

# Blockchain Security



# About ISE

know thy enemy

we do.



independent security evaluators  
[www.securityevaluators.com](http://www.securityevaluators.com)

ISE Proprietary



ANDROID





# What is blockchain?

- A decentralized database
- Chain of records called “blocks”
  - Blocks contain transactions
  - Transactions signed with private key
  - Timestamped and linked to previous blocks via cryptography
  - Later blocks validated and added by nodes with encrypted digital fingerprint (hashing)



# Bitcoin

- Cryptocurrency powered by blockchain
- First major use of blockchain (2009)
- Satoshi Nakamoto
- “Bitcoin: A Peer-to-Peer Electronic Cash System” (10/31/2008)





# Other uses

- Smart contracts
- Medical records
- Financial services



# What are your business objectives?

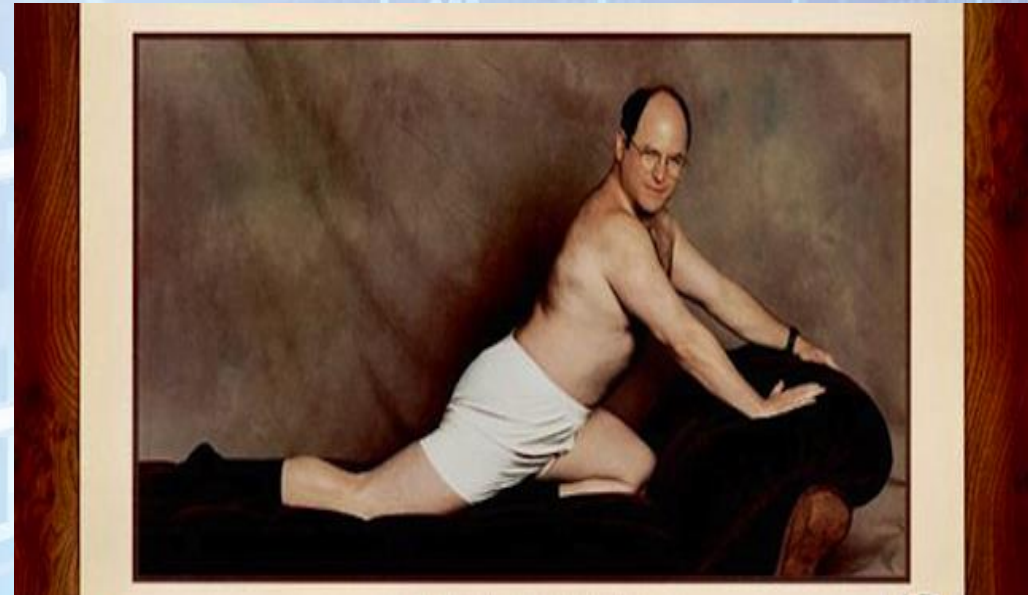
- To obtain funding
- To capture market share





# How can security help with these objectives?

- Conveys authenticity
- Robust security increases the quality of your product
- Security also is a market differentiator



# Lack of developers and dev/technical resources

- Diminished or no security





# Current Mood: First-movers win...

- Secure products win
  - Over \$1 billion in cryptocurrency stolen in 2018
  - By Q3 of 2018, amount stolen was 3x that of total stolen amount in 2017



# Current Mood: Only blockchain developers will do...

- In reality, a skilled developer will do.
  - Development delays
  - Overlooking developers with security chops

Current mood





# Current Mood: Threat actors are the biggest threats to security...

- Umm, development practices are the biggest threat to security
  - Development mistakes
    - Time constraints
    - Lack of resources
    - Other internal pressures



# The Remedy

- Stay in your lane
  - Hire skilled developers
  - Time to gain blockchain experience
  - Engage a 3<sup>rd</sup> party security firm







independent security evaluators



Ian Thomas  
Independent Security Evaluators  
[ithomas@securityevaluators.com](mailto:ithomas@securityevaluators.com)  
202-285-6875