OpenBazaar

Connor Sheehan

Danny Mandel

Shandelle Murray

A free, open, peer to peer marketplace for online trading of goods and services





Goals

- Eliminate need for third party corporations involved in online trade (Amazon, eBay)
- Eliminate extra fees and restrictions
- Reduce overhead costs of trade
- Allow global communication and trade

Welcome	New Contract	My Store	My Orders	Send Message	Settings	Bootstrap	_
Contract							<u> </u>
Your Bitcoi	n address						
Name of item to sell							
Price (in B1	rC) of item to se	ell					
Offer expiry date							
Add keywords Separate keywords by comma (ie word1,word2,word3,,wordn)						rdn)	
Add images (max 3): Browse							
Item Descr	iption:		111				

Sellers

- Install program on computer
- Create store
- Generate contract(s) to list items/services in store
- Send and receive messages from potential buyers

Buyers

- Install program on computer
- Search for items/services or browse through stores
- Send and receive messages from sellers
- Potentially select goods and services to purchase

Implementation Details

 Kademlia-style Peer-to-Peer Network to allow the possibility of connecting millions of people

Ricardian Contract

- To ensure fairness and to avoid unauthorized changes to the contract
- Protects both buyers and sellers
- States terms of contract and may include a third party notary
- From the original OpenBazaar website:

A Ricardian Contract can be defined as a single document that is a) a contract offered by an issuer to holders, b) for a valuable right held by holders, and managed by the issuer, c) easily readable by people (like a contract on paper), d) readable by programs (parsable like a database), e) digitally signed, f) carries the keys and server information, and g) allied with a unique and secure identifier.

- Ian Grigg

Makes use of a chain of digitally signed and checksum hashed contracts to create an unalterable record of agreement

- Digital signatures from involved parties provide proof of agreement
- Hashes provide proof of authenticity because the tiniest change in the contract will show in the hash

Process

- A contract describing the item and specifying the terms of sale is generated by the seller and posted to their store
- A buyer interested in purchasing the item can choose to do so
- A third party notary may be selected in order to mediate the trade
- The seller ships the item or provides the service
- The buyer receives the item/service
- If both parties agree that the contract is satisfied, the Bitcoin funds are able to transfer from one party to another
- If there is a problem with the trade and the parties are in disagreement, they must provide proof
 of a discrepancy and the notary then decides how to proceed
- If the notary decides that the seller has satisfied their part of the trade, the funds get transferred according to the terms of the contract
- Otherwise, the notary may rule in favor of the buyer and the funds may not get transferred

Demonstration