

***"I just have faith in my wallet to not mismanage my crypto":***  
**Investigating Changes in Users' Security Perceptions**  
**Post-FTX Collapse**

**Mingyi Liu**, Nivedita Singh  
Jun Ho Huh, Hyoungshick Kim, Taesoo Kim



# Crypto Is Going Mainstream

**\$2,559,251,960,872**

Market Cap ▲ 1.9%

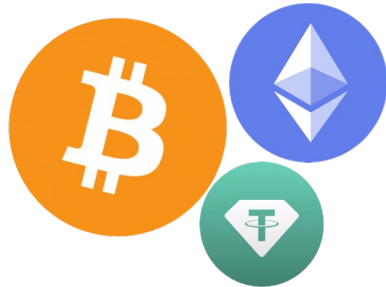


**\$104,165,855,376**

24h Trading Volume



Data source:  
CoinGecko, 4/13/2026



THE WHITE HOUSE  
WASHINGTON

NEWS GALLERY LIVESTREAM INVESTMENTS SAVE AMERICA WH WIRE CONTACT



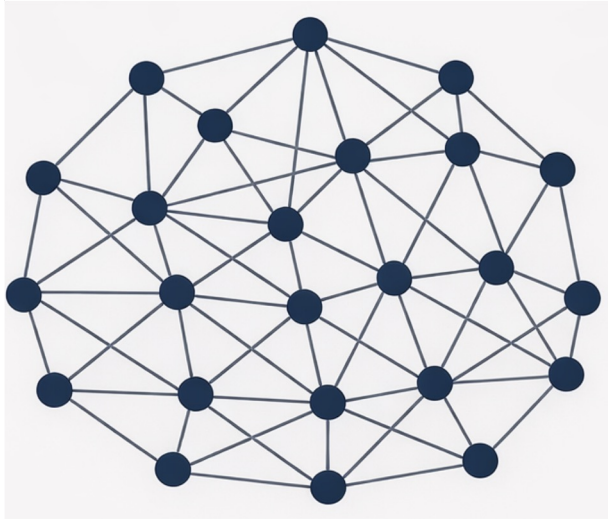
PRESIDENTIAL ACTIONS

ESTABLISHMENT OF THE STRATEGIC  
BITCOIN RESERVE AND UNITED  
STATES DIGITAL ASSET STOCKPILE

The White House | March 6, 2025

# Decentralized by Design, Centralized in Practice

## Decentralized Network



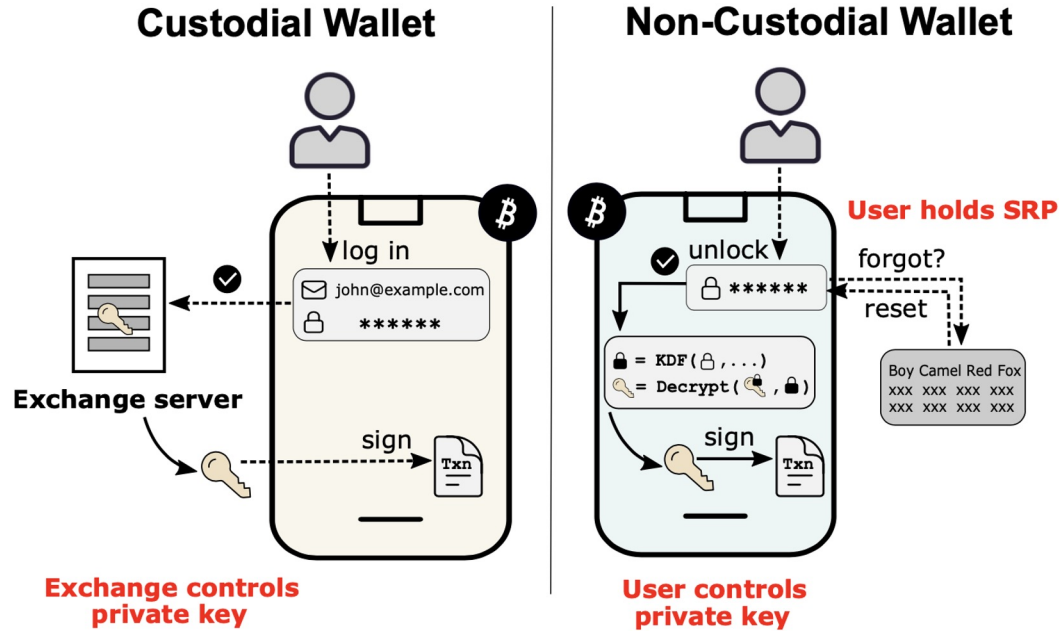
## Centralized Exchange



Blockchain → decentralized

But usage → centralized exchanges

# How Users Interact with Crypto



The key difference is that NCWs give users complete control over their private keys, while CWs entrust key management to the **exchanges**.

# When Centralization Fails

## FTX Crypto Exchange Collapse: Causes, Consequences, and Lessons

By **NATHAN REIFF** Updated November 05, 2023  
Reviewed by **ERIKA RASURE**  
Fact checked by **VIKKI VELASQUEZ**



**Mt. Gox**  
**\$480 million loss**

**Bybit**  
**\$1.5 billion loss**



**2014**

...

**2022**

...

**2025**

...

### Mt. Gox files for bankruptcy, hit with lawsuit

By **Yoshifumi Takemoto and Sophie Knight**  
February 26, 2014 2:34 PM EST · Updated February 28, 2014



**FTX**



**\$8.9 billion loss**

### Latest On The Bybit Record Breaking 1.4 Billion Dollar Crypto Hack

By **Sandy Carter**, Contributor · © Sandy Carter, COO at...  
Published Feb 21, 2025, 11:27pm EST



# The FTX incident

- FTX was founded in 2019 and quickly became one of the **largest** crypto exchanges
- In November 2022, customer funds were **misused and transferred** by the CEO
- One of the largest financial fraud cases in U.S. history

## FTX Crypto Exchange Collapse: Causes, Consequences, and Lessons

By [NATHAN REIFF](#) Updated November 05, 2025

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# Research Questions

RQ1

How does exposure to large-scale centralized exchange breaches affect users' **security perceptions** of CWs and NCWs?

RQ2

What **risk mitigation** actions do users take based on changed security perceptions?

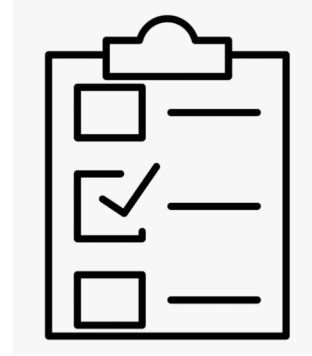
*(focus on the FTX incident due to its unprecedented scale)*

# Methodology



Semi-structured **interview**  
with crypto users  
( $N = 22$ )

1st study

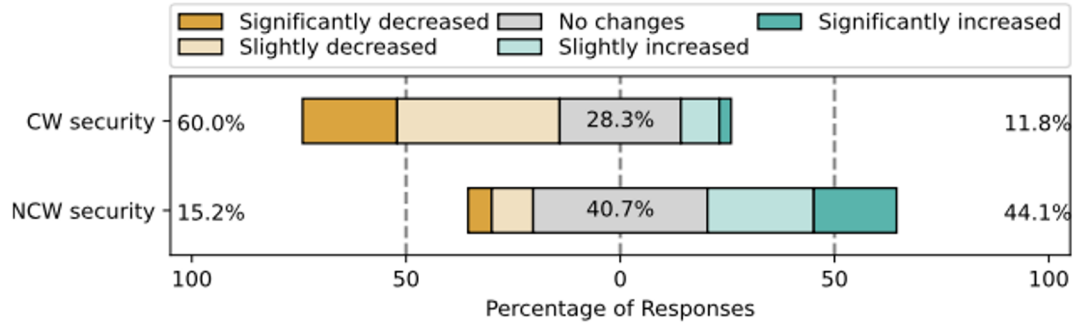


Large-scale online **survey**  
with crypto users  
( $N = 430$ )

2nd study

**Real-world FTX victims**

# RQ1: Security Perception Changes



NCW

*It's almost better to **lose it on your own merit** than someone else's mistake.*

*What if this **happened tomorrow** with my custodial wallets?*

CW

## RQ2: Risk Mitigation Behaviors

After learning about the FTX incident...

**54%** *did not update their wallet list*

**71%** *did not transfer their crypto*

# RQ2: Risk Mitigation Behaviors - No transfer

Rank  
**1**

Not much crypto



OK, reasonable

Rank  
**2**

Trust my NCWs



some mistakenly believed they were using NCWs

Rank  
**3**

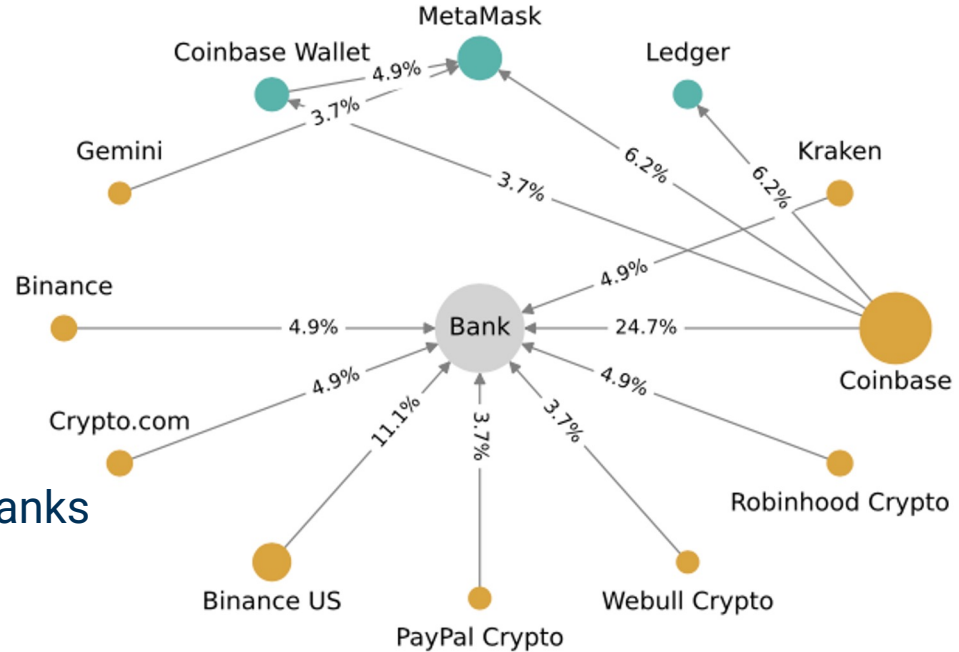
Trust my CWs



“ I just **have faith in** my [custodial] wallet to not mismanage my crypto. ”

# RQ2: Risk Mitigation Behaviors - Transferred

- Most dominant transfer flows:  
**CWs** → **Bank**
- A notable **decline in confidence in CWs**
  - 83% CW-only users transferred to banks
  - 90% of above transferred to banks exclusively



# Concerning User Groups & Recommendations - 1

- Most participants **did not transfer** their crypto or adjust wallets after learning about the FTX incident
  
- **Recommendation:** Action-first disclosures
  - e.g., feature an **imperative instruction** at the top of a message: *“Withdraw available funds as soon as possible!”*

# Concerning User Groups & Recommendations - 2

- Only 44% of survey respondents correctly **identified the type of wallets** they have used
  - more prone to misidentify a CW as an NCW than vice-versa
- Only 35% aware that **private keys are stored** on centralized exchanges' end when using a CW
- **Recommendation:** Enforce active custody verification
  - e.g., require users to actively confirm *"Exchange controls keys"* vs. *"I control keys"*

# Concerning User Groups & Recommendations - 3

- Shifts in security perceptions of NCWs vs. Interpreting the incident:

Negative Change

68% accuracy



No Change

76% accuracy



Positive Change

84% accuracy

- **Recommendation:** Standardize the content of incident reports
  - e.g., an exposure timeline, a plain-language explanation of the root cause, a summary of affected user groups, an easy-to-follow guide for securing wallets...

# Thank you!

## Q & A

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