



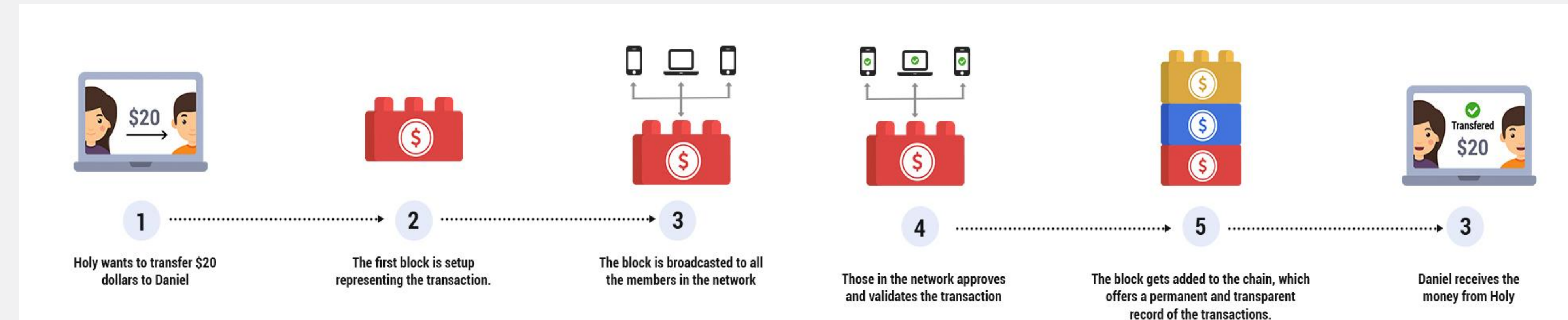
How can Public Policy fix the “ugly” in the Bankless Transaction System that Cryptocurrencies create?

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Background

Most cryptocurrencies today use **blockchain technology**. The **benefits** include:

- ✓ Auditable
- ✓ Decentralization
- ✓ Fault Tolerance
- ✓ Accountability
- ✓ Anonymity
- ✓ Crypto security



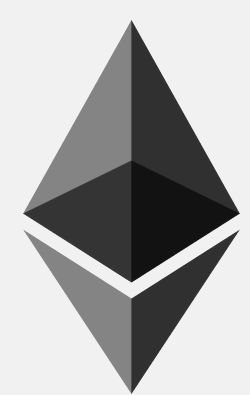
Over the past few years a number cryptocurrencies have emerged that provide their own add-ons to how they handle **transactions** and **security**.



Bitcoin



Litecoin



Ether

Anonymity

PROS

Provides an additional layer of security protecting participants from **identity theft** and **fraud**.

CONS

Bitcoin gave rise to *Silk Road*, a **darknet market platform** for selling illegal goods.



Nearly **\$72 billion of illegal activity** per annum involves Bitcoin.

Islamic State jihadist fighters have been making use of bitcoin for long-distance international transactions.

POTENTIAL REFORM

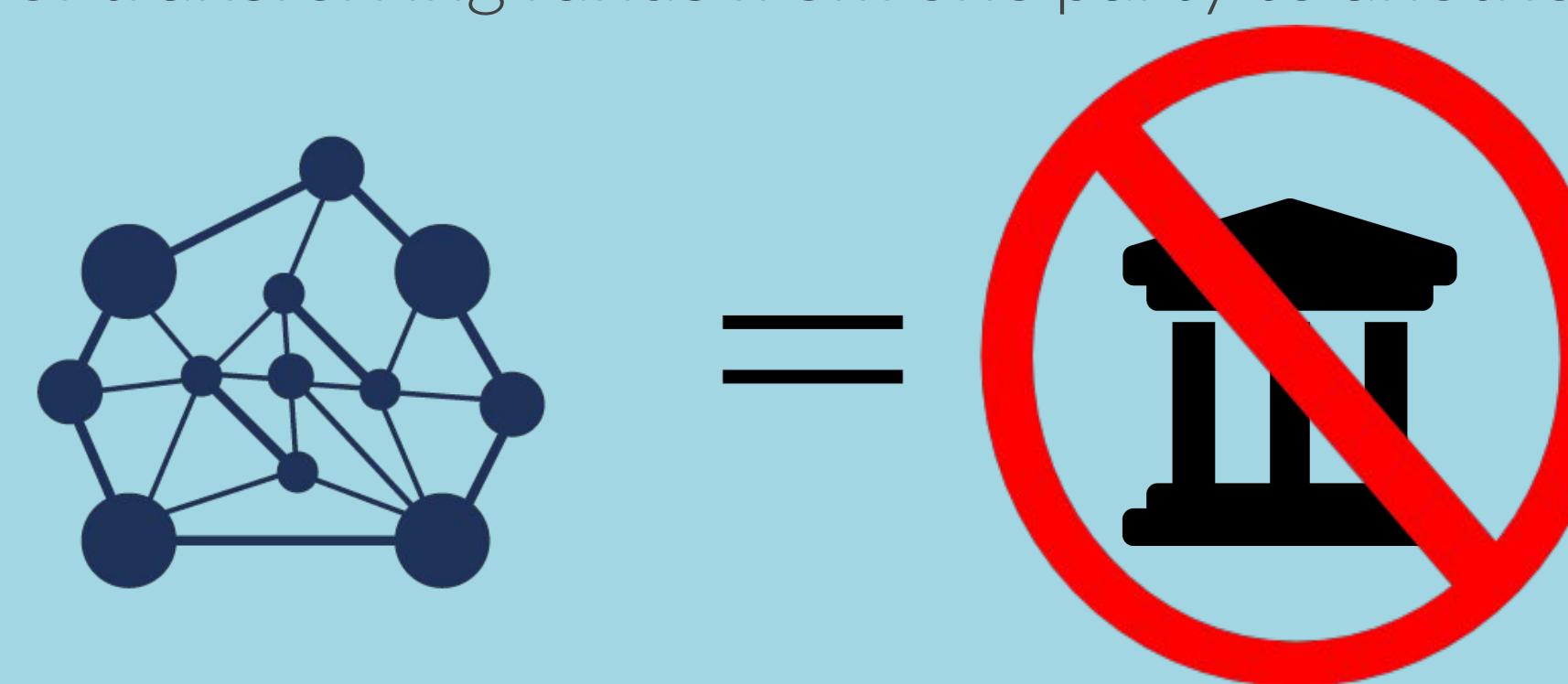
Can anonymity in transactions be made a **privilege** only to those participants who undergo **complete background checks**?

These checks can be performed by a centralized authority in the network (such as the bank).

Decentralization

PROS

Cuts out the middleman banks for transactions. This increases the efficiency of transferring funds from one party to another.



CONS

There is no verification system prior to onboarding the network.

Wall Street claims that **criminals laundered nearly \$90 million** through cryptocurrency exchanges over the last two years (2017 - 18).

Black money can flow through the system without suspicion, making it an idea system to convert black money to white seamlessly.

POTENTIAL REFORM

Instead of being completely eliminated, can banks **redistribute their centralized power** using blockchain based cryptocurrencies?

Fault Tolerance

PROS

Being an open network with multiple servers, blockchain networks provide **robust fault tolerance**.

Creates a platform where each participant can receive **financial rewards**.

CONS

Vulnerable to a “**51% attack**”. Crypto51 website shows 51% attack on bytecoin costs just \$719 using rented computing power.

Estimated Profitability of 51% Attacks		
	Amount Stolen	Estimated Cost of 1Hr Attack
Bitcoin gold	1,860,000	3,936
Zencash	500,000	5,237
MonaCoin	90,000	3,729
Verge	2,700,000	

The large networks use exorbitant amounts of computational power which has **ill effects on the environment**.

POTENTIAL REFORM

Can banks keep a **constant stake of 51%** in the network to disallow a 51% attack from every happening?



Cryptocurrency based transactional networks are flawed largely due to the absence of a mediating authority. However, the merits of cryptocurrency based transactions cannot be ignored - security, replication, and auditability. Cryptocurrencies should not become the public’s alternative means for making transactions. Instead, more banks should adopt the technology to improve the current banking system and increase customer satisfaction.