

# Blockchain Trilemma: Constraint Optimization in Digital Finance

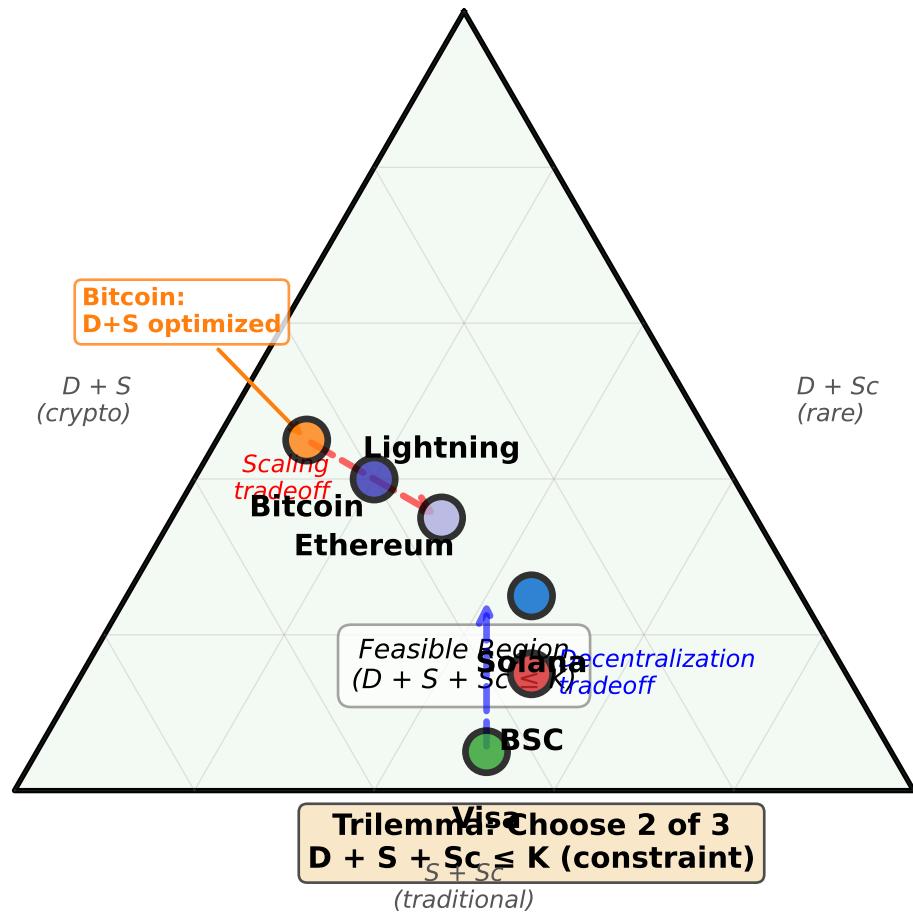
Decentralization

Trade-off Dimension (normalized)

Security

Scalability

Trilemma Space (normalized)



Trilemma Constraint:

Systems can optimize at most 2 of 3 properties.

- Bitcoin/Ethereum: D+S, sacrifice Sc
- Visa/BSC: S+Sc, sacrifice D
- Solana: Balanced compromise