

\$2 trillion

of crypto assets are held in **single key accounts**

that's about the same amount as all **USD in cash circulation, globally**

 **single key = single point of failure**



Customer: *I forgot my password!*

BANK

No problem, we'll reset that for you

BITCOIN

Tough, you've lost your money!



20% of all Bitcoins are inaccessible due to lost private keys

That's around \$400 billion lost in Bitcoin alone

introducing

ksig.uk

by **KPAY**

An air-gapped, offline,
multisig signing solution

Building trust together
eliminating single points of failure

BUILT ON 

QUANTUM
RESISTANT

AI AGENT
READY



24 Word Seed Phrase

1. toast	7. selection	13. voice	19. impact
2. medium	8. protest	14. referral	20. charter
3. advantage	9. mix	15. rabbit	21. ignite
4. egg	10. skip	16. hole	22. bank
5. differ	11. tasty	17. crevice	23. brink
6. cafe	12. wheat	18. conclusion	24. bailout

private key

```
c9a49d01
f4e7f2cd
9207803d
ff809186
f785b266
7a266599
d8f31576
ebc7b886
```

public key

anyone can see your public key

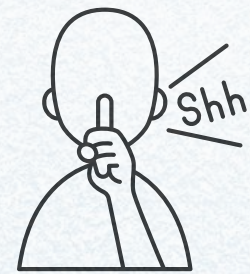
```
32d9c631
d8ff6914
7e5bbf66
2e51d163
d553c99d
c4ad57b6
a128a69e
595c5be8
```



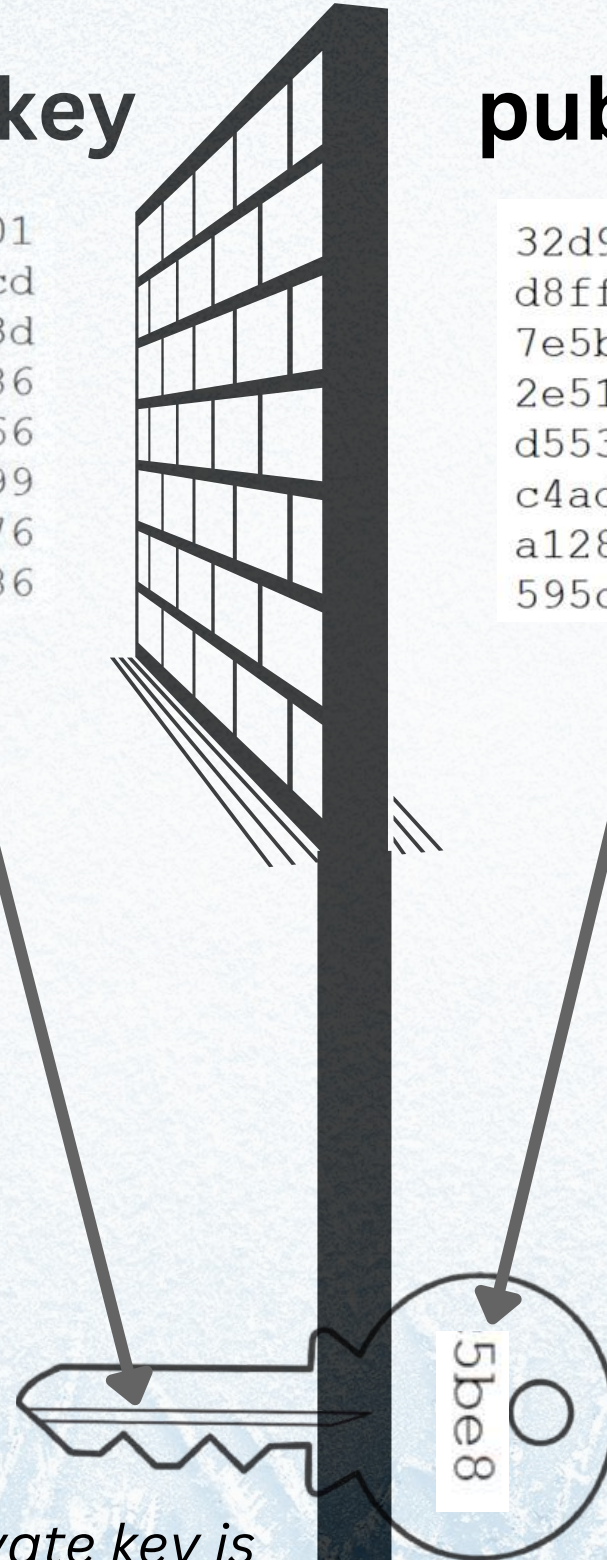
A412-1



A412-4




never share your private key or seeds



a private key is like the key cuts

a public key is like a label on a key - it identifies the key

ksig allows you to keep your **private** keys in **COLD storage**

A close-up photograph of a hand holding a golden key over a door lock. The key is held in a way that its tip is positioned near the lock's keyhole. The background is softly blurred, showing the wooden door and the lock mechanism. The lighting is warm, highlighting the metallic sheen of the key and the texture of the hand.

one door, one key?

if someone steals the key, they have access

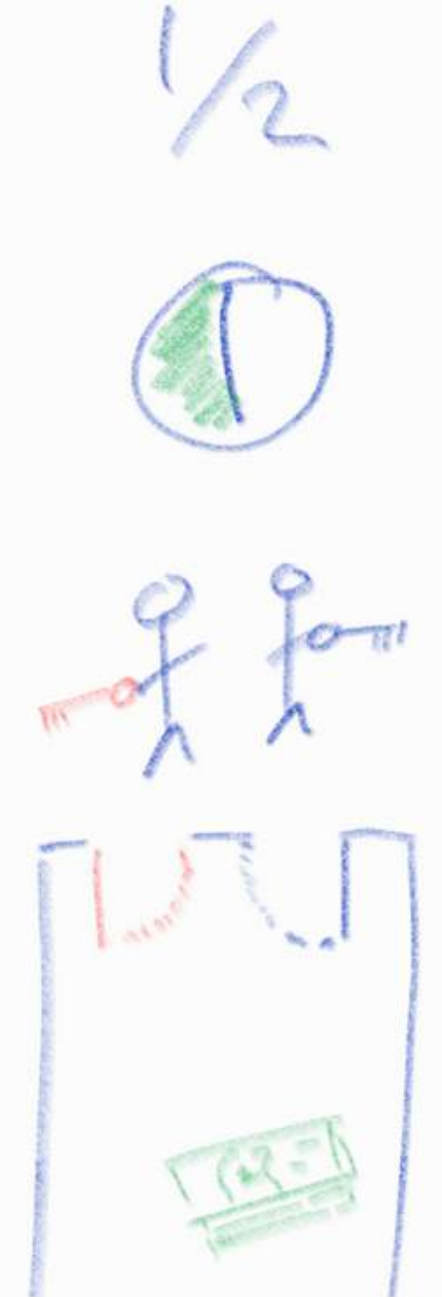
Multisig or (H)

$\frac{2}{3}$

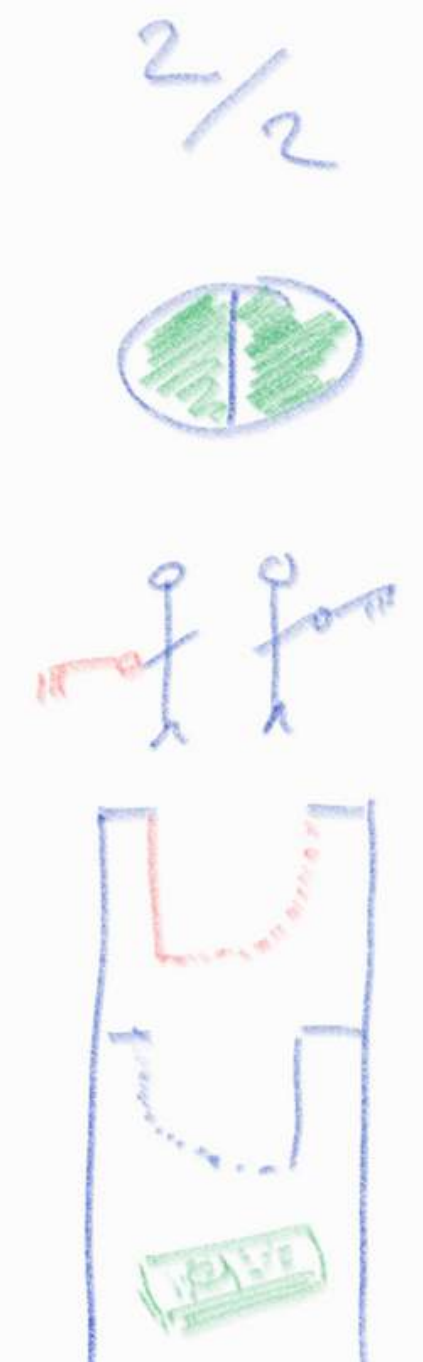
complex



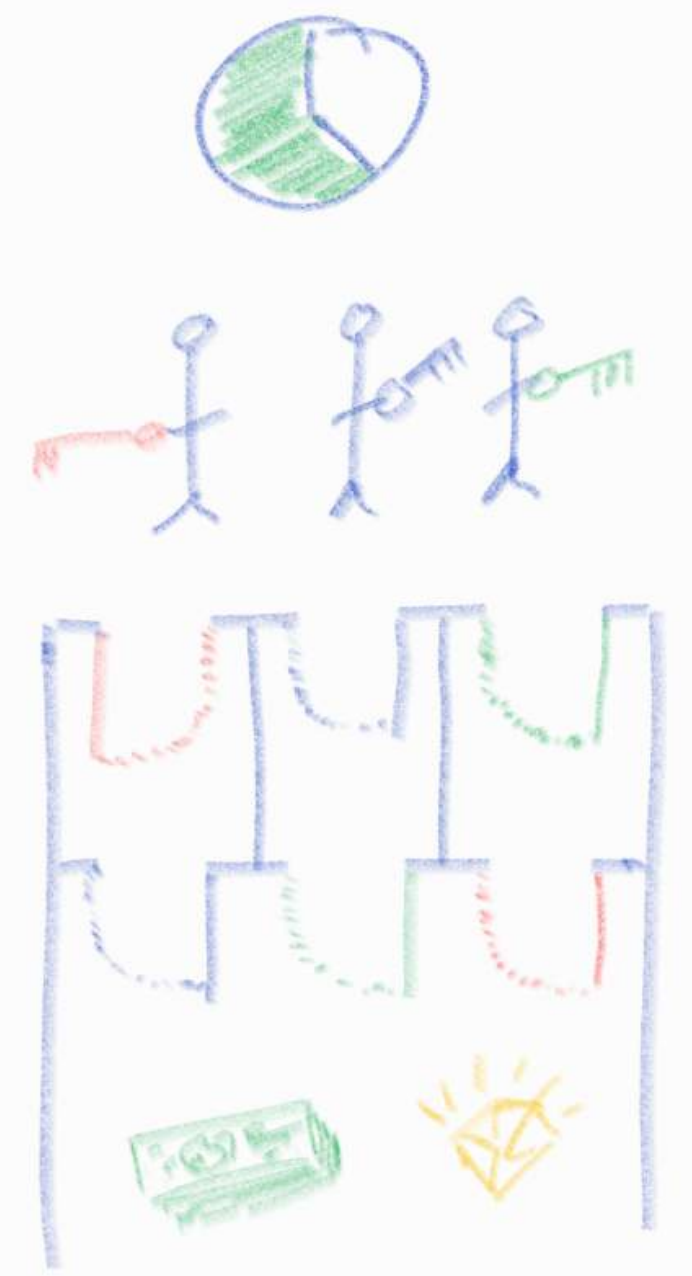
one key
one door



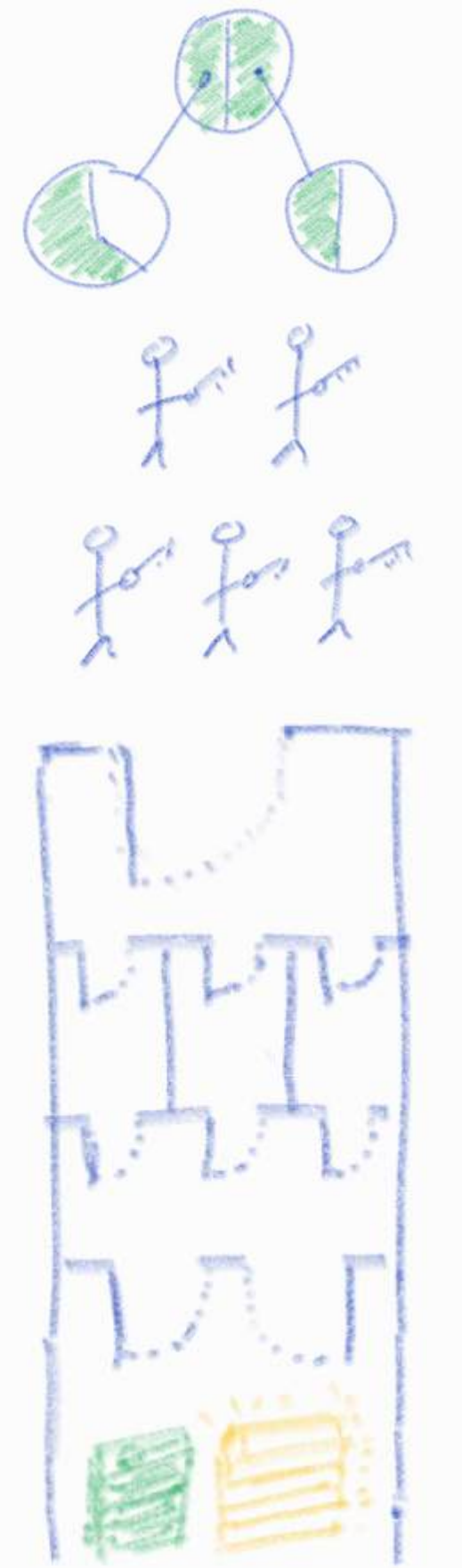
2 keys, 2 doors
enter via **either** door



2 keys, 2 doors
enter thru **both** doors



3 keys, 6 doors
enter thru **any 2** doors



time for tea ☺

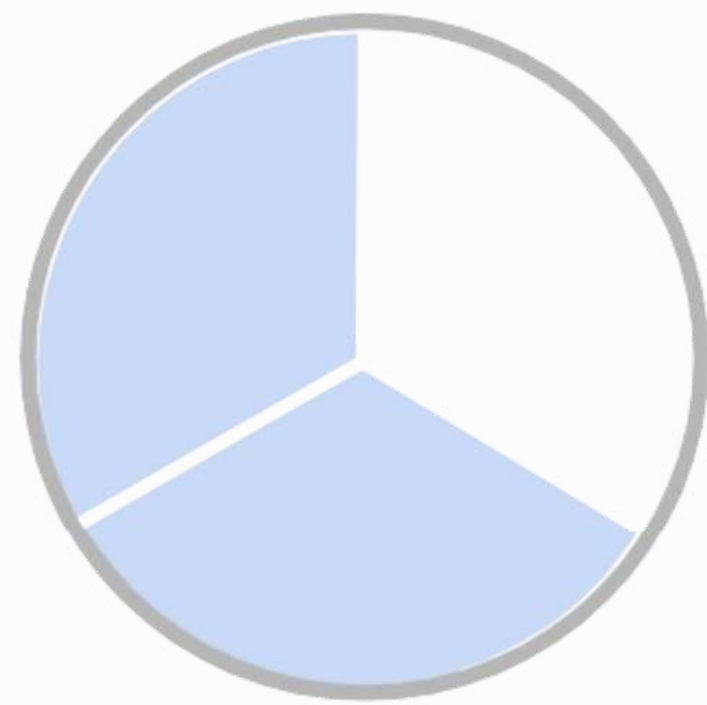
keys vs seeds

keys are formed from multiple seeds

a single seed does not leak sensitive information

add any number of seeds for extra salting / entropy / complexity in reforming

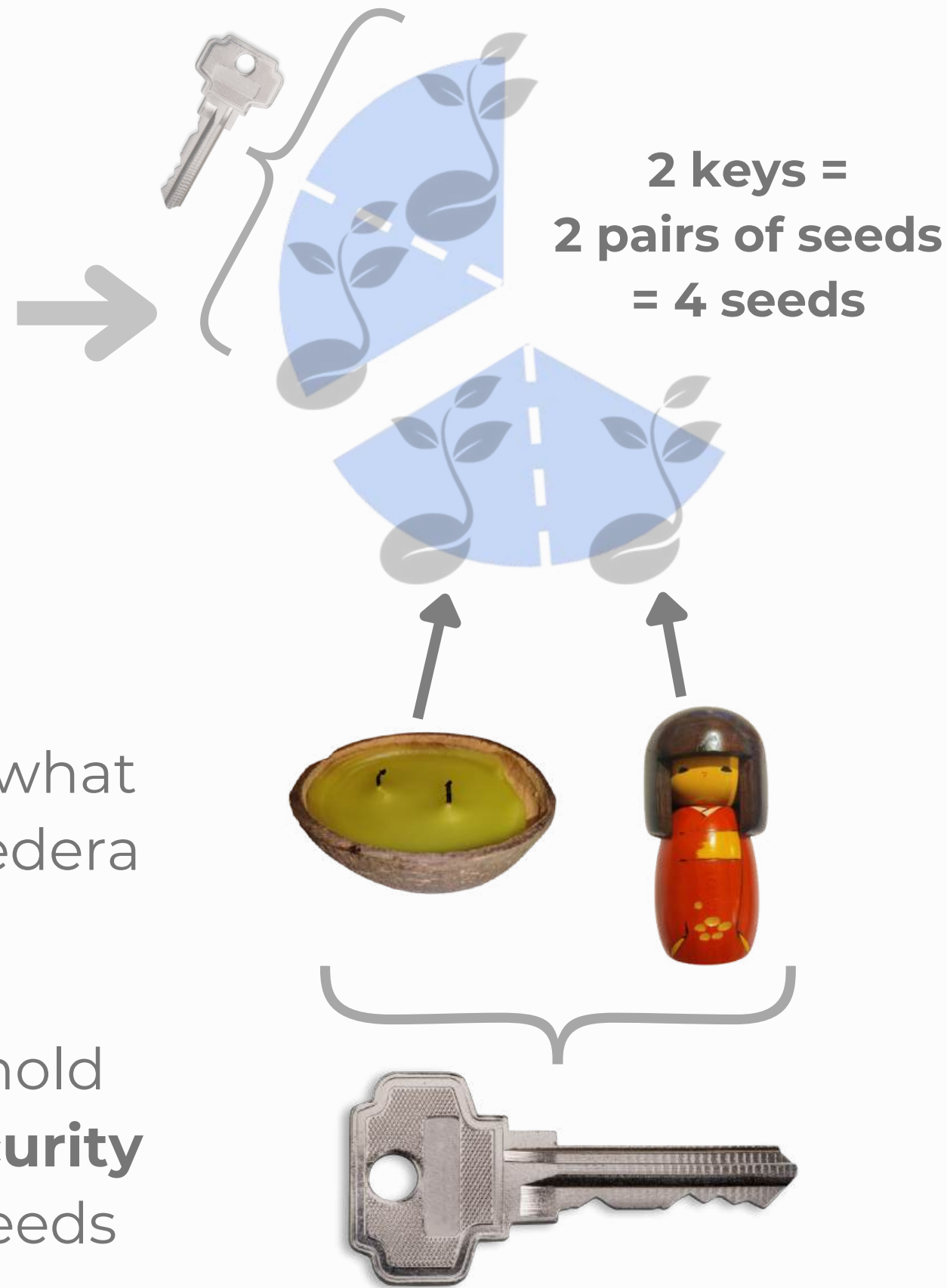
seeds stored in QR codes or NFC tags (optionally attached to objects)



2/3 threshold key

key threshold level is what is seen **publicly** on Hedera

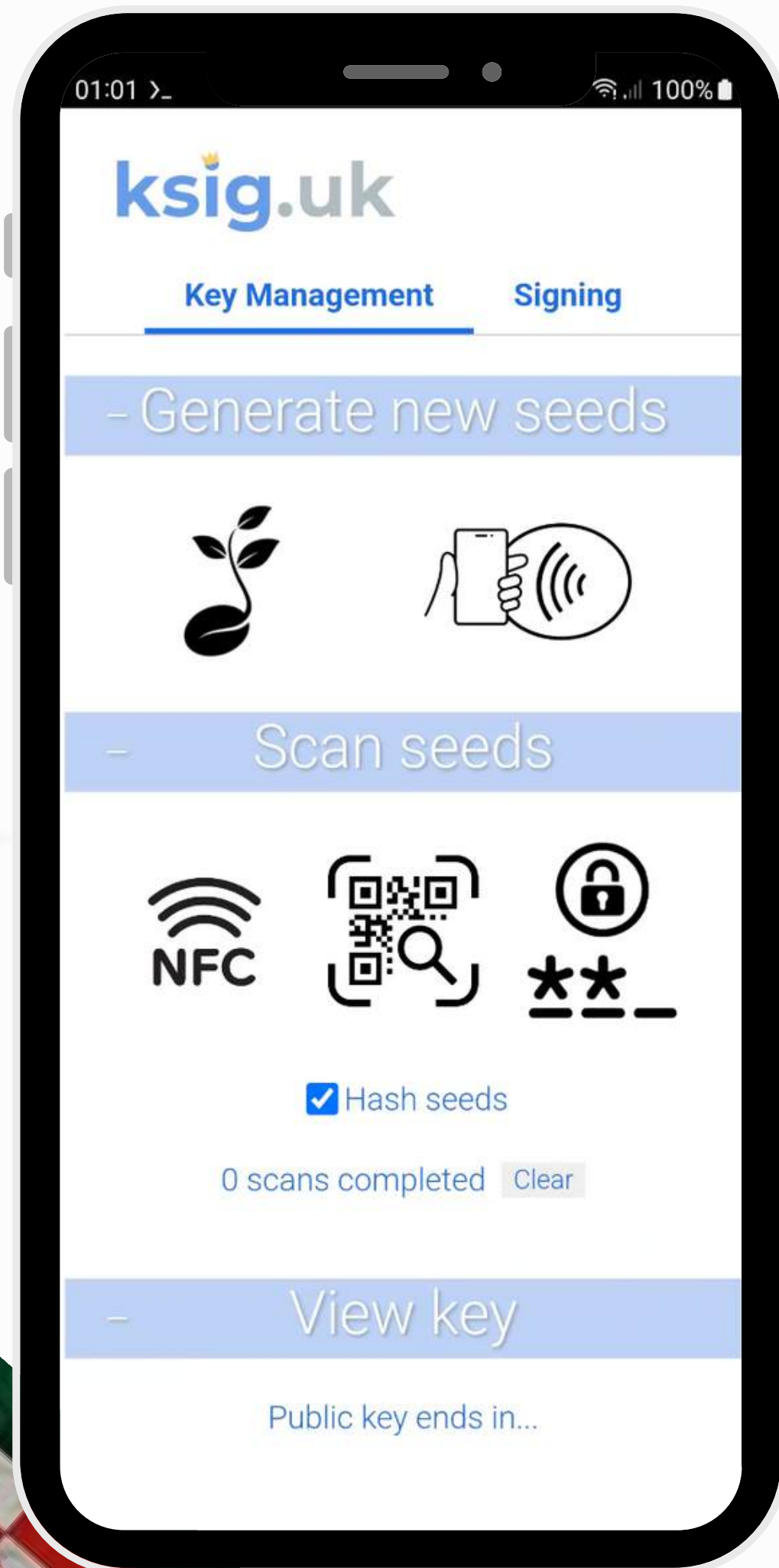
Hedera native threshold keys provide **high security** and **redundancy** if seeds are lost or stolen



2 keys =
2 pairs of seeds
= 4 seeds

example

2 seeds combined to 1 key
~ root hash



multi-sig to multi-seed
create your own unique recipe



ksig.uk

process flow

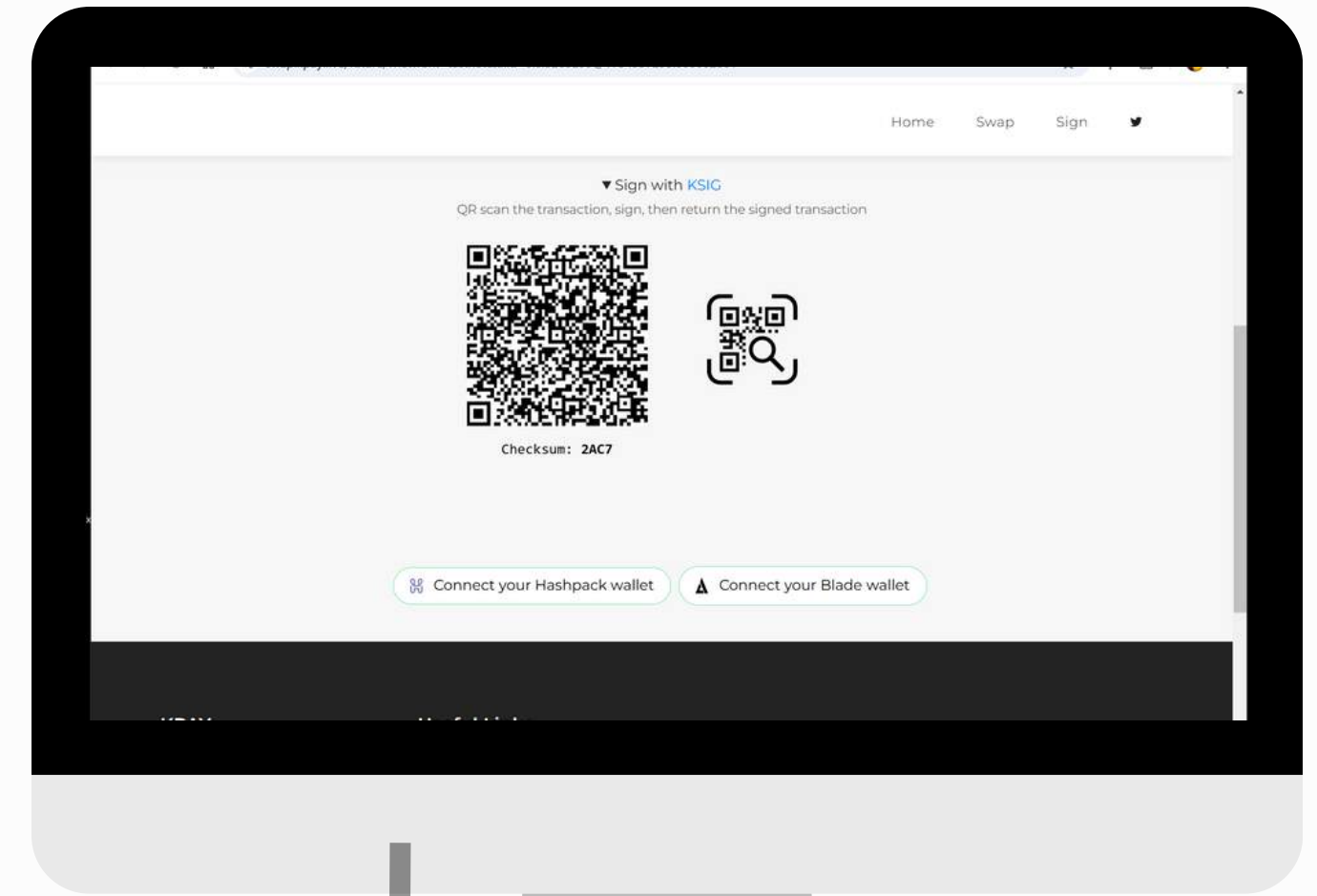
1

user visits a KSIG enabled website



initiates an off-chain Hedera transaction

(as needed) shares link with users who need to sign



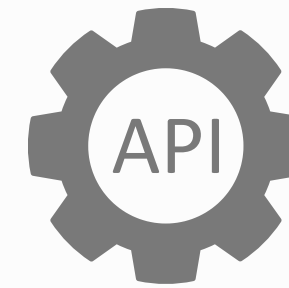
3 offline pwa **ksig.uk**

- scan QR of transaction
- scan offline seeds
- pass QR of signature back to online widget



2

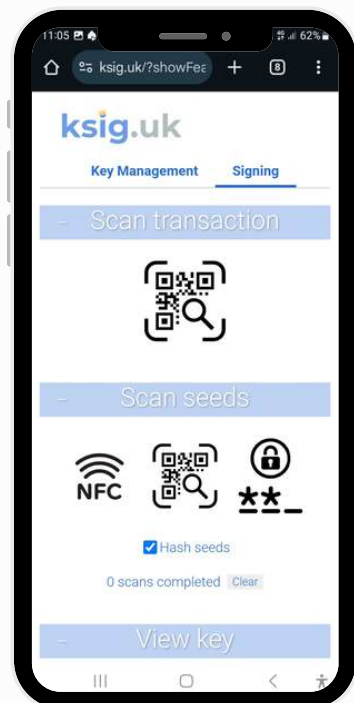
each signer receives and reviews transaction details with an online device



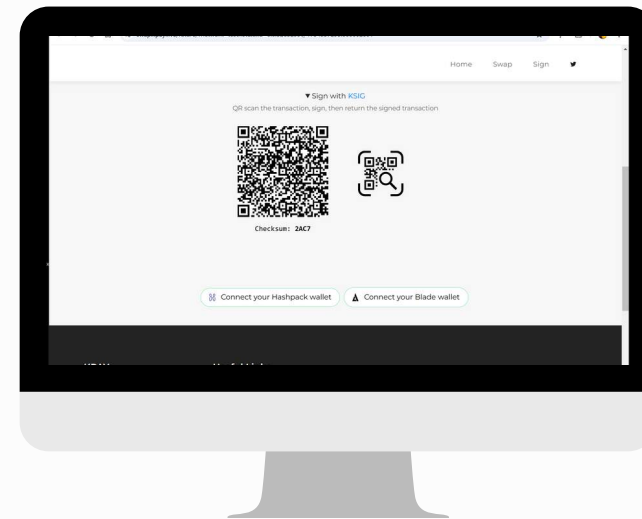
kpos.uk/deal/bytes

4

cron submits to hedera at start time



QR scans only



kpos.uk/sign/offline/widget



kpool or hashpool



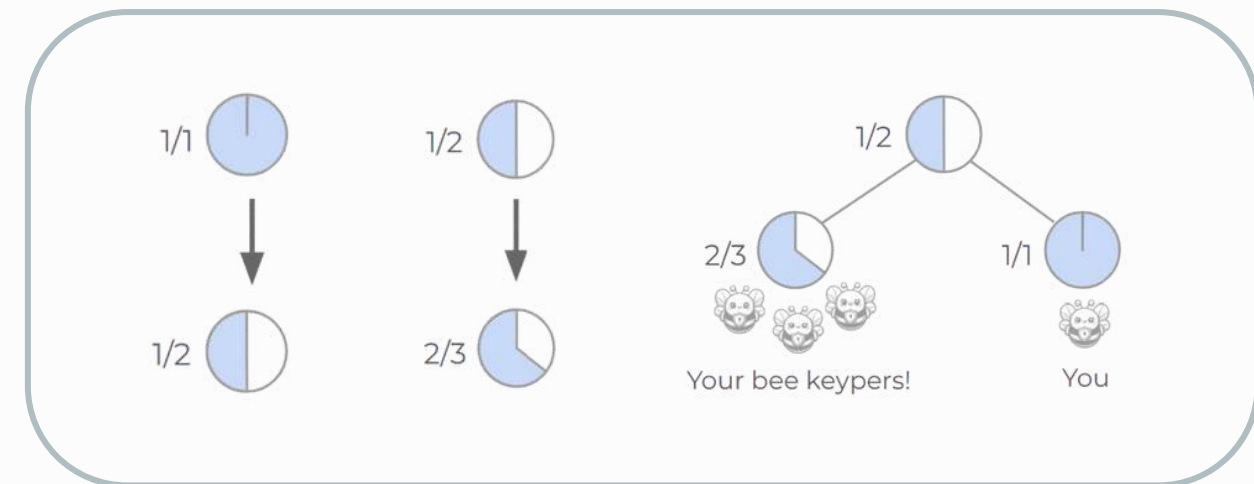
1

open a new account



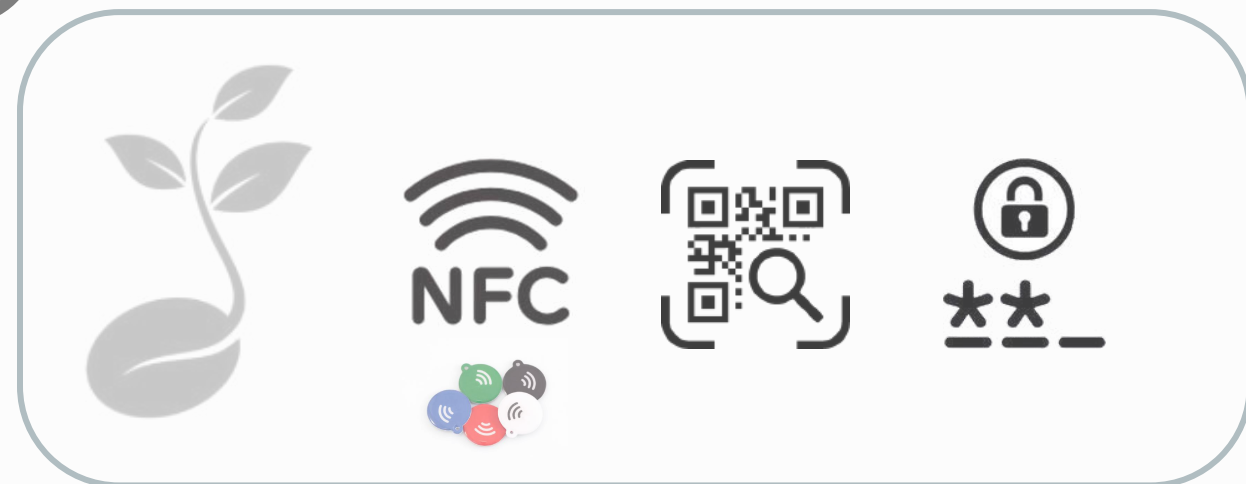
3

KPAY update keys on account



2

ksig.uk create cold storage keys



4

funds transfer with offline signing



social account recovery



Bee keepers

Bee safe - keep your spare keys with bee keepers 🐝🔑

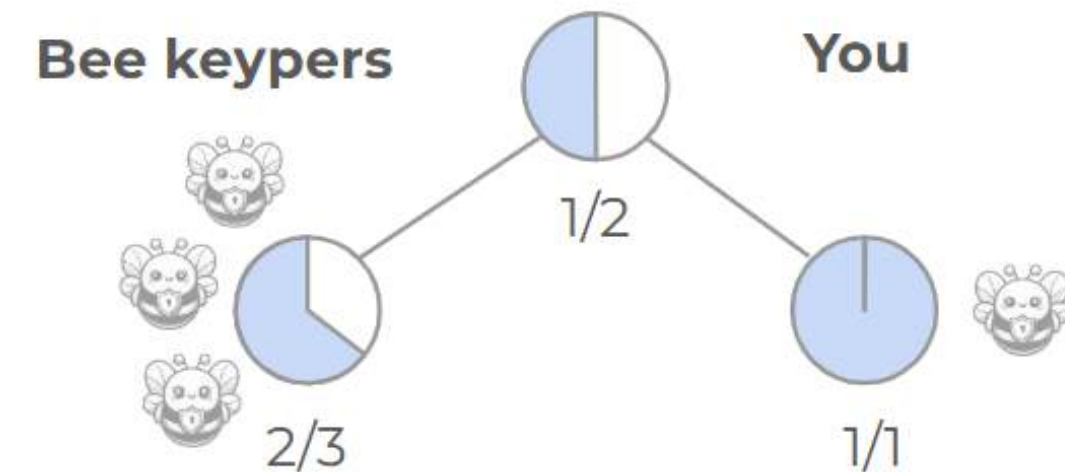
*“There once was a bee called Lee
Who looked after keys for Marie
When they fell down the loo
And were lost with the poo
Oh Lee made a brand new key!”*



Your account number

0.0.12345

These are the keys to your account. Keep them safe. But if you do lose them, get help from your bee keepers at once!

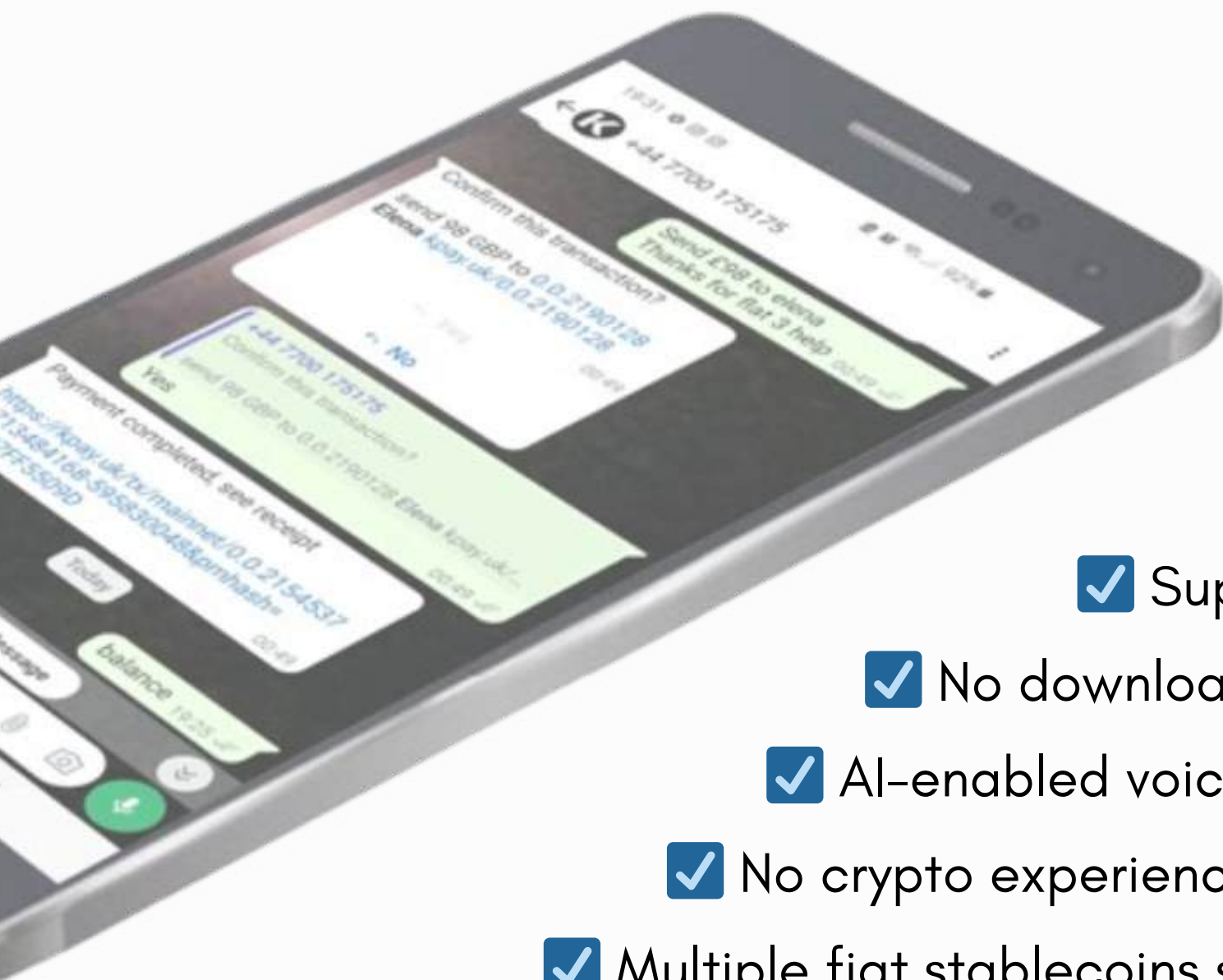


Your account can be designed just for you. In this example you have complete control of your account with just your key. But if you lose it, 2 of your bee keepers can help you replace it.

Global market



WhatsApp voice & message banking by **KPAY**



- ✓ Super simple
- ✓ No download needed
- ✓ AI-enabled voice banking
- ✓ No crypto experience needed
- ✓ Multiple fiat stablecoins supported

ksig.uk

is integrated with the world's most popular messaging app, giving instant access to

3 billion

users worldwide

1.7 billion people don't have access to financial services, but many of these do have WhatsApp

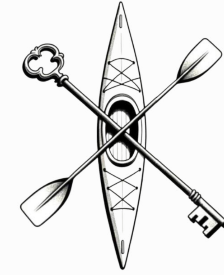
ksig empowers people with agency to manage their own financial wellbeing, and with safeguards through trust circles

regional sponsors welcome, especially LATAM

Join kpay.uk/testing and follow x.com/kpaylive

hbar value held in single key accounts

#keyac



BALANCE PER ACCOUNT

HBAR VALUE

XLarge > 10M

16 bn

Large 100k - 10M

5.6 bn

Medium 1k - 100k

1.8 bn

Small < 1000 hbar

21 M

Tiny < 1 hbar

0.4 M

**Total hbar value
in single key accounts**

23.4 billion

what's next?

wallet integrations



white label

UX experiments

security audit



open source



Join kpay.uk/testing and follow x.com/kpaylive

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