CRYPTOCURRENCY 101

(Lanzan and Himlen) An an Antoine (Life Epititian

pa (1982) (* 1973) a series de la companya de la co O galega a series de la companya de A companya de la comp



Presenter



Cary Ayers Senior Vice President, Atlantic Union Bank



Covered in Today's Presentation...

What is Cryptocurrency
How does Crypto Technology Work
Different Types of Cryptocurrencies
Current Regulatory Environment
The Future as it Relates to the Financial Industry

I DON'T KNOW HOW BITCOIN WORKS

AND ATHS PONT HITODARAD TO ASK



WISSINESSUP WHOSA

ľ

5

I a a a L A A A A A A

H

8



You said Buy Crypto No, I said Bye Crypto





Crypto: What is it?

Cryptocurrency aka Digital Assets

• "Crypto" = Cryptography: The study of secure information and communication techniques; derived from mathematical concepts.

• "Cryptography" closely aligned to "encryption".



Crypto: What is it?

(cont.)

- **1. Confidentiality.** The information cannot be understood by anyone for whom it was unintended.
- 2. Integrity. The information cannot be altered in storage or transit.
- **3.** Non repudiation. The creator/sender cannot deny at a later stage their intentions in the creation or transmission of the information.
- **4.** Authentication. The sender and receiver can confirm each other's identity and the origin/destination of the information.

Crypto: What is it?

(cont.)

Decentralized Blockchain : a digital ledger of transactions that is duplicated and distributed across a network of 1,000's of computer nodes.

The nodes serve the Blockchain by validating, confirming, securing, and writing blocks to the chain.



Someone in a network requests a transaction



The transaction is broadcast to other computers (nodes) in the network





The transaction is complete



The new block is added to the network's blockchain, in a way which is permanent and unalterable

The network of nodes validates the transaction using agreed algorithms



The verified transaction is combined with other transactions to create a new block of data for the ledger

que stions





Crypto Facts:

25,000+

different cryptocurrencies being traded. 24,500 will likely go to zero in time. The space is incredibly volatile and ripe with speculation, scammers, and some of the most brilliant engineers in the world.

\$1.1T

As of June 2022: Cryptocurrencies hold a collective market cap of just over \$1 trillion. Of this, \$521 Billion is Bitcoin, \$223B is Ethereum, and \$112B are stablecoins.

2021

A November 2021 study released by Pew Research Center found:

- 16% of Americans have invested, traded, or used a cryptocurrency.
- 14% of Americans hold direct stock investment. (52% exposure to stocks via 401k)

Cryptocurrencies: Many Use Cases (Types)

Currency: The original use case, intended as an alternative to fiat currency for daily transactions. Ironically, this use case still has a meaningful way to go due to volatility, merchant adoption, and tax treatment.







Ripple

Stable Coins: Coins pegged to a specific fiat currency, mostly USD. These are used as an on and off ramp into the crypto market and provides a path to liquidity 24/7, in keeping with the crypto market which trades 24/7.





Layer 1 Protocols: These coins are sometimes referred to as "web3", they provide the network on which many other applications and cryptos run. i.e. a Decentralized alternative to Amazon Web Services.







Applications: Application tokens running on different Blockchains.











NFTs



Storage (File)





Gaming: Emerging trend of video games played on the blockchain. Many of these games involve an avatar and virtual world in which the user plays to earn additional tokens.



"Axie Infinity"





"Decentraland " in the Metaverse

Meta reportedly plans to integrate NFTs on Facebook and Instagram profiles

Meta reportedly plans an integration to allow social media users to display their NFTs on Facebook and Instagram.

Web3 Founders Welcome Walmart and Its NFTs to the Metaverse

from Facebook's.

Business

Prada, Adidas Launch NFT Project on Polygon

The latest high-fashion foray into Web 3 includes a metaverse angle as well.

NIKE ACQUIRES RTFKT, SETTING THE STAGE FOR SWOOSH-CERTIFIED NFTS

Crypto executives tell Decrypt that Walmart's metaverse play may be different





• Initially gained traction with sports photos, evolved to memes, then jpeg artwork.

• Eventually will support accessories in the Metaverse.



CryptoPunks

by Larva Labs (Jun 22, 2017)

Rank #1 🏠

Floor Price: \$50.35

24h Change: 0.1% Market Cap: \$ 503,500

que stions





Regulatory Environment; The Future of Crypto

Global Government Dynamics:

As a currency, most world governments have a vested interest <u>against</u> cryptocurrencies developed as means of payment as they compete against fiat currencies (which they can control). Most are navigating the legal framework to live with crypto or to try to kill crypto.

In the United States:

Prior to 2023, the US, had hesitated to stifle innovation in the space, but with an administration known for strong consumer protections, regulation was expected. Also a strong focus on transaction reporting for tax purposes.



Central Bank Digital Currency: Digital Currencies issued by central banks.

- Simplifies the implementation of monetary policy and government functions.
- Will reduce counterfeiting and make money laundering more difficult.
- But, users will have to give up privacy and control.

Regulatory Environment; The Future of Crypto

Stable Coins

- Active regulatory focus on (privately issued) Stable Coins and the risks that they may pose to investors or the overall financial markets. (\$112B presently)
- These coins are kept "stable", generally via a collateralized means.
- Possible opportunity for banks to participate?





US Banks Form Group to Offer USDF Stablecoin

Founding members of the USDF Consortium include New York Community Bank, FirstBank and Sterling National Bank.

By Jamie Crawley · () Jan 12, 2022 at 8:34 a.m. EST · Updated Jan 13, 2022 at 11:29 a.m. EST ·

A group of U.S. banks plans to offer its own stablecoin, called USDF, in a move to tackle concerns about the reserves behind nonbank-issued equivalents.

- The group which is made up of institutions backed by the Federal Deposit Insurance. Corp. (FDIC), one of the industry's key regulators – said the coin "addresses the consumer protection and regulatory concerns of nonbank issued stablecoins," according to an announcement Wednesday.
- Founding members of the USDF Consortium include Synovus (the 48th largest bank in the U.S. by assets, according to MX Technologies), New York Community Bank (No. 45), FirstBank of Nashville (No. 144) and Sterling National Bank (No, 77). The consortium wants more financial institutions to join.

Crypto Prices → Solana \$135.57

Q

Regulatory Environment; The Future of Crypto

- Security and Exchange Commission has communicated its belief that most cryptocurrencies are securities and should be subject to additional regulation. The SEC has begun to take legal action against crypto exchanges, founders, and influencers.
- Examples of current pending lawsuits by the SEC: Binance, Coinbase, Ripple, Kim Kardashian.

The Future as it Relates to Finance

Peer to Peer, and Company to Company: Leveraging crypto wallets, transfers are made quickly, safely, and inexpensively, especially as compared to Credit Card, Western Union, or International transfers.

Final Settlement: For Real

Estate and other large payments. Replacement for wire transfers. Faster, cheaper, but who carries the risk? Possibly negated by "FedNow" system?

The Future as it Relates to Finance

Staked Coins: Offer your coins to be used as part of transaction validation process, and be paid a share of transaction fees in return. Think dividend paying stock.

Liquidity Pools: Delegate your coins to a DeFi liquidity pool, providing the capital to fund loans, earn share of the interest paid. Akin to banks use of CDs to fund lending.

Savings/Money Market trend: Competition from Stablecoins as a savings account or means of diversification away from fiat dollars. This trend is presently out of favor as FDIC insured accounts are returning 4%+.

The Future as it Relates to Finance

- Replacement of Retail Banking: generations embracing technology at rapid pace.
- Emerging crypto "Smart Wallets" and other applications allowing users one smart phone based portal for all things finance.



Younger

BlockFi 😨 crypto.com coinbase argent

Personal Banking / Busin

Vast Crypto Banking

We've taken the complexity and anxiety out of owning crypto.

Vast Bank is the first nationally chartered U.S. bank that allows you to buy, sell, and hold cryptocurrency assets through your mobile banking app.

Start building your crypto portfolio today!







ess Banking / Crypto / About Vast	
Accounts	Ξ
ugust 24, 2021 Afternoon, Josh!	
Account .	
Checking Account	\$5,823.22 >
Pending Deposits	\$250.00
ount	
Crypto Portfolio	\$4,357.22 >
Buying Power (i)	\$250.00

que stions





So, what's the future look like?

The Takeaway

Despite regulation, will these undercurrents impact adoption?

• Continued inflationary pressures driving investments in hard assets (real estate, gold, bitcoin).

• Global trend toward de-dollarization. Rise of BRICS, etc.

• Growing distrust of central banker's intentions and ability to enact sensible monetary policy.

The Takeaway

When we reference the "internet" today, what does it encompass?

- -Streaming video
- -Wikipedia/ Education
- -Maps/Navigation
- -Advertising
- -Email
- -VOIP

-Internet of Things (connected fridges, thermostats, cars) -Online Shopping

-Data Storage

-Social media

Share of US households using specific technologies, 1860 to 2019

C Add technology



Share of US households using specific technologies, 1880 to 2019

Add technology







2019

2000

Flush toilet Cellular phone Computer Smartphone usage Social media usage Tablet

The Takeaway

So, when you hear "cryptocurrency"....what do you think about? Is it a fad that will be gone in a few years? What do you think that your generation thinks about it in general?



que stions



