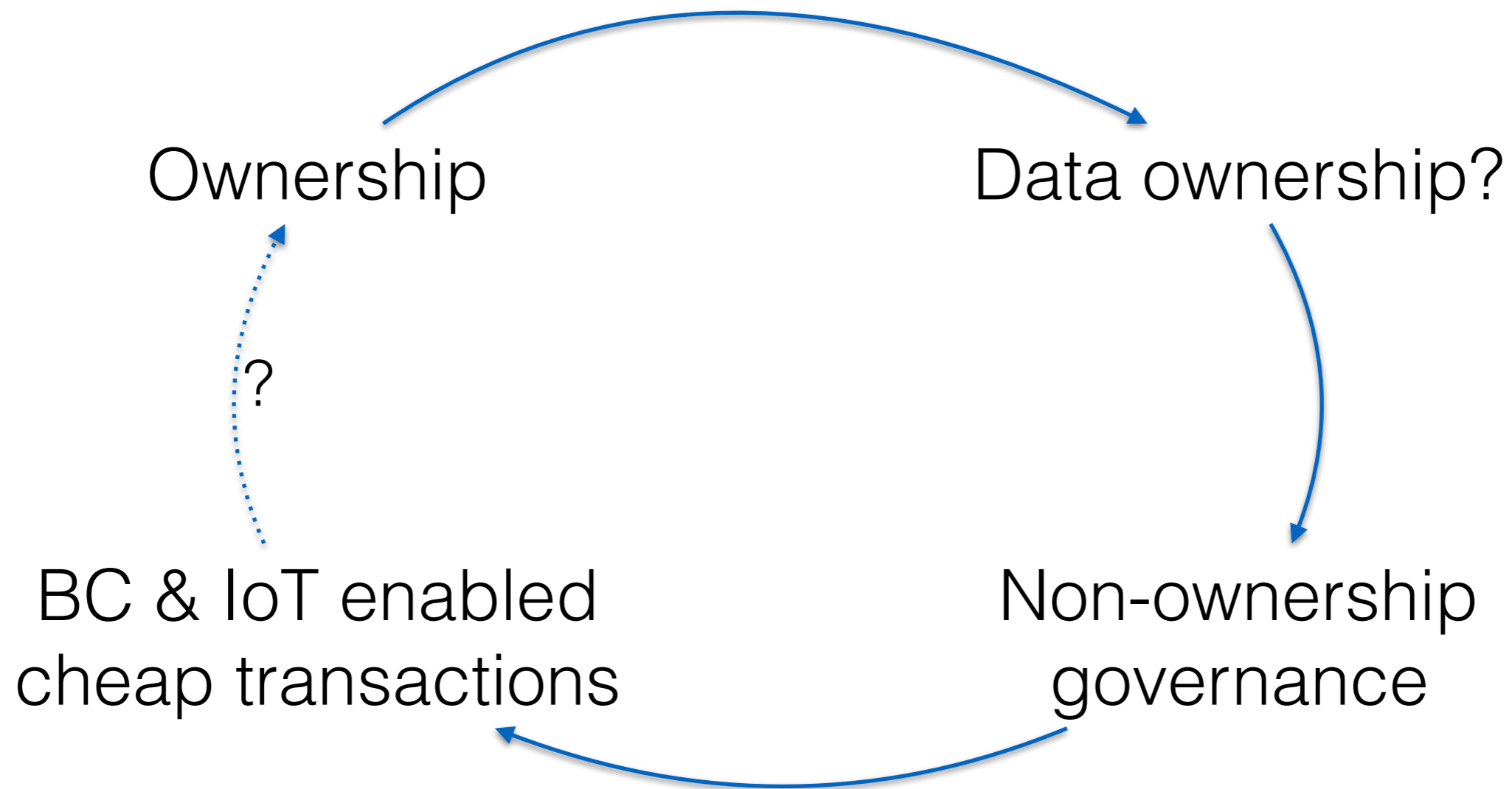


# Data governance beyond ownership

Pekka Nikander, Aalto University  
IoTWeek, panel on “Blockchain for IoT”  
June 20, 2019

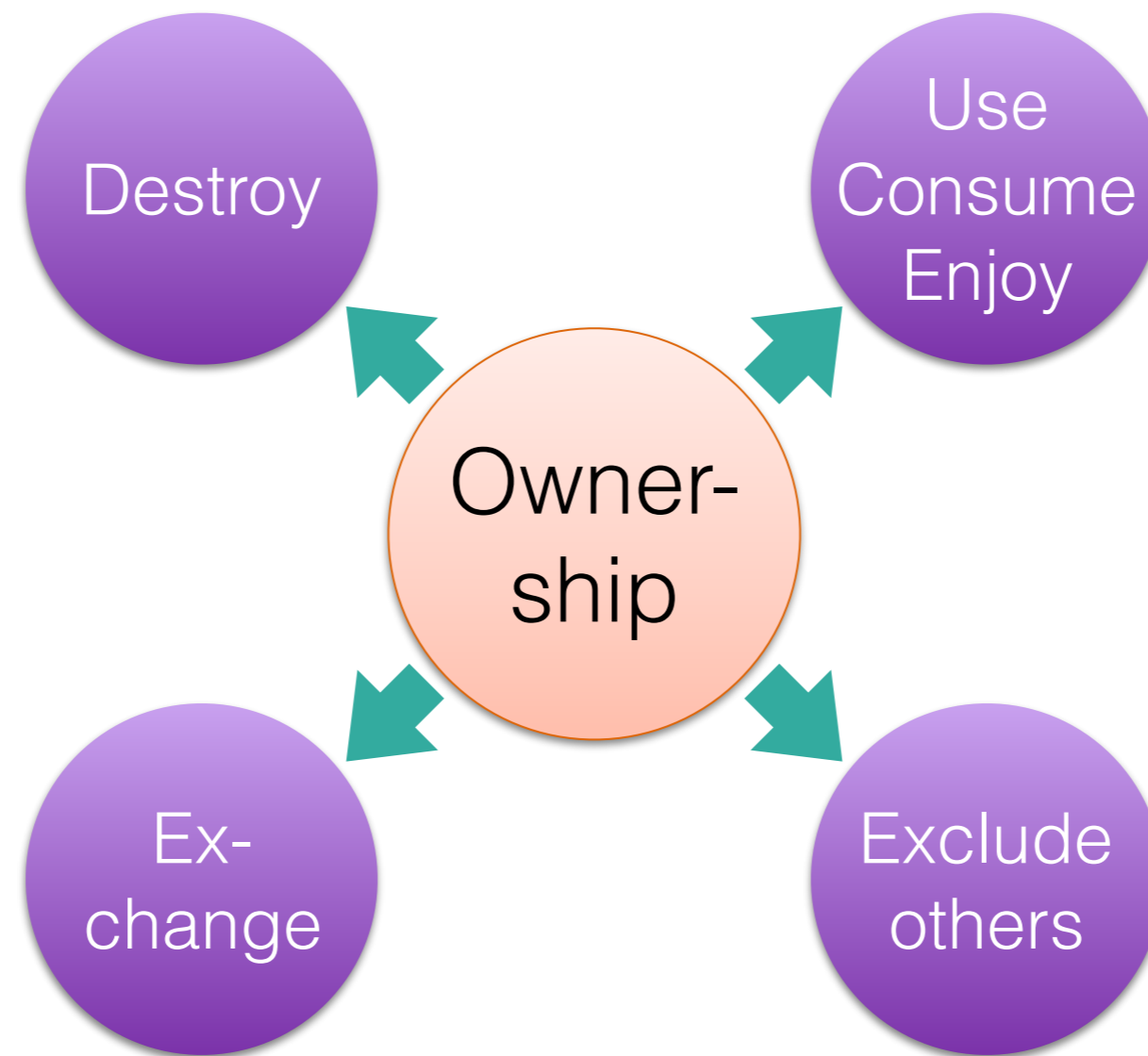
# Outline



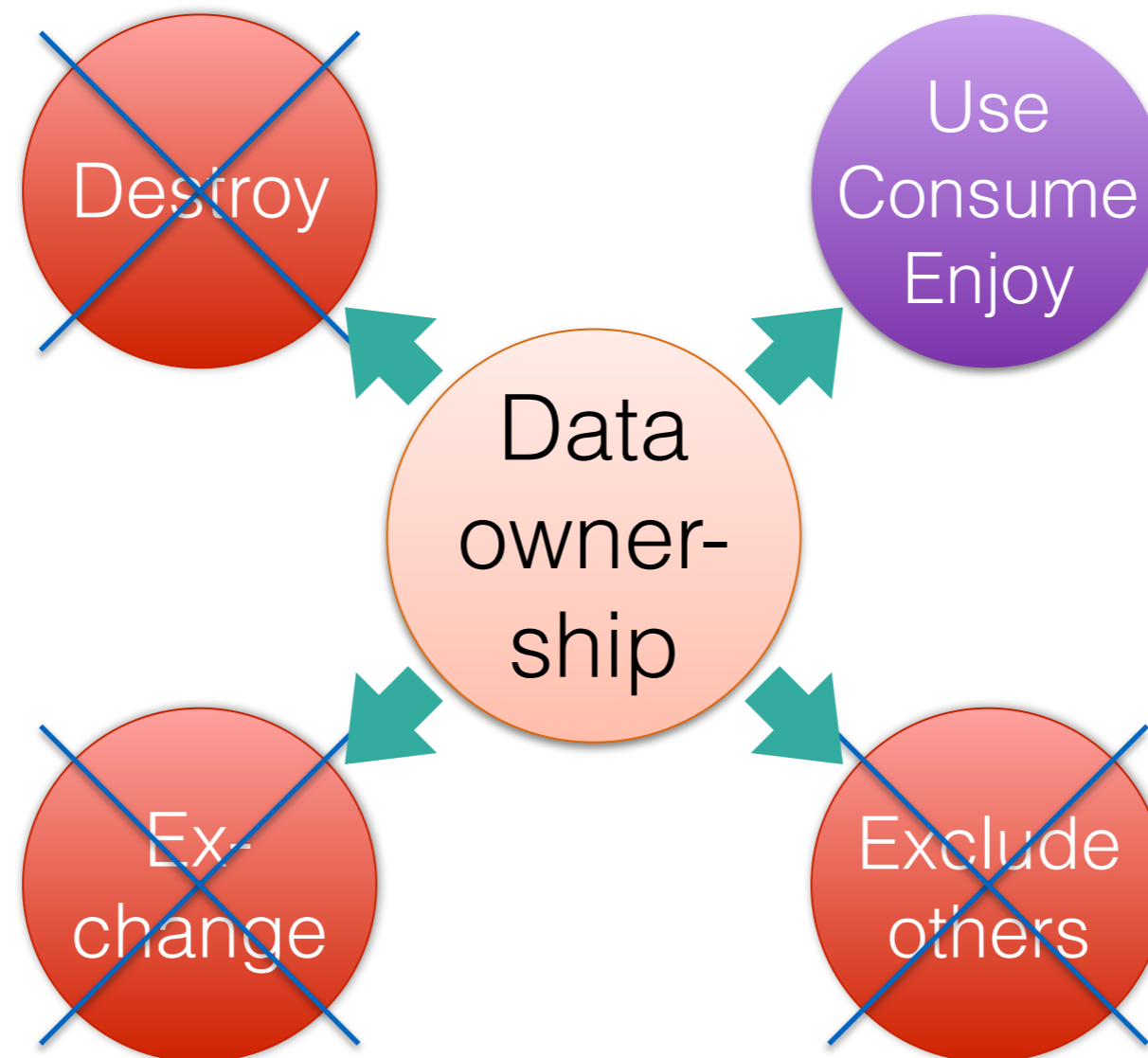
# Step 1: Need

## Data governance

# Background: Ownership = bundle of rights

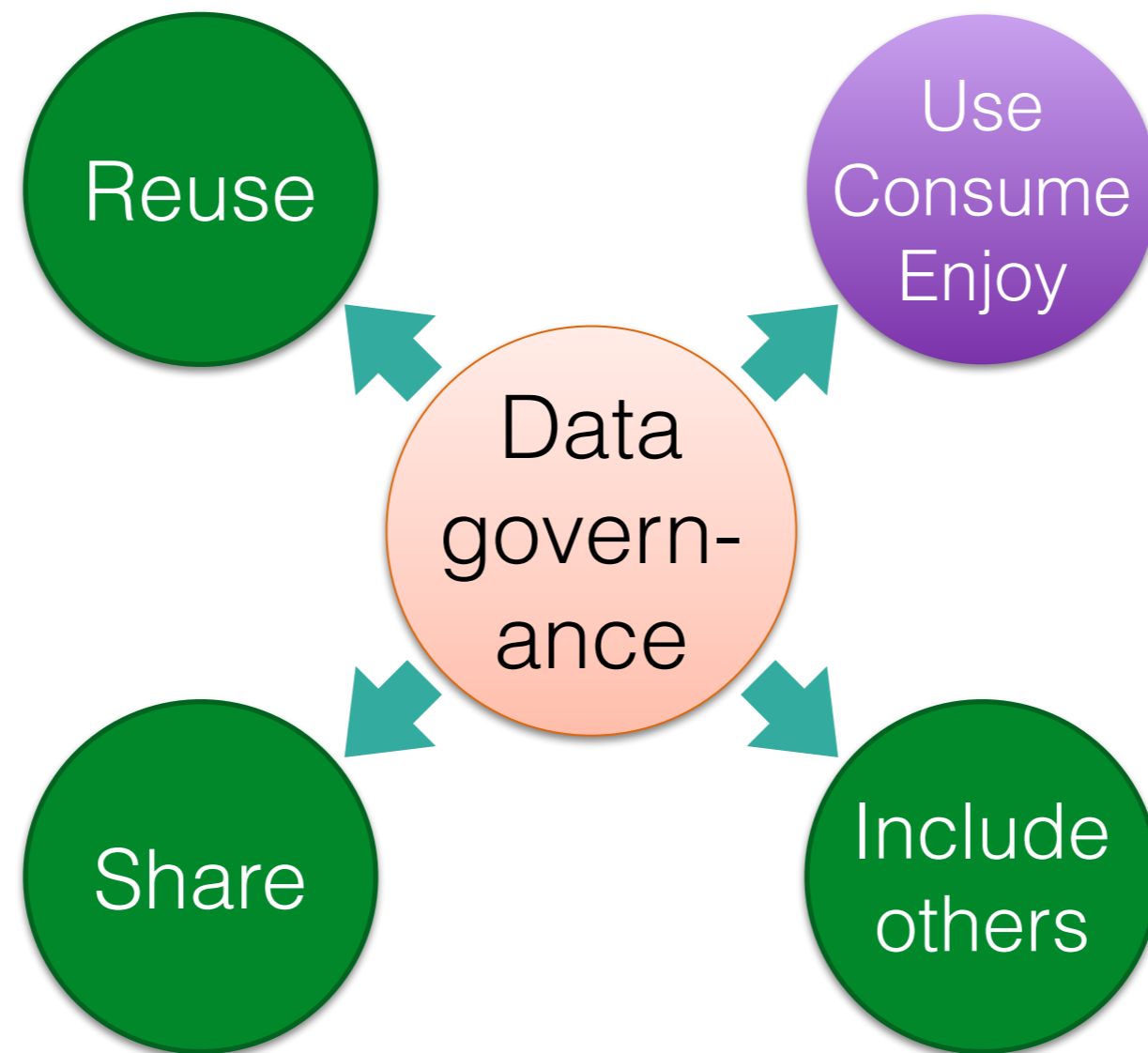


# Problem: Data cannot be owned\*



\* Once data has been shared with anyone, trying to enforce ownership rights on data is pretty much impossible

# Solution: New governance models\*



\* Define new (legal) structures that replace ownership

# Summary so far

- Thinking data governance as ownership is absurd
- **Exchanging** data is hard, **sharing** data is easy
- **Excluding** others is hard, **including** is easy
- **Destroying** data is hard, **reusing** data is easy

# Step 2: Solution

## Ultra-cheap transactions



# Ultra-cheap transactions, enabled with IoT and blockchains

# Blockchains

Blockchains and DLTs, with smart contracts

- enable encoding of
  - jointly agreed **rights** and
  - jointly agreed **obligations**
- Implementation of new governance models

# IoT

## IoT enables

- automated access to physical things (actuation)
  - i.e. implementation of rights
- verifiable recording of events (sensing)
  - i.e. verifying obligations
- Ultra-cheap enforcement of the new models

# Summary

