Reaching Everyone:

Can Bitcoin deliver decentralised Financial Liberation?

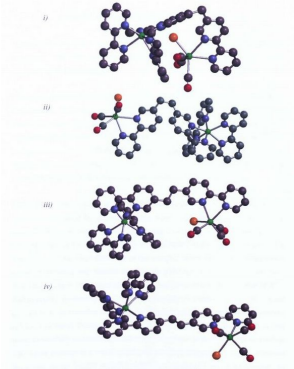
Wassim Alsindi PhD

EX-DIRECTOR OF RESEARCH
PARALLEL INDUSTRIES
WWW.PLLEL.COM // @PARALLELIND

Credit: Kevin Durkin for In The Mesh
https://inthemesh.com/archive/reaching-everyone-pt-3/

LITTLE BIT ABOUT THIS GUY

SCIENCE KID



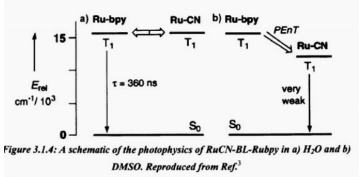


Figure 3.1.4: A schematic of the photophysics of RuCN-BL-Rubpy in a) H_2O and b) DMSO. Reproduced from Ref.[3]

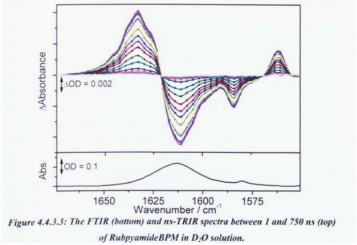
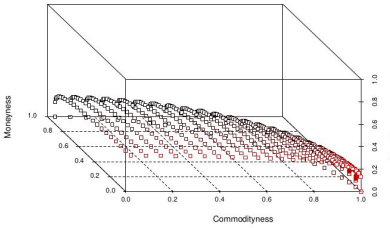
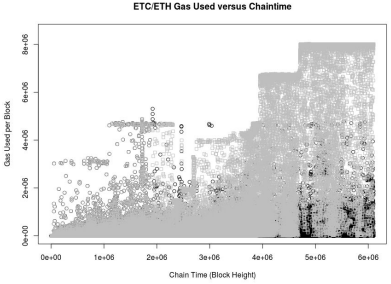


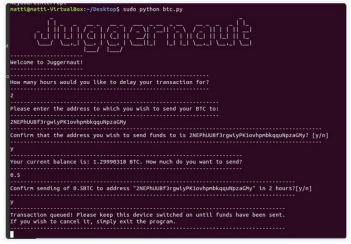
Figure 4.4.3.3: The FTIR (bottom) and ns-TRIR spectra between 1 and 750 ns (top) of RubpyamideBPM in D_2O solution.

EXPERIMENTAL ARTS

D-TECH RESEARCH
#ReachingEveryone
#Forkonomy
#TokenSpace

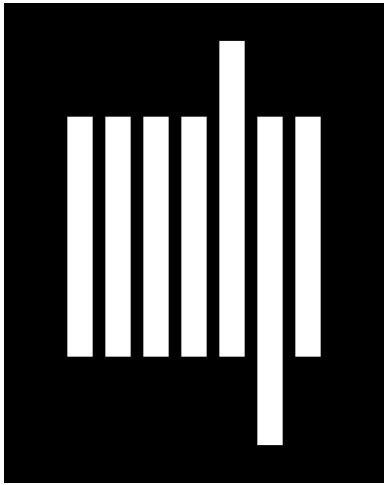






Cryptocurrency Research Review: a new scholarly journal & conference series based at the Massachusetts Institute of Technology

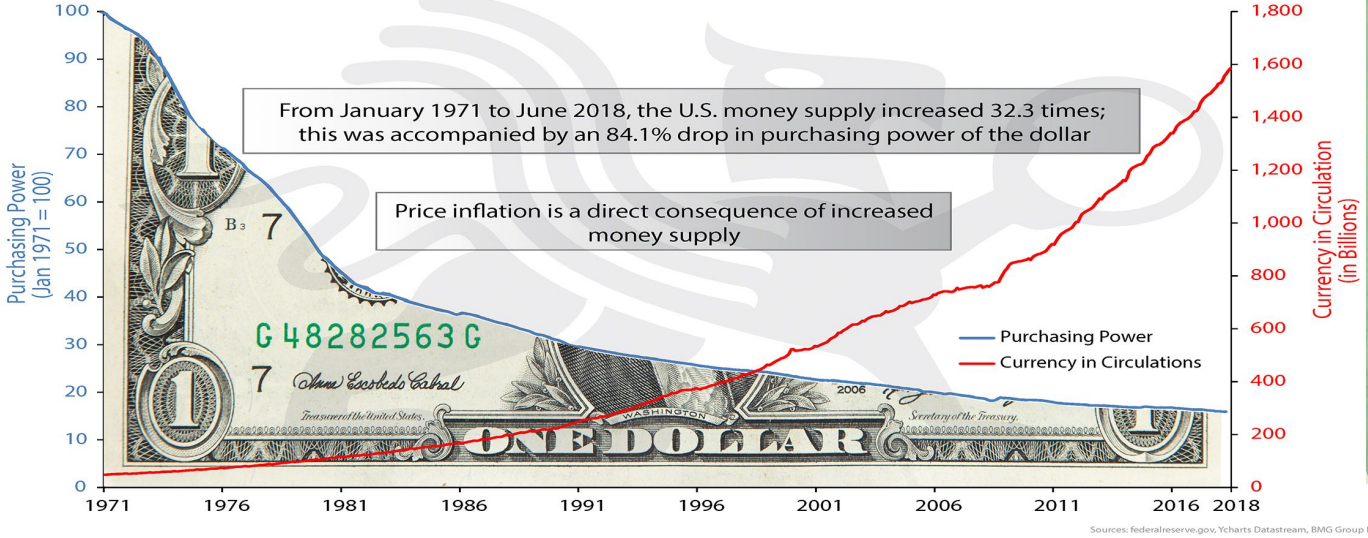
digital currency initiative | mit media lab



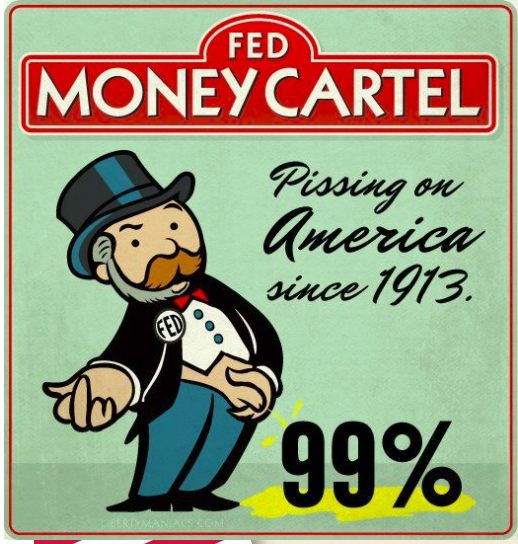
Opinions my own, weakly subjective & malleable.
No endorsements, not financial or legal advice.

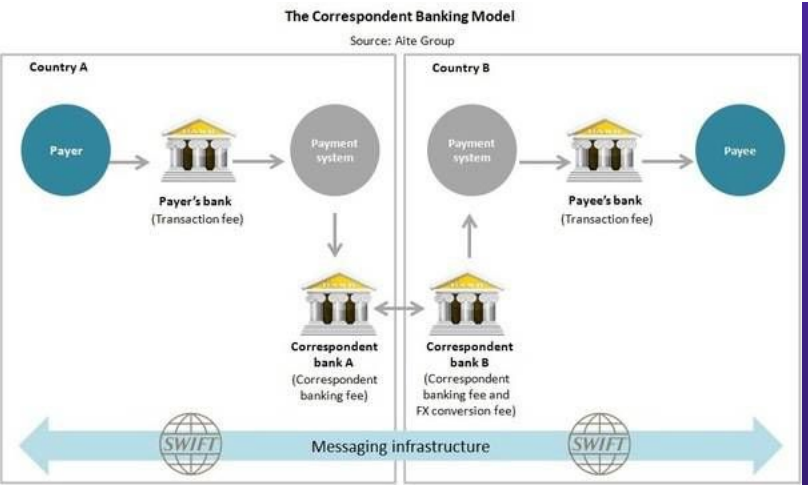
why do we need to “reach everyone”, anyway?

USD – Purchasing Power & Currency in Circulation



Sources: federalreserve.gov, Ycharts Datastream, BMG Group Inc.





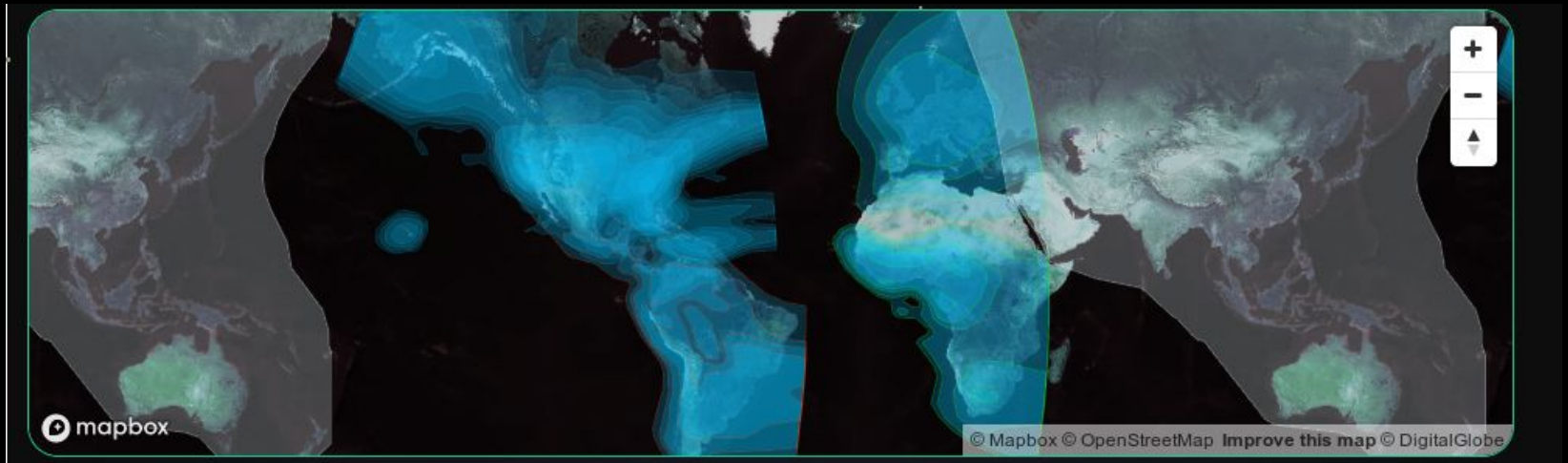
Social/Political:
Decision-making & interests arising from network participants

Monetary:
Transactions, addresses, incentives and issuance.
Emergent economic characteristics with a value transfer system

Protocol:
Cryptographic primitives, software specifications,
consensus rules & message broadcasting

Logical:
Data storage & structure. Redundancy, scalability externalities
on infrastructure, reliance on central points of failure

Blockstream Satellite Network:
Receive offline / sync without censorship / verify!



GALAXY 18
North America
Long: 123W
Freq: 12022.85 MHz
Pol: Horizontal

EUTELSAT 113
South America
Long: 113W
Freq: 12026.15 MHz
Pol: Vertical

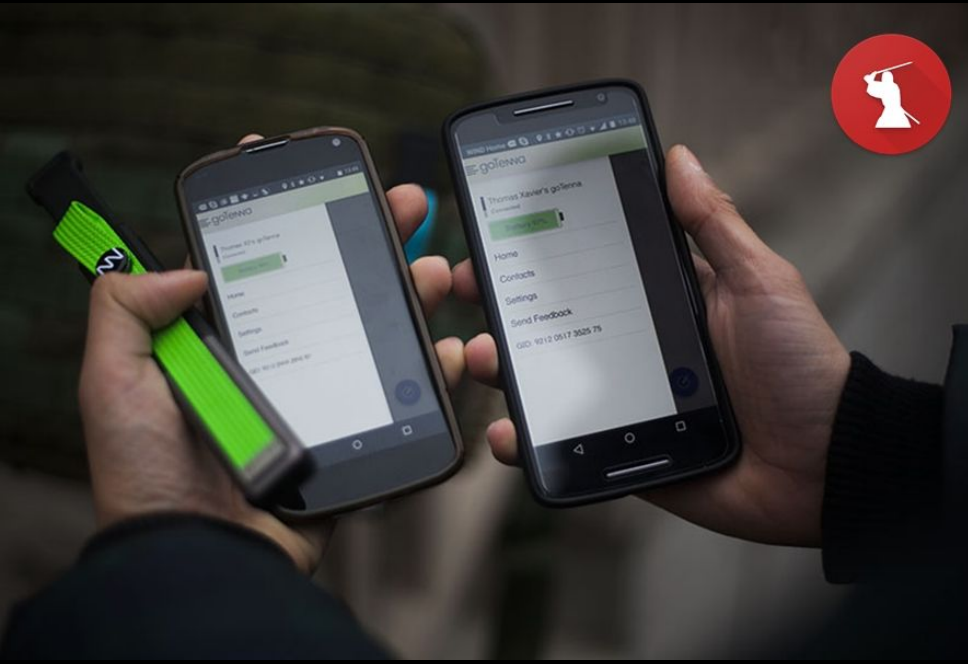
TELSTAR 11N
Africa
Long: 37.5W
Freq: 11476.75 MHz
Pol: Horizontal

TELSTAR 11N
Europe
Long: 37.5W
Freq: 11504.02 MHz
Pol: Vertical

PHASE 2
Coming Soon
Long: TBD
Freq: TBD
Pol: TBD

TxTema

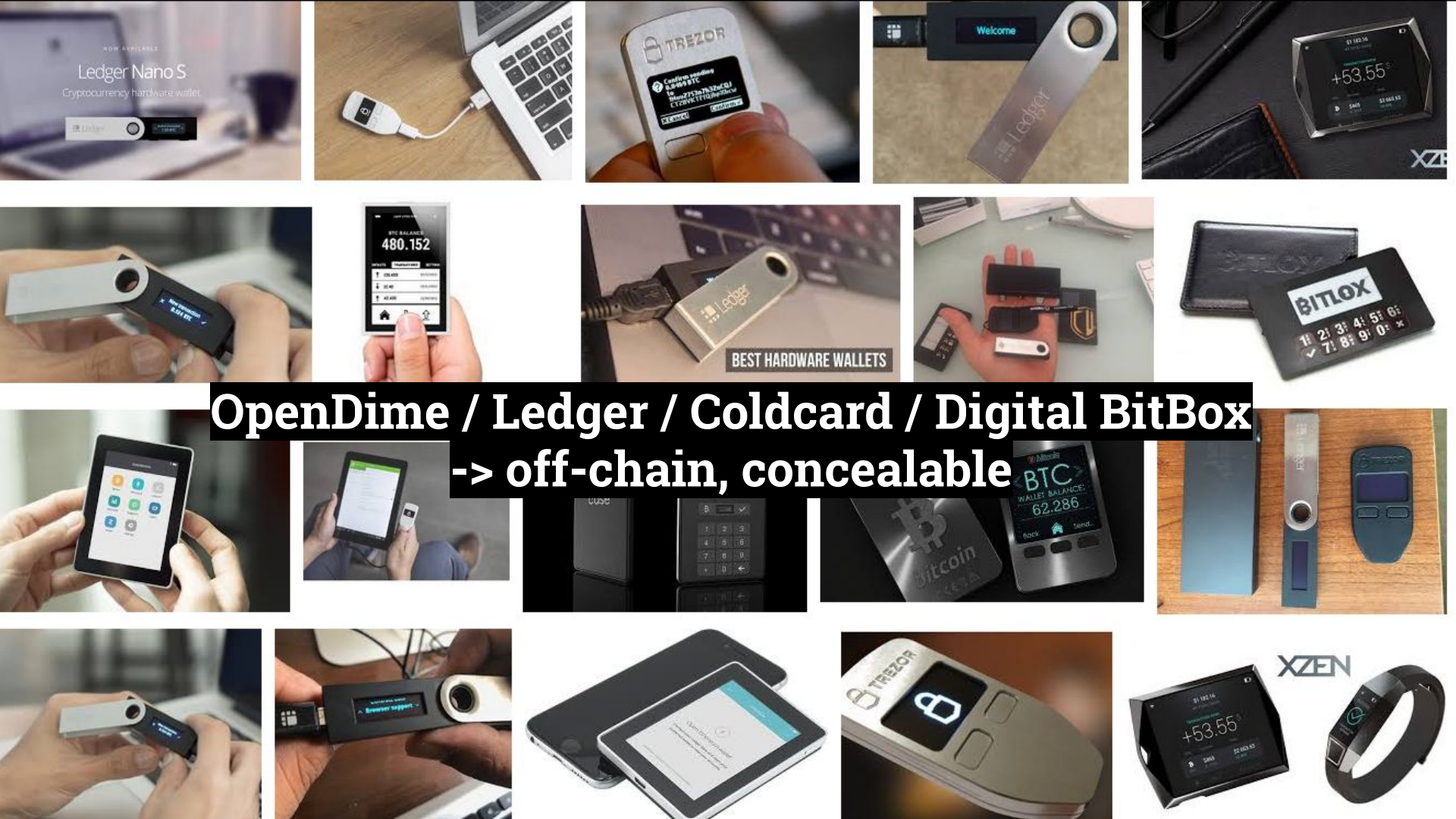
goTenna MESH Networking + Samourai = txTenna



- SMS relay
- satellite hook-up
- fax or any form of hard copy to character recognition
- save to external support (USB)
- Portable Document Format (PDF)
- telex
- HF audio
- Morse code
- meshNets
- NFC
- BLE
- chat apps (especially encrypted)

[Umbrella Revolution]

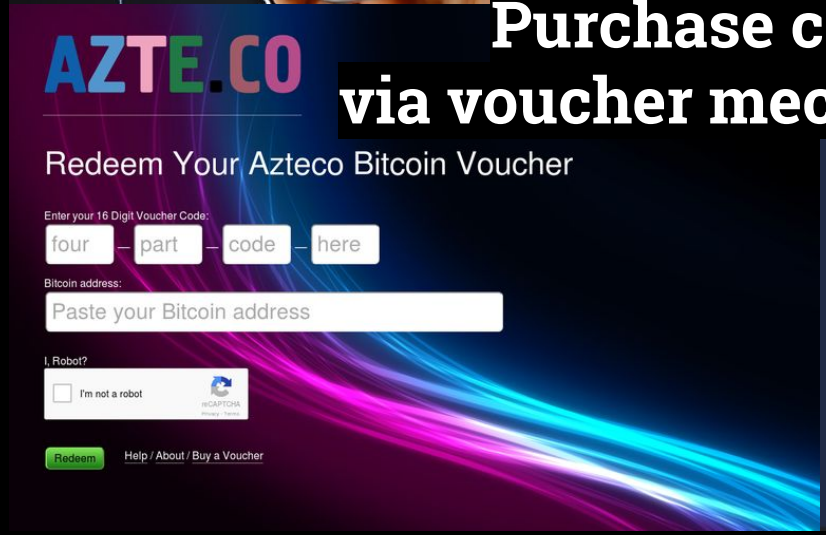
Polymerbit / Tangem / BitNotes
-> Printable, streaming top-up with Lightning
-> concealable, durable, offline

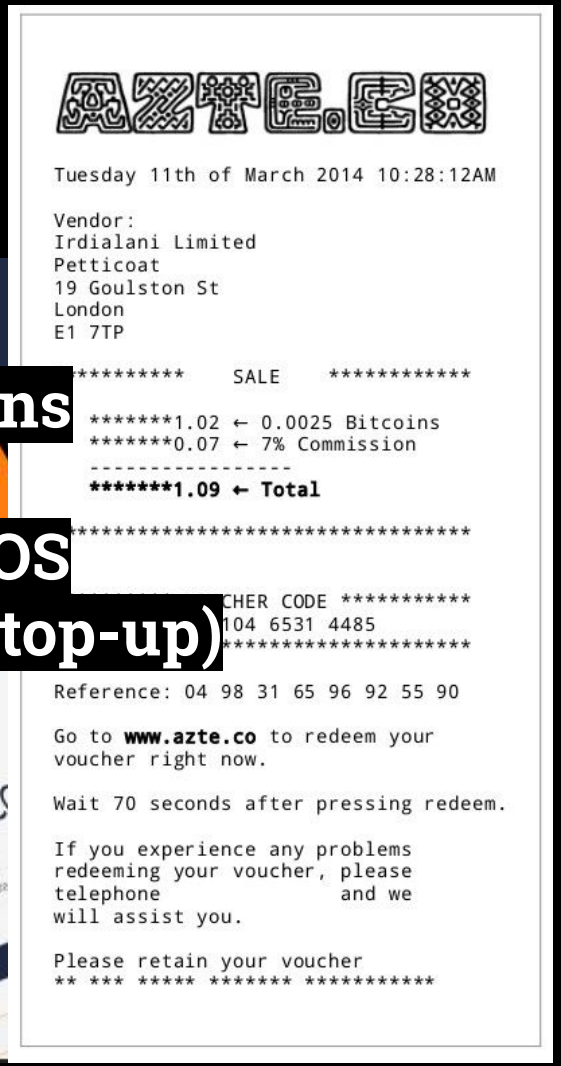


OpenDime / Ledger / Coldcard / Digital BitBox
-> off-chain, concealable

Azteco / Bitrefill / FastBitcoins

Purchase crypto at ePOS / POS via voucher mechanism / mobile top-up)





Parallel Industries @parallelind · Dec 9

They're really **#ReachingEveryone**

Josh Swihart @jswihart

The group @labitcoineta travels South America to teach people in small towns about Bitcoin. They even use a 📡 to connect to the @Blockstream 🛰️ where no internet is available. So incredibly cool. Grateful for them.

4

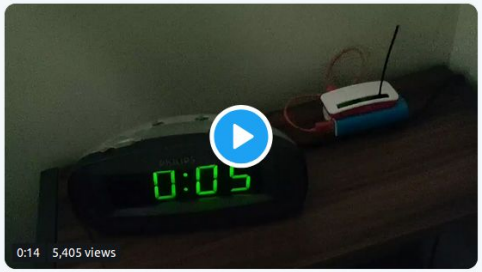
Samourai Wallet and 4 others Retweeted

Matt [Jan/3→🔑] @MattoshiN · Oct 20

Signed raw transaction broadcast over radio.

CC: @parallelind

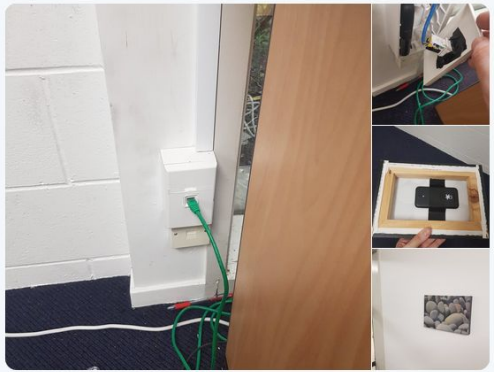
#ReachingEveryone



7 37 127

Coinsure @Coinsurenz · Oct 30

This in effect provides an open wifi access point for bitcoin transactions to anyone with a gotenna. A txtenna user who wishes to conceil their identity can then broadcast from potentially kilometeres away. Much greater distance and an extra degree of anonymity than via open wifi



Parallel Industries @parallelind · Nov 14

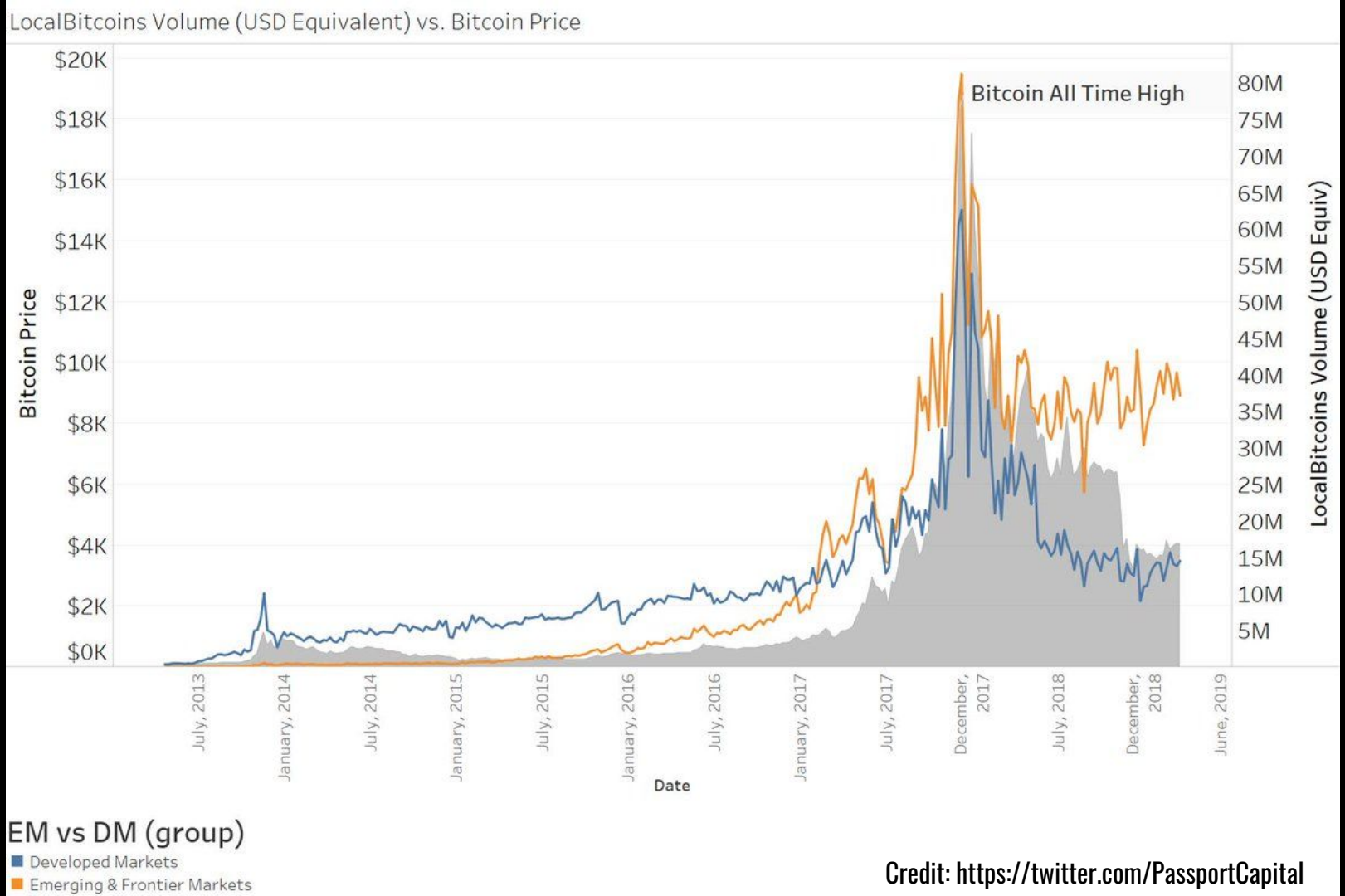
Get some range on your node.

#ReachingEveryone

Pi Supply @PiSupply

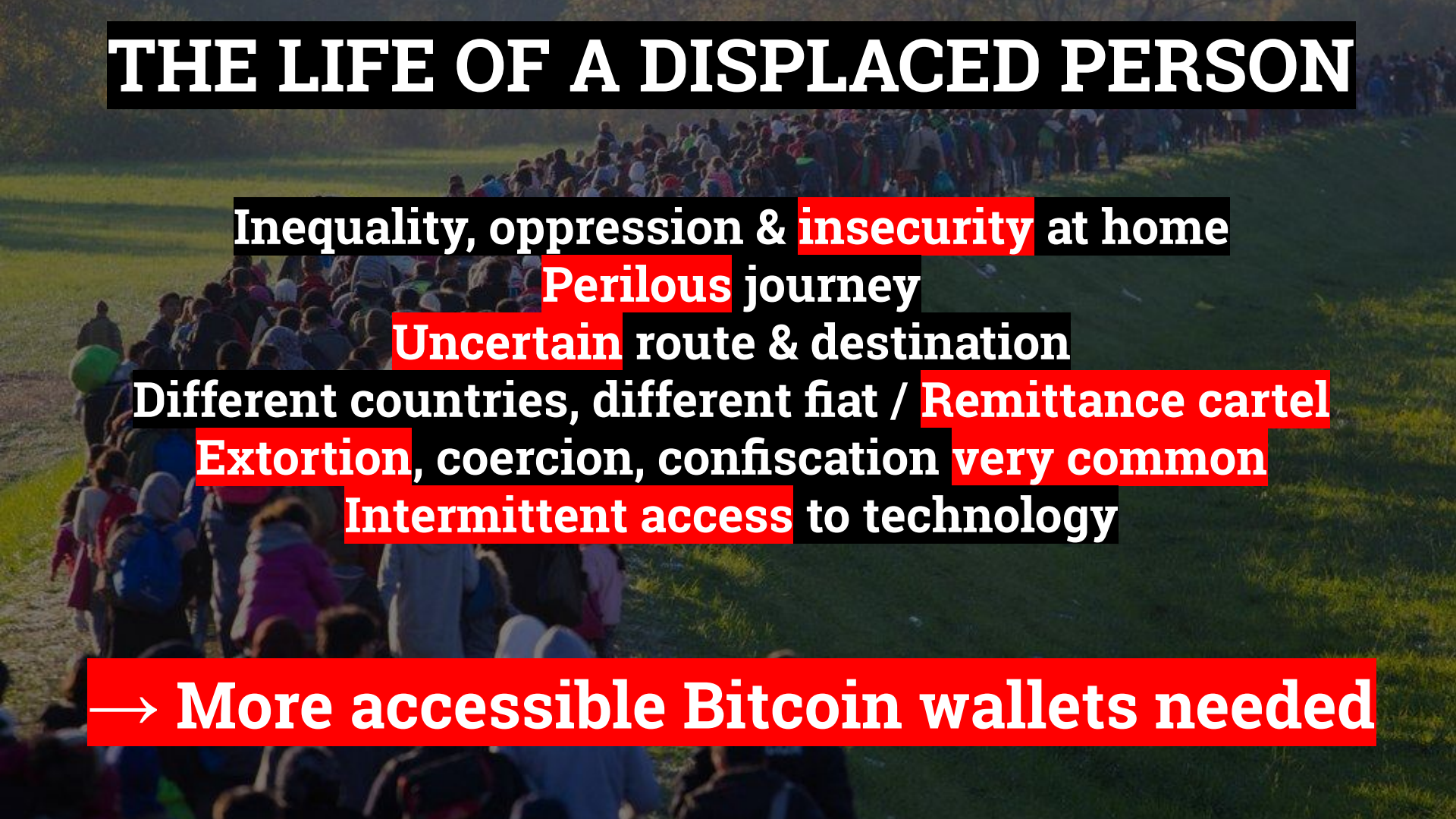
Here's a few pictures of the beta boards of our IoT LoRa Gateway HAT for @Raspberry_Pi that we launched on @kickstarter. Packaging and boards looking great. Very pleased 🤗🤗🤗

1 1 5



Credit: https://twitter.com/PassportCapital

Proof of Concept:
Bitcoin wallet for migrants & their families with limited access to infrastructure & technology



THE LIFE OF A DISPLACED PERSON

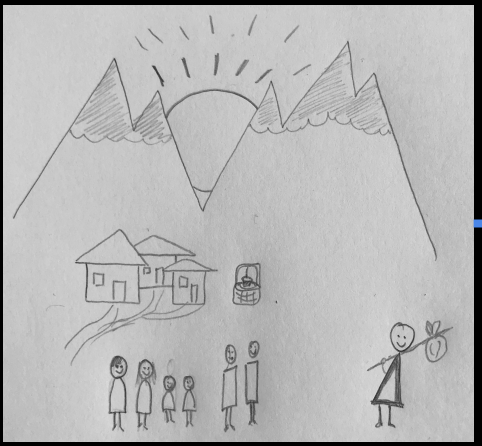
Inequality, oppression & insecurity at home
Perilous journey
Uncertain route & destination
Different countries, different fiat / Remittance cartel
Extortion, coercion, confiscation very common
Intermittent access to technology

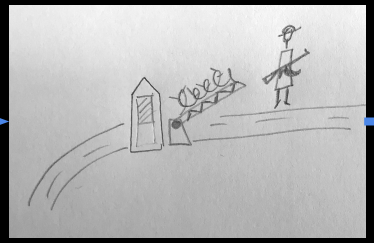
→ More accessible Bitcoin wallets needed

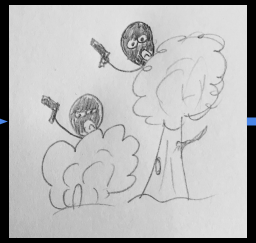
WHY BITCOIN?
DOES THIS NEED A BLOCKCHAIN?

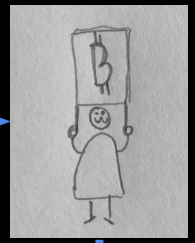
Political & Economic Oppression
Censorship / Extortion / Confiscation

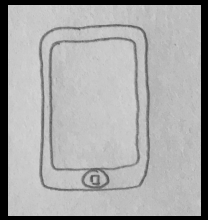
MIGRANT JOURNEY

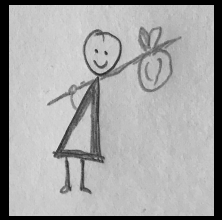


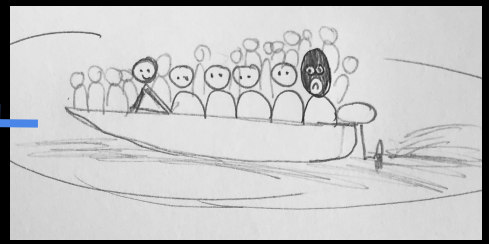


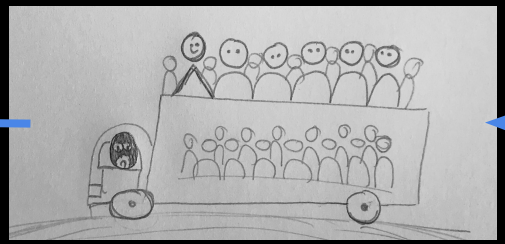


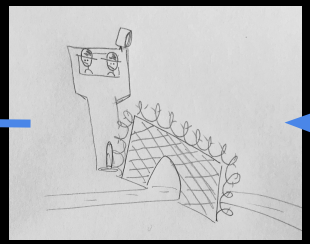


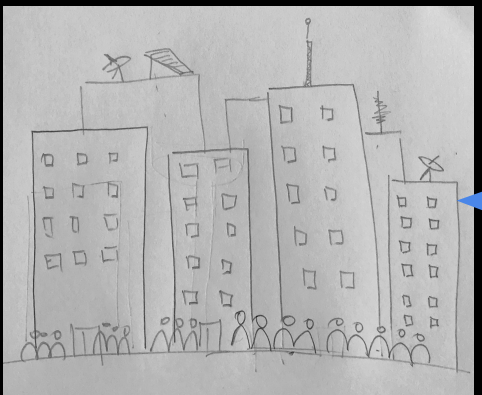




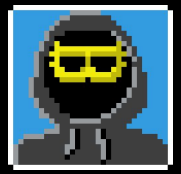




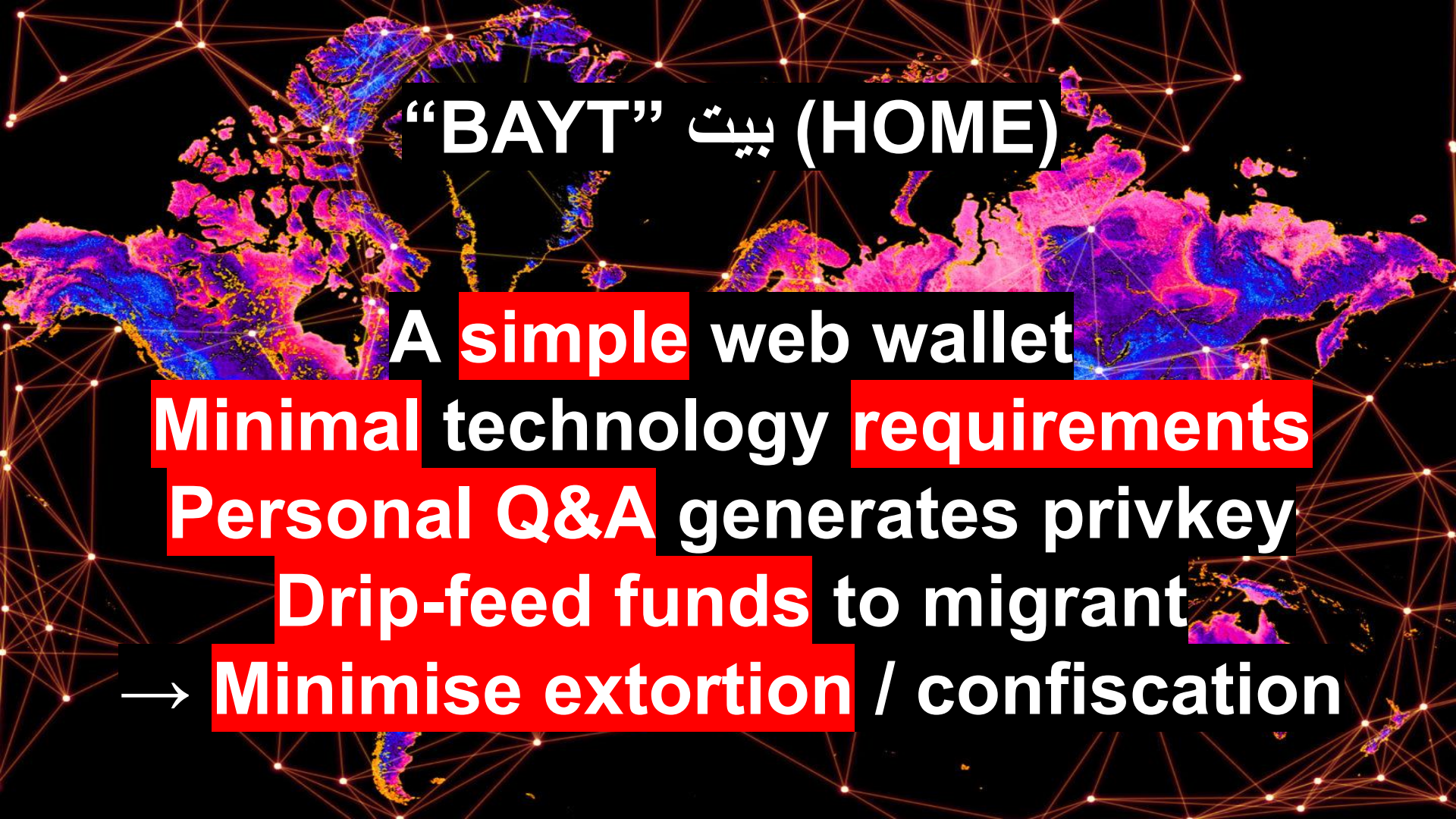


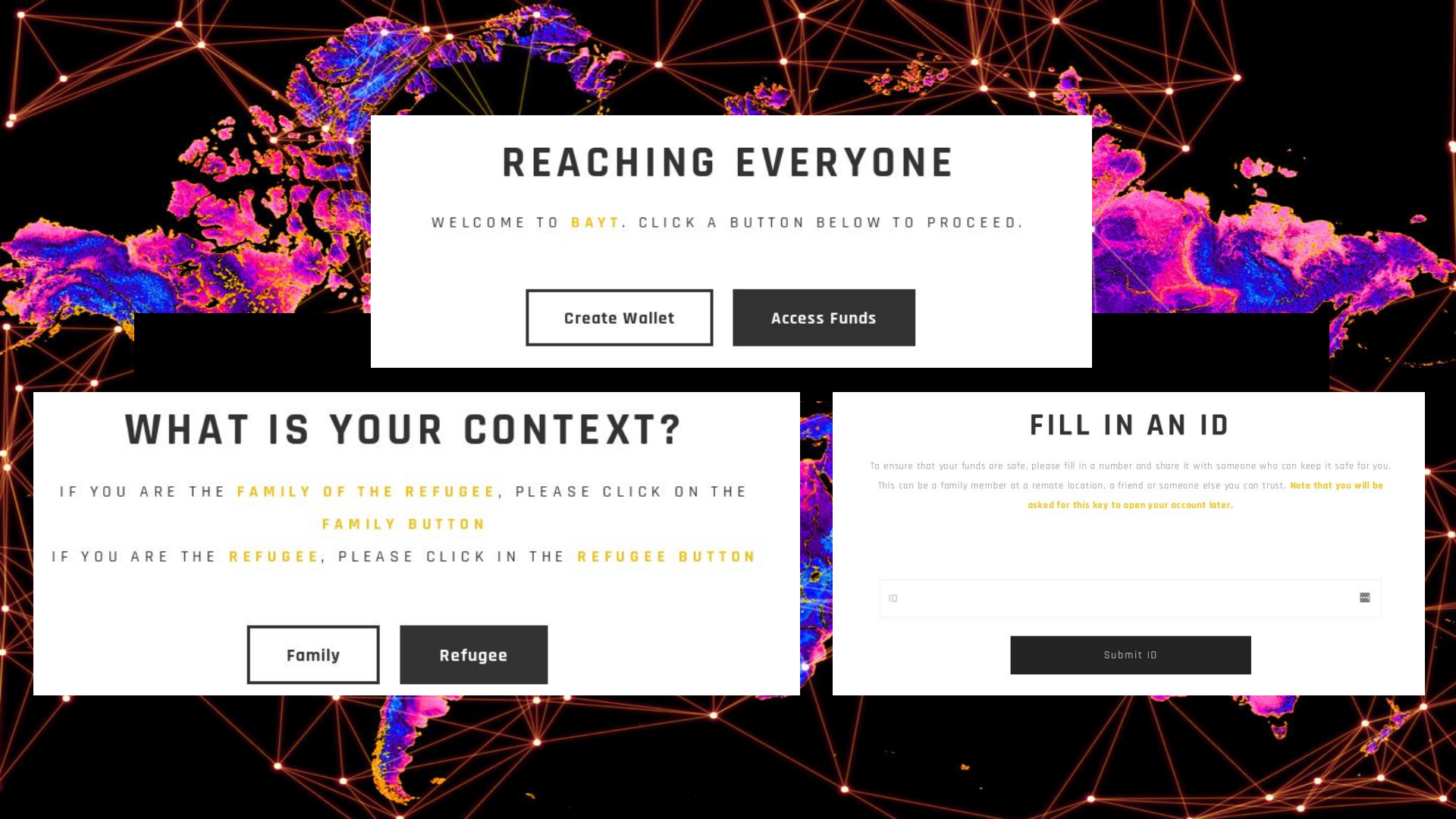


IT'S DANGEROUS TO GO ALONE! TAKE THIS.



BAYT


“BAYT” بيت (HOME)
A simple web wallet
Minimal technology requirements
Personal Q&A generates privkey
Drip-feed funds to migrant
→ Minimise extortion / confiscation



REACHING EVERYONE

WELCOME TO BAYT. CLICK A BUTTON BELOW TO PROCEED.

Create Wallet

Access Funds

WHAT IS YOUR CONTEXT?

IF YOU ARE THE FAMILY OF THE REFUGEE, PLEASE CLICK ON THE FAMILY BUTTON

IF YOU ARE THE REFUGEE, PLEASE CLICK IN THE REFUGEE BUTTON

Family

Refugee

FILL IN AN ID

To ensure that your funds are safe, please fill in a number and share it with someone who can keep it safe for you. This can be a family member at a remote location, a friend or someone else you can trust. **Note that you will be asked for this key to open your account later.**

ID

Submit ID

SECURITY / TRUST MODEL RELAXATIONS
Censorship Resistance > InfoSec
Limited entropy in privkey gen
Hub & Spoke
Web wallet
Insecure devices

THANKS FOR YOUR ATTENTION!

COLLAB/DISCUSS:
info@pllel.com, www.pllel.com, @parallelind

Slides: http://secretliveszug.pllel.com