

# How Blockchain Technology simplifies transactions

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transfer work *today*?

How does a stock  
trade work *today*?

What is different about a  
stock trade with Blockchain?

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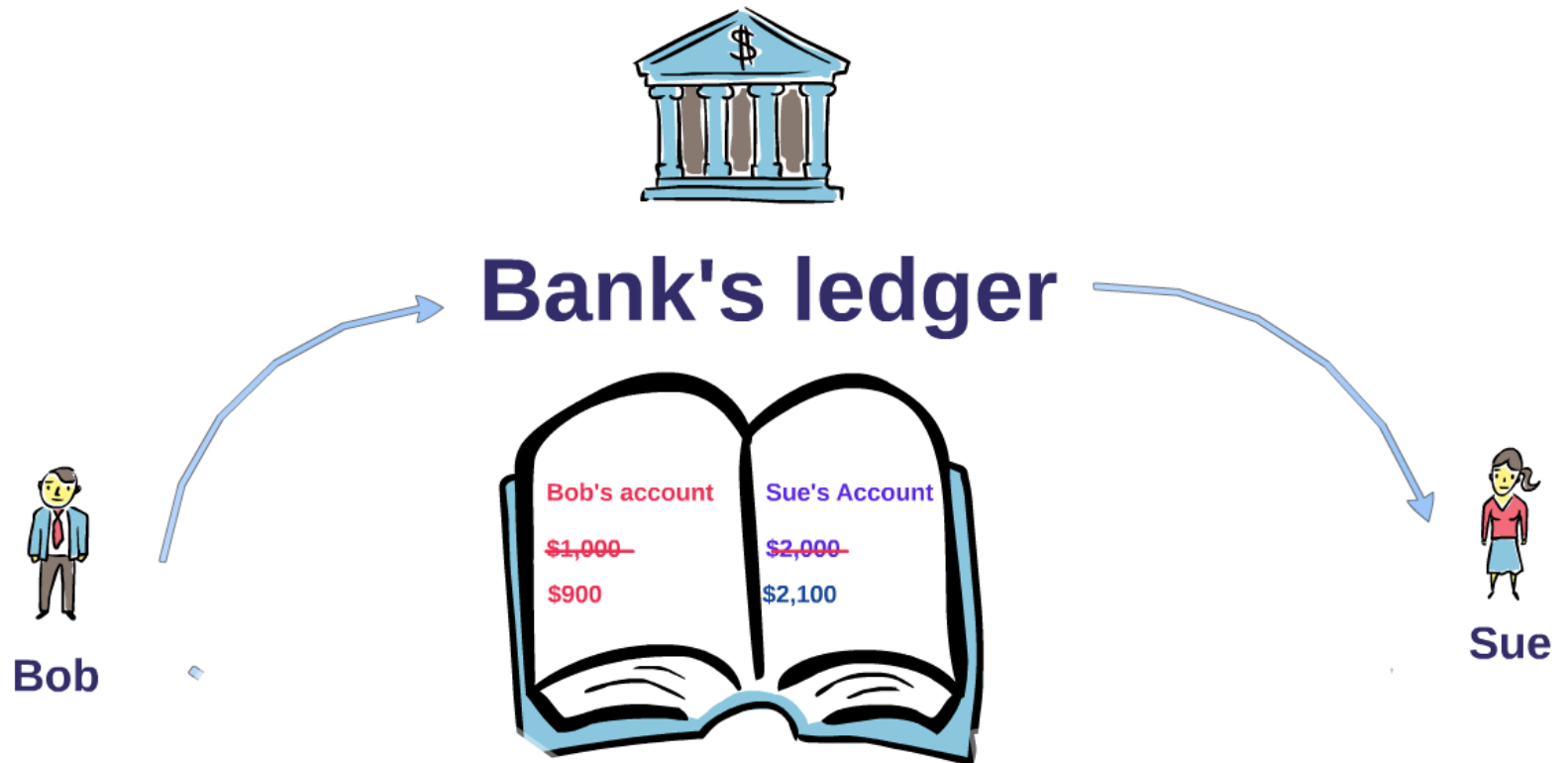
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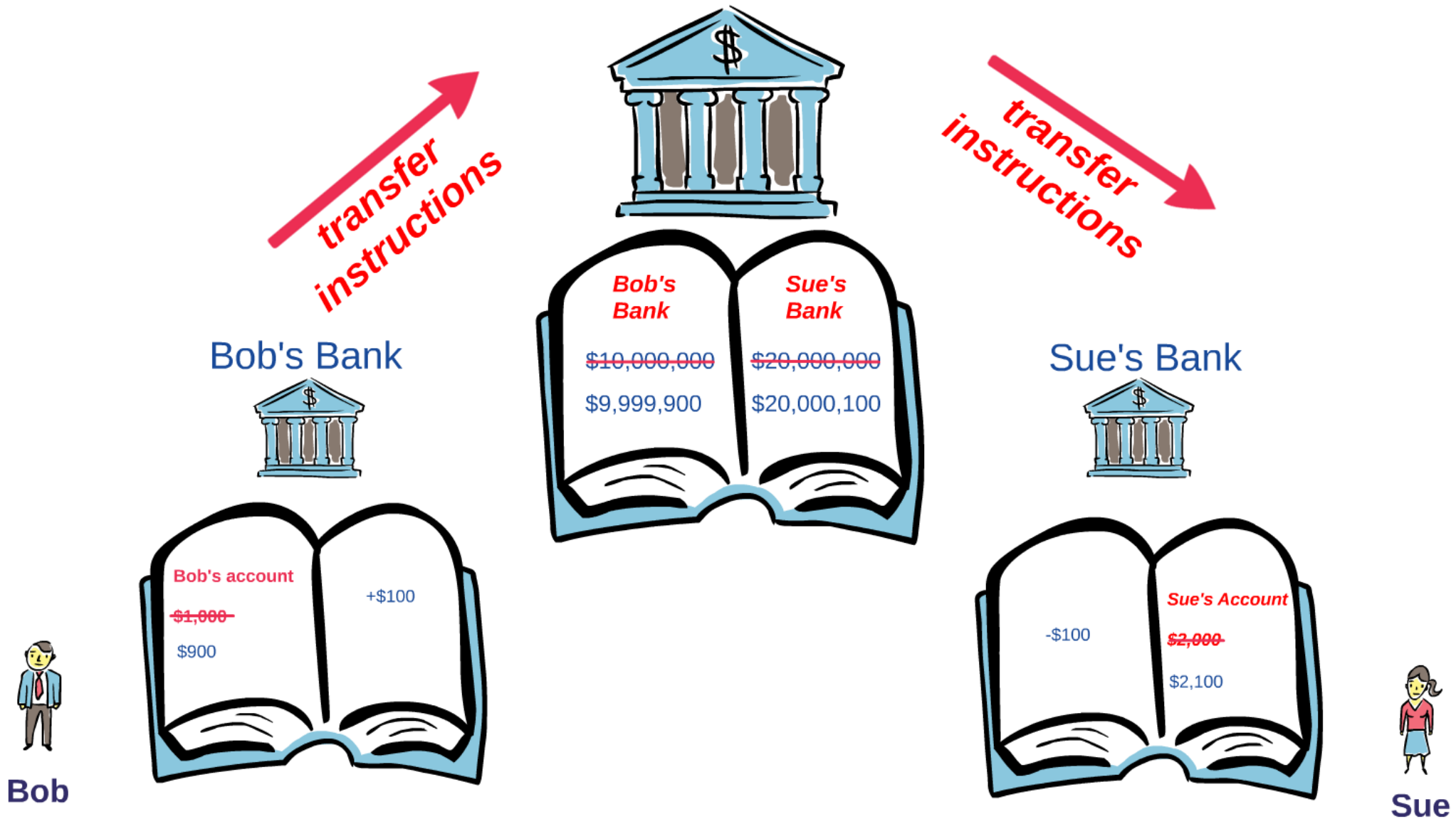
# How do money transfers work?

***Bob owes Sue \$100.***



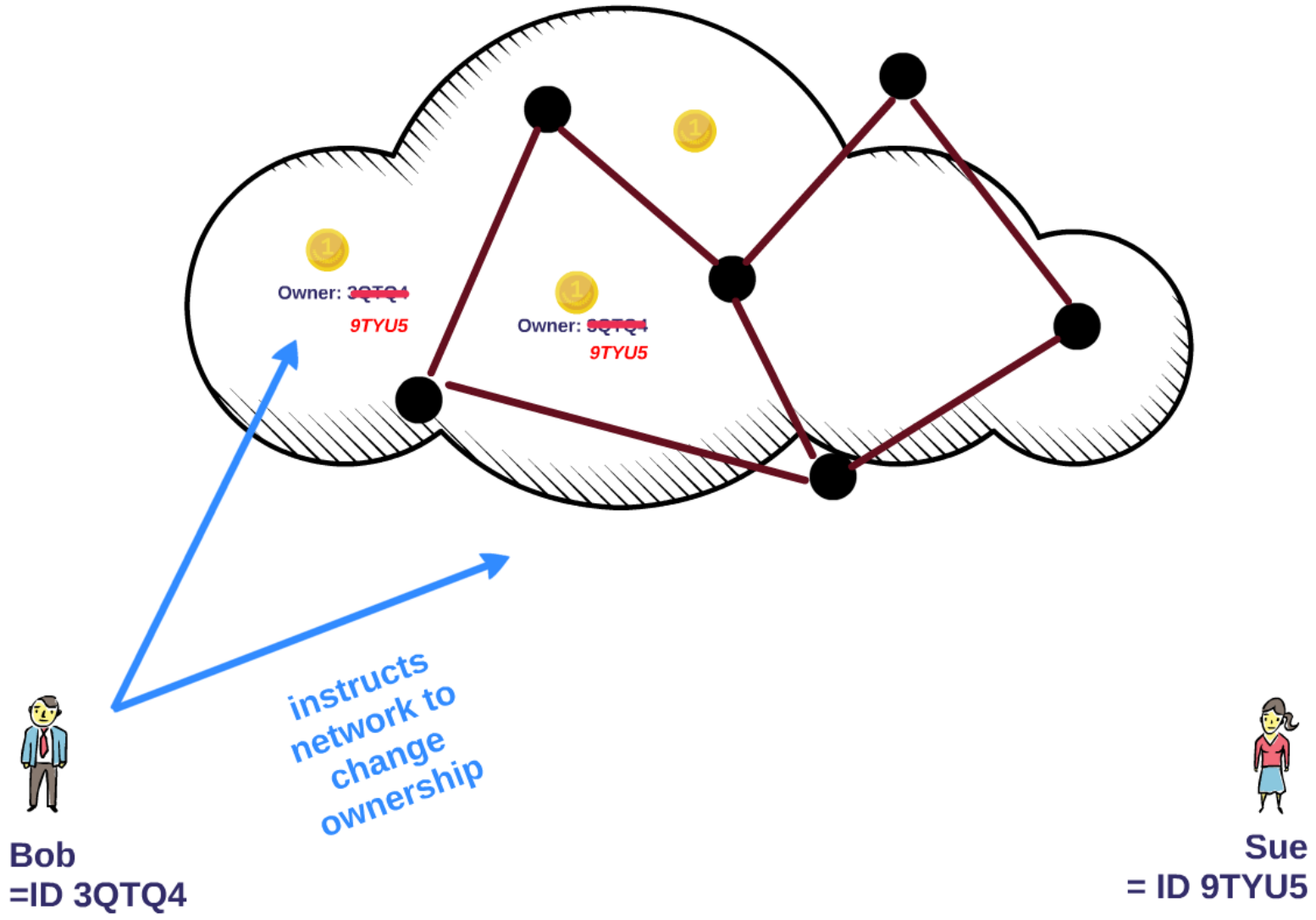
# What if their banks are not directly connected?

## Central Bank

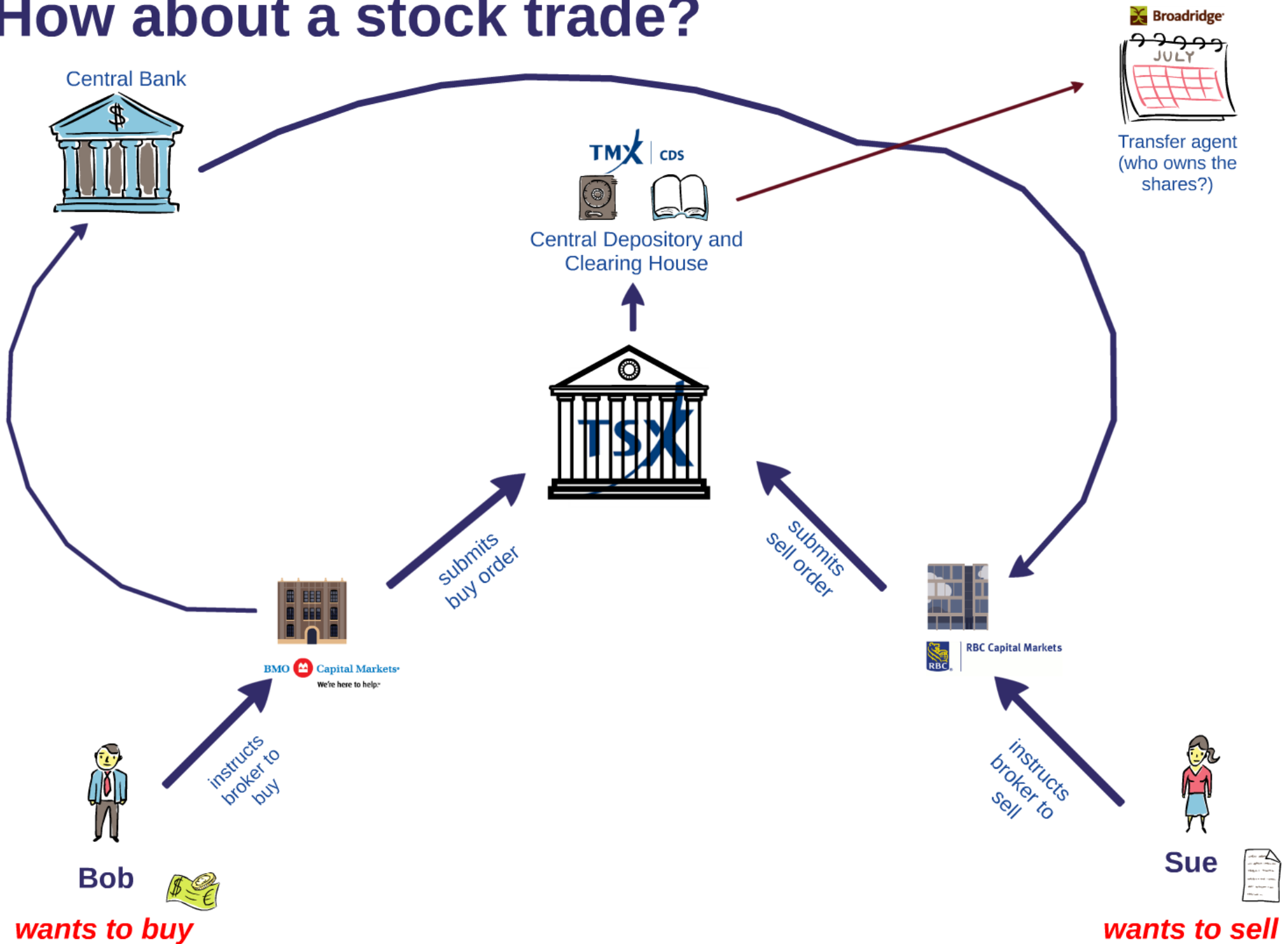


# So how would a money transfer look like with Blockchain?

Blockchain  
↔ distributed ledger  
↔ think: cloud-based database



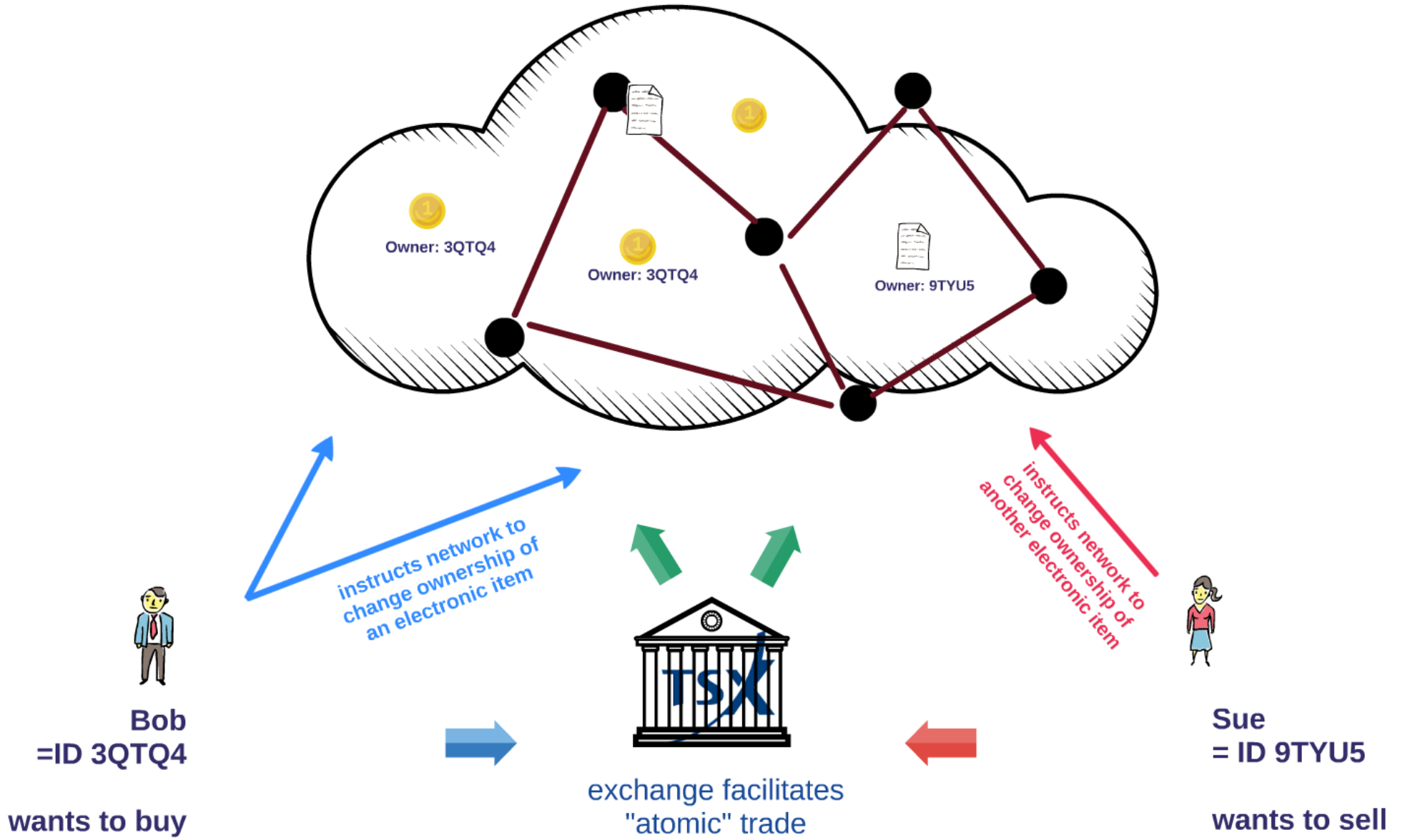
# How about a stock trade?



# Share trading is similar

Key Take-Aways  

- Blockchain is a distributed ledger
- Blockchain is a peer-to-peer network
- Blockchain is a consensus mechanism
- Blockchain is a secure and transparent system
- Blockchain is a decentralized system
- Blockchain is a tamper-proof system
- Blockchain is a secure and transparent system
- Blockchain is a decentralized system
- Blockchain is a tamper-proof system



# Key Take-Aways

- The current organization requires many parties ... and with them comes lots and lots of regulation.
- Blockchain/Distributed Ledger Technology gives the opportunity for a re-design of financial market interactions.
- BC/DLT has some unique features:
  - the trade is the settlement.
  - peer-to-peer is (easily) possible.
  - intermediaries that "maintain" accounts may not be needed.
  - transparency (can be) high.
- Design of ledger is critical:
  - Katya Malinova & Andreas Park (2016) derive several key economic implications.
    - Who should see what?
    - Who is who?
  - Is immediate settlement desirable/efficient?