#### INTRODUCTION TO BITCOIN

# WHY BITCOINS

#### **SUNDAY**

March 6th, 2022 2:00pm - 6:00pm Land Bank and Development Corporation Addis Ababa, Ethiopia

KAL KASSA Head of BD at hoseki



x = independently organized TED event

### WHAT IS MONEY?

- Store of Value
- Medium of Exchange
- Unit of Account



# NIXON, 1971

- End of Gold Standard
- Cheap Debt/ The FED
- Inflationary System/ target of 2%
- National Bank of Ethiopia



#### THE US DOLLAR

- Backed by soft power, military, petroleum
- 60%-80% of all USD printed in past 2 yrs
- Inflation in the United States at 7.5%
- Inflation in Ethiopia at 35%



# CRYPTOGRAPHY, '74-'08

- 40 years of research including breakthroughs from Ralph Merkle, Adam Back, Nick Szabo, and Hal Finney.
- Predecessors include HashCash, B-Money, E-Gold, Bit-Gold, Digicash



# **BITCOIN, 2009**

- Satoshi Nakamoto, White Paper
- Peer to Peer (P2P)/ Sovereignty
- 21m BTC/ scarcity/ consensus
- Proof-of-Work/ Energy
- SHA256/ Data Integrity





#### **OPEN-SOURCE**

- Grants users rights to use/ modify/ distribute software and its source code
- Android, Linux, Firefox, VLC Media Player



#### **BITCOIN NODE**

- Distributed Ledger/ Decentralized
- "Blocks" verify 2k txs every 10 mins/ 1-2MB of data in each block. There are 724,000 blocks as of today, full bitcoin node requires roughly 200GB of harddrive space



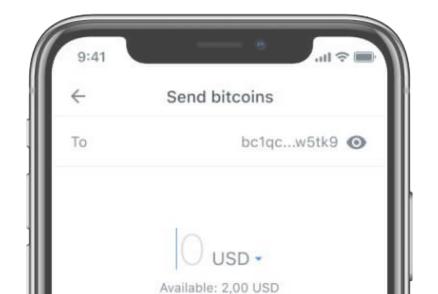
## **SATS**

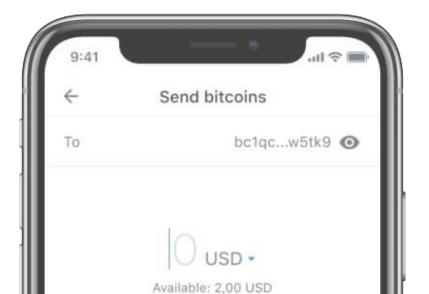
- 0.027863500 BTC
- 2,786,350 SATS
- 50,000 ETB
- 1,000USD



#### LIGHTNING NETWORK

- Exists on the second layer of the bitcoin protocol
- Enables instant/smaller transactions at almost free rates - can be thought of as the transaction layer where Bitcoin is the settlement layer
- EthioTelecom/ BitRefill/ BTC to ETB payment





#### MINING

- Energy is the input for "mining" for bitcoin reward
- Bitcoin Mining will go on until 2140/ Project Mano
- Mining reward at 6.5 bitcoin per block/ reward reduced by half every 4 years/ Increased hash rate means that there are more miners and the system is more secure



#### **BLOCKSIZE WARS**

- 2015 2017, battle over control of the bitcoin protocol
- Led to numerous coins/ tokens that forked the bitcoin protocol into their own (BitcoinCash, BitcoinSV)
- As of today, the free market has choosen bitcoin as the more favorable protocol



#### **EXCHANGES**

- 14mln of the 18mln bitcoin mined are off exchanges
- Roughly 4mln float on various exchanges (Binance, Coinbase, CashApp, etc.)
- Exchanges might be a point of failure depending on a variety of factors.



# BENCHMARK VALUE (USD)

- 100 300 trillion (Global Bond Market)
- 10 trillion (GOLD)
- 1.3 trillion (SILVER)
- 1 trillion (BTC)
- 500 billion (ETH)/ 500 billion (all other cryptocurrencies)



#### **EL SALVADOR**

- Activity begain with Bitcoin Beach
- Bitcoin adopted as legal tender
- 1 billion USD in bitcoin bonds/infrastructure
- McDonalds, Starbucks, etc. all accept bitcoin as payment



### **ETHIOPIA**

- Sovereign Wealth Fund
- Mining/ Node Operation
- Open-Source Development/ Education
- 2.5 bitcoin available for Ethiopian Government (Grant)

