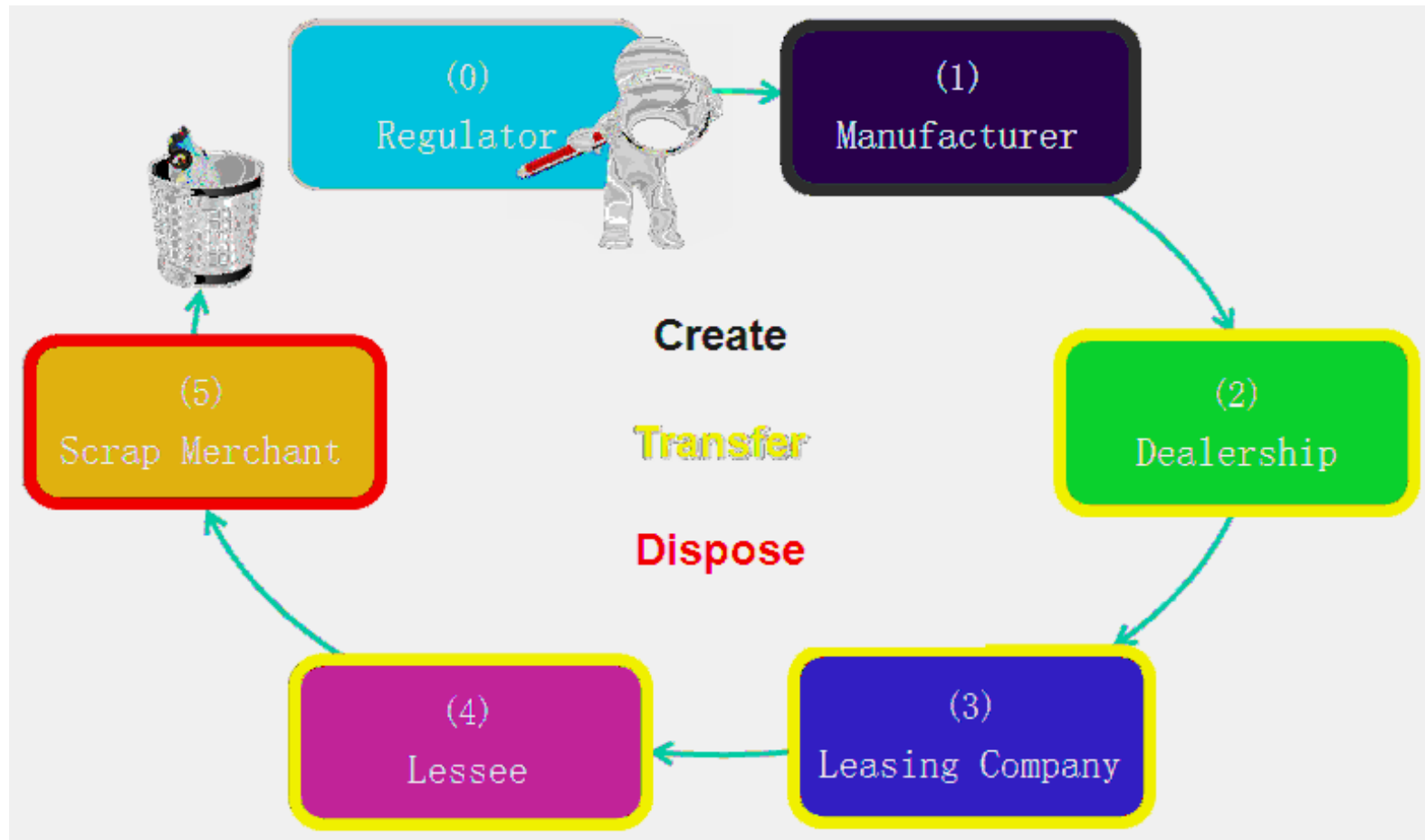
In the Blockchain Asset Transfer Demo, we will be transferring cars,



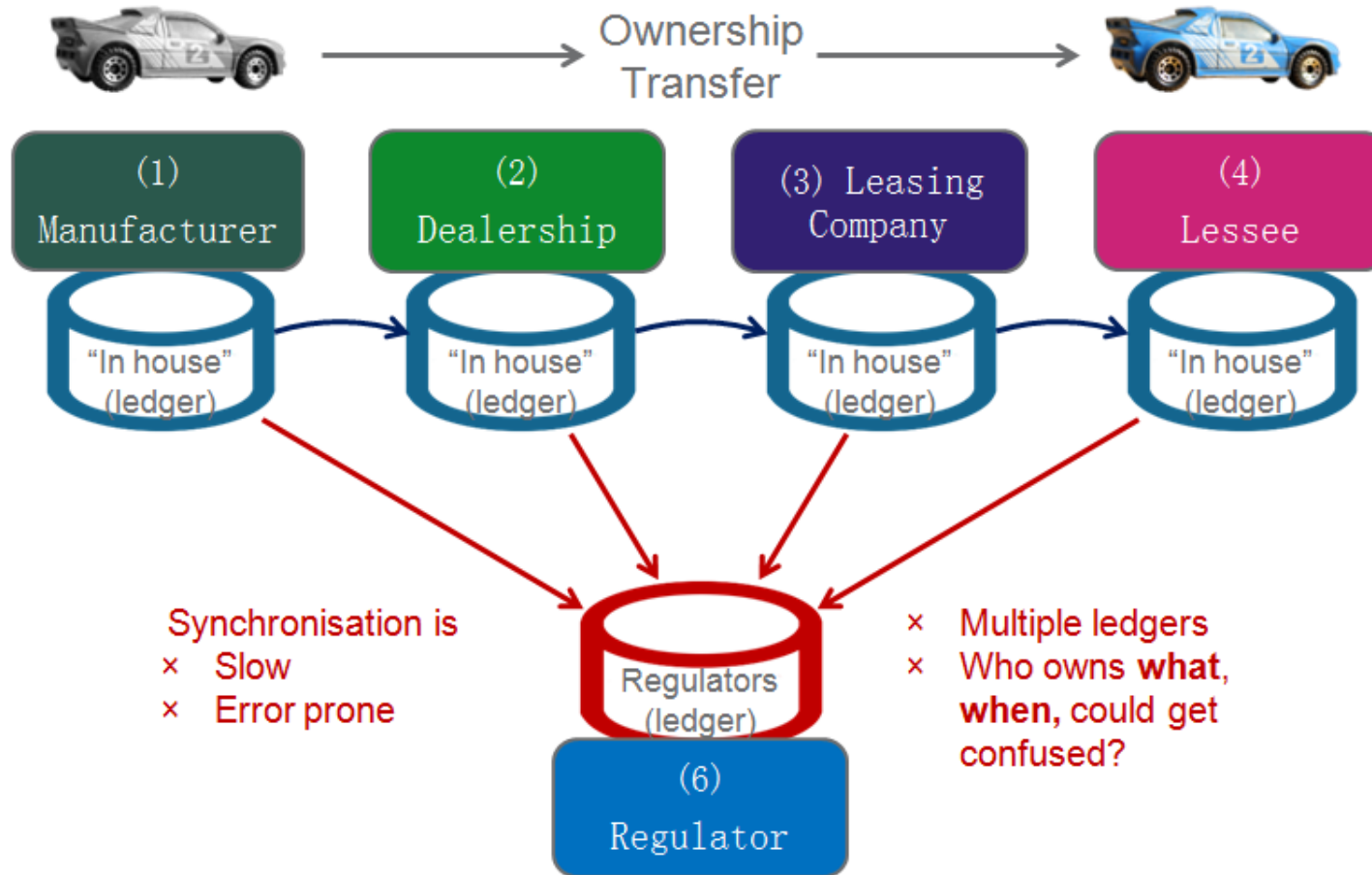
but we could transfer other commodities or instruments.



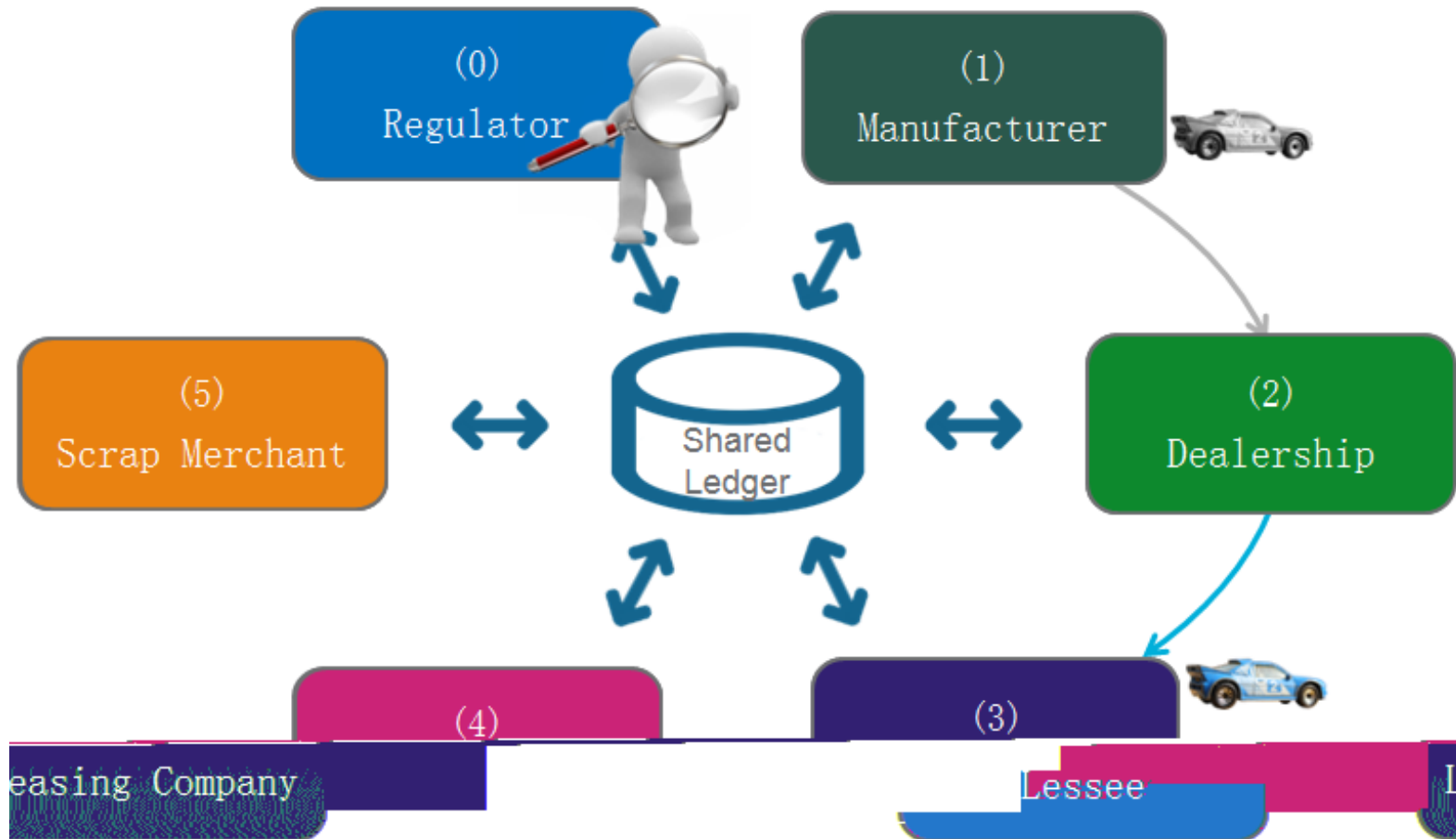
Who's involved in asset transfer



How do participants perform the same tasks now?

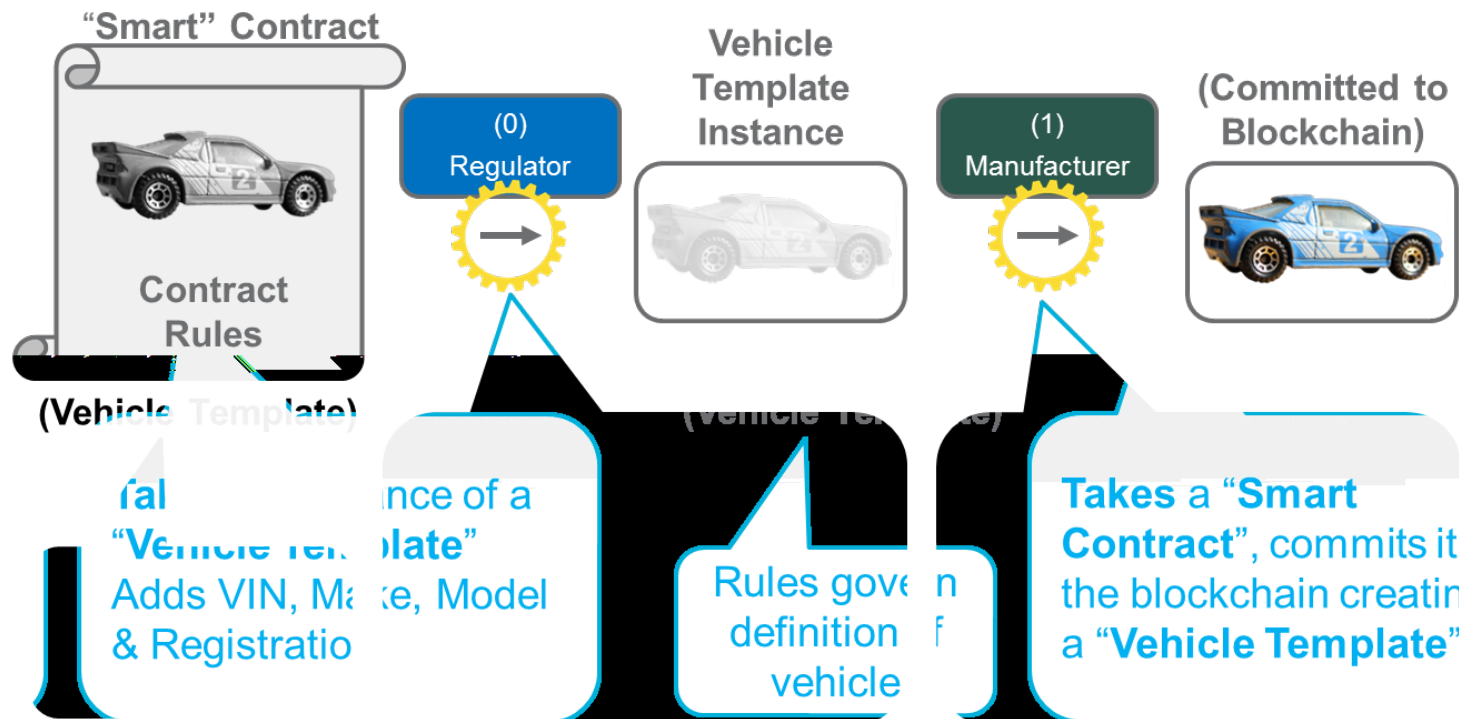


How can the tasks be done using blockchain?



Representing a car using blockchain technology

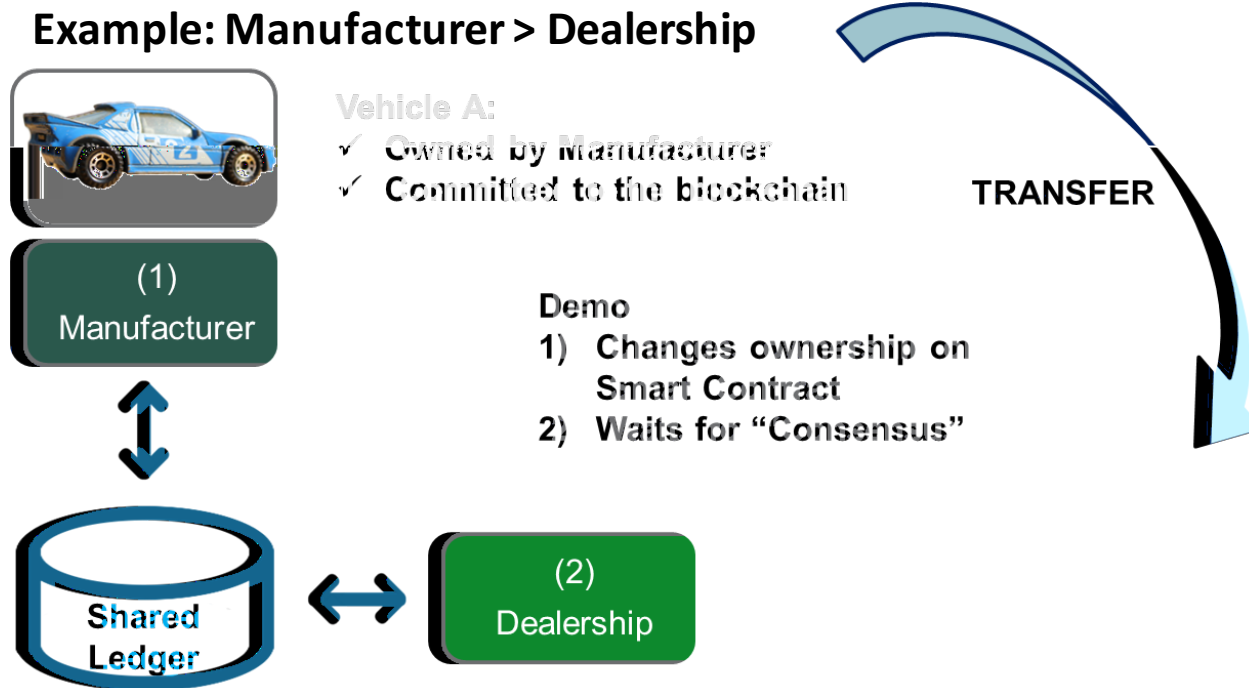
- Blockchain **smart contract** feature is used to define the **Vehicle Template**.
- The Regulator creates an instance of a **Vehicle Template** and commits it to the blockchain.



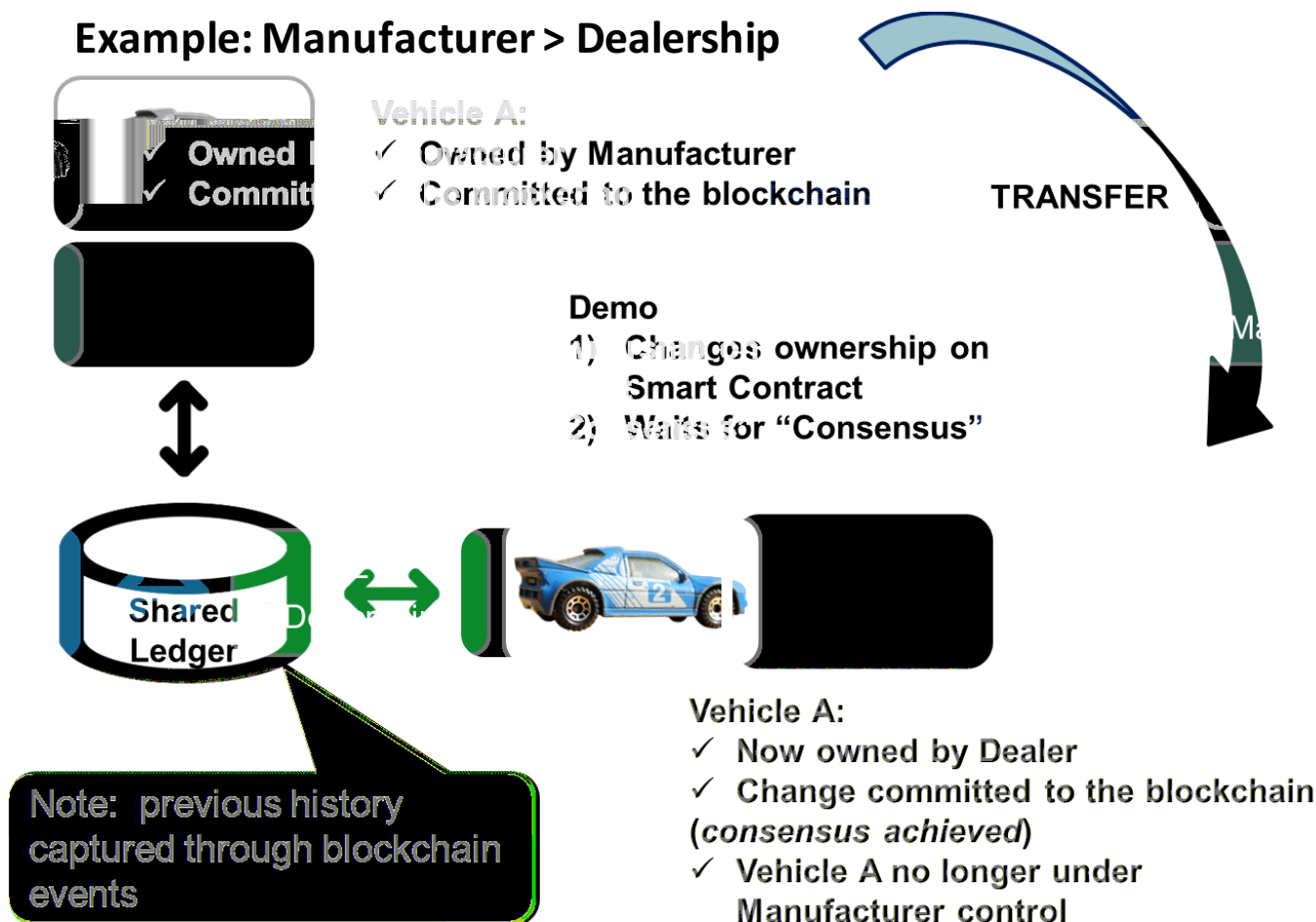
Modeling a transfer using blockchain technology



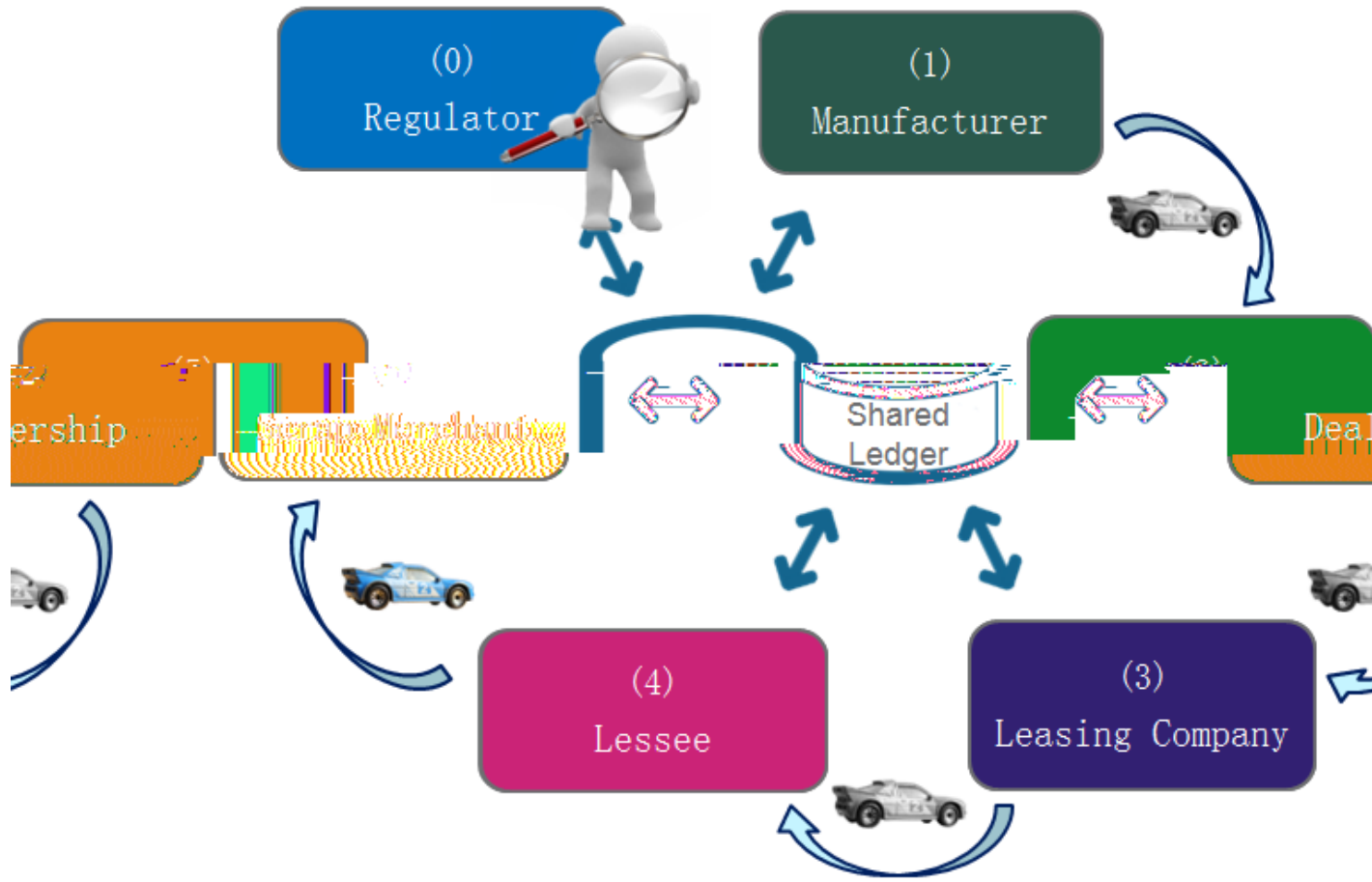
Modeling a transfer using blockchain technology



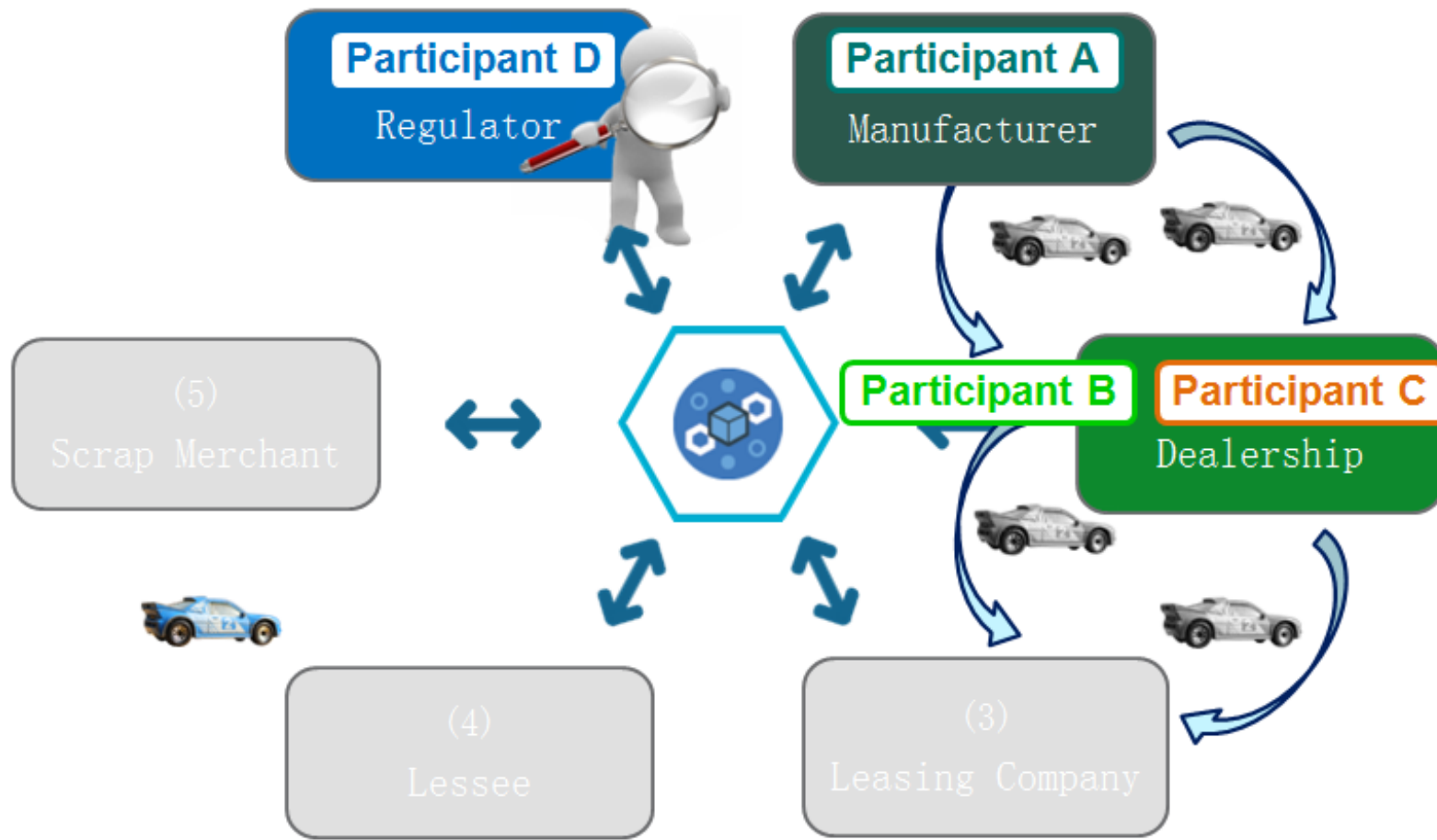
Modeling a transfer using blockchain technology



Similar transactions between participants

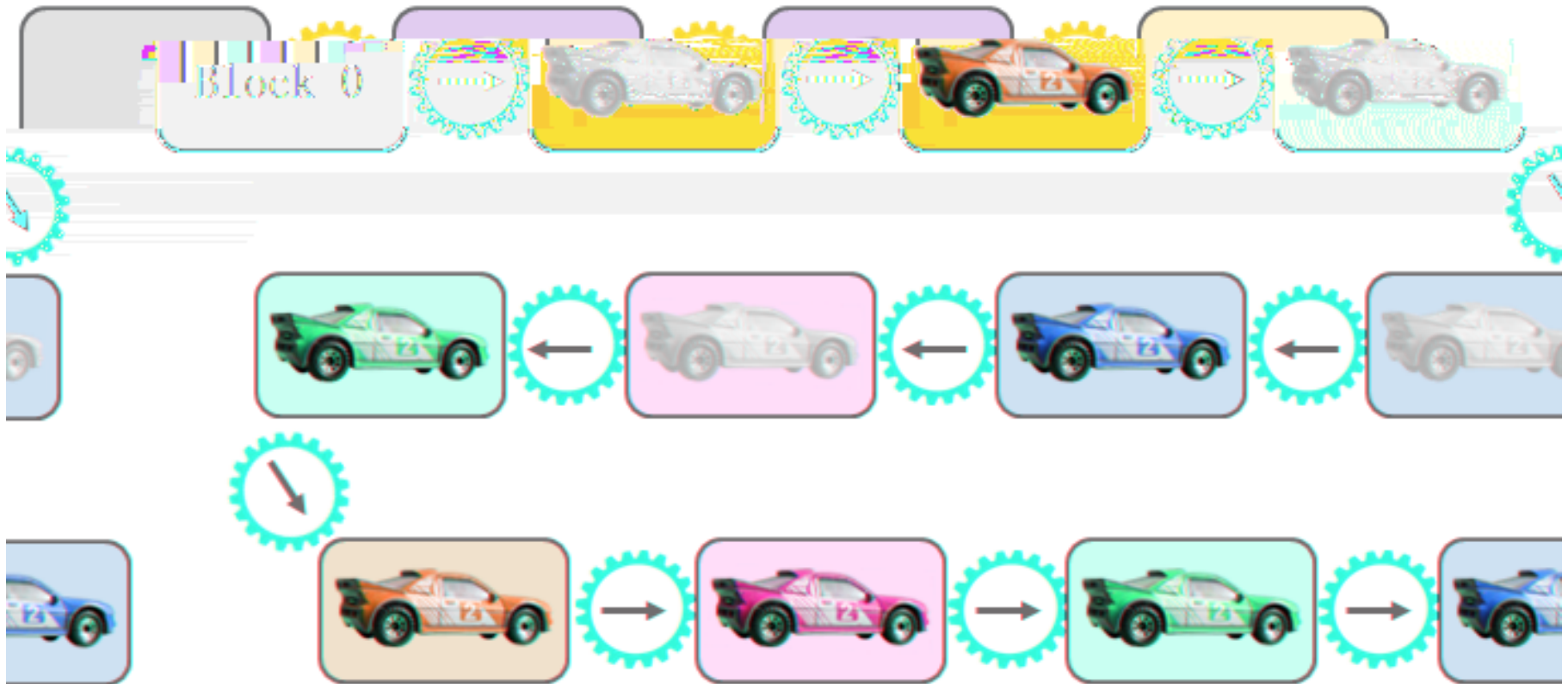


Transfers between participants on Bluemix



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”