

**DEMATSIGN
TERS'24**

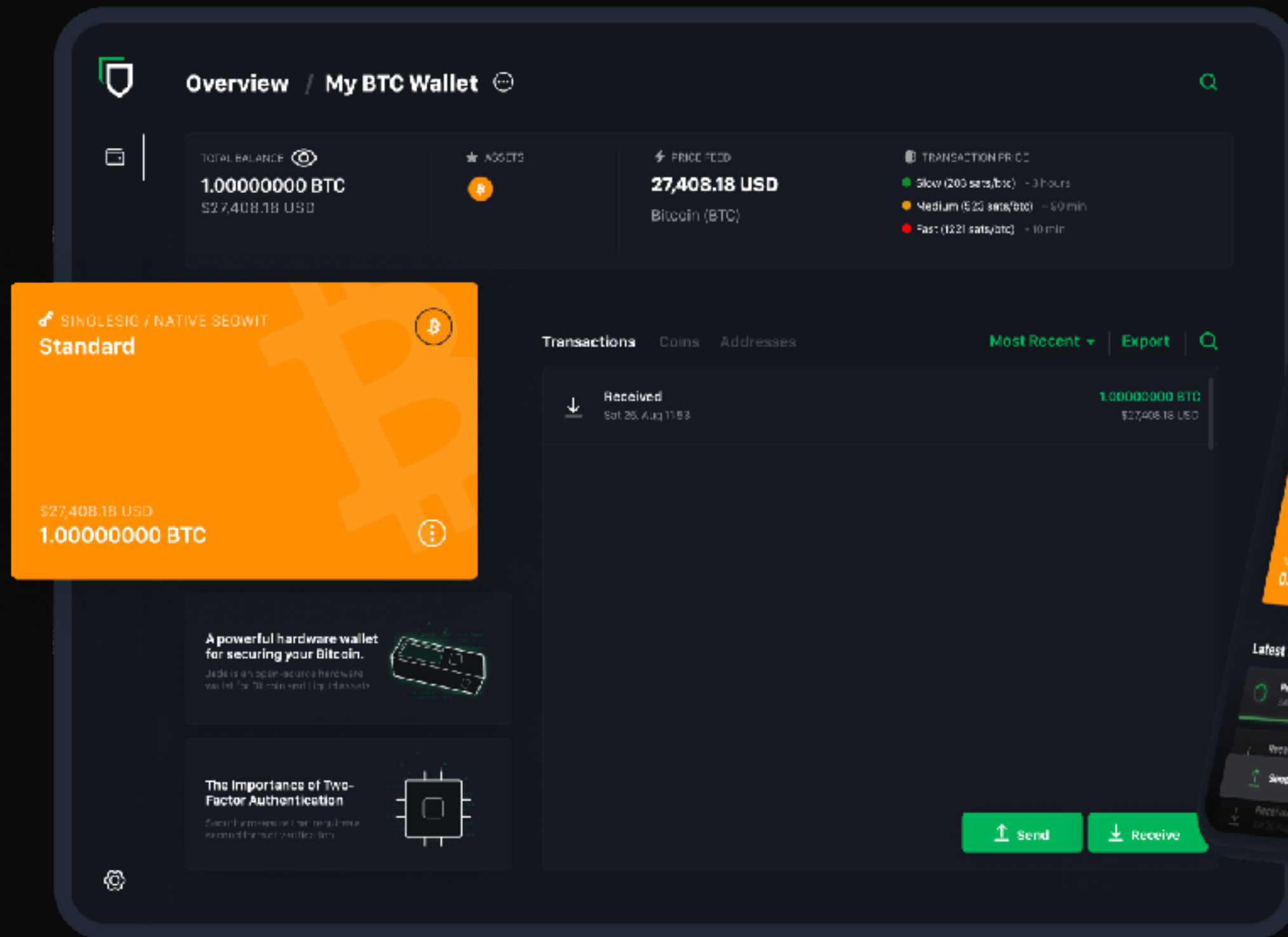
BUCKLE UP, DESIGNER!: How to Design for New Frontiers

Basak Haznedaroglu
@bashakalakha



**Artificial Intelligence. Quantum
Computing.
Bitcoin & Blockchain. Robotics.
Autonomous Vehicles.
Nanotechnology. Metaverse.
Generative AI. Augmented Reality.
Virtual Reality. Machine Learning...**

**Artificial Intelligence. Quantum
Computing.
Bitcoin & Blockchain. Robotics.
Autonomous Vehicles.
Nanotechnology. Metaverse.
Generative AI. Augmented Reality.
Virtual Reality. Machine Learning...**





1/Context is everything.

Understand context.

Adapt fast.

Personalize.

Context for

/Unbanked vs Underbanked

/Novice vs Advanced

/Internet-bandwidth

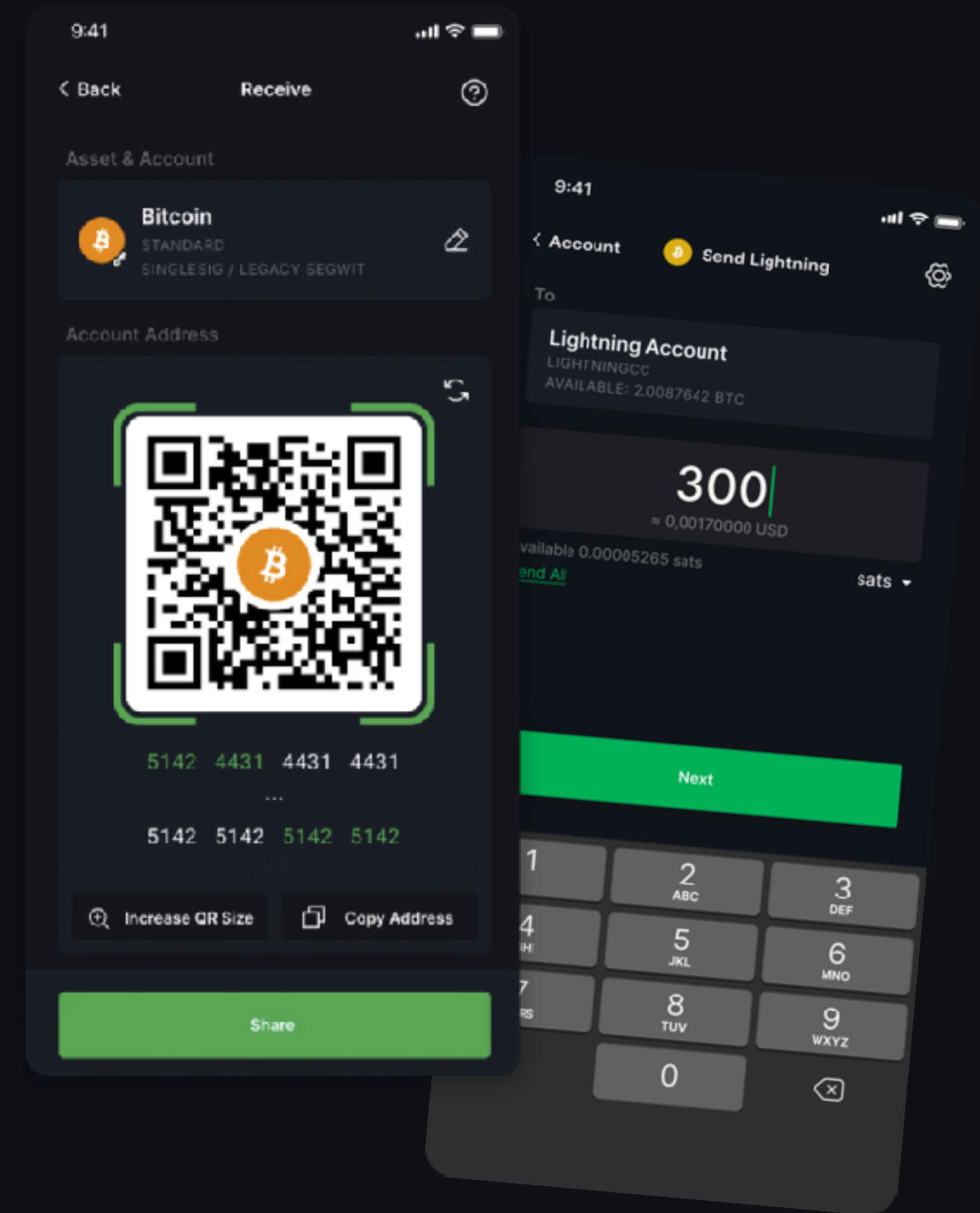
/Public vs Private space

/Regulatory vs Compliance

...

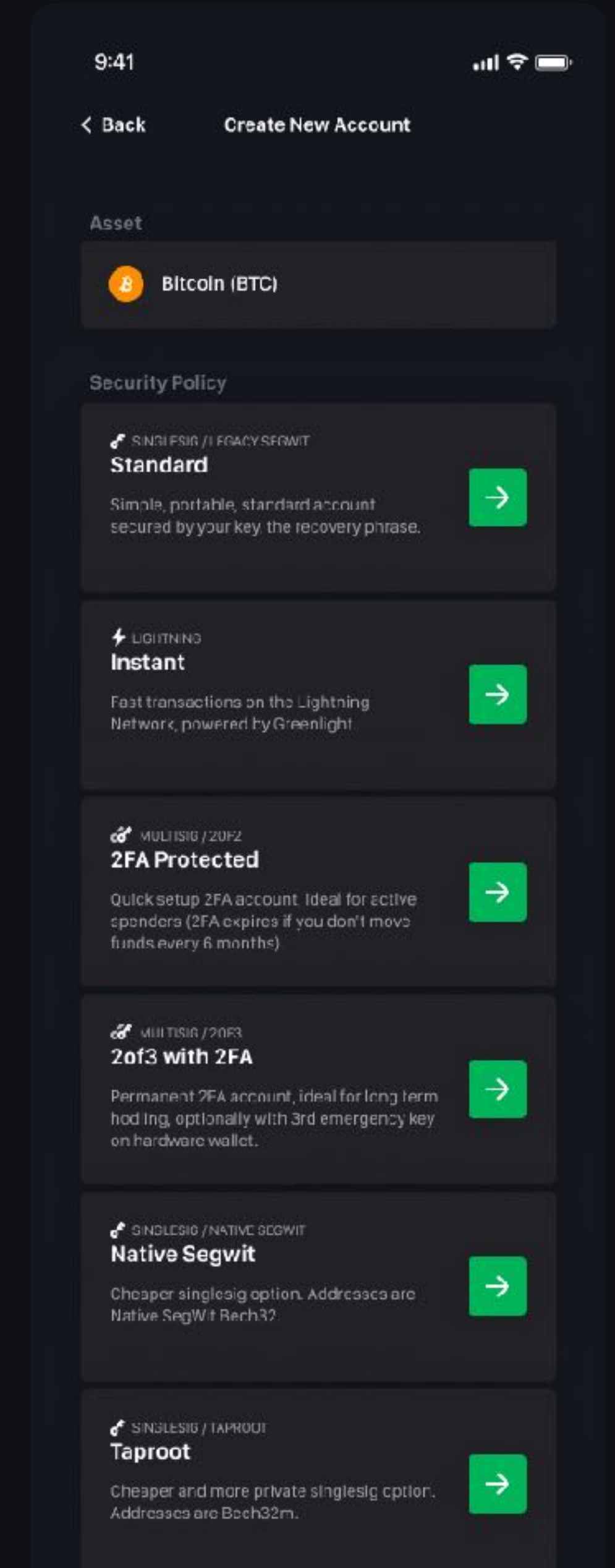
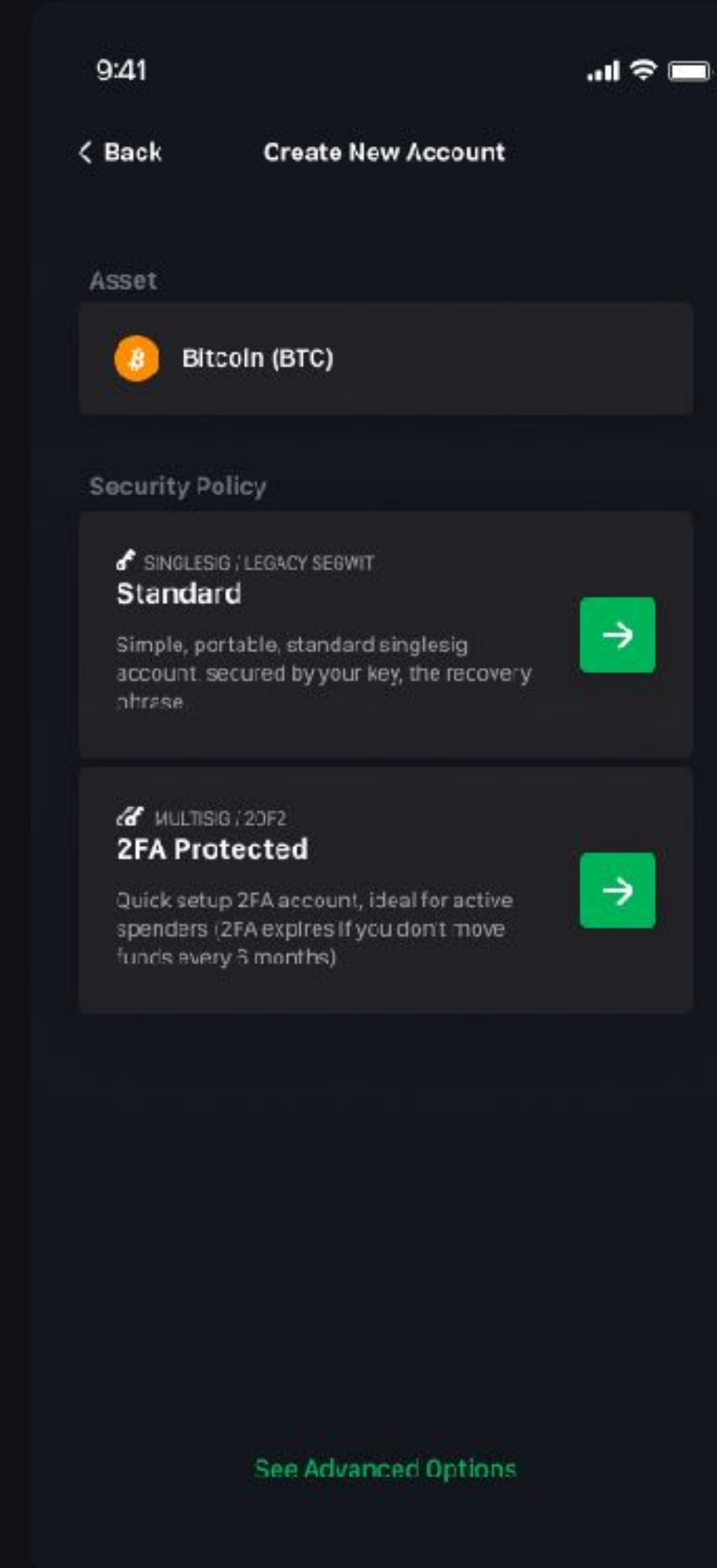
CONTEXT

Access to Systems, Tools & Opportunities



CONTEXT

Familiarity with Technology



CONTEXT

Emotional Spectrum & User Values

- ✓ Unbanked or Underbanked
- ✓ Individual
- ✓ Early Adopter/Technologist
- ✓ Novice Skeptic
- ✓ Merchant or Business Owner
- ✓ Privacy Advocate
- ✓ Institutional Investor
- ✓ Governments
- ✓ NGO or Charity Organization
- ✓ Political Dissident
- ...

A business accepts Bitcoin as payment for goods and services.

A privacy-conscious user seeks to maintain anonymity in financial transactions.

An institutional investor like a hedge fund adds Bitcoin to its assets under management.

An NGO receives Bitcoin donations from around the world.

Someone in a region with limited access to traditional banking uses Bitcoin for financial inclusion.

A tech-savvy individual intrigued by Bitcoin's underlying blockchain technology.

A user in an authoritarian regime uses Bitcoin as a way to avoid capital





2/Start with trust.

Enable transparency.

Use a simple language.

Educate at every opportunity.

TRUST

Enable
transparency.
Open source wherever
possible.

The screenshot shows the GitHub interface for the 'Blockstream / Jade' repository. The repository is public and has 43 issues, 1 pull request, and 1,173 commits. The file tree on the left includes folders like .github/workflows, components, configs, diy, docs, flashing, hardware, jadepy, logo, main, pinserver @ d761777, production, release, test_data, and tools. The right pane displays the 'Jade Do-It-Yourself Hardware Guide' with a table of contents and introductory text.

Jade Do-It-Yourself Hardware Guide

This guide is designed for the general user who is not incompetent with computers and is looking to secure less than \$100,000 (in 2023 prices) worth of bitcoin.

Table of Contents

- [Background](#)
 - [What is a Jade?](#)
 - [Motivation \(Who Should Follow This Guide?\)](#)
 - [Who Should NOT Follow This Guide?](#)
 - [MUST READ: Keep Your DIY Jade Secured](#)
 - [Current Limitations of Third-Party DIY Hardware](#)
- [Hardware Options](#)
 - [TTGO T-Display](#)
 - [M5Stack M5StickC PLUS](#)
 - [M5Stack Core Basic](#)
 - [M5Stack FIRE v2.6](#)
- [Set-Up Instructions](#)
 - [Use the Semi-Automated Script](#)
 - [Use a Device-Specific Script](#)
 - [Run the Commands Manually](#)
- [Acknowledgements](#)

Background

What is a Jade?

The Blockstream Jade is a bitcoin-only hardware wallet that runs 100% on Open Source code.

The firmware that runs Jade can also run other general purpose hardware that shares the same ESP32 microcontroller.

Motivation (Who Should Follow This Guide)

Why Should I Follow This Guide?

Three words: **supply chain attacks**.

You understand that the person who sells you hardware for your bitcoin shouldn't know you use it for bitcoin.

WARNING: Do not hold more than \$100,000 (in 2023 prices) on any hardware wallet including the Jade. For large amounts, refer to the "Who Should NOT Follow This Guide?" section.

Who Should NOT Follow This Guide?

1. You want to secure more than \$100,000 (in 2023 dollars) worth of bitcoin. For large amounts, install Linux yourself on dedicated laptops and use multisig on Bitcoin Core following a [best-practices self-custody guide](#).
2. You want to learn how to use the Jade hardware wallet. Refer to [the Jade's help center documentation](#) or [contact Blockstream](#) for software support.

TRUST

IBM 2021 Consumer Survey on Digital Trust

According to this survey, 75% of consumers say they would stop doing business with companies if they didn't understand how they work.

Deloitte's 2021 Global Blockchain Survey

Deloitte found that 54% of consumers view blockchain as overly complicated, which was a barrier to its wider adoption.

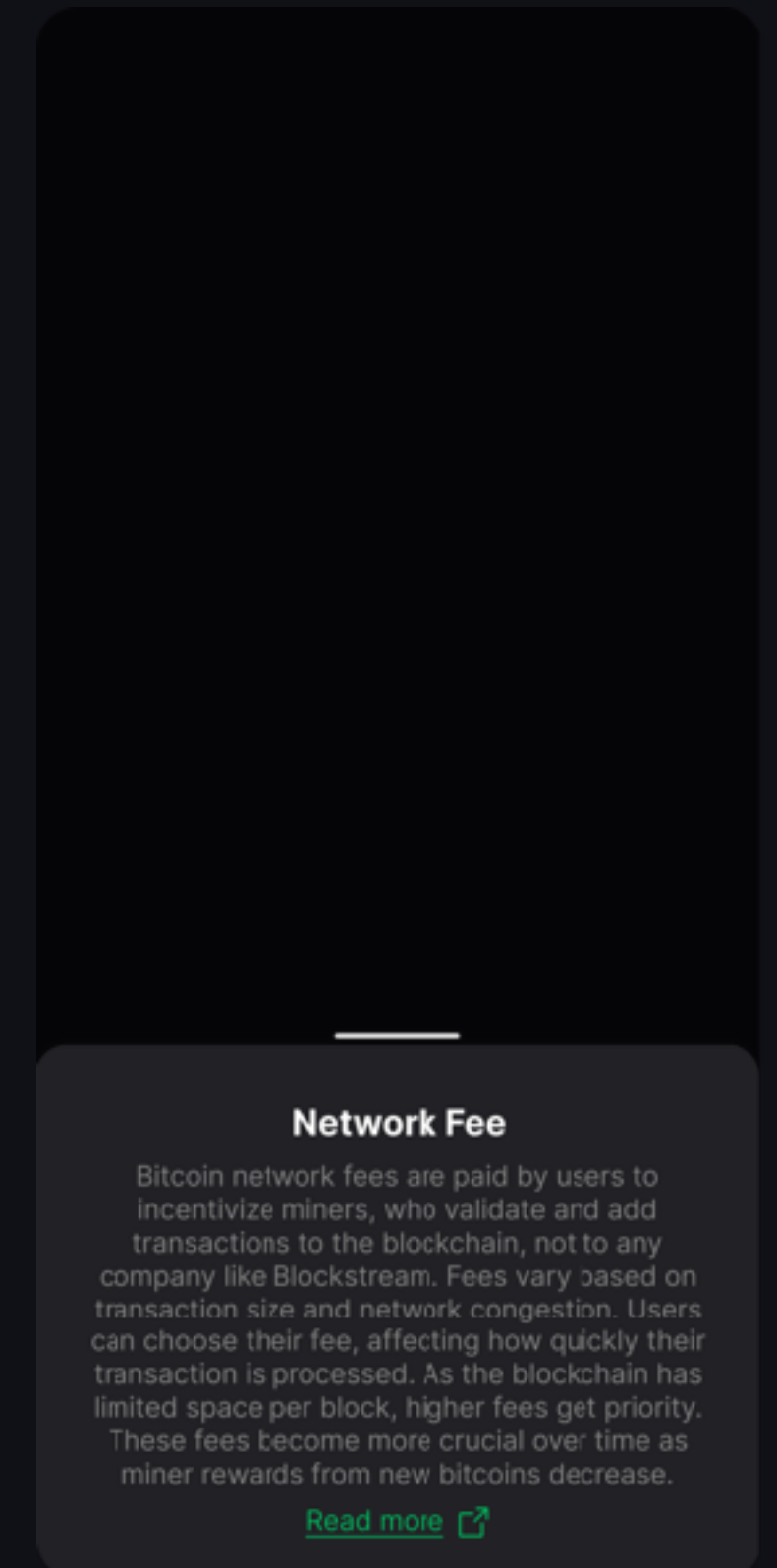
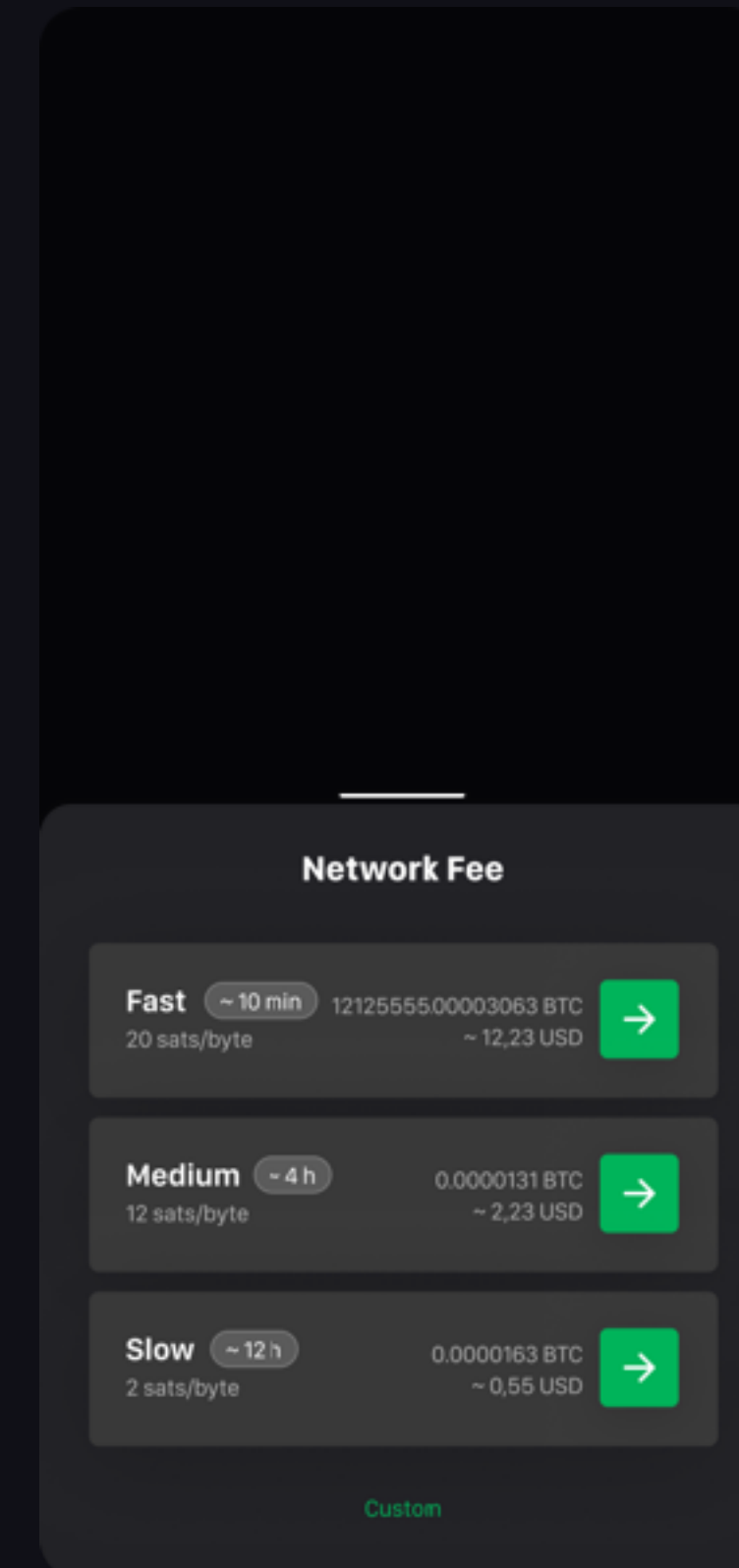
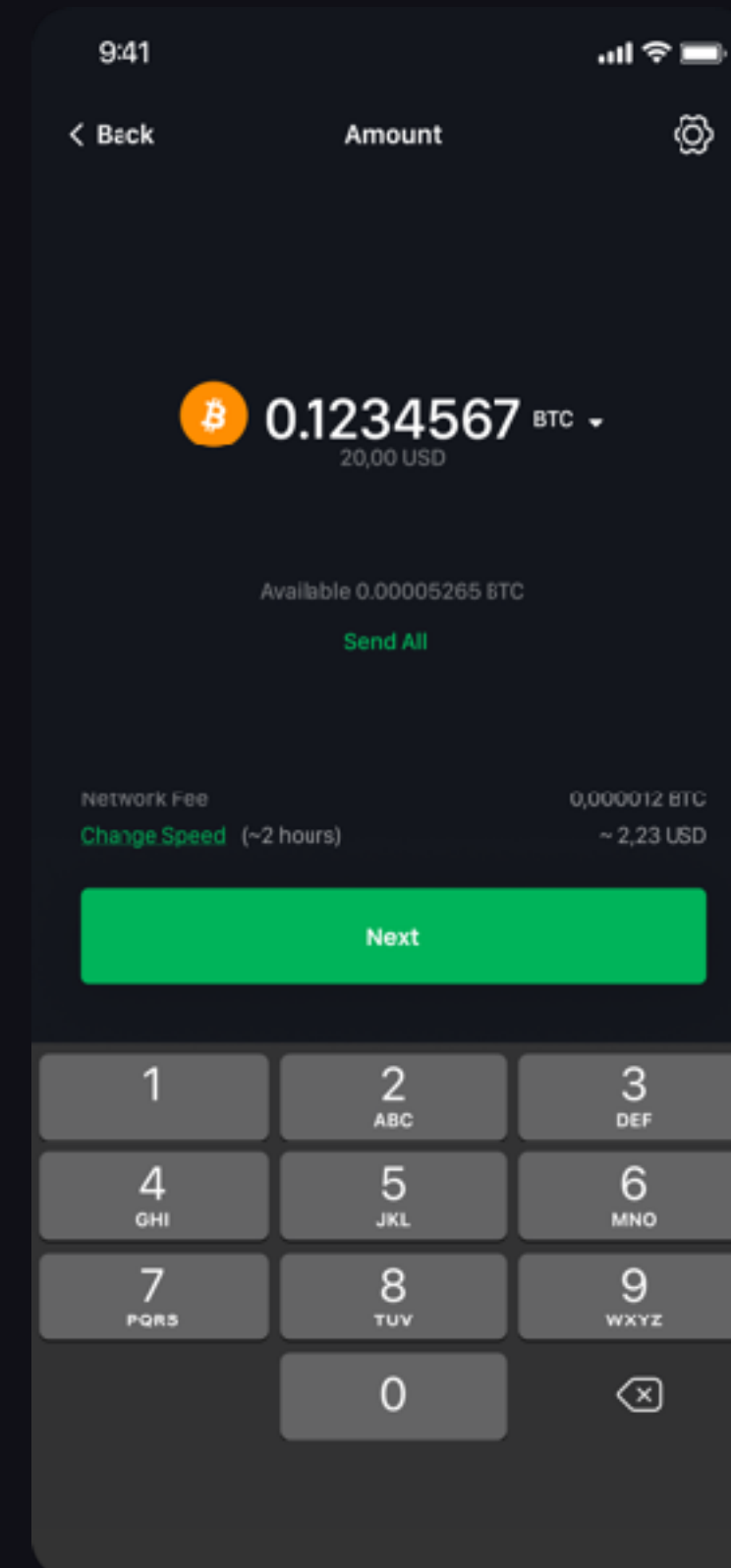
PwC 2020 AI Predictions Survey

In this survey, 76% of executives believed that a lack of user education on AI was a major obstacle to its adoption in businesses.

...

TRUST

Educate at every opportunity.





3/ Put the user back in charge.

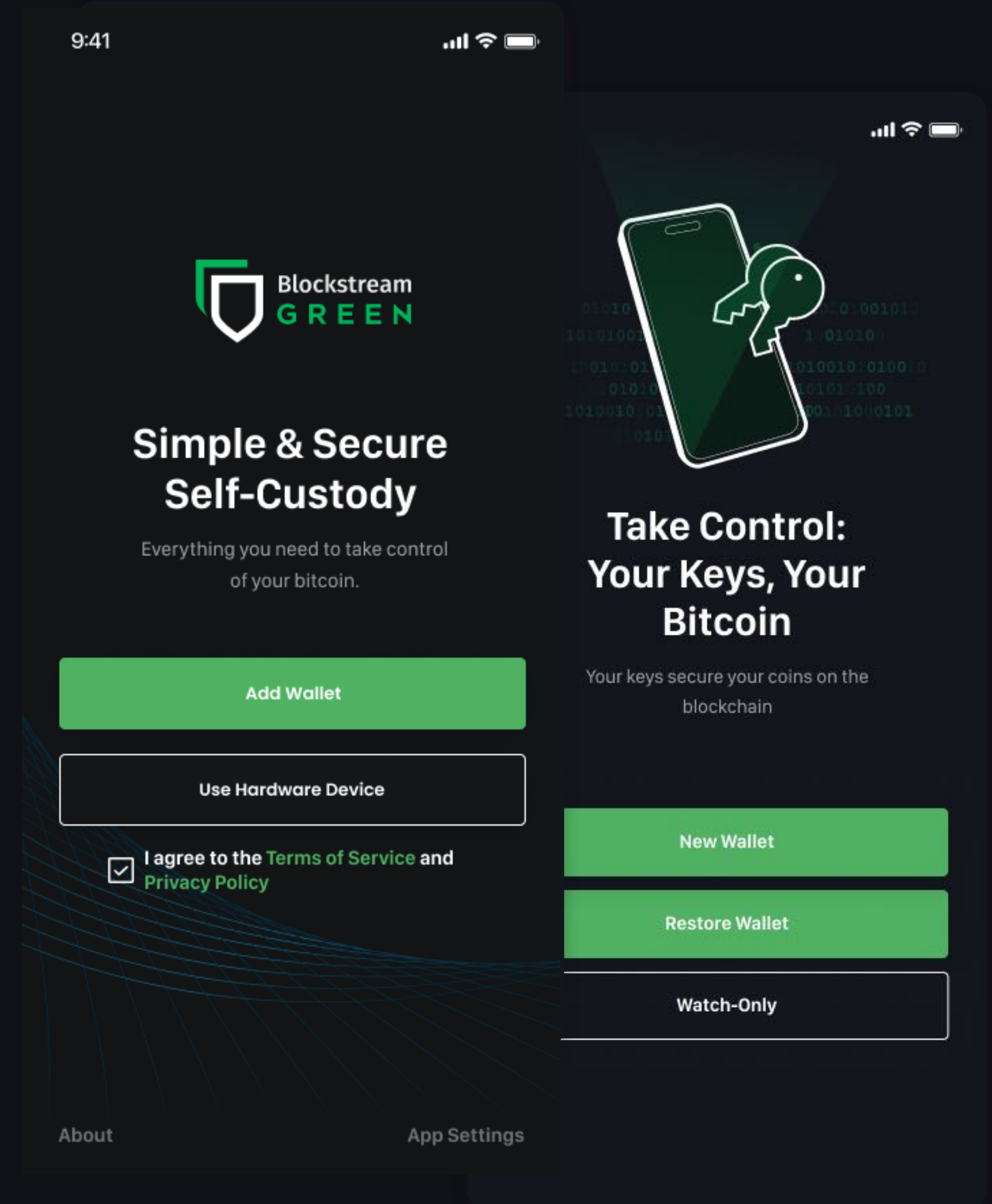
Build the right technology.

Keep people's data safe and secure.

Embrace privacy-preserving techniques.

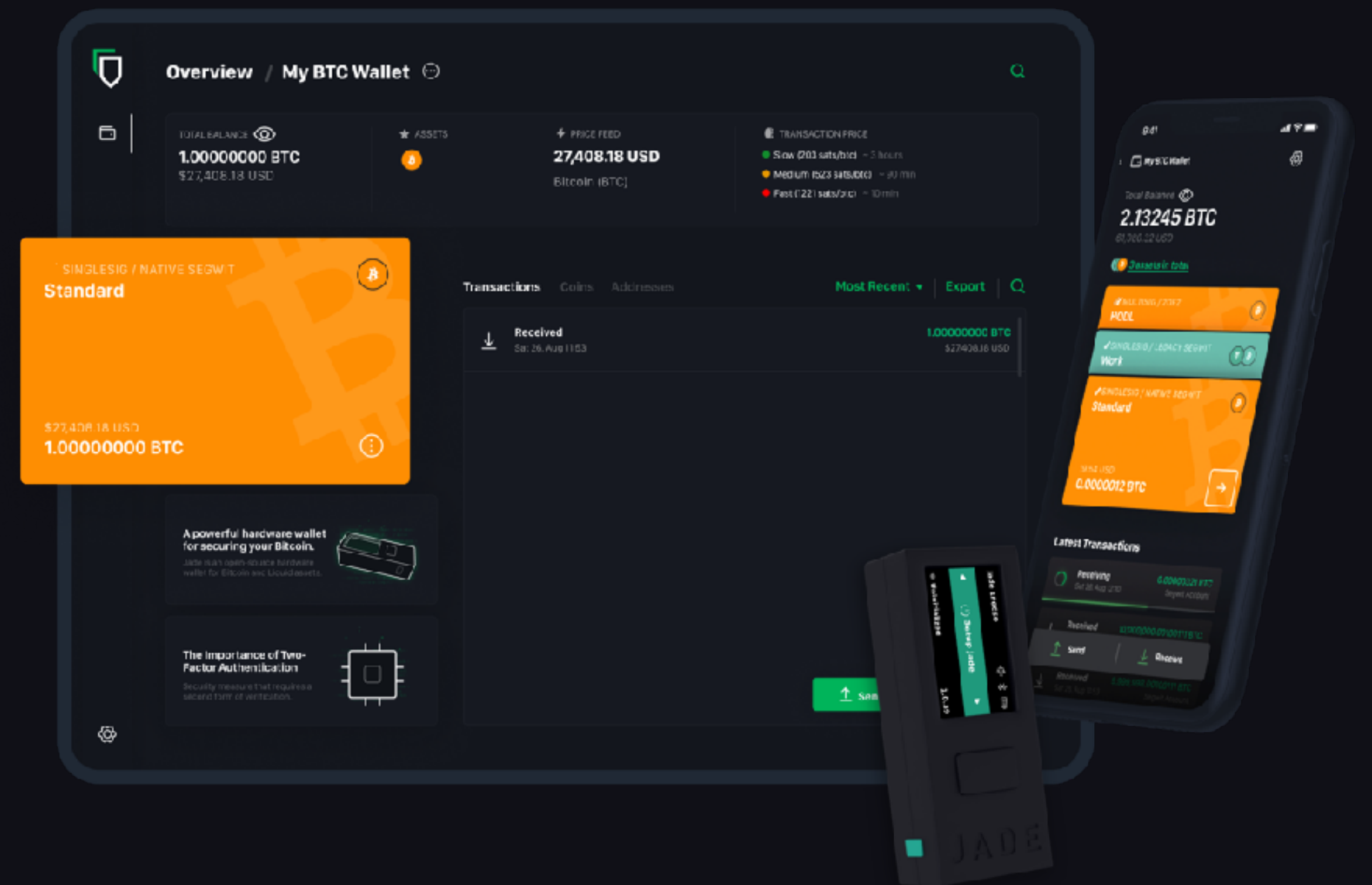
EMPOWER

Your Keys. Your Bitcoin.



EMPOWER

Safeguard your users security & privacy.

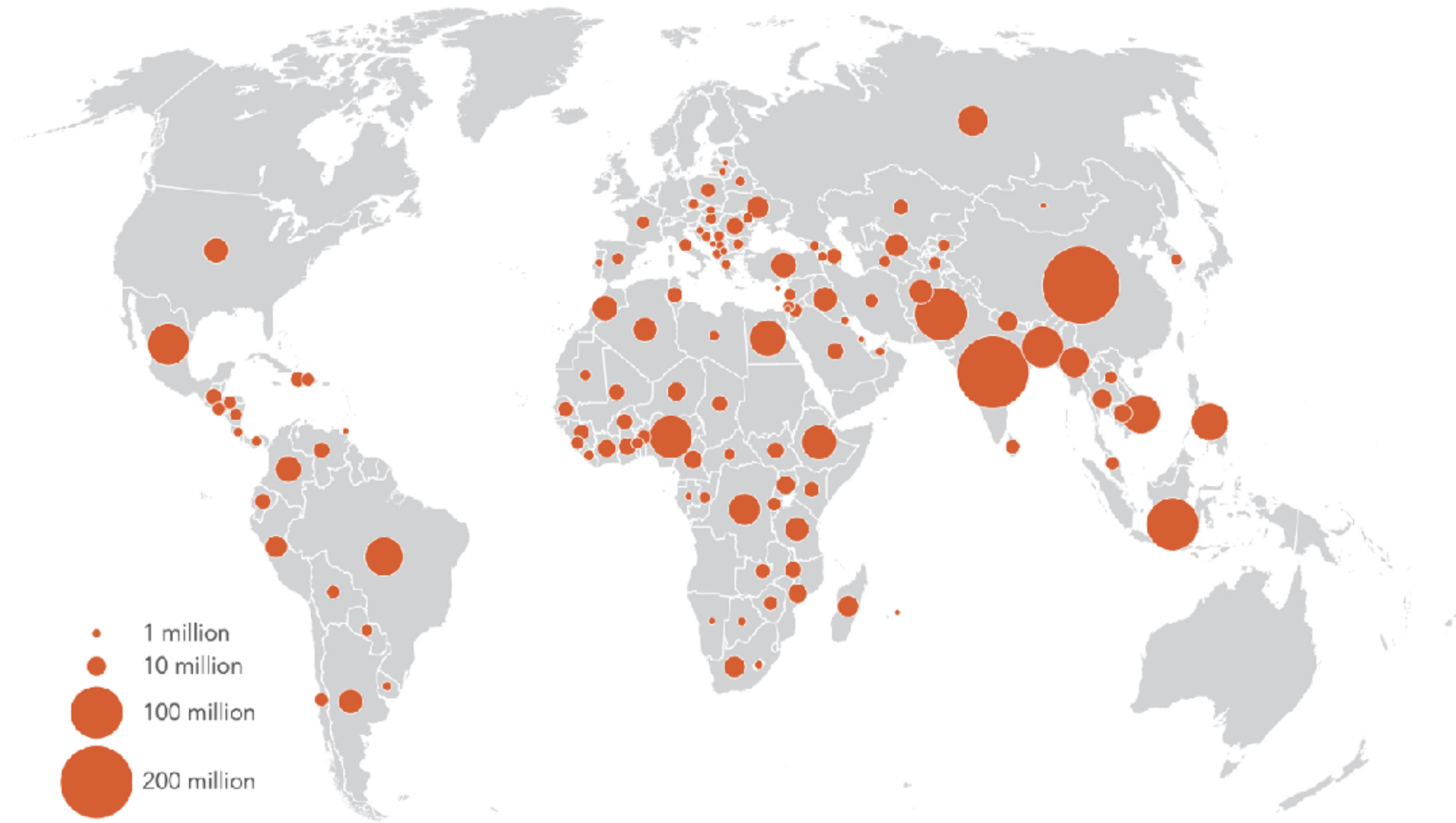




4/Do the right thing.

Design for everyone.

Consider the impact and consequences.

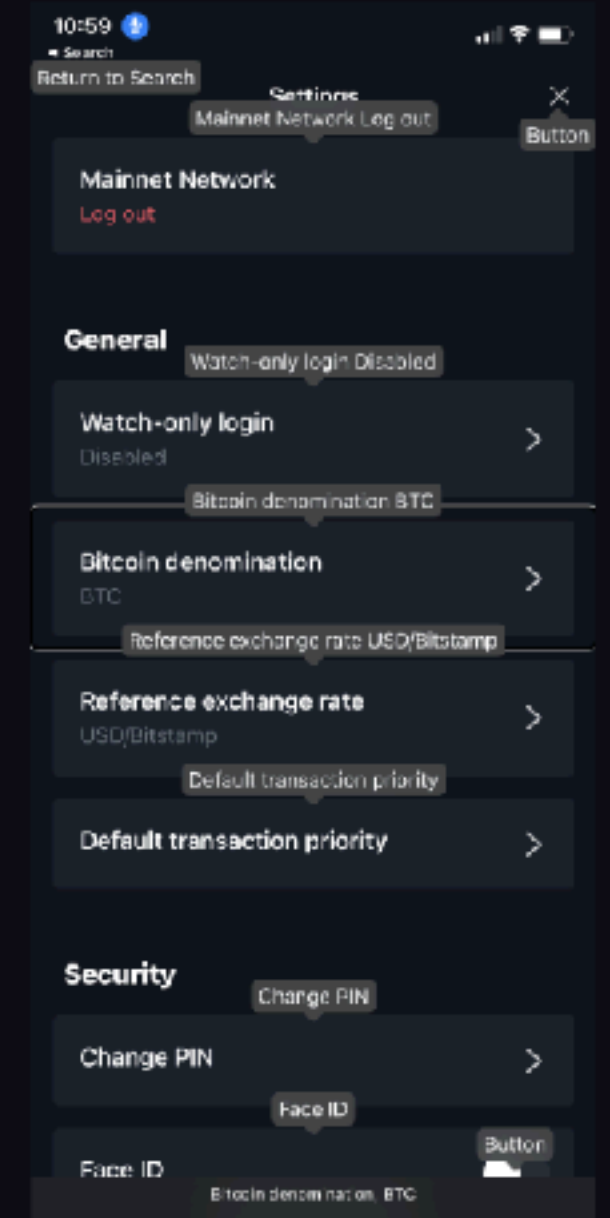
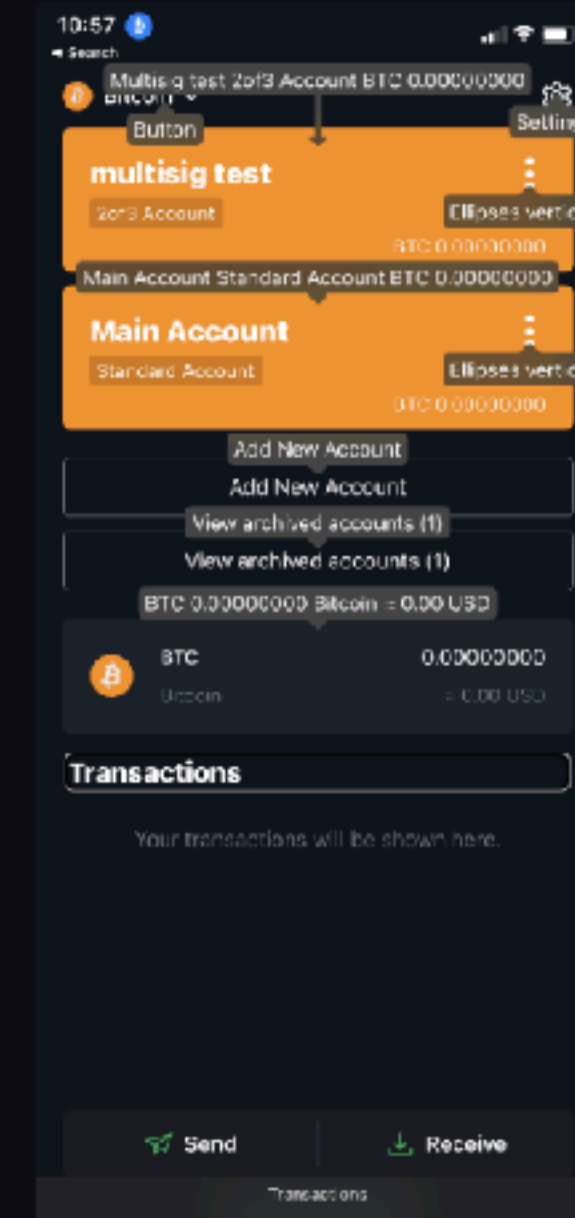
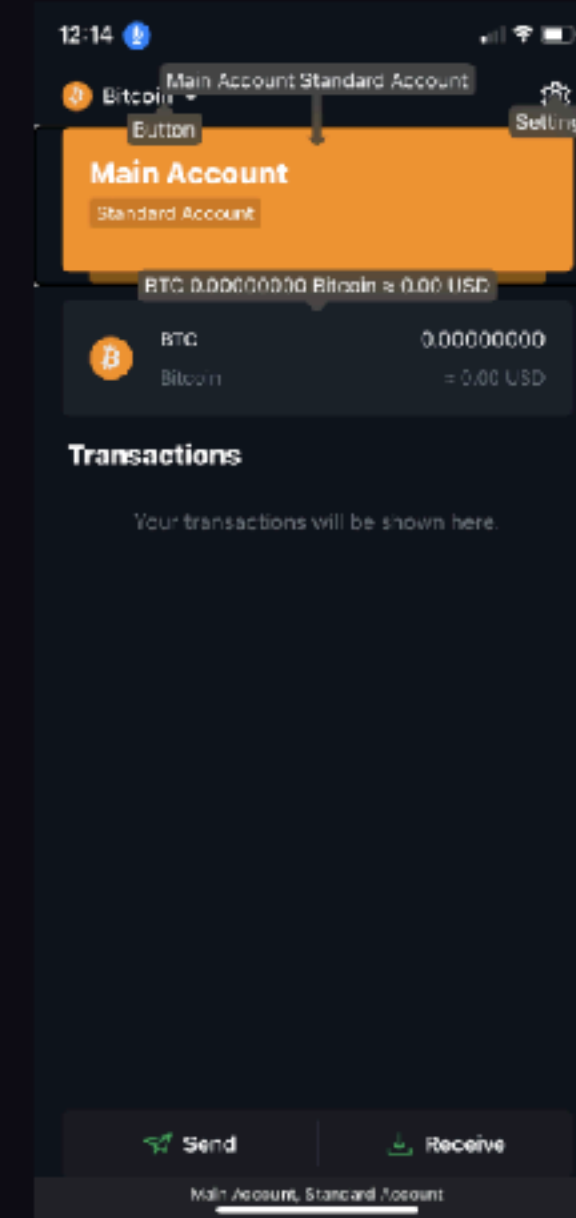
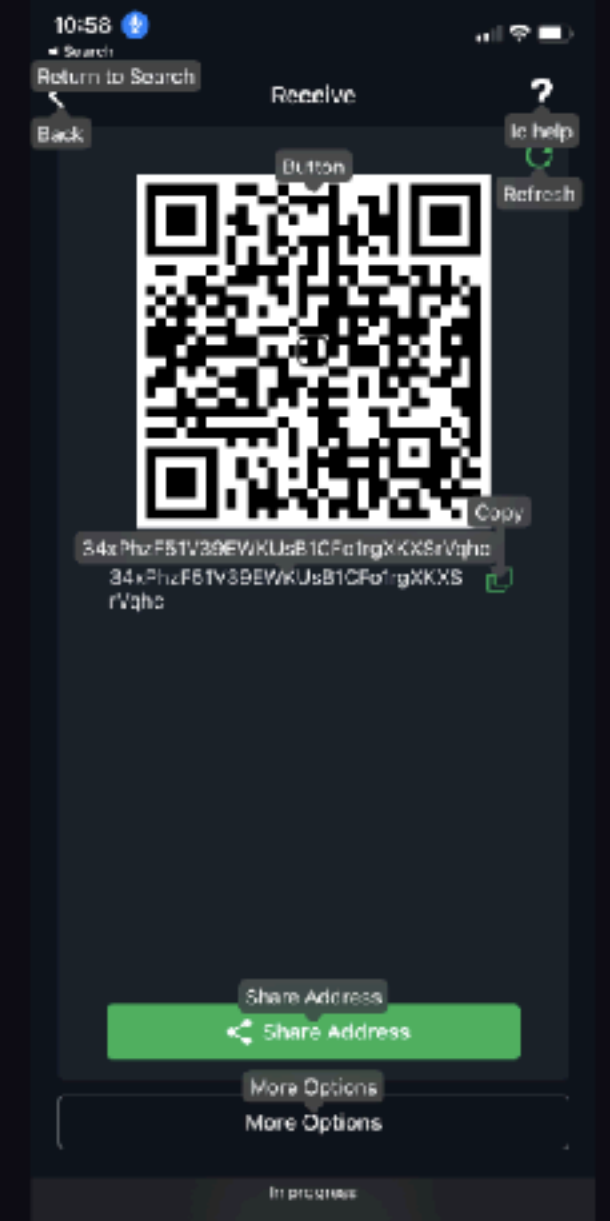
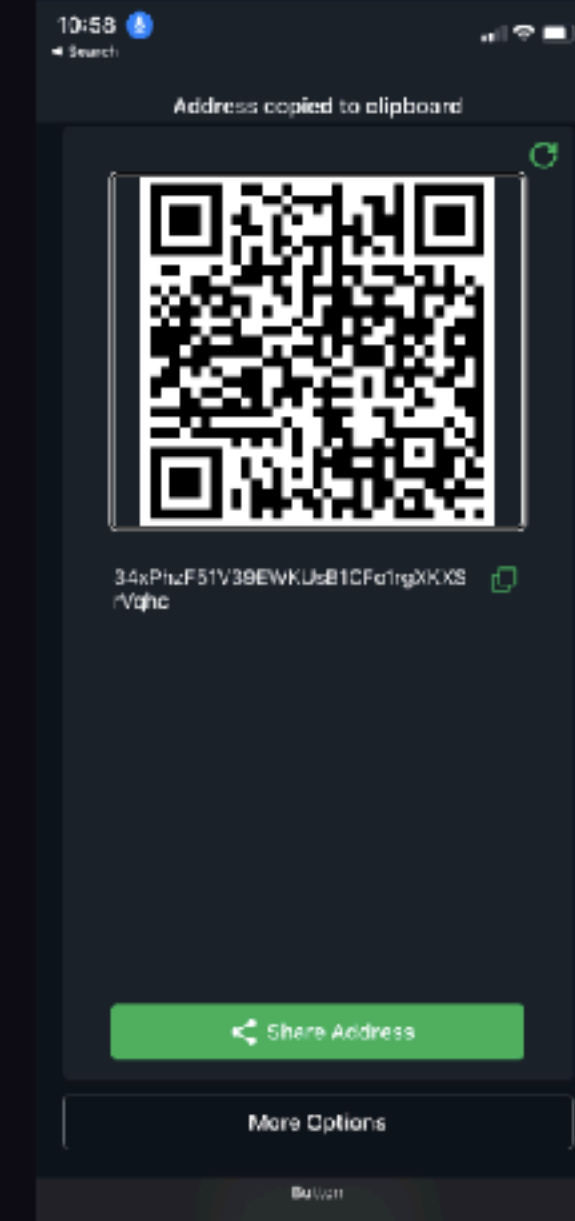
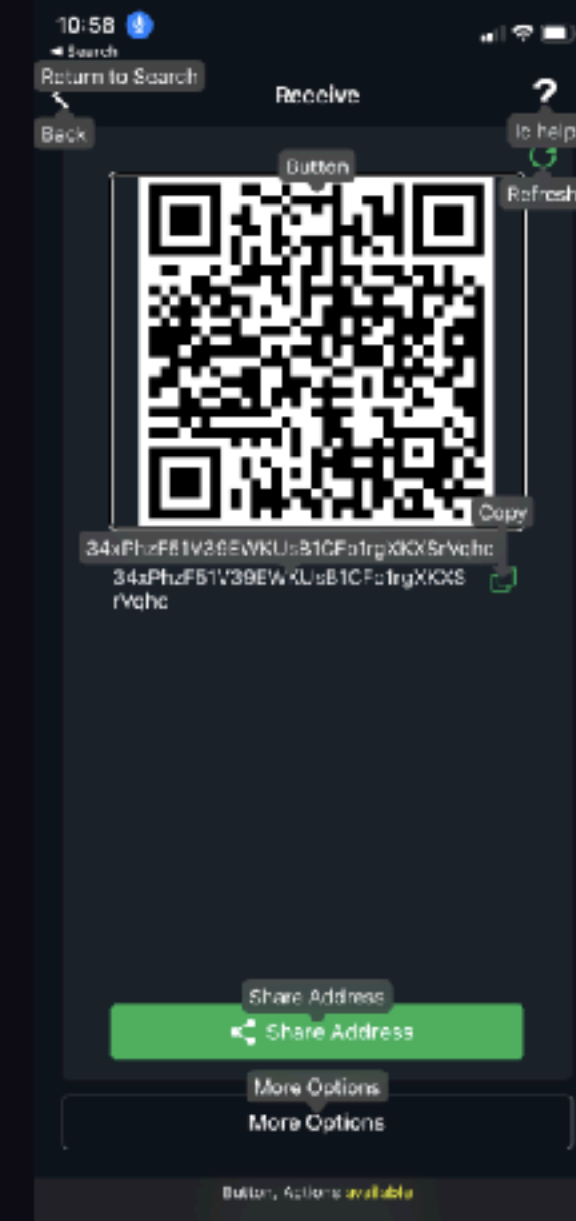


Source: Global Findex database



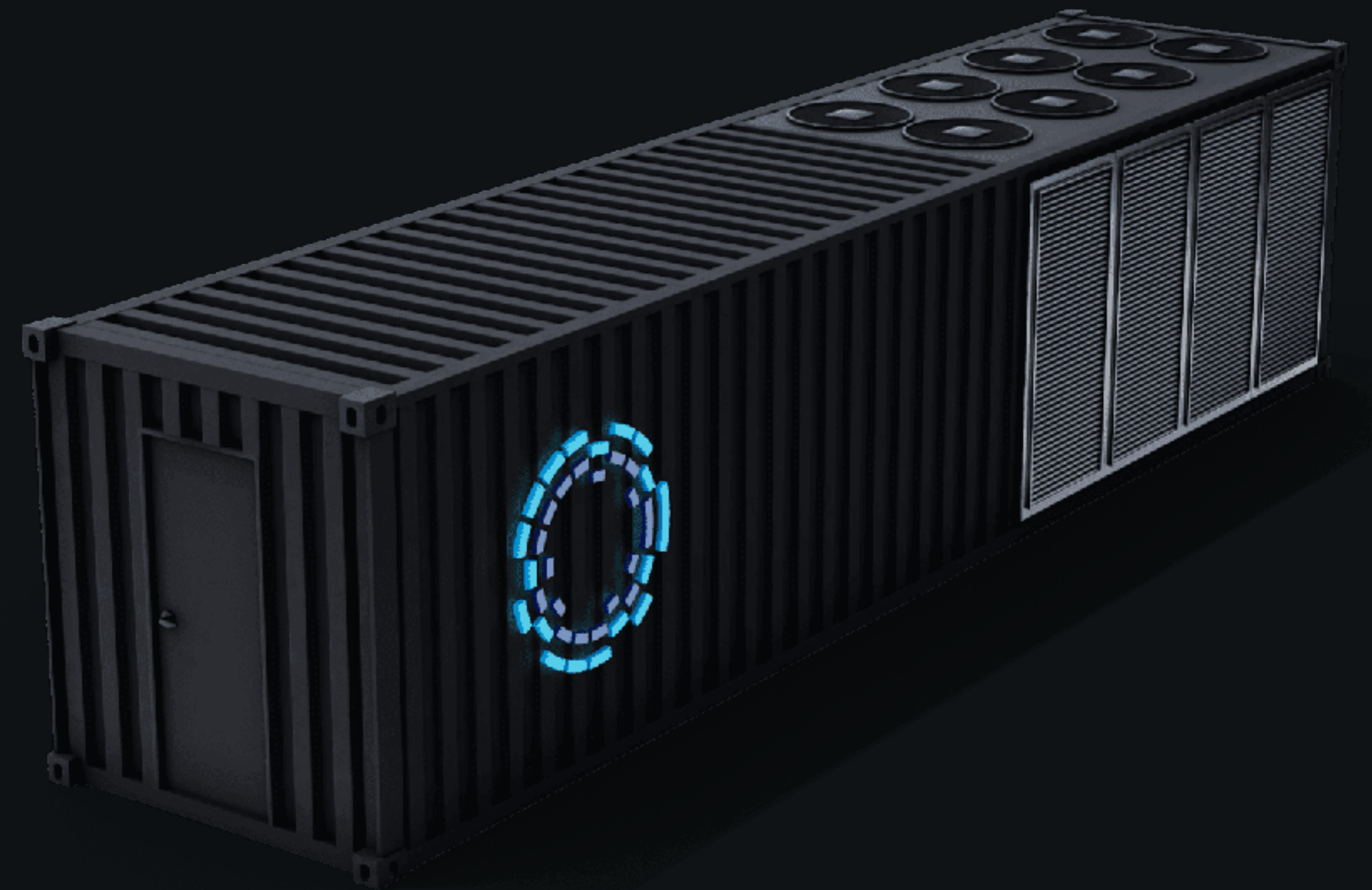
ETHICAL

Empower everyone, not just a select few.



ETHICAL

Consider the impact & consequences.





5/Find your people.

Build your community.

Engage in education & advocacy.

Share resources.

COMMUNIT
Y

Build your community.



Design bitcoin for everyone

Open-source design for bitcoin products

Join us on Discord

Design guide



The Bitcoin design calendar

Join community calls, design reviews, project discussions and other events. Our calendar makes it easy to stay in the loop. Calls are open for anyone to join, and you can choose how much you want to participate.

What's in the calendar?

Community calls

Open conversations around current topics. Every 3 weeks on Twitter Spaces.

Design guide jam sessions

We discuss the ongoing work on the guide. Every 2 weeks on Jitsi.

UX research calls

Discuss research topics and collaborate on the UX research kit.

Learning bitcoin & design

A series focused on an open discussion of the fundamentals.

Project calls

Individual projects organize their own calls to hang out and discuss progress. Peek in if you're curious.

Design Reviews

Reviews of bitcoin products by the community.

How to subscribe

Add our [calendar](#) (an .iCal file) to via your favorite calendar tool via the following steps:

- Copy this URL: <https://raw.githubusercontent.com/bitcoin-design/meta/calendar/events.ics>
- In Apple Calendar (desktop), use 'File' -> 'New calendar subscriptions'
- In Google Calendar (web), click the small '+' icon next to 'Other calendars' in the sidebar and select 'From URL'.

- Paste the URL and save. New events (if there are any scheduled) should show up right away.
- In Thunderbird (desktop), New Calendar > 'On my network' > 'iCalendar (.ICS)' and paste the [calendar \(.ics\)](#) in the location field.

COMMUNIT
Y

Share resources & elevate others.

Design source files

In the spirit of [open design](#), the community maintains several design files related projects. You can duplicate, use and modify them as you like.

There is no design tool yet that provides a public, open, and communal source alternative. At the moment, many of us use [Figma](#), as it comes closest, with [Fandora](#) source alternative. You can also use other design tools and workflows.

These files are licensed under [CC-BY](#) and you may use them freely for commercial purposes. It would be fantastic if you could also help improve comments, feedback and edits.



Bitcoin UI Kit



Hardware Elicitors



Slide template

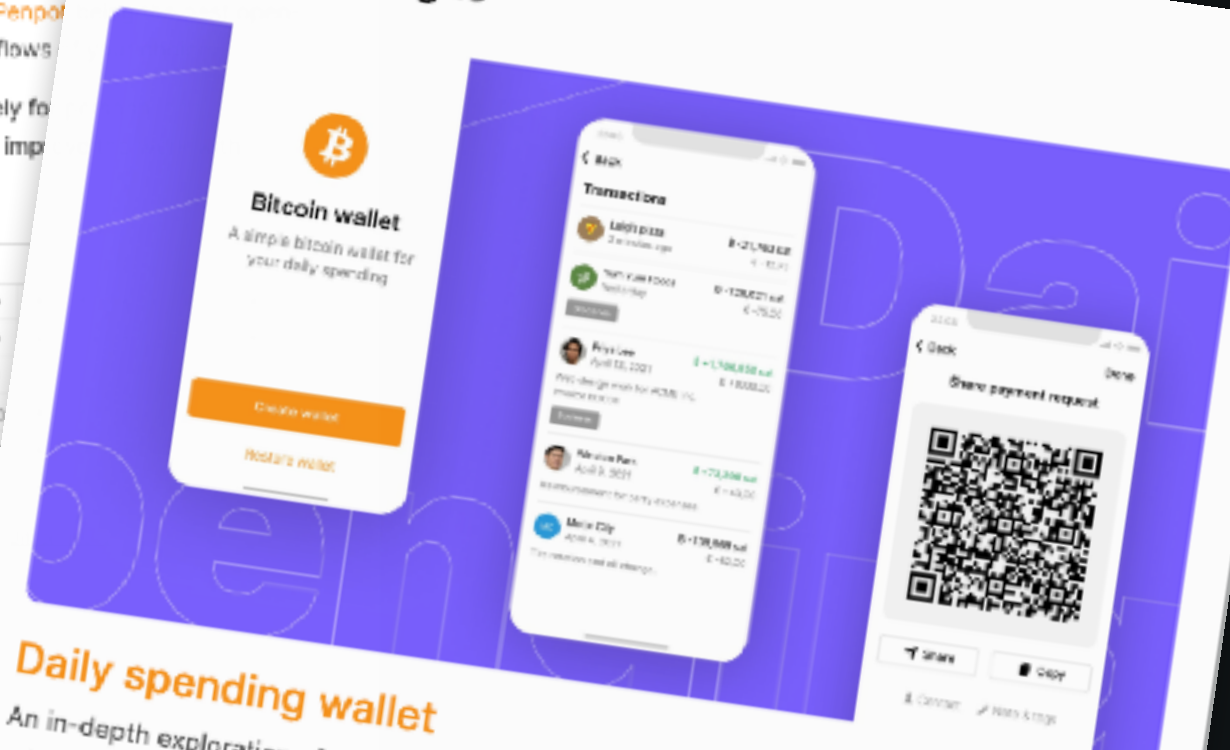


Bitcoin for local business website



Bitcoin Design Stickers

Reference designs



Daily spending wallet

An in-depth exploration of a mobile wallet for a lightning-first, on-the-go use case. Covers primary user flows like **first use**, **sending** and **requesting**, features like **backup** and **contacts**, and more.



Savings wallet

A multi-key mobile wallet design that provides great security for larger amounts, and low-friction for smaller transactions.



Upgradeable wallet

Exploring the concept of progressive security, in which applications help users navigate varying security configurations appropriate to their holdings and use case.



COMMUNIT
Y

Engage in education & advocacy.



BFF Bitcoin for Fairne...
@BitcoinZ... · Follow

Recently, BFF Zambia hosted Blockstream Local's @Liquid_BTC workshop in Zambia @BFFbtc @AnitaPosch @Blockstream



bffbtc.org
Liquid BTC Workshop in Zambia with Blockstream ...

12:49 PM · Jun 30, 2024

9 Reply Cop...

Read 1 reply

Blockchain & We...
@bwcn20... · Follow

Yesterday at Vida Café, in partnership with @Blockstream Local, we empowered blockchain developers with insights on Liquid Bitcoin and hands-on Green Wallet training. Exciting times ahead! 🚀 #Blockstream #LiquidBitcoin #GreenWallet



10:28 AM · Jun 30, 2024

3 Reply Cop...

Read more on X

Blockchain & We...
@bwcn20... · Follow

We just wrapped up our very first Blockstream Local workshop for our team in partnership with @Blockstream. Our members are now equipped with essential knowledge to educate the Zambian Bitcoin community about Liquid. more workshops coming your way. 🚀 #Bitcoin #Blockstream



6:07 PM · Jun 14, 2024

7 Reply Cop...

Read 2 replies

Blockchain & We...
@bwcn20... · Follow

Happy Pizza day with a board game play !

VJL6vWmBgriRHpnQp6Cyu8vES ap1BPhk7RpQUdahns2HpvZ22v HtA2WHipi7yKaWYXGv2zFnZWE uWgR



12:38 AM · May 23, 2024

9 Reply Cop...

Read more on X

FINAL REMARKS

Embrace the chaos.
Don't mind the trolls.
Take good care of yourself.
YOU GOT THIS!

DEMATSIGN
TERS'24

Thank you!

Basak Haznedaroglu
@bashakalakha