

Crypto Currencies

*(I own no cryptocurrencies, therefore I have no conflicts of interest,
nor do I recommend ANY cryptocurrency over any other)*

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BLOCKCHAIN.COM

<https://www.blockchain.com/explorer>

Cryptocurrencies – a new way of understanding money

Or... a new way of making money

Or... a new way of losing money

If you buy a stock, it can go up and you make money
If you buy a stock, it can go down and you lose money
If you buy a cryptocurrency,

But what effects the volatility of a stock? The company could make a new wonderful product that the world wants, or Their product causes cancer!

What effects the volatility of a cryptocurrency? ***Hype, panic, all kinds of emotions***



Bitcoins **do not exist** except on ebay as semi-worthless tokens.

So.... What is a Bitcoin?

- It is part of a family of “crypto currencies”
- Bitcoin was the first cryptocurrency
- It was introduced along with a set of rules that described how anyone can trade them, and
- How the trading of them is logged in a secure manner so that there is no hanky-panky 😊 *
- Currently it is the most traded cryptocurrency and the most expensive – but why?

* Hanky-panky – say you claim to have 20 bitcoins – how can you prove or disprove it? **Every** trade ever made for a crypto currency (including bitcoins) is logged into a database accessible by anyone and they can see that the transaction was valid. (actually a little bit complicated than that, but that is the gist of it without getting too nerdy)

And so What is a cryptocurrency?

- Anyone in this room can create a cryptocurrency
- You can call it Bobcoin, Marycoin, etc.
- You either have to create your data store (database), or use someone else's
- Then all you have to do is convince 100,000 of your closest friends to buy and sell them
- And you have to reward someone for verifying that your 100,000 friends are being honest
- There are literally tens of thousands of cryptocurrencies currently capable of being traded

We live in a digital age

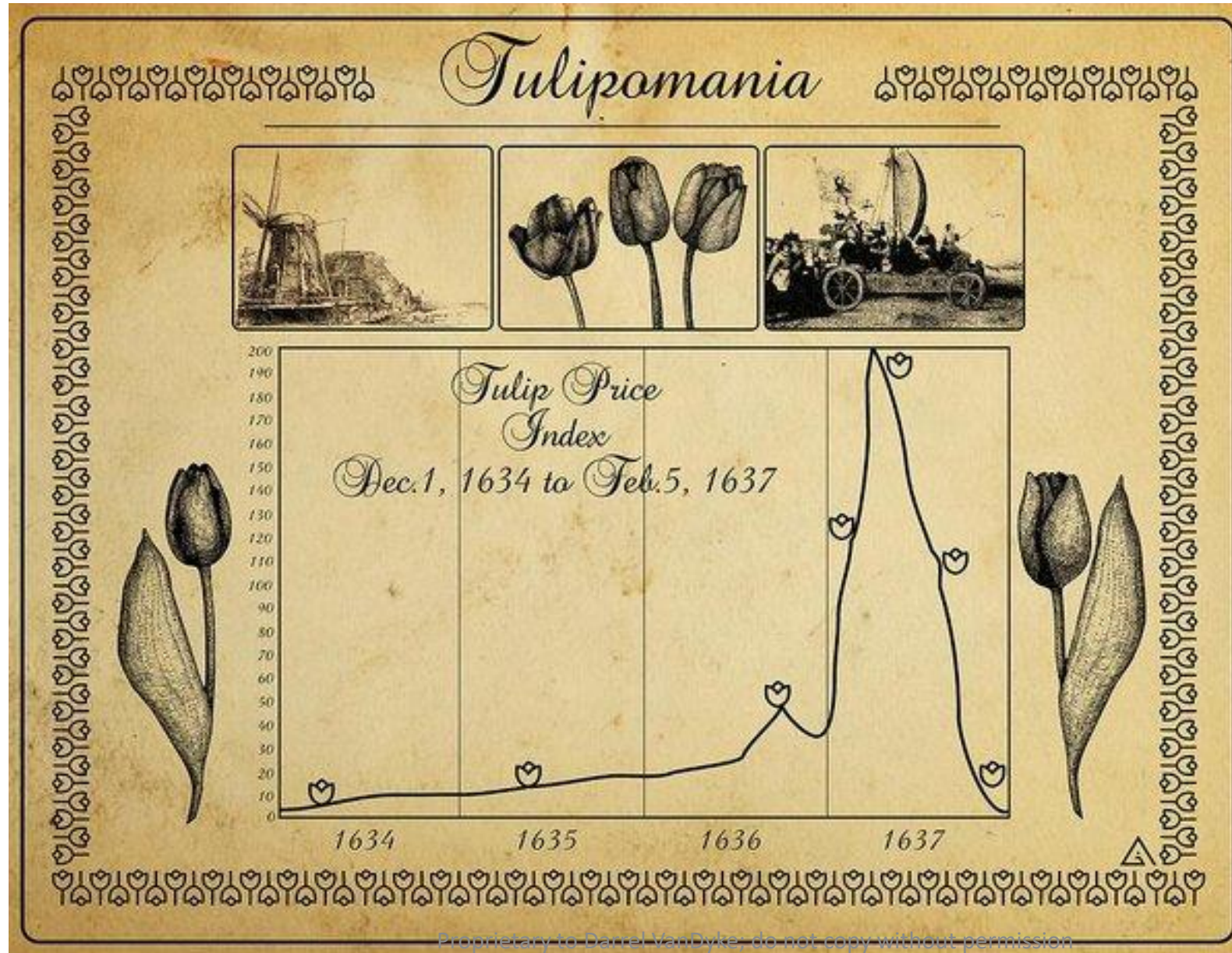
- If you buy a bitcoin, what do you really own? You own the hope that someone will pay you more than you paid for it.
- If you buy a share of Ford:
 - ☐ You get a dividend
 - ☐ You are a part owner in Ford
 - ☐ You may or may not sell your share for a profit

FOMO

Fear Of Missing Out

HYPE

The Netherlands Tulip Investment Strategy



Panic!

Early 1980's – gas lines!!!!

Covid!

- Who remembers toilet paper hoarding?
- Sandwich meat hoarding?

\$Melania coin

- On eve of President Trump's inauguration, the First Lady announced on social media: "The Official Melania Meme is live! You can buy \$MELANIA now."
- The hype drove price to over \$13.00 a "coin"
- As of mid October, 2025, the price hovers around 10 cents

- Tom Brady (aka Mr. Quarterback for Tampa) says he would “love to” accept a portion of salary in bitcoin, Ethereum, or Solana.
- Mat Damon, in 2022 Super Bowl commercial, gazed out into space and says history is made up of, “The ones who embrace the moment and commit. Fortune, favors the brave.” (he was hawking some obscure, easily forgotten crypto)

- Who started this Uh... stuff? A “name” called [Satoshi Nakamoto](#).
- In 2009, he/it published a paper (on the web, open to anyone who is interested in how it works)
- The paper details how the trades/transactions are to be logged into a database file, how transactions are moved to a person’s “wallet”, who can view them, and gives a “reward” for anyone who is the first to validate that the “chain of transactions” are ok and that there was no hanky-panky with those transactions
- The paper set a limit of 21,000,000 bitcoins to be “minted”
- The paper says that a bitcoin can be divided up to 1,000,000 times
- Satoshi kicked things off by transferring 10 bitcoins from its wallet to another person’s wallet

10 bitcoins were transferred to another's "wallet" as a reward after that guy verified that the few transactions/trades were valid and all was working as planned

- Approximately 46 million people own bitcoin
 - ~13% will purchase cryptos in the next year
 - 84% of crypto investors are between ages of 25-44
- Facebook jumps into cryptocurrency with Libra.
(If Facebook wants to jump start Libra, I am waiting for them to announce, "We are giving every Facebook user 20 Libras!")

Happy Pizza Day

1st bitcoin **business** transaction ever (2010, May 22) was a guy who convinced a pizza place to accept bitcoins for his order for 2 pizzas. Reluctantly the business settled on 10,000 bitcoins for his \$41 purchase.

(Those 10,000 bitcoins today in 2025 would be worth \$1,150,000,000)

Can you use bitcoins (or any cryptos for that matter) to buy something tangible?

Rarely and far and few between any merchant willing to accept any crypto in exchange for their product. Why not?

Volatility – the price of a crypto can swing dramatically in a few seconds.

To use your crypto investment:

- you first have to sell it (find a buyer)*,
- move those funds to your bank
- Then use those real dollars to buy whatever you want

* This is what a crypto trading company does – more on this later

Facts of Life

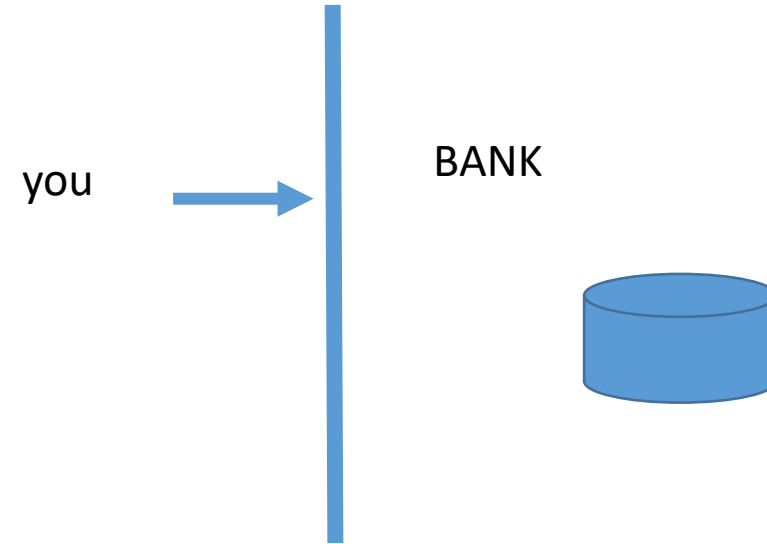
- Say you want to spend \$1,000 to buy a bitcoin
 - Money is moved from your bank account THROUGH an “exchange” which finds a seller
 - The “exchange” charges you a fee
 - Say BTC (the bitcoin actual crypto name) is selling for \$100,000
 - You get moved into your wallet $(1,000 * .005) / 100,000$, or
 - $(100,000 - (995 / 100000)) = .995$ bitcoins
-
- If you want to sell them you tell an exchange you have some number to sell, and the exchange will find a buyer
 - Both the seller and buyer are charged a small percentage
 - An exchange exists to make money!

How to buy and sell a cryptocurrency

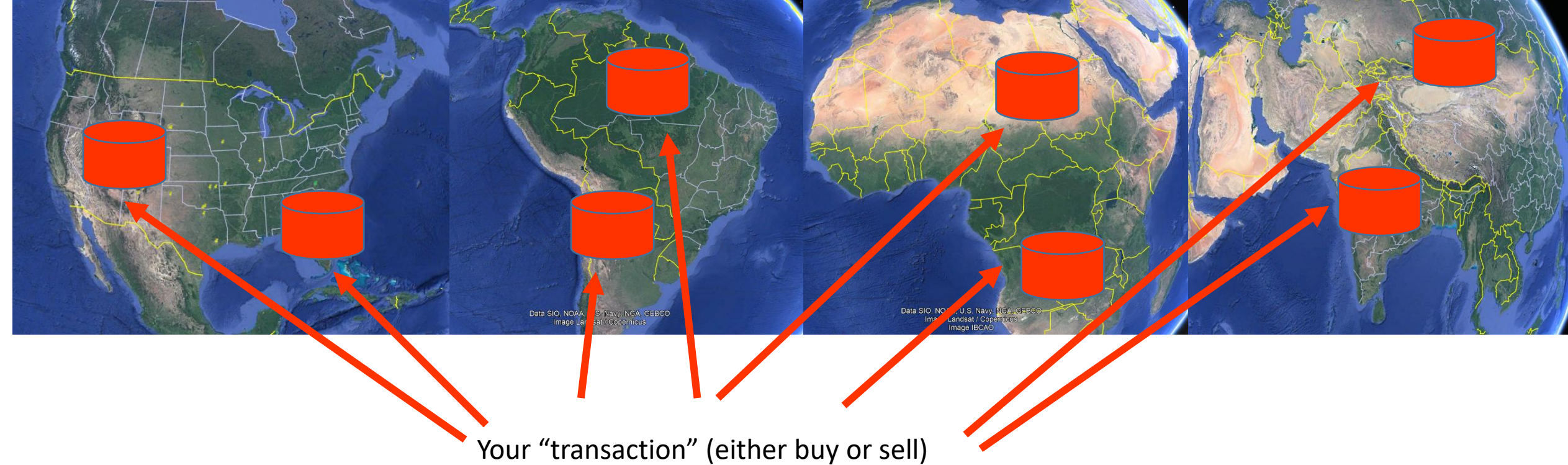
1. Have an account with real money in it (PAYPAL or bank)
 2. Connect to a crypto “exchange” (more on this later)
 3. Establish an ID and password*; this will create a “**wallet**” for you**
 - a. **BUY** – tell the exchange how much you want to spend and why crypto you want to buy
 1. The exchange will find a seller of the crypto you want to buy
 2. The exchange will extract funds from your account and move to seller
 3. The exchange will extract cypto from seller and move to your account
 4. The exchange will extract a “fee” from both seller and buyer
 - b. **SELL** - basically just the reverse of the above
- There is NO help desk to call if you lose this information; if you lose it or forget it, you will never be able to access your wallet
 - ** no one will be able to equate your name to this account – it is just a number now residing in a database spread around the world (sort of.... The Feds are working on this)

If you buy a crypto currency, then what?

1. Do you want to hold it yourself? Do you want money moved to your bank account? (there is a transfer fee for this)
2. Do you want someone to hold it for you? (there is a holding fee)
3. Fidelity and other established companies will hold your trades and help; yes, they charge a fee

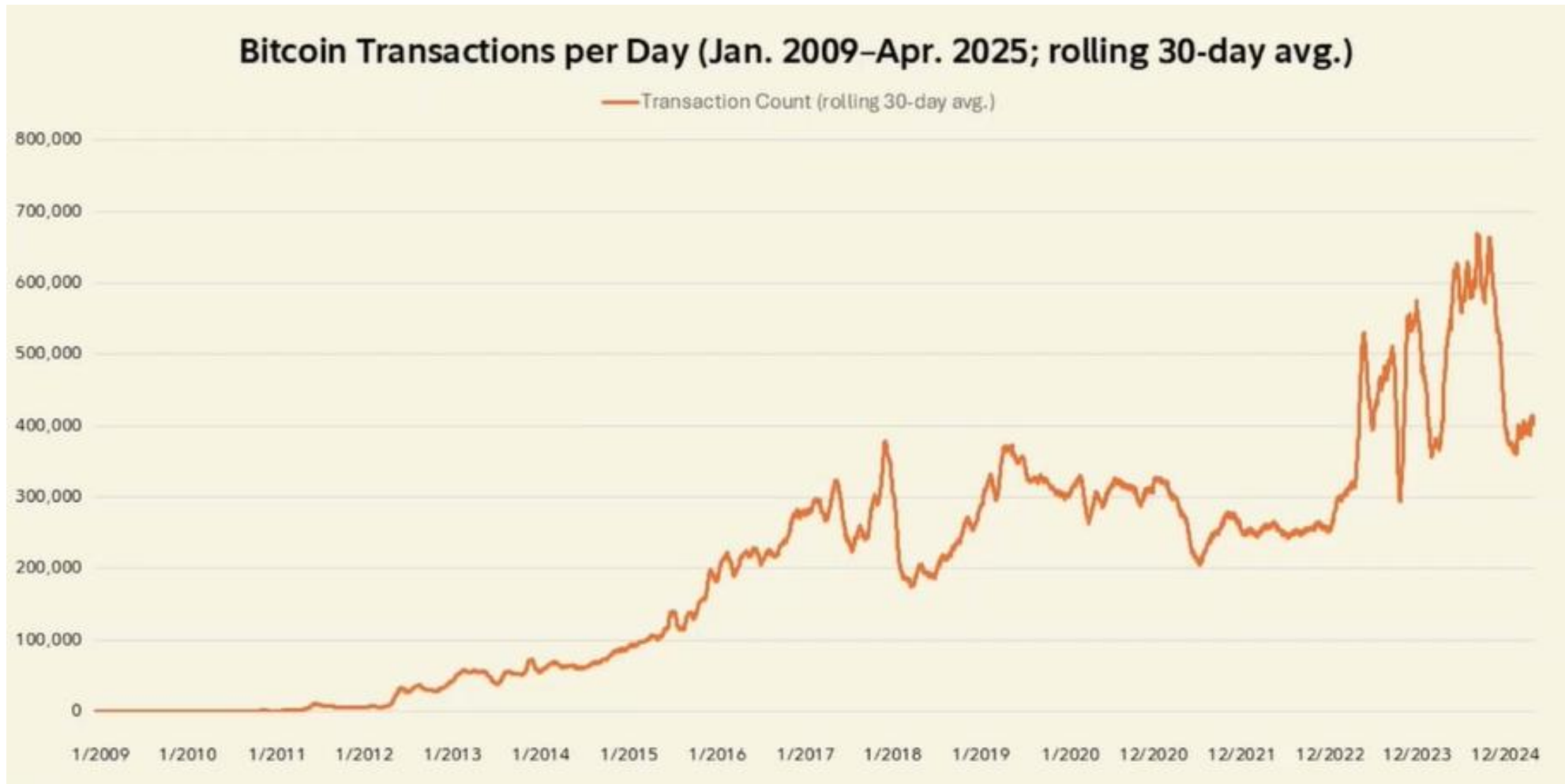


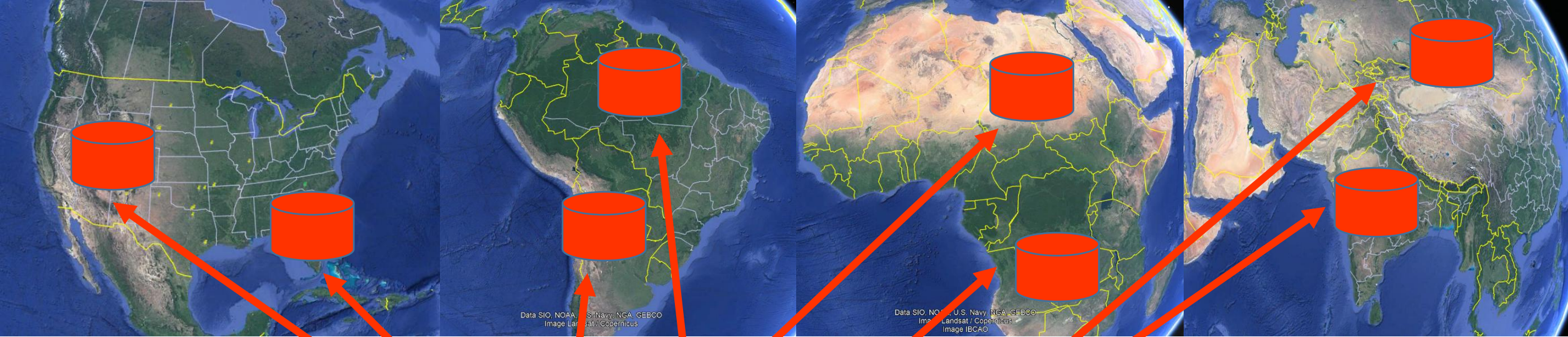
- A bank owns the physical database where your account lives
- You can access your account, you can get help if you need it
- The bank builds a “firewall” to keep out the bad guys



- In the crypto world NO ONE owns the physical database where your account lives
- There are literally hundreds (if not thousands) of copies of the crypto database scattered around the world (every data mining company probably has their own copy just for the speed needed for mining – more on this later)
- Bad guys just need to figure out your password and name to access your “wallet”, and it is “game over” – and they do this all of the time with scams
- There is NO help desk – there is NO ONE to call for help

It takes approximately 10 minutes for a transaction to be completed from Point A to Point B (between two entities)





Your “transaction” (either buy or sell)

- All transactions are logged into the “crypto database”
- Once a block of transactions* (for simplicity sake, say 100) is filled up, how does anyone know that those transactions were all valid and that there was no hanky-panky that went on (e.g. a transaction was snuck in that said you got 1,000 bitcoins to you when reality no such trade occurred?)
- Welcome to the world of “mining”

* A block of transactions is called a “blockchain” – think of this as a chain of transactions

Picks and Shovels - Crypto Mining 101

Remember, cryptocurrencies DO NOT exist except in a database, so what are you mining?



Crypto Mining 101

- Mining is about helping to keep transactions fraud free (think of a CPA company)

<https://www.bitdegree.org/crypto/tutorials/how-to-mine-cryptocurrency>

Nerd Slide

- Imagine 1,000 buys/sells (crypto transaction)
- They are recorded in a crypto database into what is called a block of transactions
- Each transaction records the buyer, seller, type of crypto, amount traded, etc.

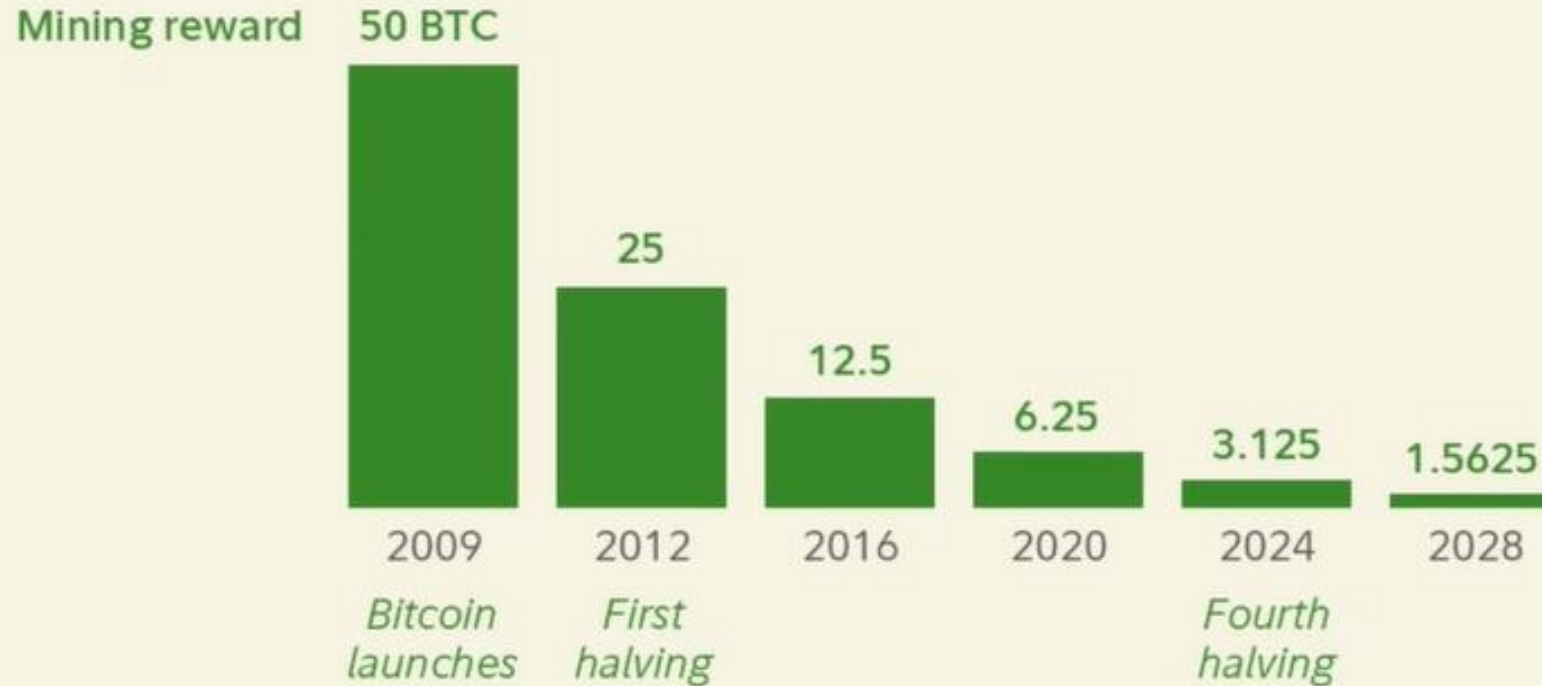
T1	T2	• • •	T1,000
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Crypto Mining is this:

- When a block fills up (e.g. 1,000 buys/sells recorded), there is a mad scramble to verify that every transaction is legit – no hanky-panky, no fraud, no one inserting a bogus transaction just for fun
- The first one to say “I verify that all of the transactions are okay”, they win!
- (and by the way their validation has to be validated)
- What do they win? Bitcoins or whatever crypto they were “mining”
- This is the **ONLY** way new bitcoins are generated and entered into the supply of them

A History of the Bitcoin Halving

When the Bitcoin network launched, a miner was paid 50 BTC for each group of transactions they added to the blockchain. Since then, the mining reward has been halved about every 4 years.



- A reward to a miner for verifying all transactions in a blockchain are valid and new block can be started
- In today's value of btc, a mining company can make \$300,000 within seconds

Mining companies:

1. Employ few people
2. Suck a lot of energy (the lights are never off because crypto trading never stop)
3. Invest millions to build a facility and specialized computers
4. Once all bitcoins are “minted”, mining companies will keep mining other cryptos, or maybe get into trading business

Seriously want to mine cryptos? Buy Antonopoulos' book to learn about technical nitty gritty of bitcoin. Or... watch 12 sessions (combined duration: 15-16 hours) taught by Princeton professor and other PhDs.

<https://www.youtube.com/watch?v=fOMVZXLjKYo>

Miners' Rewards for successfully completing 1 block
halve every 210,000 blocks, or an average of every 4 years



- Estimated it will take another ~100 years for the remaining 2.4 million bitcoins to be put into circulation
- In 2024 the reward was 3.125
- Eventually the reward will get to zero and the full supply of 21 million bitcoins will be done – MAYBE! Who says the rules can't be changed and a billion bitcoins can't be awarded?

There are estimated 200 trillion data mining computations going on as you read this slide

- Think of the electricity cost
- Think of your mining competition
- Think of the return on investment to be a mining company and get so little for your effort?
- Estimated that mining companies had assets of around \$140B in BTC as recently as 2 years ago
- Competition and costs go up, and mining companies have to sell some BTC to get cash to continue operations; estimated mining assets are around \$75B now

Currently about 19,000,000 btc in circulation; what happens when the 21,000,000 limit is reached?

1. Bitcoin miners going away, but miners will keep mining other cryptos
2. Miners then anticipate making money by charging for transaction fees to do trades

Bitcoin errata

- Currently there are about 18.5 million bitcoins in circulation
- <https://www.blockchain.com/charts/total-bitcoins> shows you in near real-time how many bitcoins are in circulation

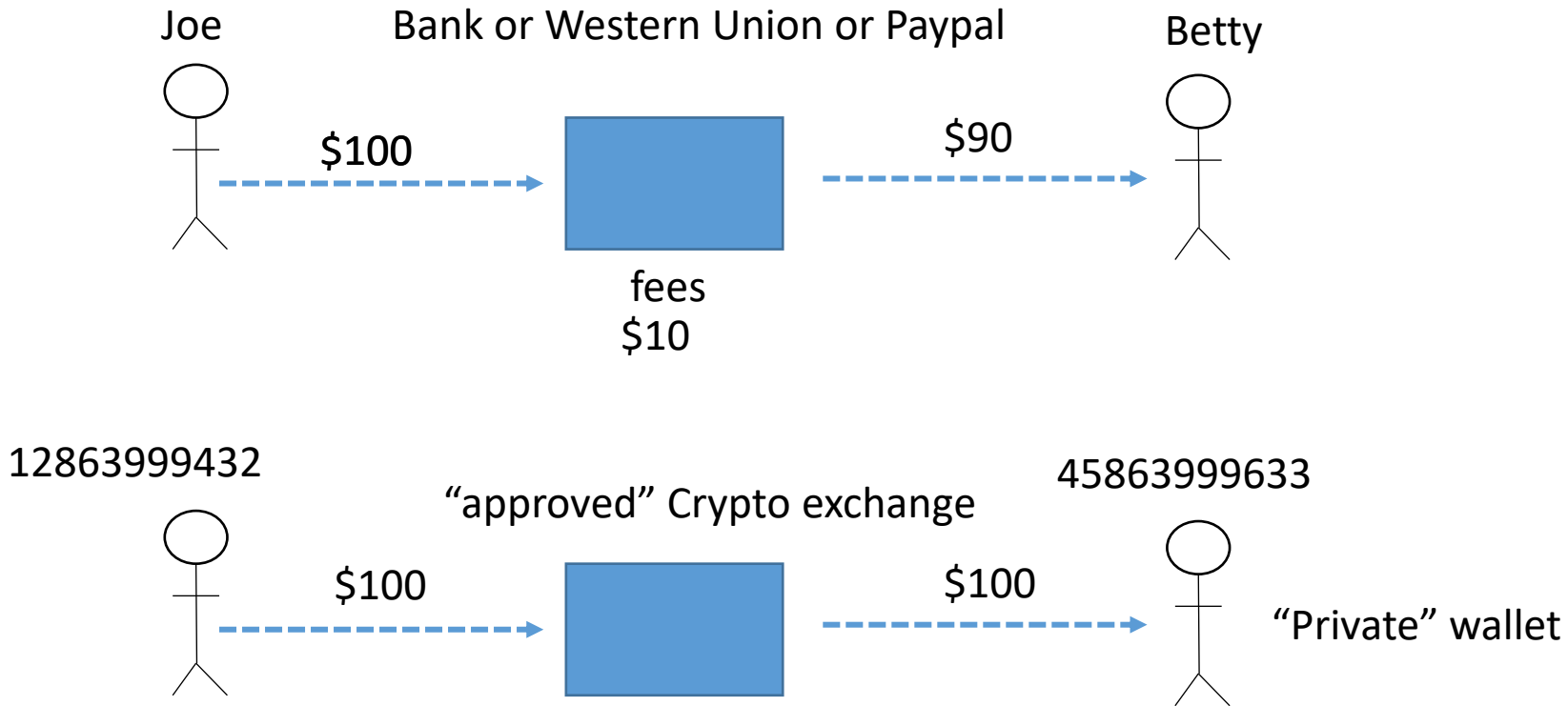
Want to get into crypto mining?

- Download software
- Can use your ordinary laptop
- Can mine almost ANY crypto
- A 1% fee is charged if you are successful mining
- Can get paid with cryptos and moved directly to your wallet
- There are urban myths that Joe in his basement with his old computer competes in crypto mining – probably not a snowball's chance

There is a fallacy that “Joe” in his basement on his HP computer can mine for bitcoins – probably an urban myth; fact is you need 5,000+ computers running 3 times as fast as “Joe’s” computer

Blockchain.com

<https://finance.yahoo.com/news/appalachian-town-told-bitcoin-mine-152255550.html>



Every exchange exists to make money; small % fees are charged for transactions and storage (if you want to use their wallet bank)

Silk Road

Does Bitcoin's rise and fall correspond with other cryptos?

Generally, the answer is “yes”, but not necessarily.

Best Places to Buy Bitcoin in 2022

- **Best Overall:** [Coinbase](#)
- **Largest:** [Binance](#)!)
- **Best for Beginners:** [eToro](#) (*high fees; nice “play with me first” fun trading*)
- **Best for No Cost:** [Robinhood](#) (*commission free; limited cryptos exchanged*)
- **Best Instant:** [CoinMama](#) (*easy to use if you have wallet already set up; convoluted fee structure*)
- **Best for Interest and Borrowing:** [BlockFi](#) (*can use bitcoins as collateral without selling; can borrow against your holdings*)
- **Best for Privacy:** [Bisq](#) (*nice for first time novices; low commissions*)
- www.buy.bitcoin.com
- Celsius

No website is 100% secure; once you purchase any cryptos, if stored in THEIR wallet, move to your own private one (of course they might charge a “fee” for this!)

- June 7, 2022 – Crypto Exchange Celsius cannot handle all the trades put to it
- Celsius shuts down
- People cannot access their wallets
- Celsius promises to try and recover trades and wallets

Bank of England boss Bailey says 'be prepared to lose all your money' in crypto after lender Celsius freezes accounts



June 14, 2022

The Bank of England governor, Andrew Bailey. DAN KITWOOD/Getty Images

FRAUD

Estimated **\$7.7 BILLION** has been stolen in **2021!**

Bitcoin has been on the market for over a decade and never been hacked. Wallets have been hacked, but not the underlying bitcoin system.

Remember – no one is in control of who buys or sells. There is a log in the blockchain, but buyers and sellers only known are “ids”

If bad guys get into your wallet, look out. And the bad news – cryptos get moved, then moved again, then distributed again, and your 10 bitcoins are now in 100 wallets. They will use every and any trick they can to get into your wallet.

Bots are looming. If, for instance, you type in a trade wrong; you meant to buy .10 bitcoin but you type in 10. A bot will make the trade before you can correct it yourself.

Classic fraud example 101

1. A “friend” of yours says “I have buddy who has made millions in the crypto world. If you give me \$1,000 I will have him buy some for you. Don’t worry, it is on the up and up, and he will give you a monthly statement.”
2. You give your “friend” \$1,000, and lo and behold your first monthly statement shows you tripled your investment!
3. What a great deal! You give your “friend” \$10,000, and your next monthly statement shows you again tripled your investment! Your friend’s buddy is a genius!!!
4. Maybe you give your friend some more money, and your next monthly statement shows that your money has bought many crypto currencies and are now worth \$1,000,000!
5. You can’t believe it! You are rich. Time to cash out. You ask your “friend” to help you cash out, but.... Your “friend” says something is wrong He A. can’t find his buddy, or B. your buddy is having trouble finding buyers of your cryptos... “just hold on”
6. Time goes along and your “friend” and his buddy has pocketed all of your investments – the monthly statements you have been getting were bogus

Never, ever buy cryptos except through a reputable crypto trading company!

Bitcoin used to order 2 pizzas

Tesla Motors says they will accept bitcoins to purchase one of their cars; within 2 months rescinds that decision

El Salvador adopts bitcoin as legal tender in September 2022
(they have ~1,400 bitcoins – current value August 2025 = \$165,000,000)

There is a political PAC for the acceptance of BITCOIN as “legal” tender. The funny thing is, this PAC contributes real money to political folks – they do not accept BITCOIN 😊

Even the North American Bitcoin conference that at one time accepted bitcoins as payment, then stopped taking bitcoin!

Dell and Expedia toyed with accepting cryptos, then abandoned it.

Red Cross and National Kidney Foundation accept donated cryptos

October 2021, Houston Firefighters’ Relief and Retirement Fund bought \$25,000,000 bitcoin and ether.

Genius Act

- The GENIUS (Guiding and Establishing National Innovation for US Stablecoin) Act was signed into law on July 18, 2025
- Establishes the first regulatory guidelines for “stablecoins”* in the U.S.
- Hope that it will lead to regulatory guidelines for the crypto industry.

* A stablecoin is a type of cryptocurrency that has its value tied, or "pegged," to another asset, often a traditional fiat currency (currency issued by a government) like the US dollar. For example, one unit of a stablecoin that's pegged to the U.S. dollar should always be worth \$1. The goal of a stablecoin is to make the world of cryptos easier to get into. Stablecoin values should not fluctuate if they maintain their peg.

A company that wants to issue a “stablecoin” (e.g. Darrelcoin) must deposit real dollars/currency into an account held by the FED, then Darrelcoin can be traded in the crypto world like other cryptos with anyone buying/selling/trading knows that Darrelcoin is worth \$1.

5 Day Ethereum Snapshot

Ethereum USD (ETH-USD) ☆
CCC - CoinMarketCap. Currency in USD
2,725.80 +109.60 (+4.19%)
As of 02:53PM UTC. Market open.



(Day Russia invaded Ukraine)

Bitcoin USD (BTC-USD) ☆
CCC - CoinMarketCap. Currency in USD
38,198.92 +886.58 (+2.38%)
As of 11:25PM UTC. Market open.



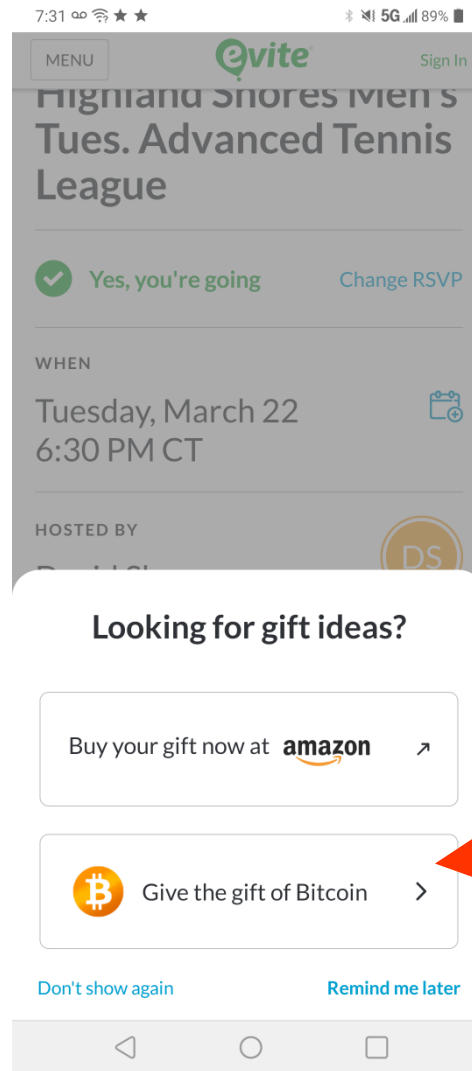
Proprietary to Darrel VanDyke; do not copy without permission

Investment thoughts

- All digital currencies fluctuate wildly and unpredictably; profits and losses are impossible to predict
- ALL digital currencies trading companies are unregulated; (Feds can “ask” a trading company to stop “user 101010” from trading, but nothing says they have to do that)
Trading companies can be hacked.
- Digital wallets can be hacked
- Digital currency is not legal tender. No law requires anyone to accept it.
- In the U.S., we have FDIC – nothing like this exists in the digital currency world
- Once a payment is executed, it can never be reversed.
There is no “whoops” button.

Tory Newmyer, The Washington Post, (January? 2022)

- NEBR Research: Top 10,000 crypto investors own ~1/3 of all digital tokens
- Chainalysis: Transactions over \$10,000,000 accounted for more than 60% of trades
- CoinMarketcap: 2020 crypto market = \$774 billion; 2021 crypto market = \$2.2 trillion
- Specialized ATM's and Coinstar Coin kiosks will take your money and buy crypto
- Staples Center L.A. renamed "Crypto.com Arena"
- Miami Heat basketball team now play in the "FTX Arena"



!!!

Peter Lynch: “When you hear someone hyping a stock, what do you really know about their investing skills and track record?”

Warren Buffett: “I’m pretty sure crypto currencies don’t manufacture anything.”

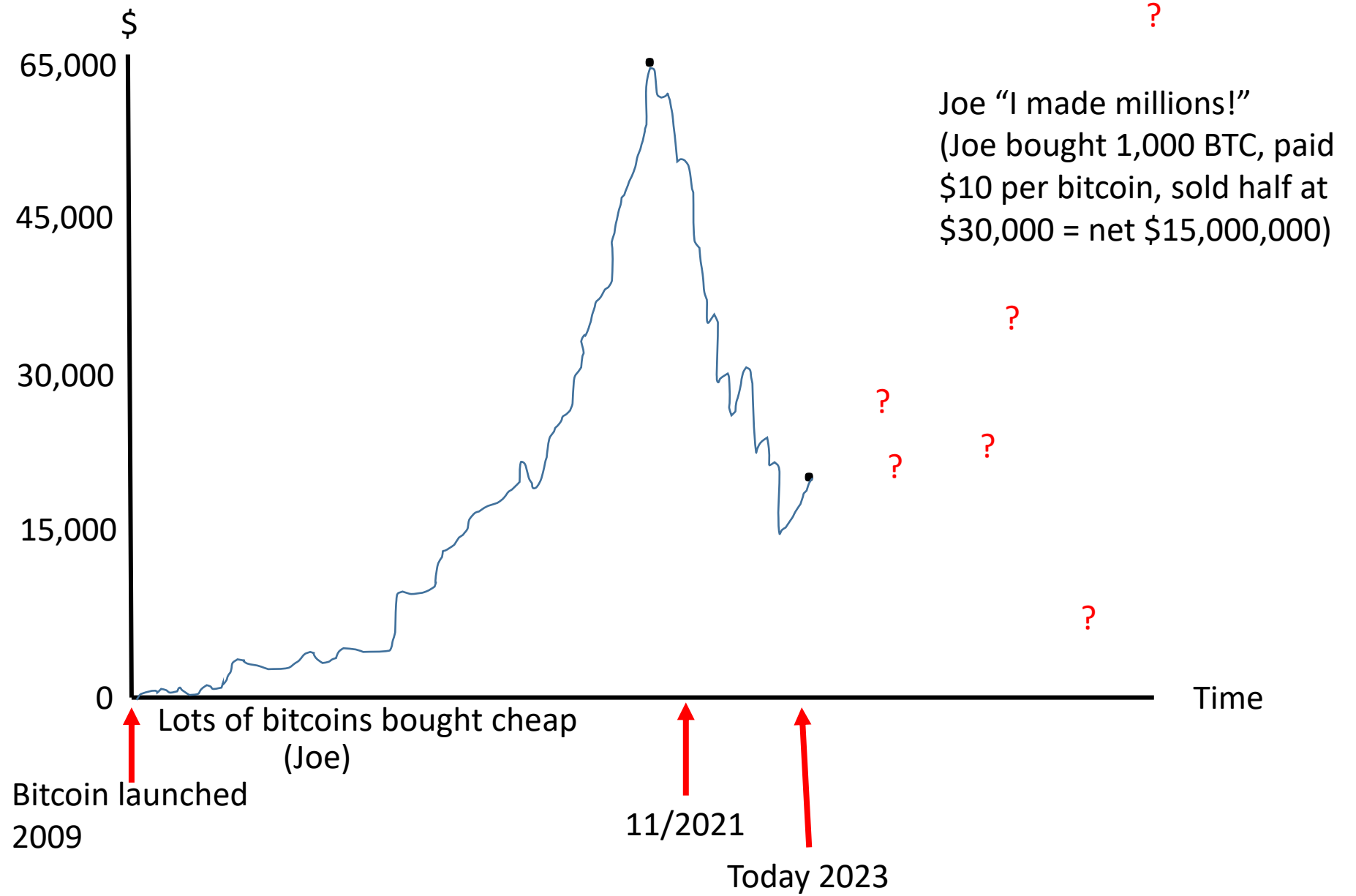
Are bitcoins tulips?

Bitcoin could 'easily' recover to hit \$100,000 over next the 24 months, powered by tech developments and macroeconomic improvements, says Anthony Scaramucci *

Carla Mozée

Mon, June 13, 2022, 12:02 PM ·

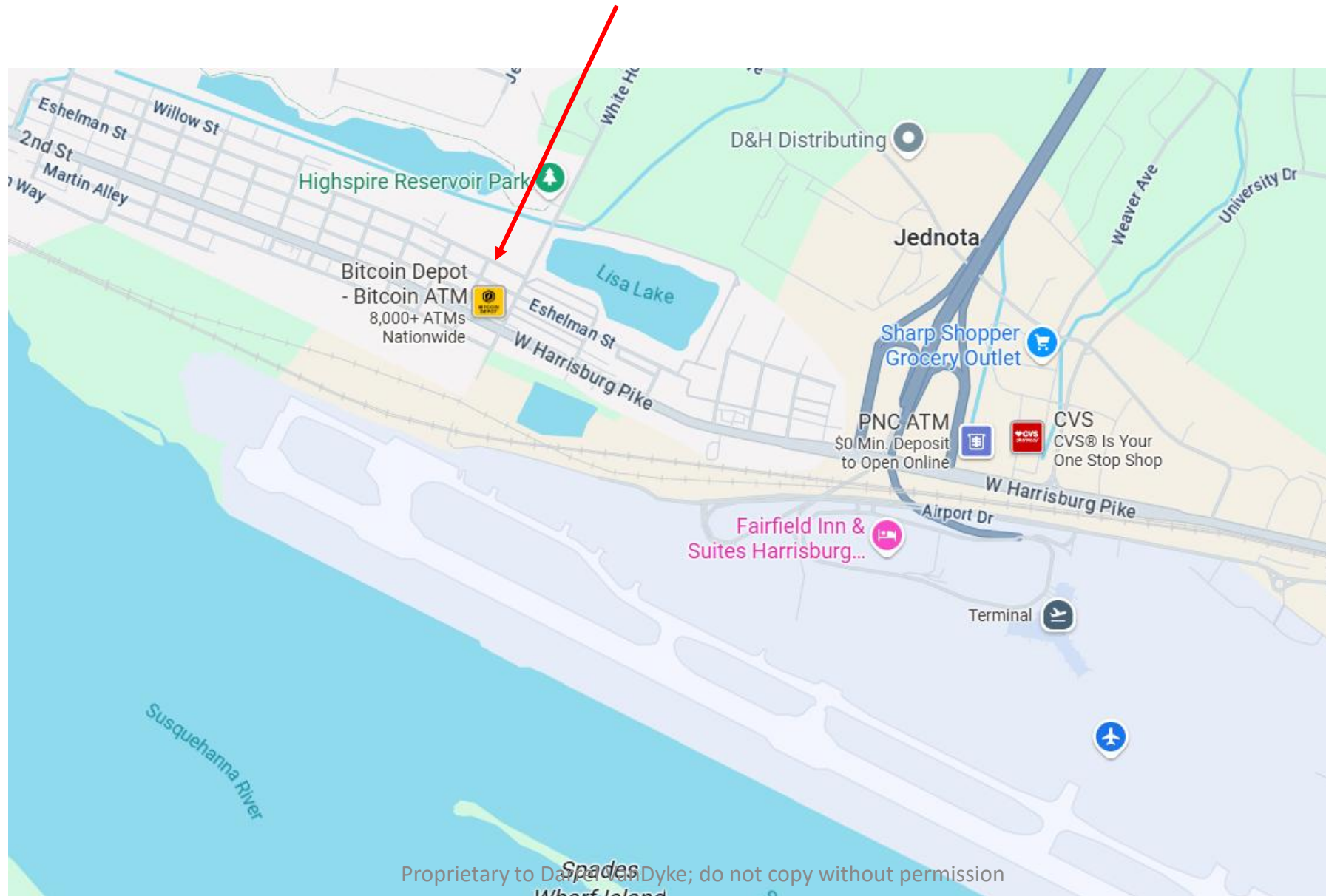
* He is CEO of Skybridge Capital, and investment business



Who wants to be a millionaire?!

Proprietary to Darrel Vandyke; do not copy without permission

Always out to make a \$, Google sells space on their maps; I found this interesting while researching Harrisburg, PA's, airport



What is money?

- A U.S. dollar is worth a dollar because our government says it is.
- A EURO is worth a EURO because a bunch of governments say it is.

A U.S. dollar is just paper, right?

1. It is the official currency of the U.S.
2. The U.S. controls supply
3. The U.S. sets interest rates
4. Keeps things relatively stable (**non volatile**), so at the end of the day the paper in wallet is worth something; a dollar value might vary a tenth of a cent (compared to an exchange rate with another country), but overall it stays about the same)
5. A dollar can be used to buy something and later that dollar can be used to buy something else
6. Can be stored to used in the future... although
7. Inflation can erode dollar value



Coinhub Bitcoin ATM - Inside Fast Track

\$50K DAILY ATM PURCHASE LIMIT

631 S Lake Dallas Dr
Lake Dallas, Texas 75065, US

Mon - Sun 7:00 AM - 11:00 PM



Coinhub Bitcoin ATM - Inside Vamp Vape & Smoke

\$50K DAILY ATM PURCHASE LIMIT

817 S Mill St, #102B
Lewisville, Texas 75057, US

Mon - Fri 9:00 AM - 9:30 PM

Sat - Sun 10:00 AM - 9:30 PM



Coinhub Bitcoin ATM - Inside KNJ Beverage

\$50K DAILY ATM PURCHASE LIMIT

3211 Fort Worth Dr
Denton, Texas 76210, US

Mon - Sun 10:00 AM - 12:00 AM

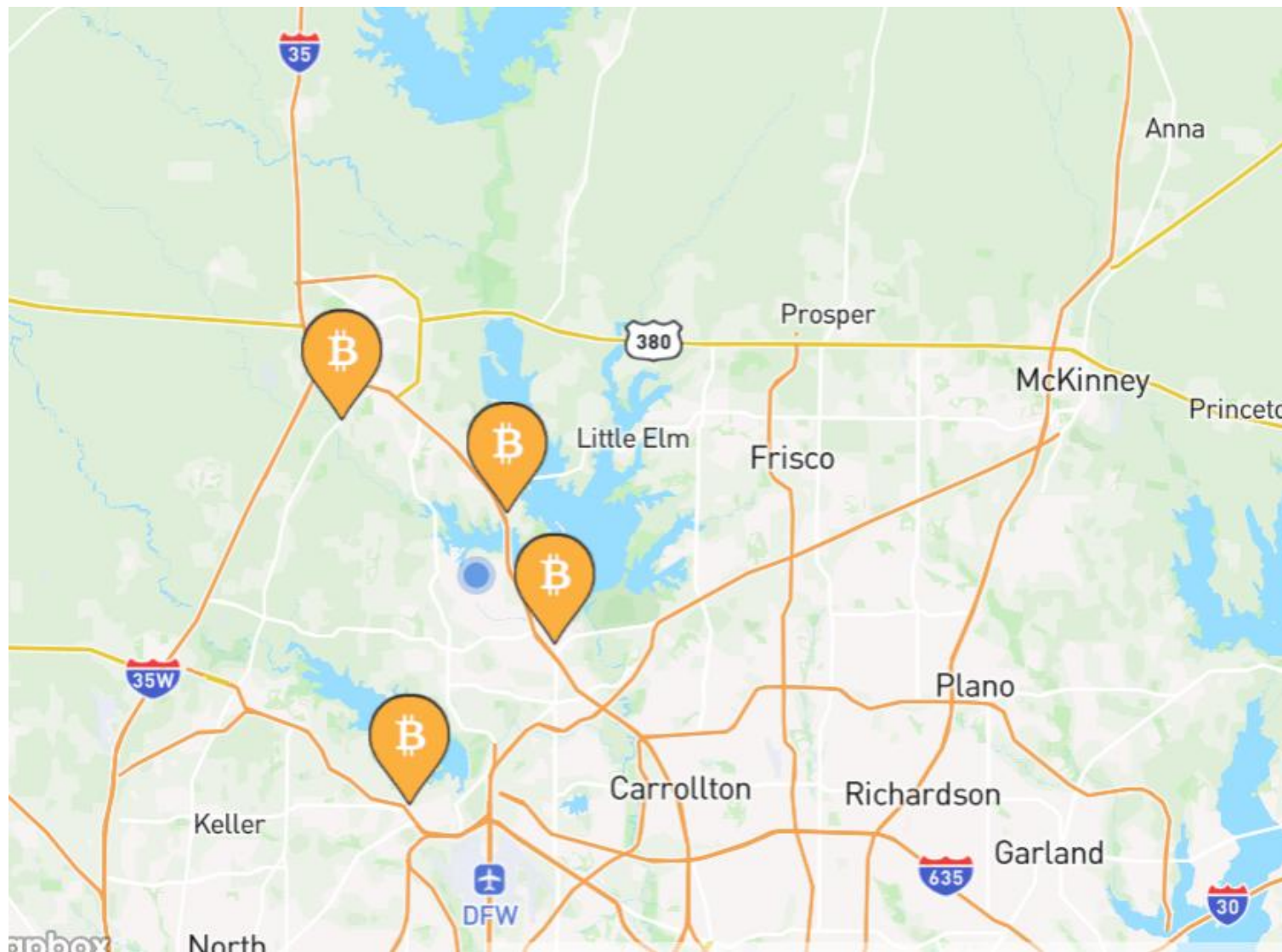


Coinhub Bitcoin ATM - Inside Grapevine Beer & Wine

\$50K DAILY ATM PURCHASE LIMIT

2100 W Northwest Hwy, Unit 215
Grapevine, Texas 76051, US

Mon - Sun 10:00 AM - 11:00 PM



Never, ever use these! They charge a fee and you might be stuck using “their” wallet hosting after you set up your account

Bitcoin's Journey: 15-Year Price Phase Timeline

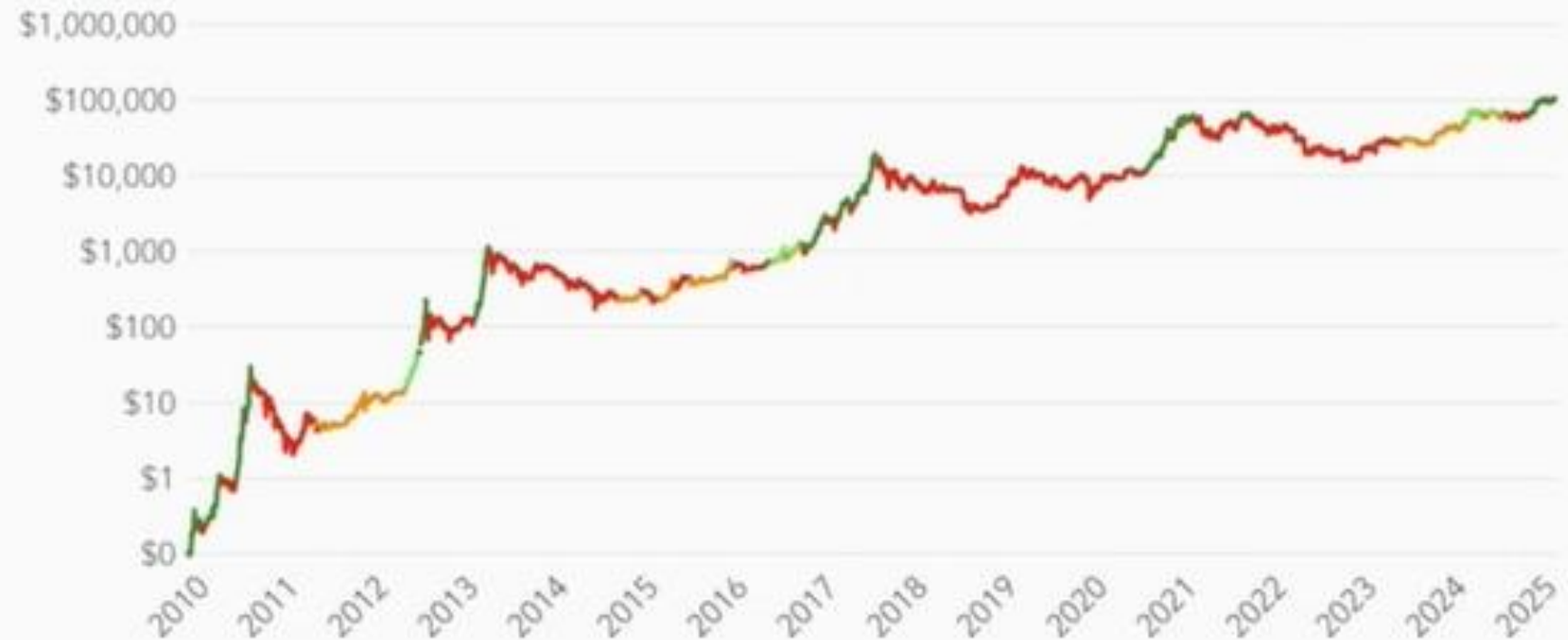
Bitcoin Price Phases

Reversal Phase
Low Profit, High Volatility

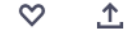
Bottoming Phase
Low Profit, Low Volatility

Appreciation Phase
High Profit, Low Volatility

Acceleration Phase
High Profit, High Volatility



Tuesday, November 11



Mining Disrupt Conference | 2025 | Irving - Dallas : Texas

From \$149.50
Nov 11 · 7:00 PM CST

Get tickets

Very hypocritical - why don't they accept cryptos?

Want to buy/sell crypto?

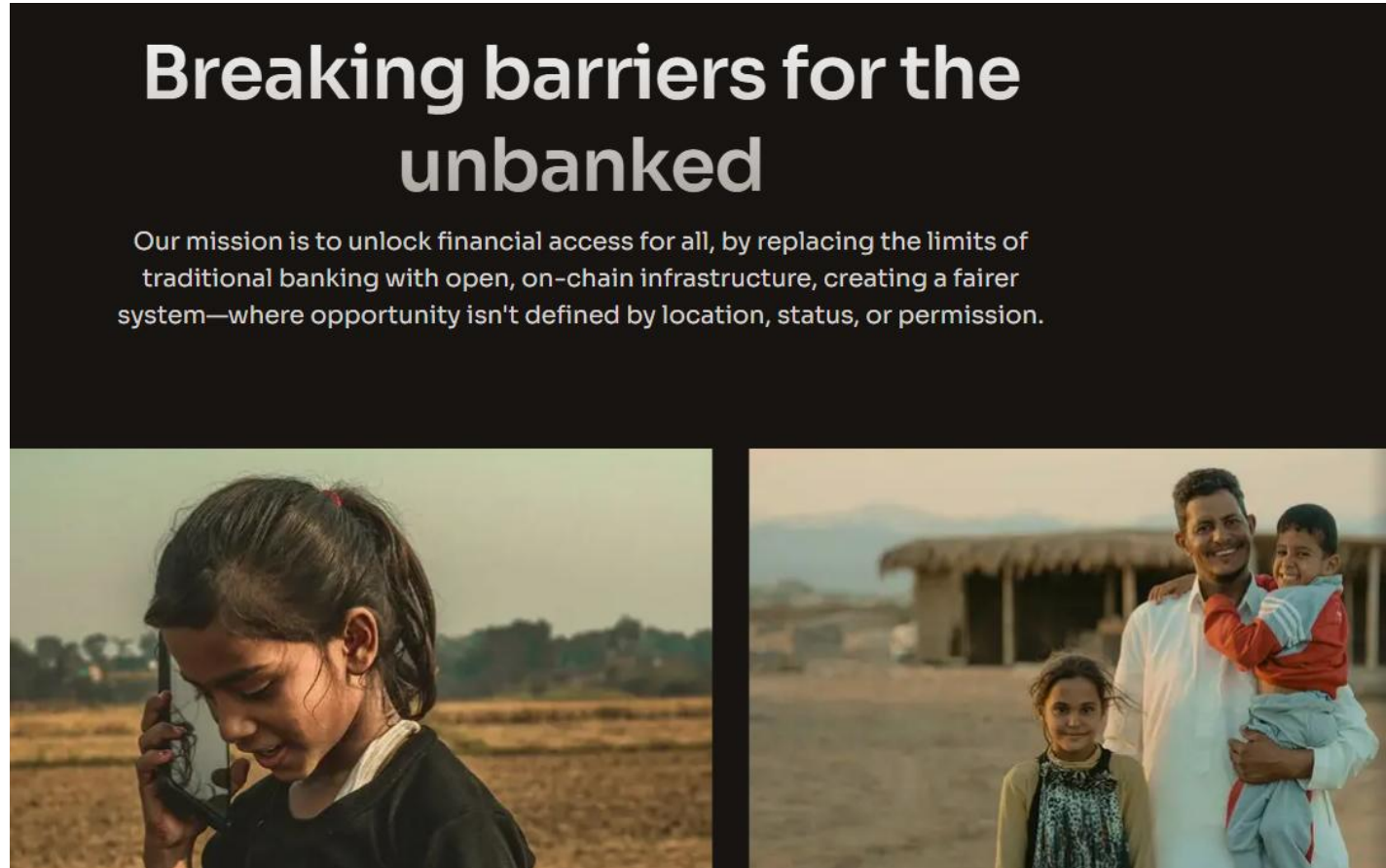
- Several trading companies in the market
- CRYPTO.COM is interesting...
 - ☐ Promises no transaction fees!
 - ☐ How do they make money?
 - ☐ Says they are regulated by the Commodity Futures Trading Commission (CFTC)
 - ☐ Pretty fancy and easy to use website
- Fidelity, Charles Schwab, etc. – have a back-door into cryptos, as they don't really buy/sell them like stocks/bonds
- Gemini.com
- Coinbase.com
- Etc.

Which ever one you choose, the first thing they require is you establish your credentials
Then they ask for is \$
You put money into your wallet, then you are off and running

World Liberty Financial

- Launched in September, 2025 *
- USD1 (their token) is pegged as a “stable coin”, meaning that it can be exchanged for 1:1 for USD
- The gotcha is that if you want to invest \$1,000 for 1,000 USD1 tokens, you will incur a fee on the World Liberty Financial platform. If you want to sell your USD1 tokens and move them to your bank account, another fee will be charged
- There are 2,674,531,784.327 USD1 tokens in circulation
- One can trade USD1 tokens for other cryptocurrencies

* Facts are a little murky on this 😊



Binance – a story of intrigue

“The world of the rich is different from you and I”, F. Scott Fitzgerald in the “Great Gatsby”

- Binance founded as a crypto exchange by Changpeng “CZ” Zhao (actually started in real estate in Cambodia)
- Becomes the world’s largest crypto exchange within just a few years
- CZ allows trades all kinds of nefarious activities (e.g. drug smuggling, prostitution rings. Etc.)
- U.S. confronts CZ, serves 4 month sentence, pays \$4 billion fine!
- CZ promises to boost Trump-coin by buying, buying, buying – driving up the price/demand
- Binance allows USD1 to use Binance’s blockchain (instead of USD1 having to create their own software)
- United Arab Emirates MGX Fund Management Limited buys \$2B of USD1 and invests it in Binance
- Company owners of USD1 holdings now worth \$3.4B each
- U.S. pardons CZ
- CZ rejoins Binance

WIKIPEDIA.COM ----→ search World Liberty Financial
(to see owners)

July 7, 2025
(Ad on the Internet)

What Are the Top Cheap Cryptos To Buy?

If you're ready to [invest](#), check out the 13 cheap cryptocurrencies that could generate nice returns in 2024 and beyond:

1. [XRP \(XRP\)](#) 2.3
2. [Dogecoin \(DOGE\)](#) .17
3. [Chainlink \(LINK\)](#) .0004
4. [Uniswap \(UNI\)](#) 7.38
5. [Cardano \(ADA\)](#) .0002
6. [Polygon \(POL — Formerly MATIC\)](#) .18
7. [Stellar \(XLM\)](#) .25
8. [The Sandbox \(SAND\)](#) .24
9. [Decentraland \(MANA\)](#) .26
10. [NEAR Protocol \(NEAR\)](#) 2.18
11. [Tron \(TRX\)](#) .28
12. [Wall Street Memes \(WSM\)](#) .0005
13. [Metacade \(MCADE\)](#) .008

Summary

- Investors with high tolerance for market fluctuations
- Investors can lose it all, or make gazillions
- Not insured by FDIC
- BITCOIN folks get caught up in the supply/demand; finite number to be “minted” – like Beanie Babies, Pokemon cards, etc.

<https://www.bing.com/videos/riverview/relatedvideo?&q=cbs+crypto+fraud&&mid=CDCAF9C7679B7B3C0172CDCAF9C7679B7B3C0172&&FORM=VRDGAR>

search for CBS crypto fraud

Questions?

Thank you – please go to the OLLI URL and complete feedback form

Contact me at DARRELVAN@GMAIL.COM