

A black and white photograph of the MIT dome at night, illuminated against a dark sky. The dome is the central focus, with its classical columns and pediment visible. The pediment features the inscription 'MASSACHUSETTS INSTITUTE OF TECHNOLOGY' and a small plaque with 'MCMXVI'. The foreground shows a grassy lawn and some trees.

Blockchain Basics

Next Gen Internet

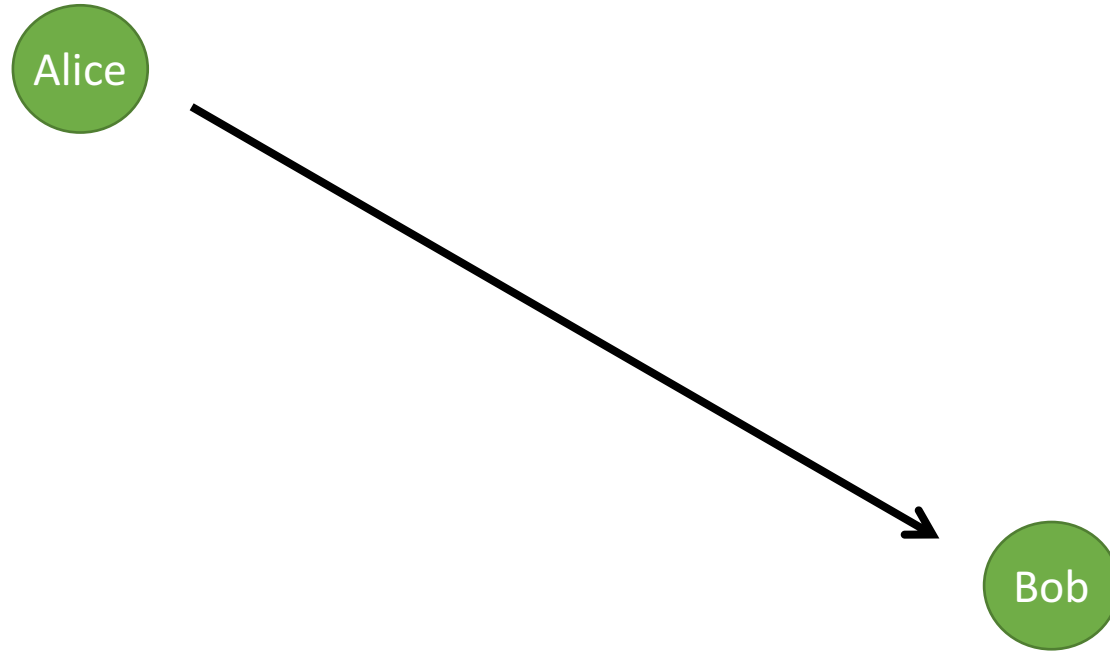
Abel Sanchez, John R. Williams



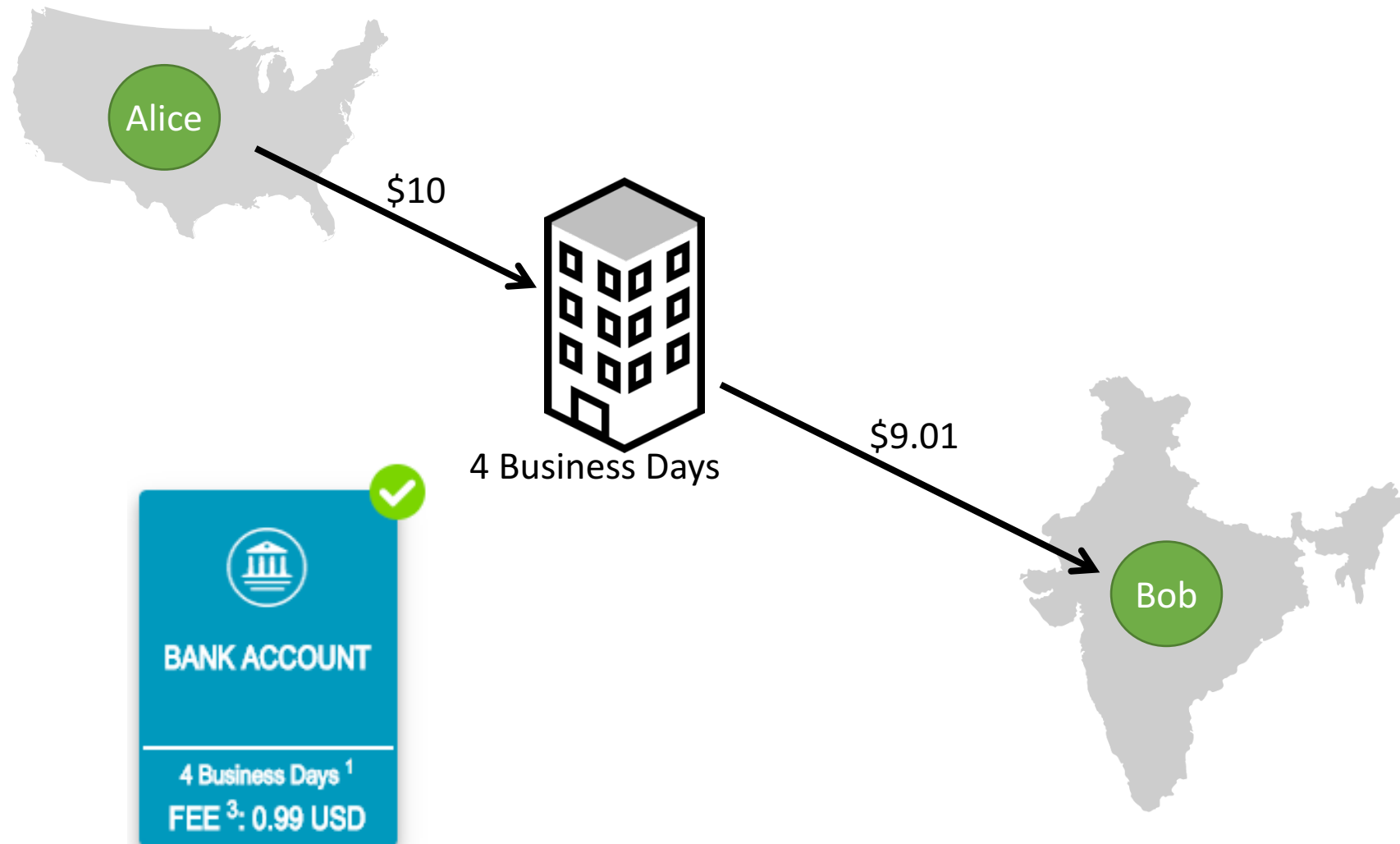




Money Transfer



Money Transfer





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புதுஆறு கே. ஜி. எஃப். எஸ்.

புதுஆறு ஃபினான்ஷியல் சர்வீஸஸ் பிரைவேட் லிமிடெட்
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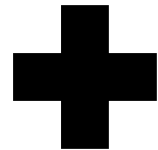
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UNI
UNSEER



How much do Indians send home?

70+ Billion Dollars

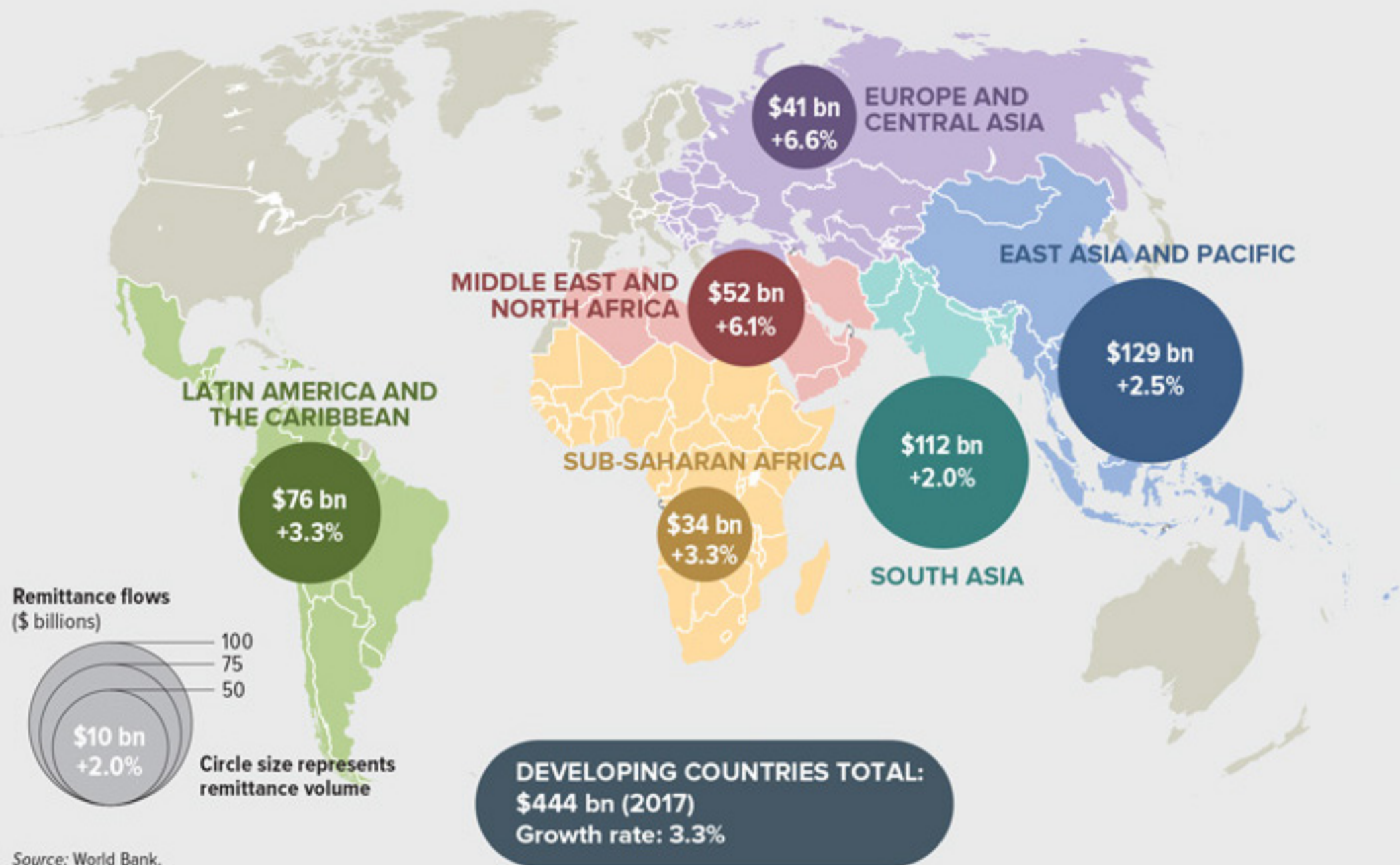


UBER

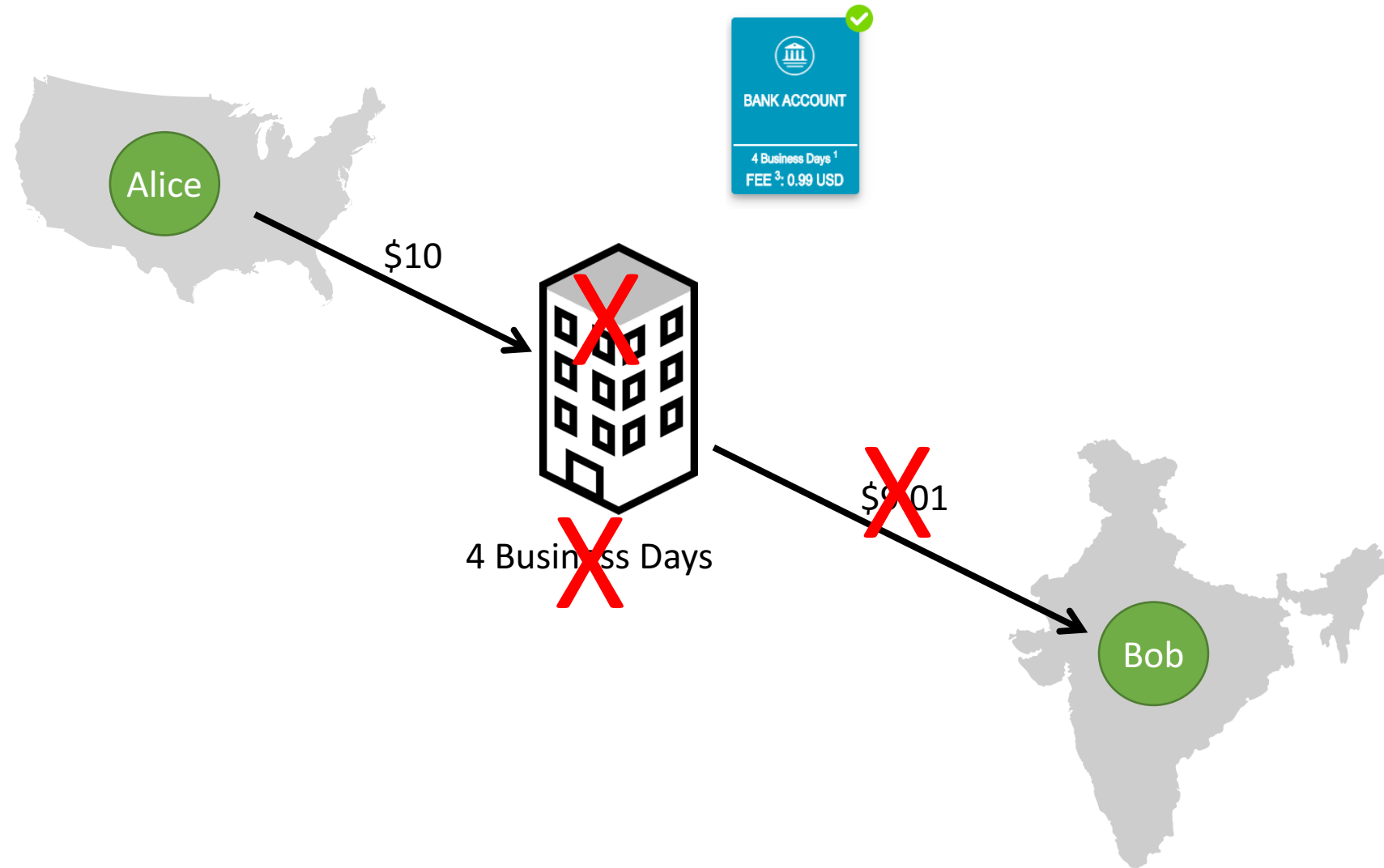
Remittances

- 70 India
- 64 China
- 33 Philippines
- 31 Mexico
- 22 Nigeria

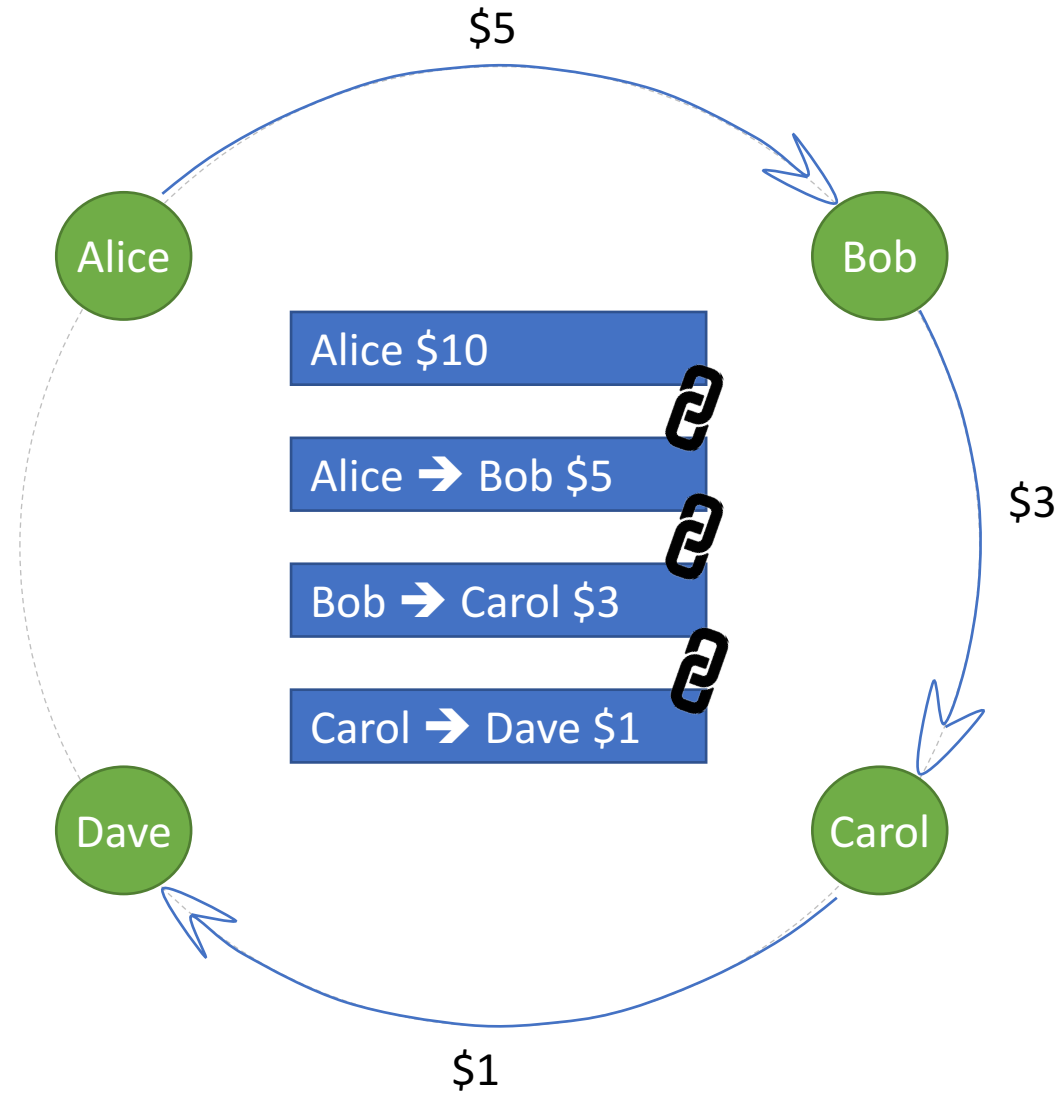
REMITTANCE FLOWS TO DEVELOPING COUNTRIES, PROJECTED-2017



Money Transfer: Blockchain Goals

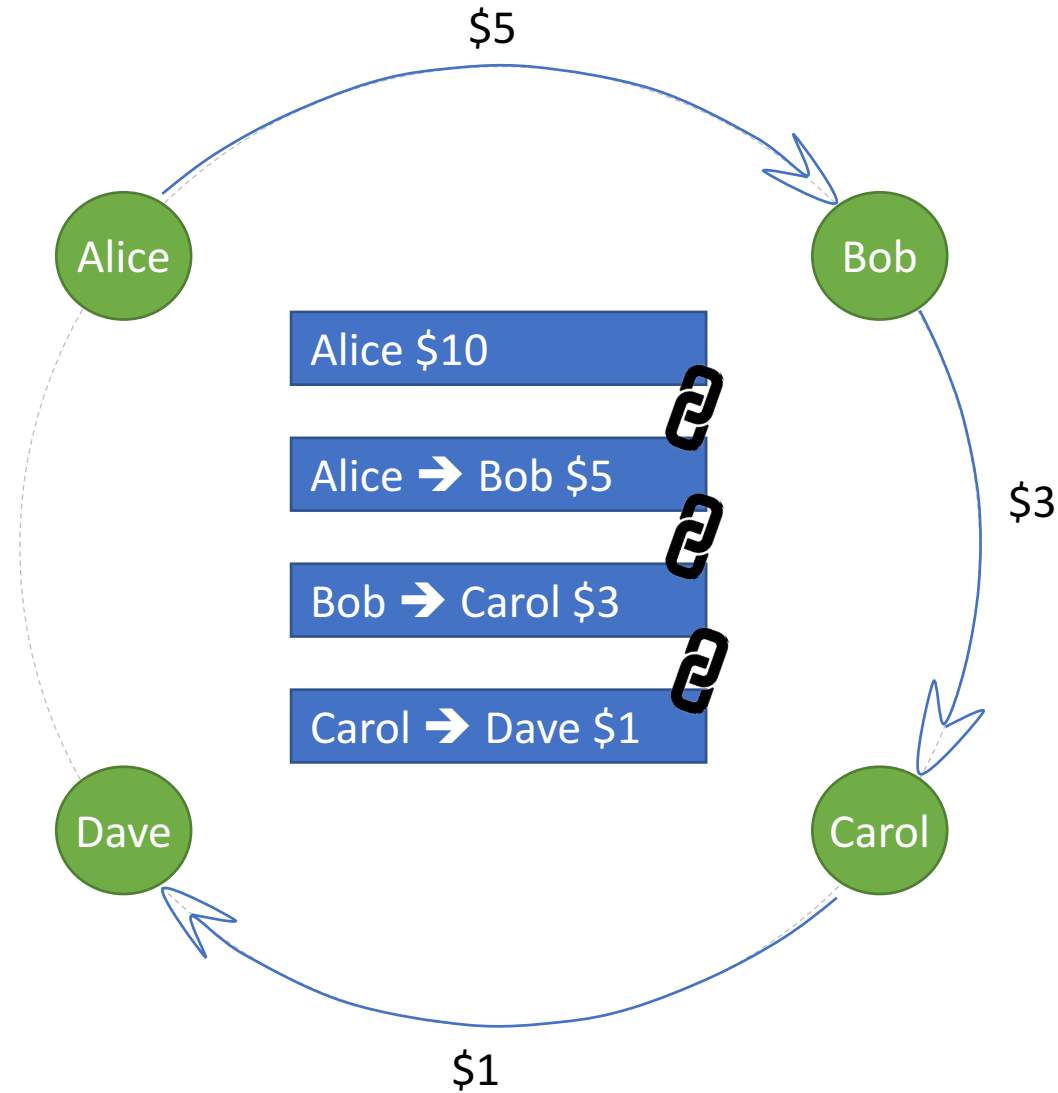


Open Ledger

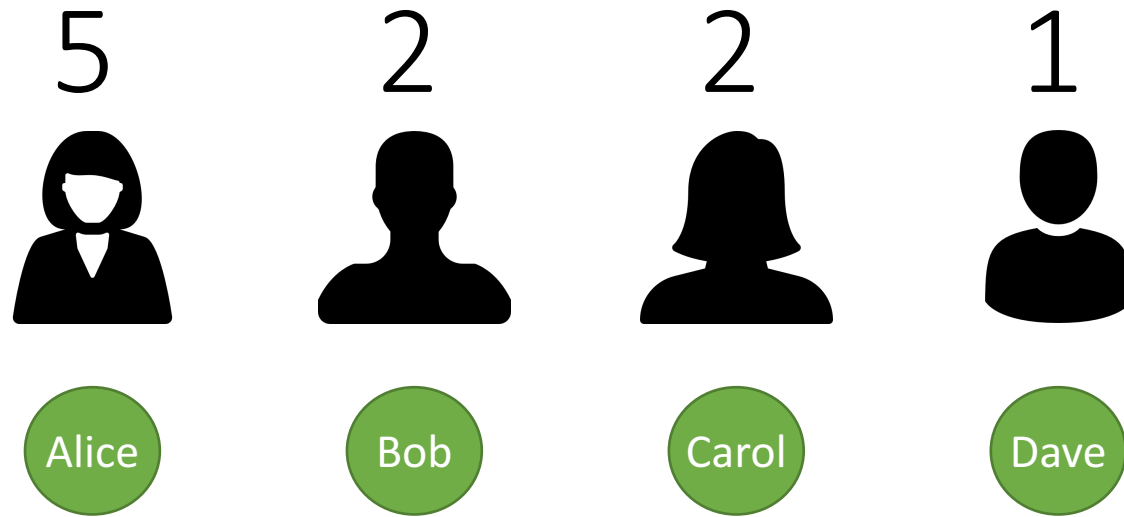


Chain: Alice → Bob → Carol → Dave

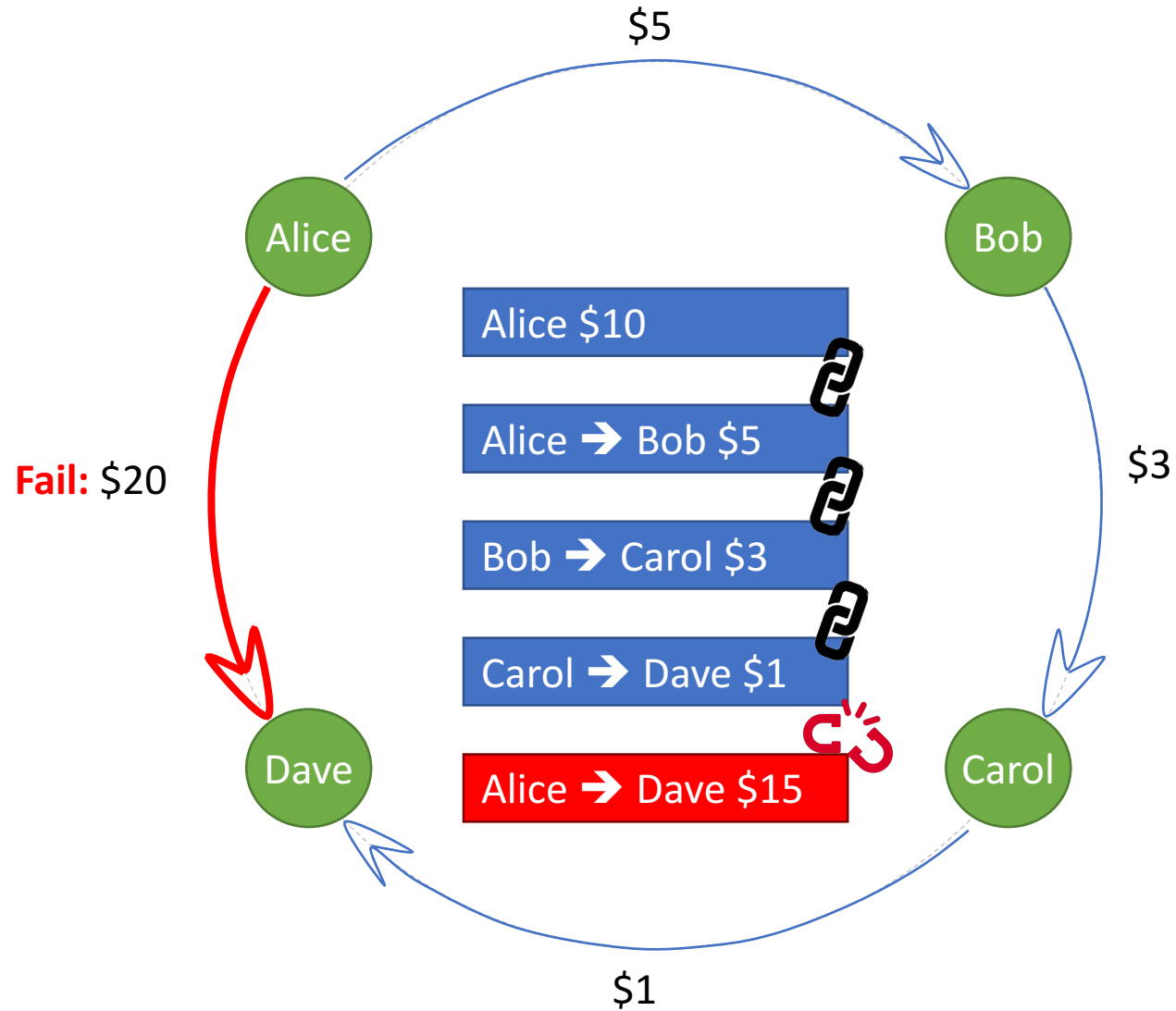
- Open
- Public
- To Everyone
- Funds Visible



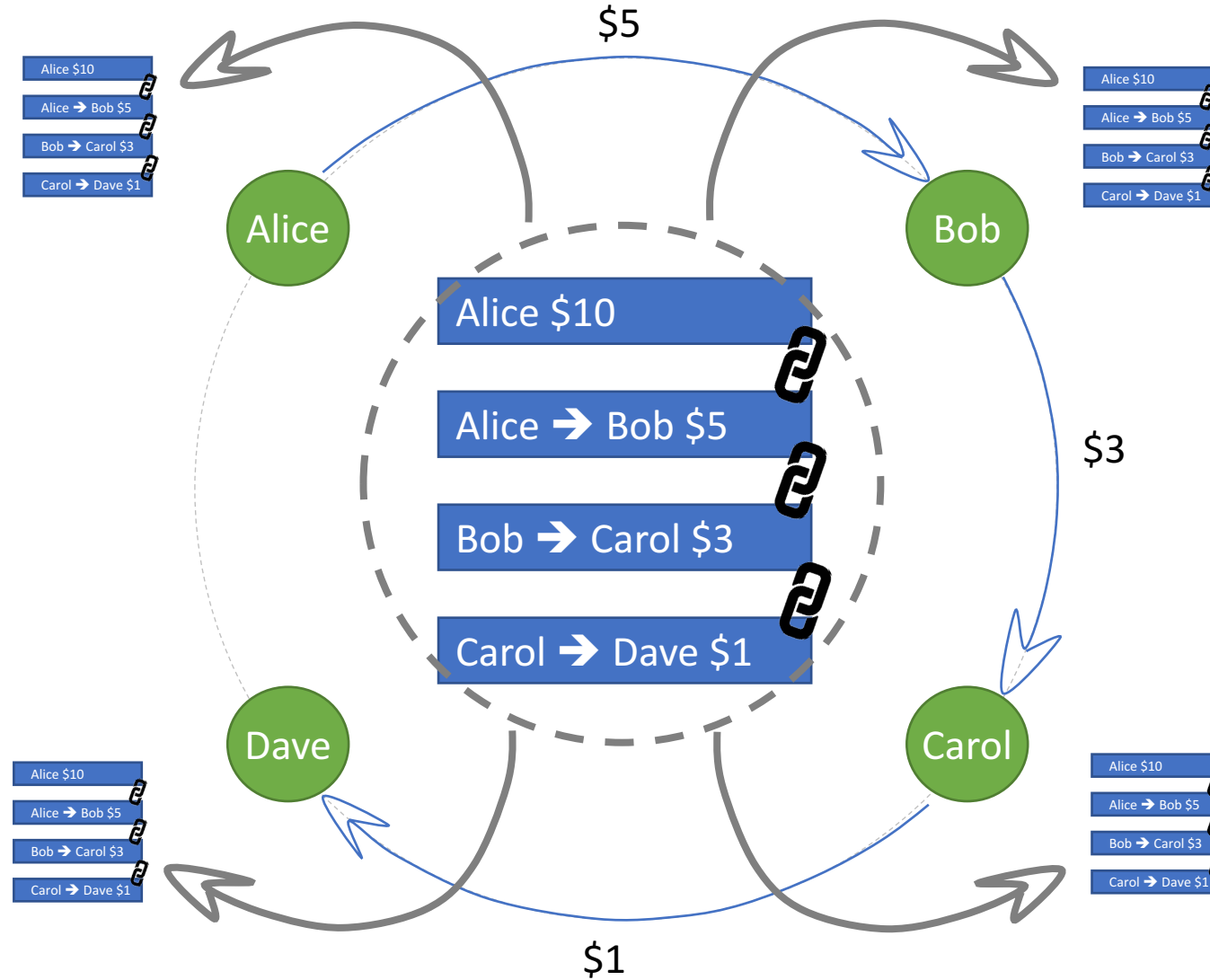
Open Ledger



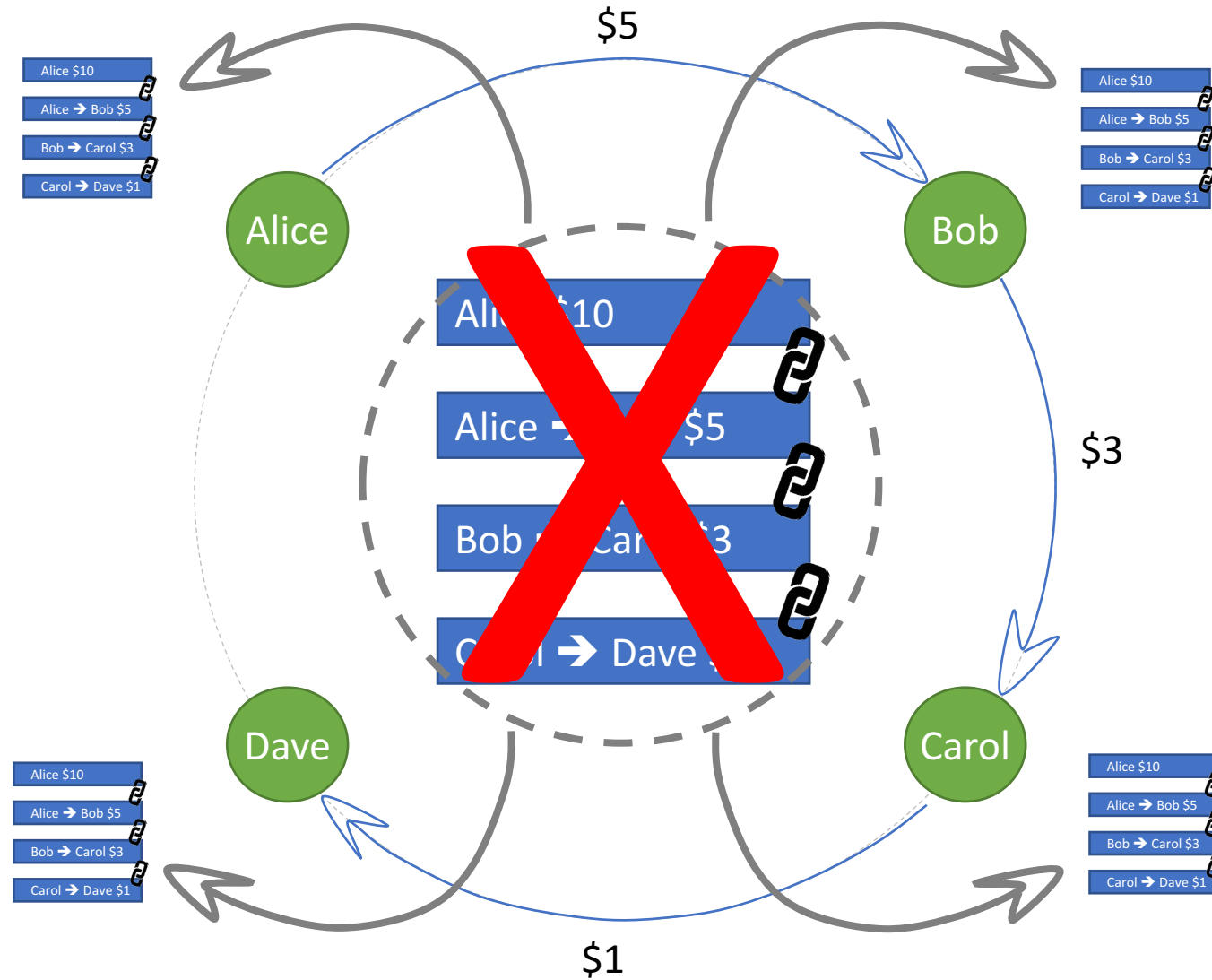
Chain: Alice → Dave, \$20



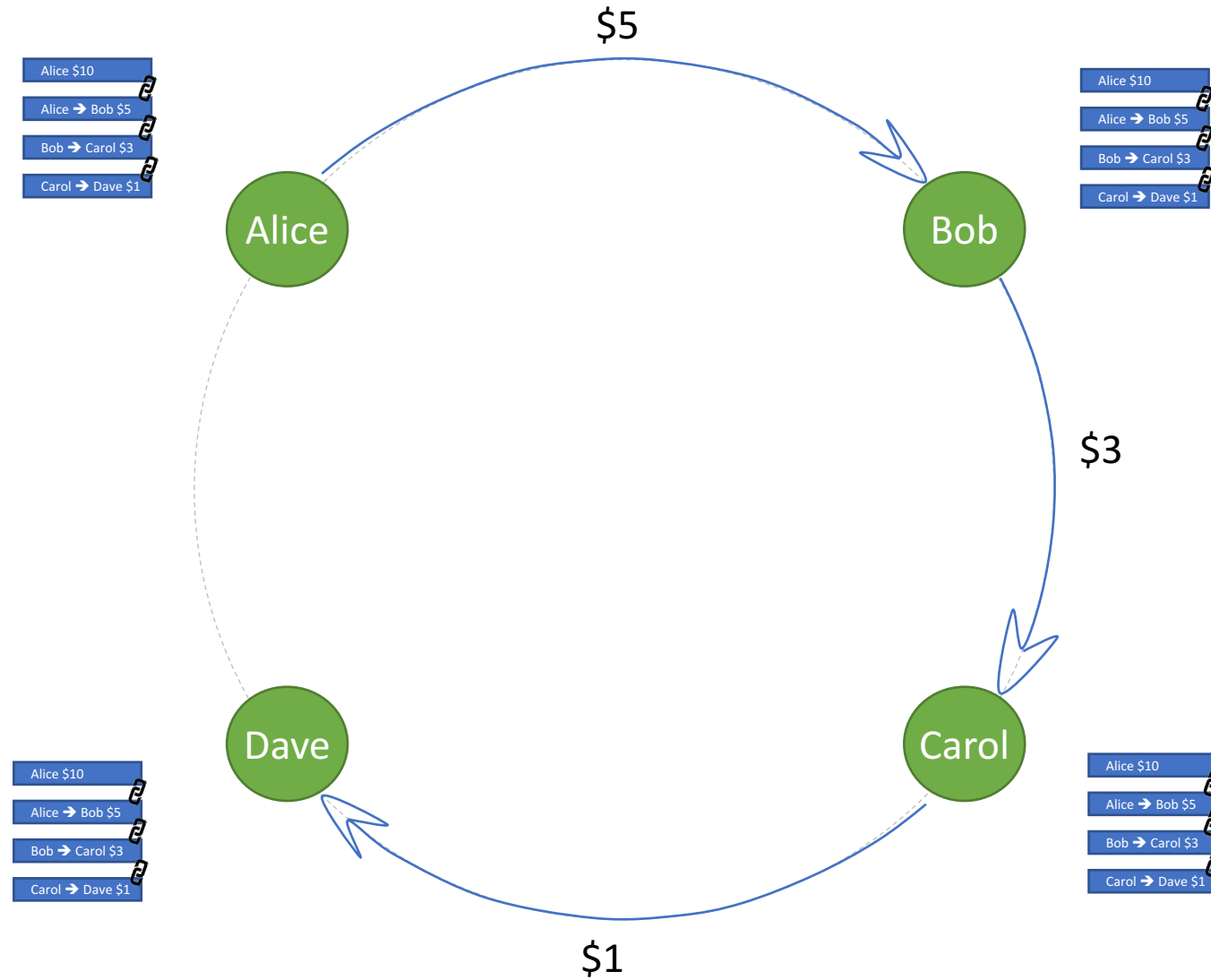
Distributed Open Ledger



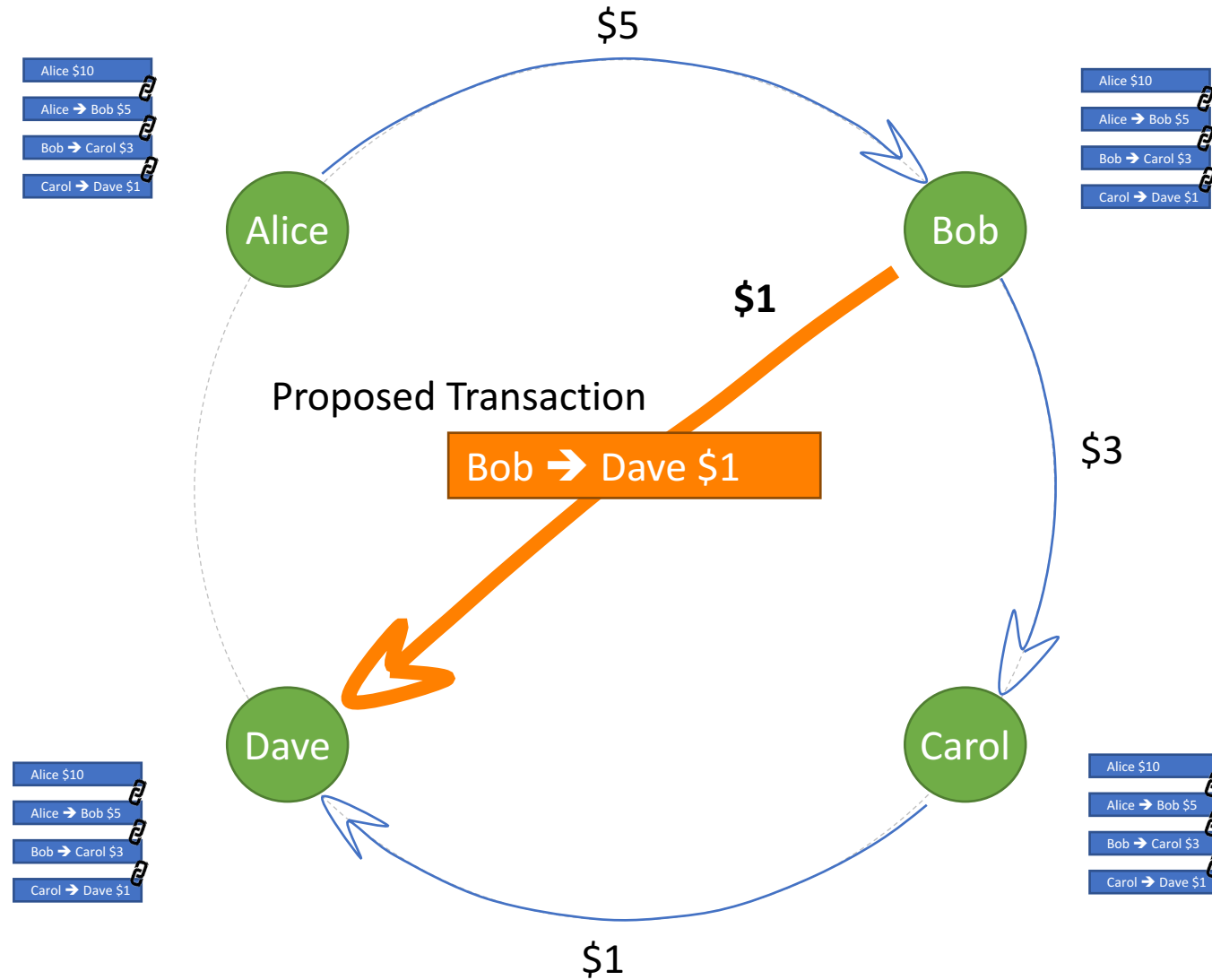
Distributed Open Ledger



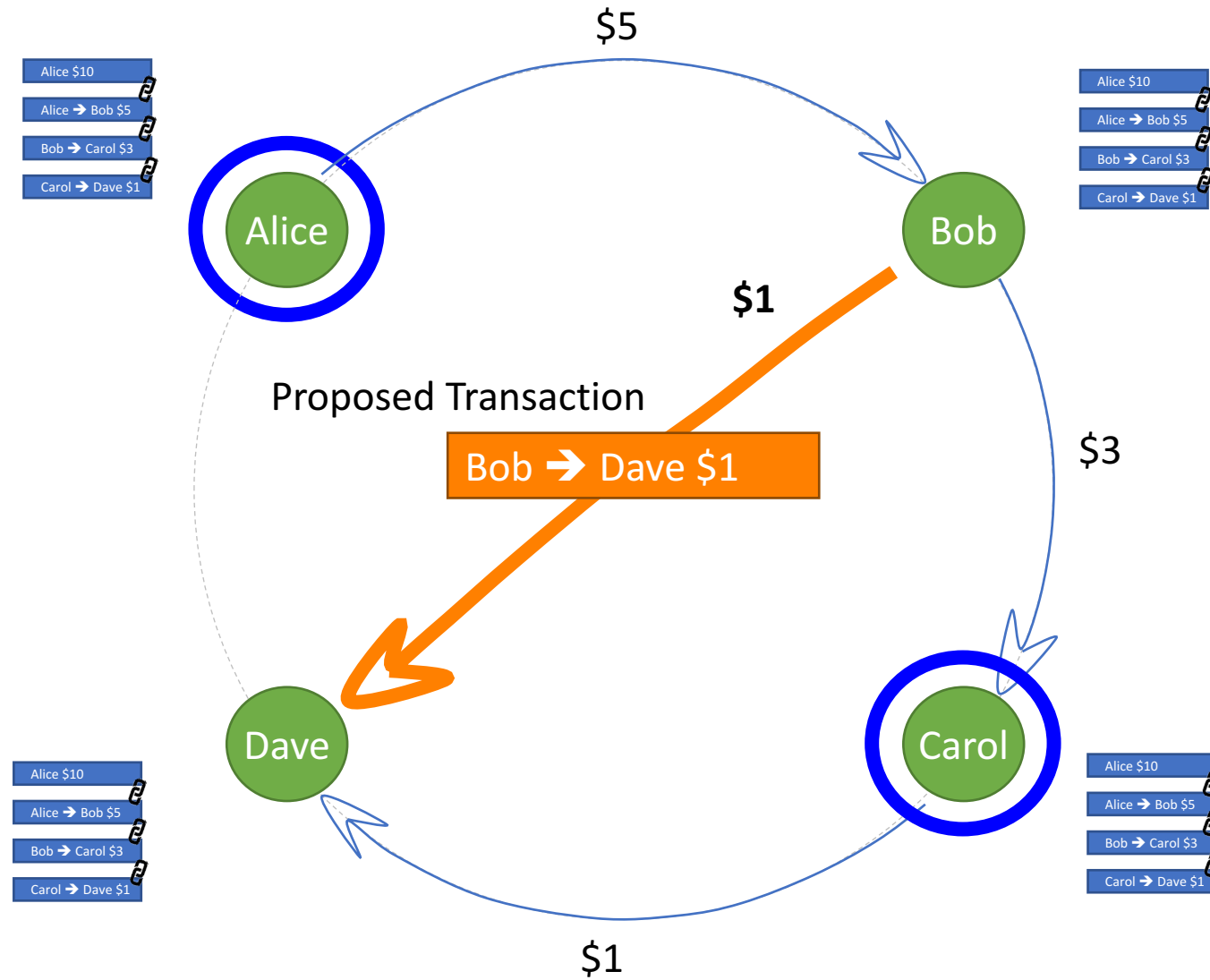
Distributed Open Ledger



How do we maintain sync?



Miners



Advantages

- No third parties
- No fees (lower fees)
- Faster
- Privacy
- Less Censorship
- More robust systems
- Foundation for services and products

Properties

- Database
- Multiple writers
- Absence of trust
- Disintermediation
- Chain of custody
- Validation

Most important properties?

Agreement on:

- *Identity*
- *Contracts*
- *Payment*

Blockchain Generations

- 3rd Generation - Digital Services
 - DNS
 - Digital Identity
- 4th Generation - Digital Infrastructure
 - Government
 - Education
 - Health
 - Publishing
- 1st Generation - Currencies
 - Bitcoin
 - Bitcoin like
- 2nd Generation - Contracts
 - Financial Services
 - Crowdfunding
 - Prediction Markets
 - Smart Property
 - Development platforms
 - DApps