

# **bitmarkets**

anonymous decentralized markets  
with no trusted third parties

**problem**

**centralized markets**

censorship

no privacy

high fees

winner takes all

**solution**

**decentralized markets**

no censorship

more privacy

no fees

market diversity

# implementation

privacy via tor

payments via bitcoin

communication via bitmessage

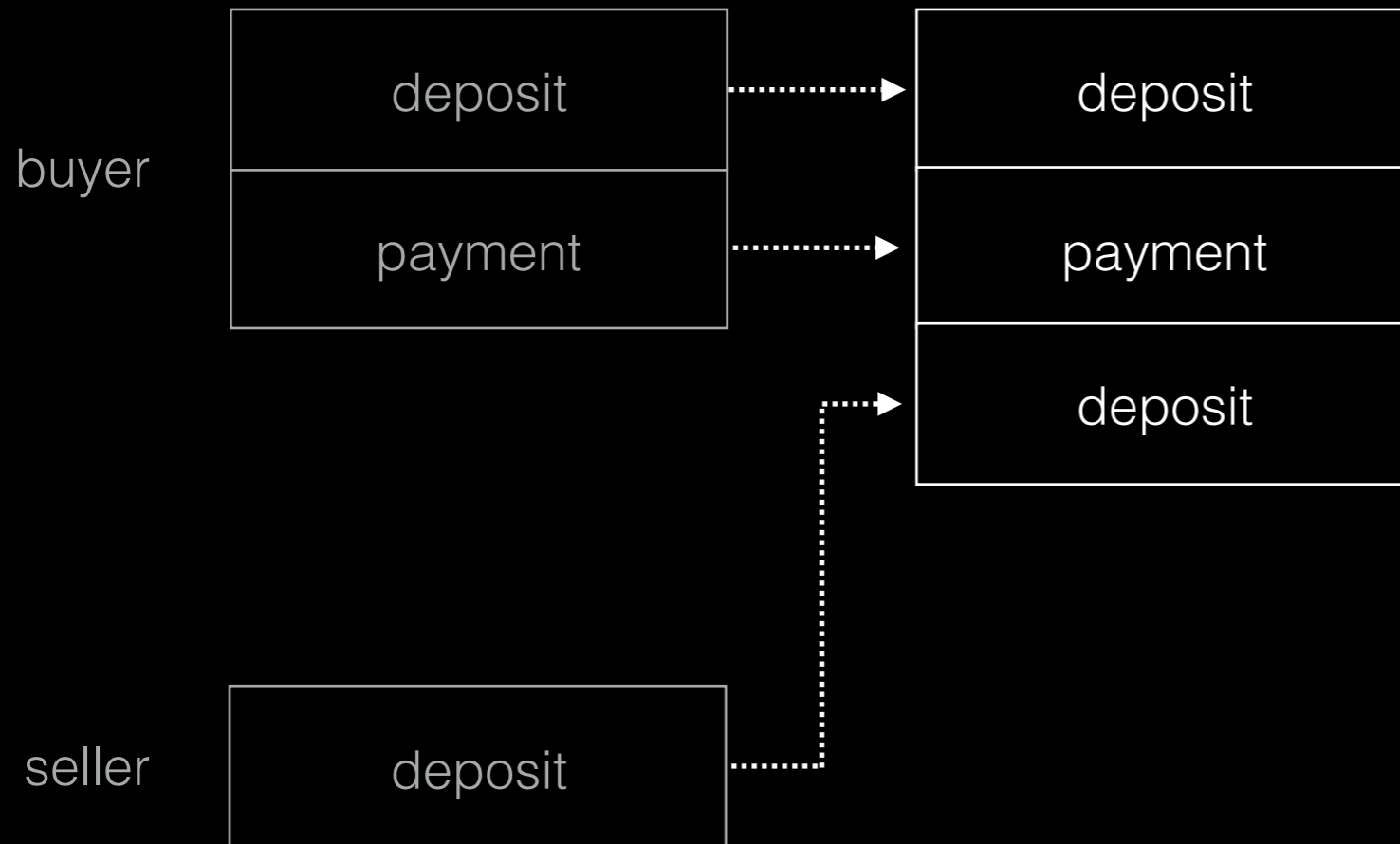
trust via two party escrow

## **two party escrow**

both parties lock mutual deposits and buyer payment in a transaction both must sign to release.

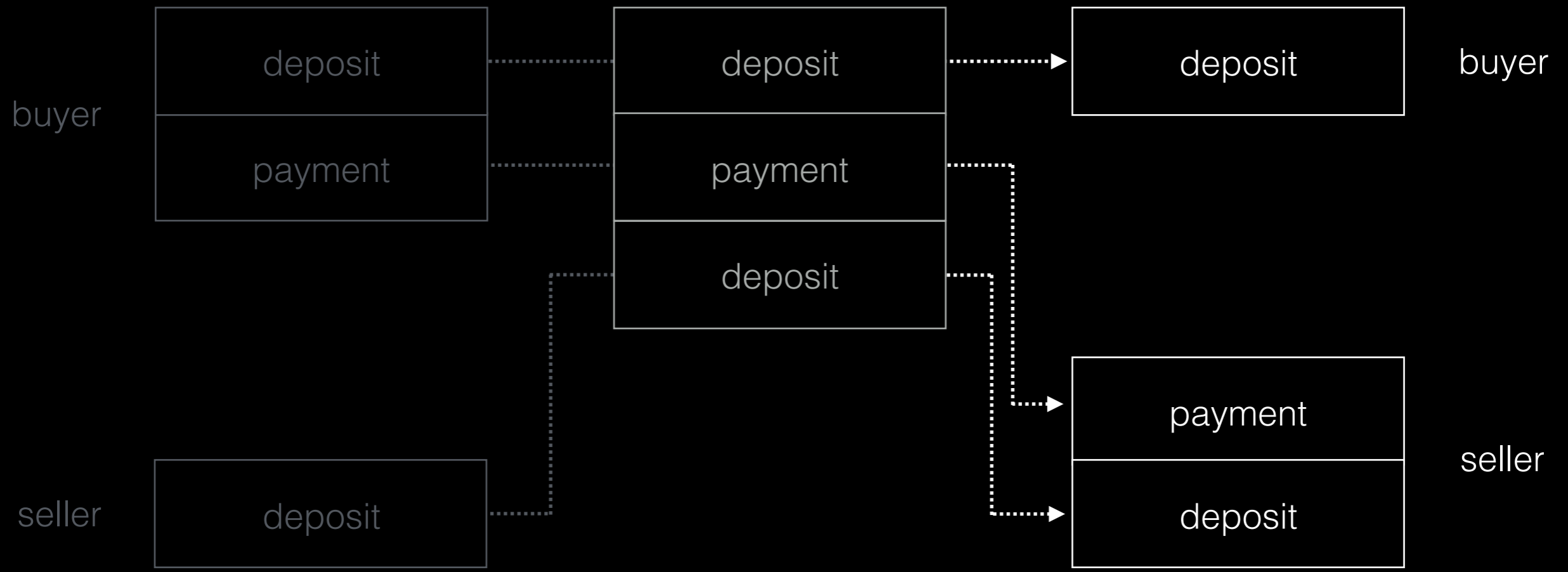
once locked, neither can profitably defraud the other.

**both sign to lock**

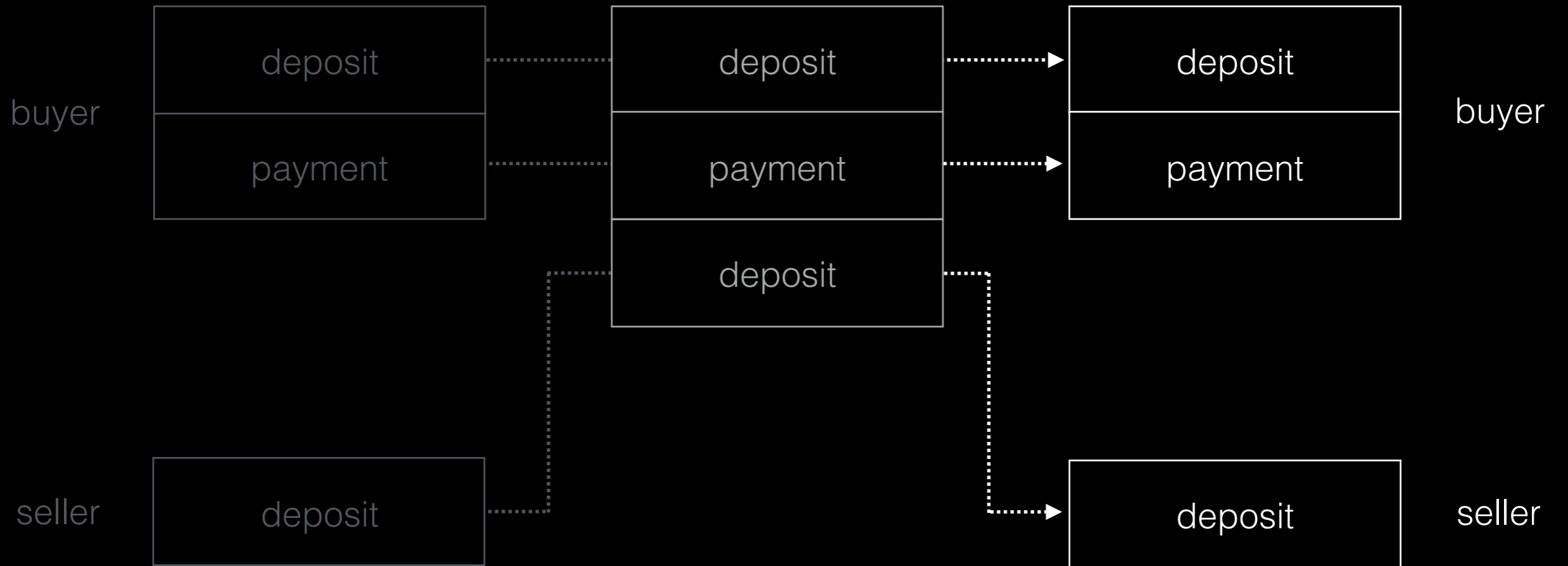


**money remains locked until agreement**

**both sign payment...**



or both sign refund





## **if seller doesn't send item**

seller  $-1x$  (keeps item but loses deposit)

buyer  $-2x$  (loses deposit & payment)

## **if buyer doesn't send payment**

seller  $-2x$  (loses item & deposit)

buyer  $-1x$  (gets item but loses deposit & payment)

## **game theory**

users need to be willing to take a loss to punish fraud, but will they?

ultimatum game experiments suggests they will

**why no escrow agent?**

agent only has one party's word  
against the other and therefore

no means of fairly resolving disputes

# **what about reputation?**

pseudonymous reputation

vulnerable to sybil and proxy attack

reputation is useful when tied to real identities as they are immune to such attacks, but this comes at the cost of privacy

## **proxy attacks**

proxy orders to gain reputation

## **sybil attacks**

leave bad reviews for competitors &

leave good reviews for attacker

these can be automated

# **reputation**

can be stolen

can be bought & sold

exit scam incentive increases with reputation

eventually, everyone retires...

## **escrow agent markets?**

replacing markets-as-agents  
with market-of-agents

lowers costs of proxy attacks

**trusting pseudonymous agents**

30% of hidden service markets

have been exit scams



## **two party escrow**

guarantees fraud unprofitable

safe from reputation attacks

safe from exit scams

no middle men

# browsing posts

syncing with bitmessage network - 8 connections, 1595 messages processed

Q +


Markets 8	Global	Automotive	Games Cards, Board Games...	Cool Tools Book by Kevin Kelly 0.0427BTC
Sells 8	US	Currencies	Instruments Musical Instruments	
Buys	Canada	Electronics	Paper Books, Magazine... 1	
Wallet 1.5000 BTC	Austria	Fashion 4	Plastic DVD, CD, Vinyl	
About	Belgium	Home	Video Gaming Games and Gear	
	Bulgaria	Media & Games 1		
	Croatia	Other 1		
	Czech Rep	Services		
	Denmark	Sporting		
	Finland	Tests 2		
	France	Tickets		

### Cool Tools Book by Kevin Kelly

0.0427BTC 10.1USD 9.1EUR [Buy](#)

Perfect condition. This item is \$25USD on Amazon. Shipping in US only.

📍 Shipping within US  
👤 *BM-2cTUgt97vPRASYUGvU83CAQToLpwGQ8NHf*  
▶ Media & Games / Paper



# tracking sales

syncing with bitmessage network - 8 connections, 1273 messages processed

Markets 8 ACR-FW-0708 E-P... 1.2000BTC

Sells 8 ACR-FW-1213 P9-... 1.2000BTC

Buys ACR-FW-1213-DS-... 0.8000BTC

Wallet 1.5000 BTC Banana Republic... 0.0443BTC

About Cool Tools Book b... 0.0427BTC

Test 0.0100BTC

Test 2 0.0100BTC

Test 3 0.0070BTC

Listed ✓ Bids • Lock Escrow Dispatch Release Escrow Complete

**Status**  
Awaiting bids.

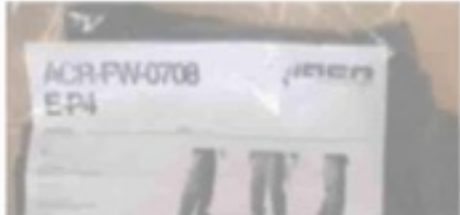
Accept First Bid Remove Listing

ACR-FW-0708 E-P4, BLK (M)  
1.2000BTC 284.3USD 255.2EUR

The medium of these was a bit too small for me (I'm a 32 waist).

For more info on this brand, see:  
<http://www.acronym.de/collections.php>

📍 Shipping within US  
👤 [BM-2cTUgt97vPRASYUGvU83CAQTolpwGQ8NHF](#)  
▶ Fashion / Men's / Pants



app, source, white paper and  
protocol spec available at

**[bitmarkets.org](https://bitmarkets.org)**

## **team**

chris robinson designer

rich collins bitcoin integration

adam thorsen bitmessage & tor work

steve dekorte ui & lead