

Digital Assets Fact or Fiction: Dispelling Common Myths

Nik Fahrer, Blake Burge, & Shree Mukhopadhyaya / May 2024

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Meet the Presenters



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Agenda

Introduction

Why Is This Important?

What Is Blockchain?

Fact or Fiction

Associated Risks

Closing

Learning Objectives

- Learn about the ethos behind crypto: sovereign ownership.
- Learn to dispel common myths such as crypto is only used for criminal activity.
- Learn to dispel common myths such as crypto has no value.



Housekeeping Items

- Please ask questions
 - There is no such thing as a stupid question
 - We will try to answer as many as we can
- This presentation is not investment, financial, tax, or legal advice
 - Consult your advisor



How Did You Get Involved in Cryptocurrency?





Who Can Tell Me What Happened Here?



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Who Can Tell Me What Happened Here?



2008 Financial Crisis → Bitcoin

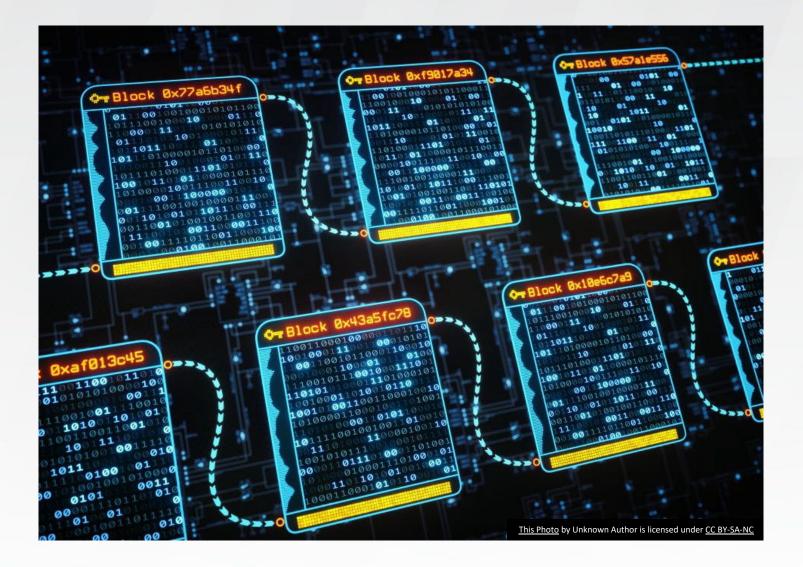
 "What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party."



Source: bitcoin.pdf

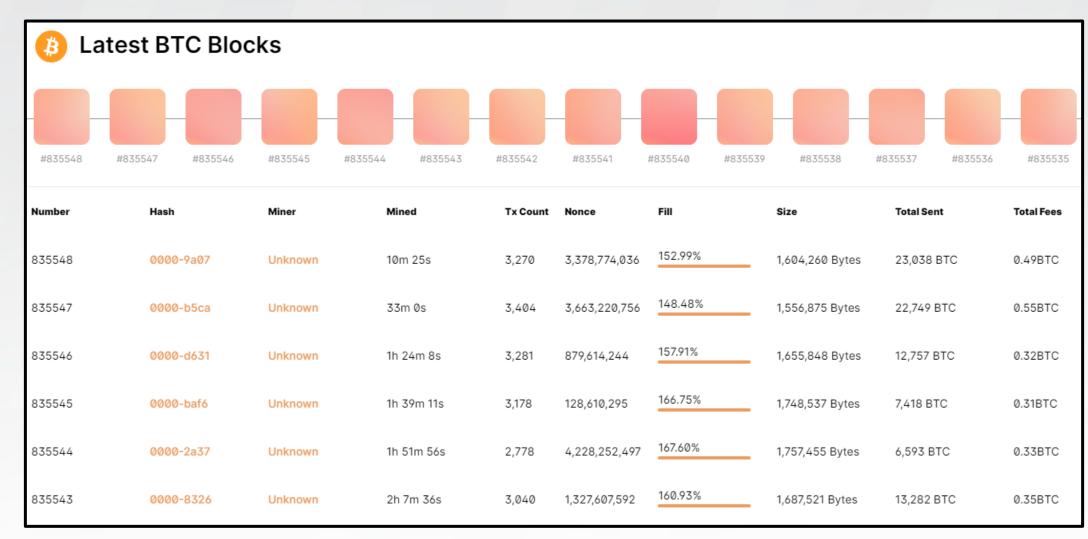
Blockchain

- Blockchain is a fancy word for a database
- Blockchain is a transparent, distributed, append-only, digital ledger





Bitcoin Blockchain Explorer



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Source: blockchain.com/explorer/blocks/btc?page=1

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When I invest \$2500 into crypto and I'm not a millionaire a week later



Yahoo Finance · 20d

Biden Report: Most of Crypto Has 'No Fundamental Value'

Powell calls cryptocurrencies 'not really useful stores of value' and says Fed will move slowly

PUBLISHED MON, MAR 22 2021-11:02 AM EDT | UPDATED MON, MAR 22 2021-12:27 PM EDT

Crypto hackers stole billions; why it's a growing problem

https://www.cnbc.com/2022/08/19/crypto-hackers... -

World Regulators Worried About Cryptocurrencies Used In Illegal Activities

F Futurism · 1d

Mining Crypto Is Even Worse for the Environment Than We Thought

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Let's Play a Game ...





Fact or Fiction – Crypto has no value



Largest Investments in the World by Market Cap

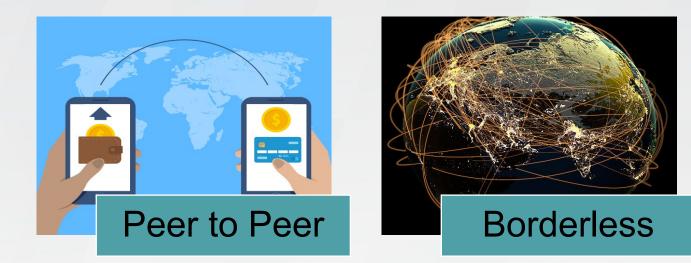


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Rank	÷	Name		 Market Cap 	Price 💧	Today	Price (30 days)	Country 🔶
1		1	Gold	\$14.529 T	\$2,164	0.10%	~~~~	
2			Microsoft	\$3.109 T	\$418.52	0.50%	mm	s USA
3		Ú	Apple AAPL	\$2.702 T	\$175.02	1.39%	$\sim\sim\sim$	usa 🔤
4		©.	NVIDIA NVDA	\$2.216 T	\$886.57	0.93%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	s USA
5		×	Saudi Aramco	\$2.014 T	\$8.30	-0.16%		🗖 S. Arabia
6		G	Alphabet (Google)	\$1.837 T	\$148.32	4.33%	\sim	usa 🔤
7		a	Amazon	\$1.814 T	\$174.69	0.15%	\sim	usa 🔤
8		0	Silver	\$1.422 T	\$25.28	-0.42%	~~~~~	
9		₿	Bitcoin	\$1.318 T	\$66,997	-1.83%		
10		\sim	Meta Platforms (Facebook)	\$1.259 T	\$493.88	2.02%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	usa

Source: <u>Companies ranked by Market Cap - CompaniesMarketCap.com</u>

What Characteristics Create Value?







Permissionless



Crypto Has No Value



Ukraine / Україна 🤣 @Ukraine

Stand with the people of Ukraine. Now accepting cryptocurrency donations. Bitcoin, Ethereum and USDT.

ALC: N

BTC - 357a3So9CbsNfBBgFYACGvxxS6tMaDoa1P

ETH and USDT (ERC-20) -0x165CD37b4C644C2921454429E7F9358d18A45e14

4:29 PM · Feb 26, 2022 · Twitter for iPhone

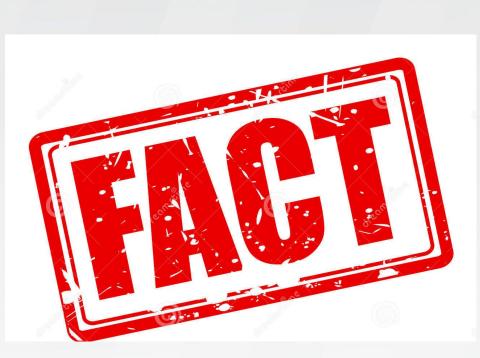
3,875 Retweets 810 Quote Tweets 16.5K Likes



Fact or Fiction – Crypto is volatile & not a safe store of value



"Crypto Is Volatile & Not a Safe Store of Value"







Dot Com Bubble

Stock declines from the peak of the dot com bubble to the bottom:

Adobe:-56% Microsoft: -56% Amazon:-75% Nvidia: -75% Apple: -78%

Stock gains over the next 20 years:

Apple: +58,746% Nvidia: +33,818% Amazon: +19,405% Adobe: +6,250% Microsoft: +1,240%

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Source: https://www.threads.net/t/CufIl6JPmHO/

"Crypto Is Too Volatile & Not a Safe Store of Value"



Source: From American Dream to American Nightmare

Fact or Fiction – Crypto is scammy & needs consumer protection



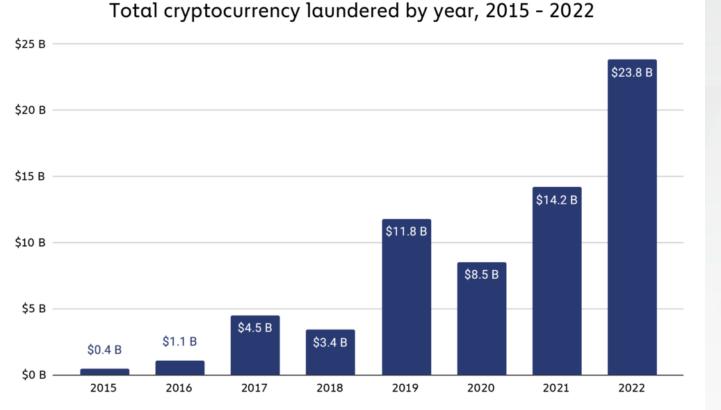
TOTAL CYBERCRIME COMPLAINTS AND LOSSES BY YEAR



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Source: The cost of Cybercrime in the U.S.

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0.21%

of cybercrime

© Chainalysis

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Source: Crypto Crime Report 2023.pdf (chainalysis.com)

То	You		
Cc			
Subject	"MAKE 1000% MONTHLY RETURNS WITH MOONCOIN"		

То	You
Cc	
Subject	"GET A PHD IN TWO WEEKS WITH THE UNIVERSITY OF PHEONIX!!"





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Diploma Mills: A Pervasive Problem



2,615 Estimated number of diploma mills in the world.



50

400

Number of diploma mills in the U.S. "awarding" an estimated 500 fake Ph.D. degrees monthly.



Sources: Verifile Limite, College Choice

Estimated amount that U.S.

diploma mills take in each year.

© 2017 World Education Services

wenr.wes.ora

\$200 million

WES



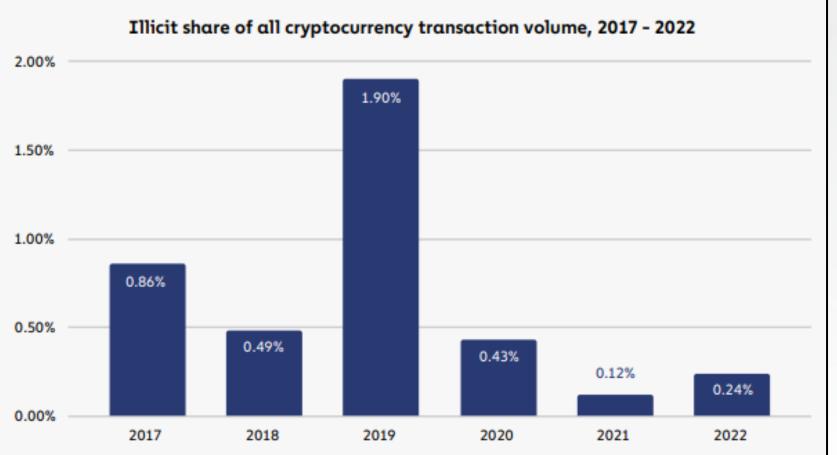
Fact or Fiction – Crypto is only used by criminals



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"Crypto Is Only Used by Criminals"





Source: Crypto_Crime_Report_2023.pdf (chainalysis.com)

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"Crypto Is Only Used by Criminals"

A. Tracing cryptocurrency

Cryptocurrency, despite the purported anonymity it grants criminals, provides law enforcement with an exceptional tracing tool: the blockchain.⁴⁵ While the blockchain's historical ledger will not list the names of parties to transactions, it provides investigators with ample information about how, when, and how much cryptocurrency is being transferred.⁴⁶ Moreover, this information is publicly available; no subpoenas or warrants are required to obtain it.

- The Department of Justice

"Today's arrests, and the department's largest financial seizure ever, show that cryptocurrency is not a safe haven for criminals," said Deputy Attorney General Lisa O. Monaco.

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Source: Consolidated Bulletin (justice.gov)

Fact or Fiction – Crypto is bad for the environment



Bitcoin mines are increasing energy bills for millions of American families while enriching crypto executives — and causing as much pollution as an additional 3.5 million gas-powered cars. An alarming @nytimes report.

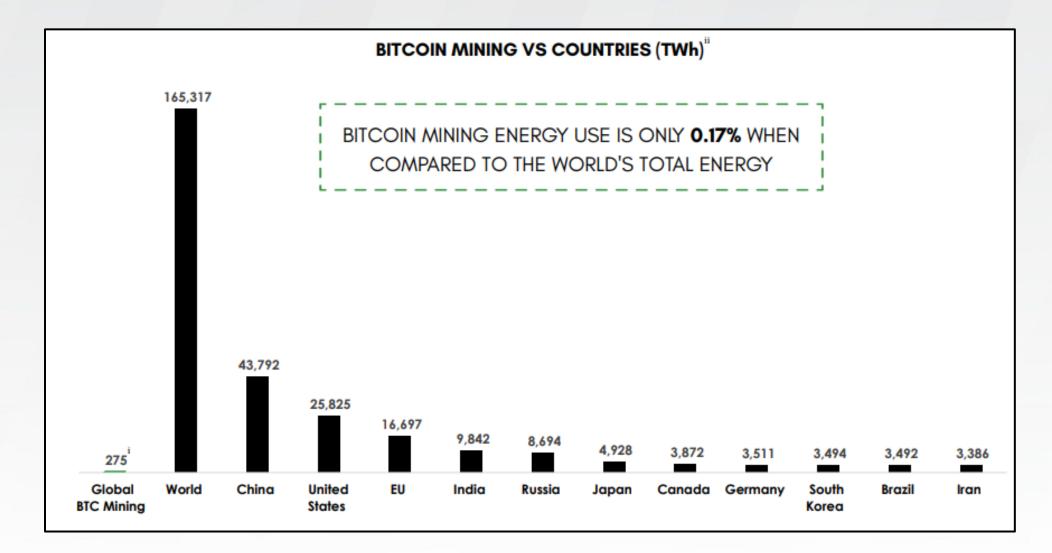


nytimes.com

The Real-World Costs of the Digital Race for Bitcoin

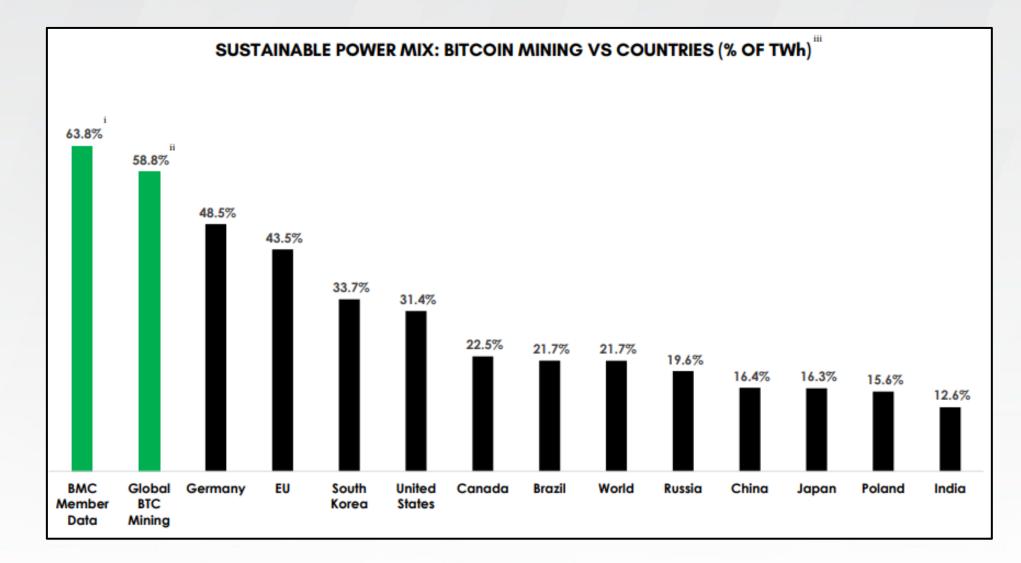
Bitcoin mines cash in on electricity — by devouring it, selling it, even turning it off — and they cause immense pollution. In many cases, the public pays a ...

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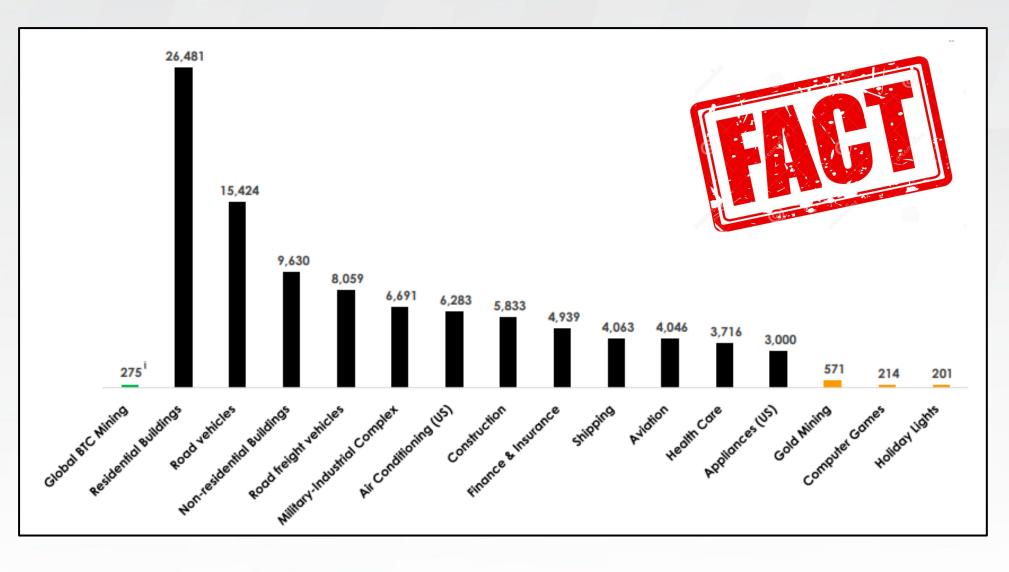
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Source: BMC Q4 2022 Presentation (bitcoinminingcouncil.com)



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Source: BMC Q4 2022 Presentation (bitcoinminingcouncil.com)



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Source: BMC Q4 2022 Presentation (bitcoinminingcouncil.com)

a16z crypto

State of Crypto

2023

Trends to Watch: Scaling Blockchain

18

YouTube

Burj Khalifa

830 m

(244 TWh)

(0.0026 TWh)

Ethereum now consumes 0.001% of the energy that YouTube consumes annually

Ethereum switched to energy-saving Proof of Stake (PoS) from energy-intensive Proof of Work (PoW)*

Estimated energy consumption

	Annualized energy consumption (TWh)	Comparison to PoS Ethereum	Height comparison
YouTube	244	94,000x	for scale
Gold mining	130 - 240	50,000 - 92,000x	
Global data centers	200	78,000x	
Bitcoin	100 - 130	38,000 - 50,000x	Thursday -
PoW Ethereum*	78	30,000x	
Gaming in USA	34	13,000x	
PayPal	0.26	100x	PoS Ethereum
PoS Ethereum*	0.0026	1x	
	nd upper bounds from different sources. Esti ;//ethereum.org/en/energy-consumption/.	mates can vary dramatically.	Half a penny 0.95 cm

For the full list of sources, visit <u>https://ethereum.org/en/energy-consumption/</u>

Source: https://ethereum.org/en/energy-consumption/. *PoW and PoS are consensus mechanisms for securing blockchains.



The Nebraska Public Power District testified on Bitcoin Mining in the Senate last month.

They say that Bitcoin mining is a boon to rural communities.

One site has \$65m economic impact, 200 associated jobs, and \$5.5m tax revenue for an otherwise struggling area.

Bitcoin miners say they're helping to fix the broken Texas electric grid — and POLITICIAN agrees





But what about the risks?

There Are Risks

Risk Type*	Example	Potential Mitigation
Operational	Losing private keys & thus access to the assets	Third-party custody
Market	Price volatility	Investment horizon, stablecoins, use of derivatives/hedging
Cyber	Hacking & misappropriation	Advanced security & internal controls over authorization
Regulatory	Uncertainty	Legal consultation
Financial reporting	Incorrect accounting classification, measurement, & reporting	Proper application of GAAP
Tax implications	Misunderstanding of taxable transactions	Understanding tax regulations, complete/accurate data collection

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Evolution of the Internet

Web 1

- Read Only
- Decentralized
- Basic Web Pages
- Desktop
- 1990 2000



Web 2

- Read & Write
- Centralized
- Social Media
- Mobile
- 2000s 2020s

NETFLIX

Web 3

- Read, Write, & Own
- Decentralized
- AI/VR/AR/Metaverse
- IoT Devices
- 2020s -



What Is Your Perception of Cryptocurrency Now & Where Do You Think It's Going?





Questions?



Thank you!

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