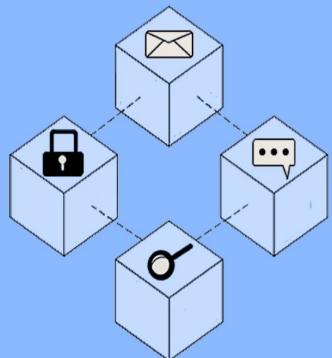


Blockchain and cryptocurrency

Introduction

Artem Surzhenko

Blockchain



Blockchain

[ˈbläk-,chān]

A digital database or ledger that is distributed among the nodes of a peer-to-peer network.

Cryptocurrency



Cryptocurrency

[krip-tō-ˈkär-ən(t)-sē]

A digital or virtual currency secured by cryptography and based on a network that is distributed across a large number of computers.

How is cryptocurrency different from regular money?

COMPARING CURRENCY	
FIAT	CRYPTO
<ul style="list-style-type: none">• physical• issued by governments• centralized (monitored by government)• unlimited supply• restricted by borders	<ul style="list-style-type: none">• digital• generated by computers• decentralized (no one can control)• limited supply• unseizable

Cryptocurrency extraction and mining

Cryptocurrency mining means adding new blocks to the blockchain chain. This process is difficult and requires enormous computing power.



Designed by Artem Surzhenko (Introduction Part)

Banking and Bitcoin

Matvii Vasylenko

Online Banking – money goes digital



Before crypto - late 20th and early 21st centuries banking.

1980s



Evolution of payment system, debit/credit cards and standards VISA & MASTERCARD.

Smartphone

2002 - 2008



Growth of the smartphone
market and its rapid
technological leap in future.

How big is this trend?

**From the 2023 report of an independent marketing platform
GITNUX:**

- Online banking usage in the United States increased from 36% in 2005 to 73% in 2021.
- 51% of US adults use digital banking, with 81% of them accessing their accounts via mobile platforms.
- The global online banking users is expected to reach 3.6 billion by 2024.
- 89% of UK adults now use online banking, and 64% use mobile banking apps.



Digital Currencies – money in air

Central Banking Systems around the world – started to create and convert their currencies into "Digital Format"

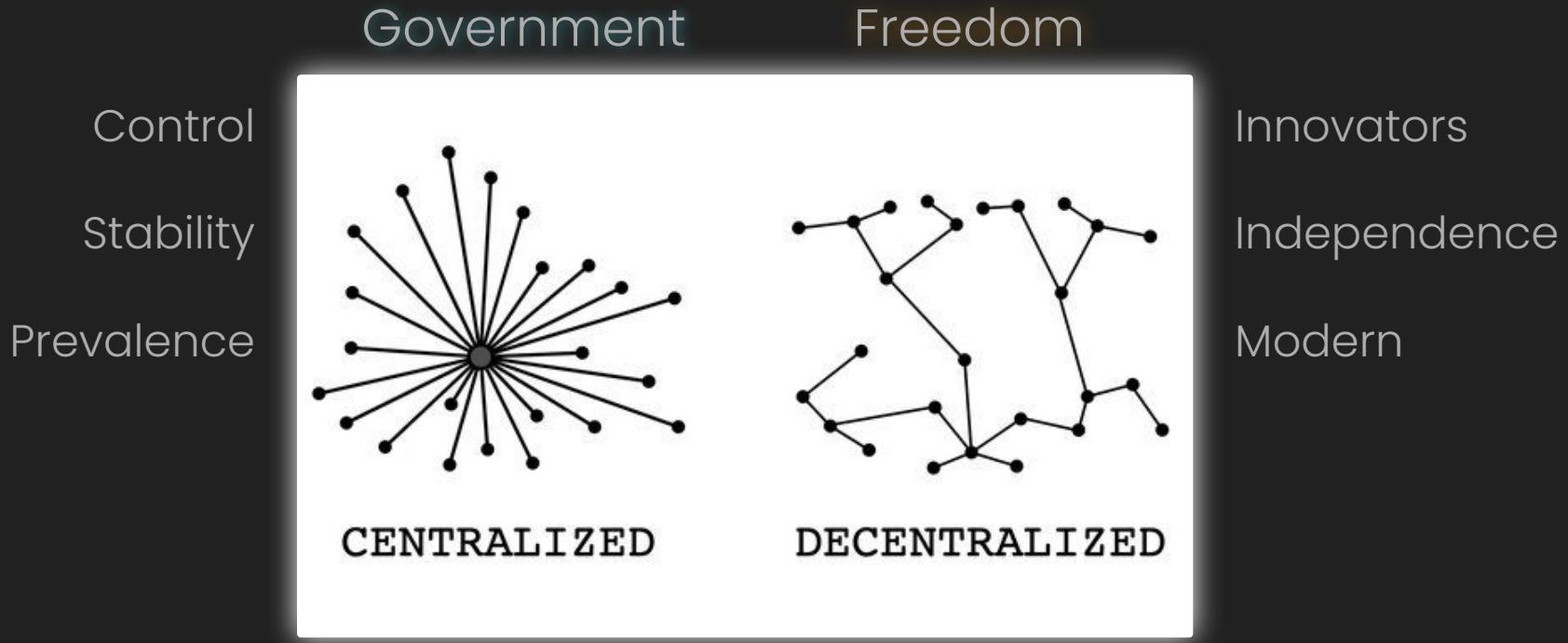
Honourably the first steps in this direction are taken by the USA, after which all other big nations joined in: Japan, EU, Canada, UK.

How Bitcoin works?

Very-very-very-simple explanation



Decentralization



CONCLUSION:

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Hacking

Danyil Tymchuk

Introduction



Importance of Security



The Nature of Blockchain Hacking

How Hacking Differs in Blockchain

Common Misconceptions



How Hacking Differs in Blockchain



Common Misconceptions

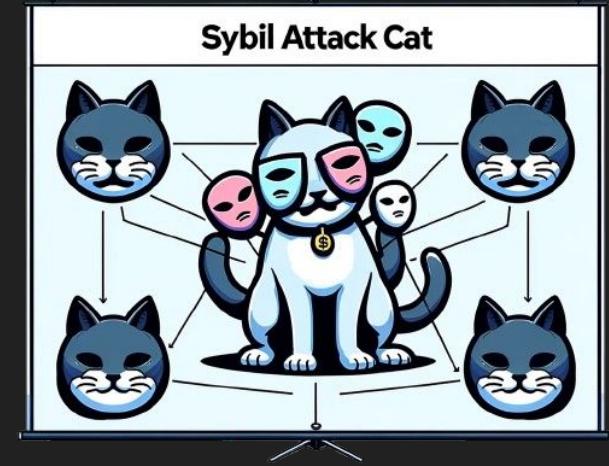


Types of Blockchain Hacks



51% Attack

Backdoor Attack



Sybil Attack

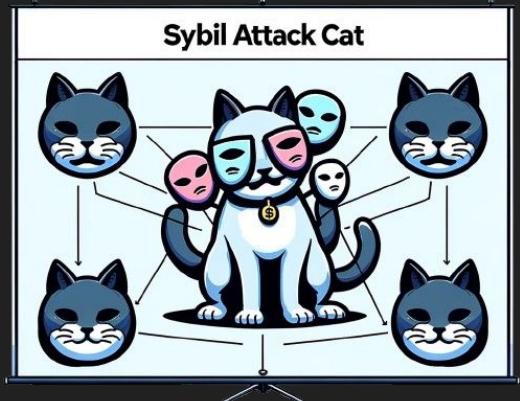
51% Attacks



Backdoor



Sybil Attacks



Notable Blockchain Hacks



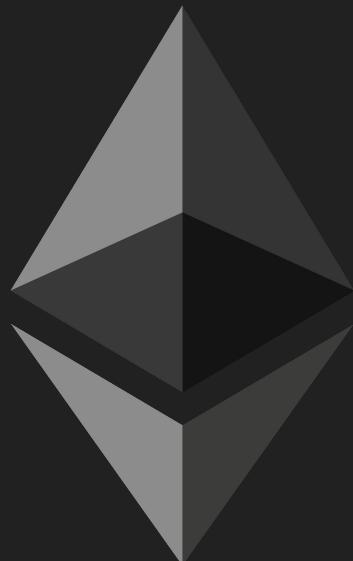
DAO Attack

- 2016 year
- -50\$ millions
- Backdoor Attack



Hard-fork

Ethereum (ETH)



Ethereum Classic (ETC)



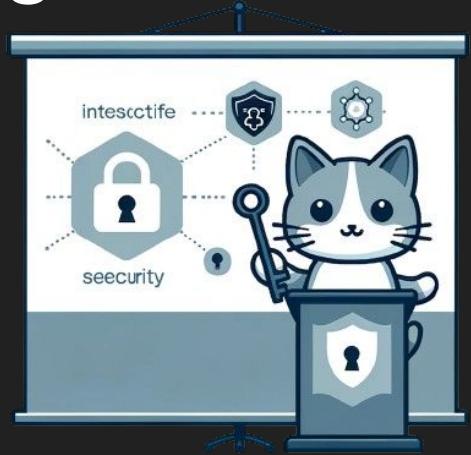
Mitigating Hacking Risks

Security Measures

Role of the Community



Security Measures



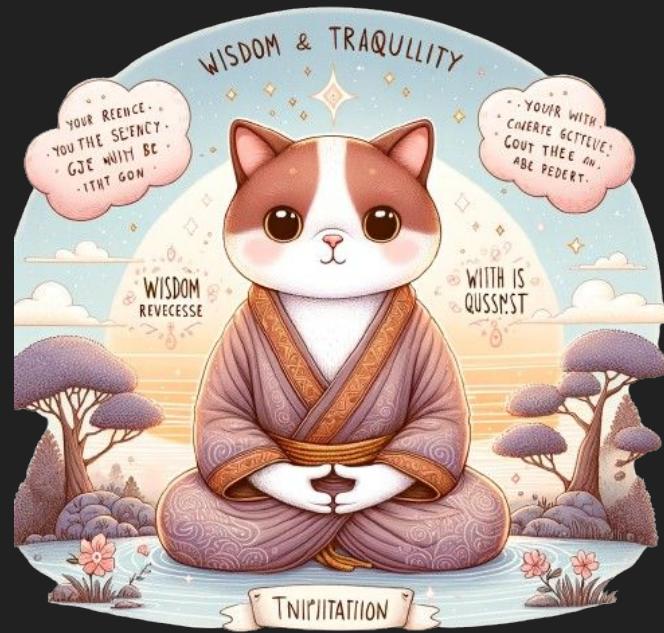
The power of the people!

Role of the Community



Conclusion

“No matter how advanced the system is, anything can be hacked”



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04.12.2023

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