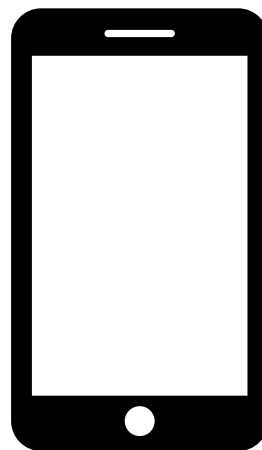




**Bitcoin**  
Lightweight Clients

## Why Lightweight Clients?

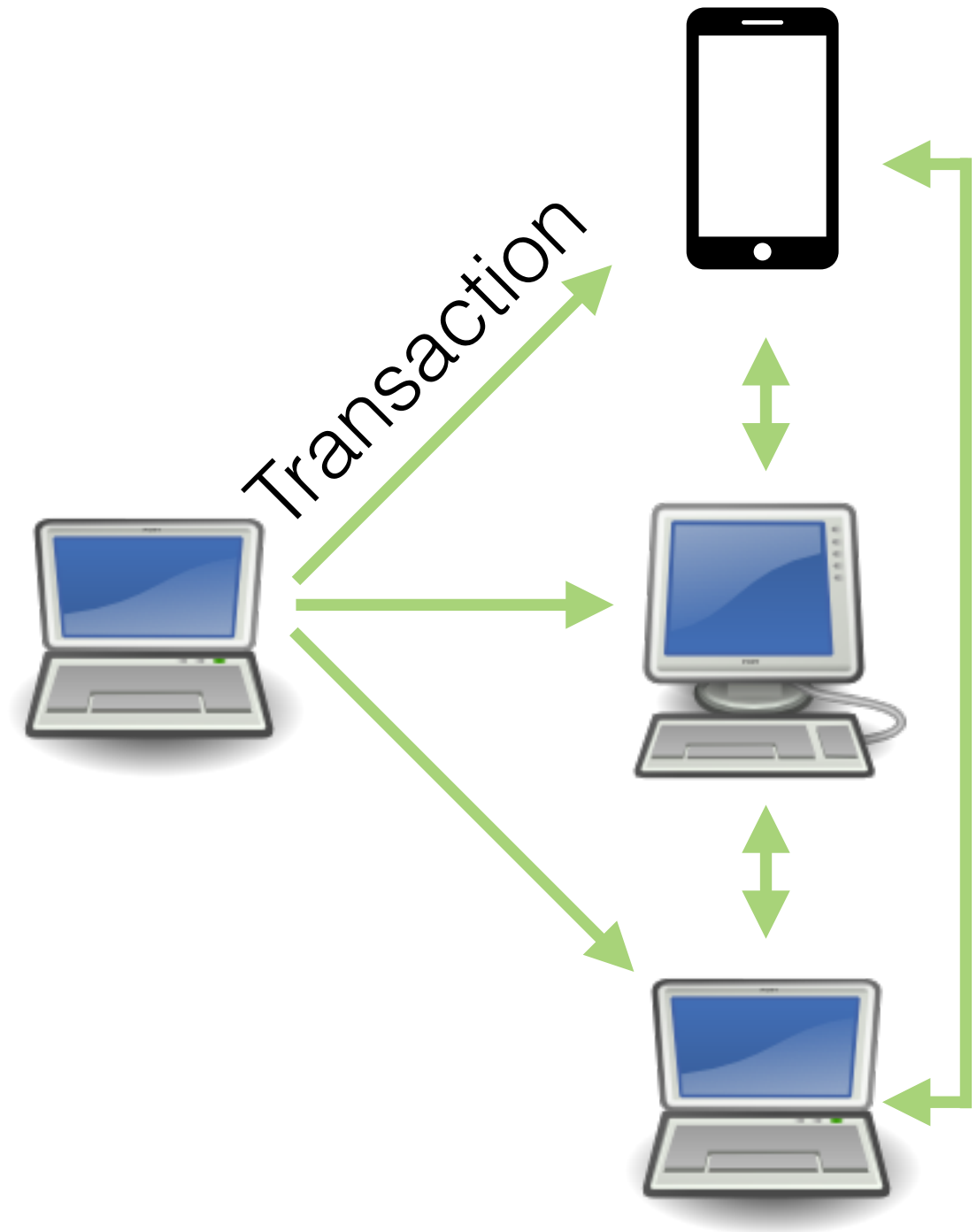
- Mainstream will not store >300 GB of data for a wallet
- Mainstream will not use substantial CPU power to validate transactions of other users
- Transaction security should still be high



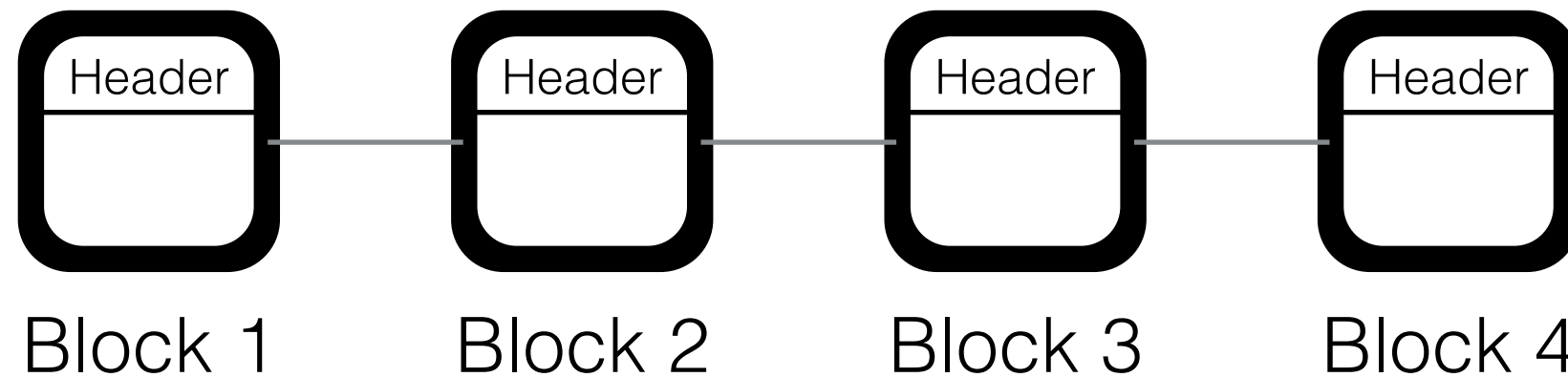


# Scaling Problems for Lightweight Clients

1. Log of transactions (>120 GB)
2. Mobile phones receive irrelevant transactions
3. Limited data traffic over 3G/4G



## SPV Transaction verification



Blockchain  
with headers  
**only**

- Much smaller
- Can verify the Proof of Work
- Can find the longest chain with most work!

# SPV Transaction verification

