

UNDERSTANDING DIGITAL ASSETS FOR THE FINANCIAL PROFESSIONAL :

THE STORY OF THE BLOCKCHAIN WITH A DASH OF A



DAVID K. SPENCER C.P.A. DKS TAX AND CONSULTING & CLEAR VISION GLOBAL CONSULTING

UNIVERSITY OF OREGON GRADUATE - SCO DUCKS! MAJOR IN ACCOUNTANCY & FINANCE TRAVELED TO BEIJING, CHINA IN 2015 ON A CONSULTING INTERNSHIP TRAVELED TO WASHINGTON, DC AND MET WITH MEMBERS OF THE HOUSE OF REPRESENTATIVES **ACCOUNTANT IN PUBLIC PRACTICE OWNER – DKS TAX AND CONSULTING RSM US LLP DILORENZO AND CO. GREGORY SHARER AND STUART CPA BLOCKCHAIN COUNCIL® CERTIFIED CRYPTOCURRENCY EXPERT BLOCKCHAIN COUNCIL© CERTIFIED SMART CONTRACT DEVELOPER IBM BLOCKCHAIN ESSENTIALS V1 AND V2 PANELIST ON "THE BLOCKCHAIN WEALTHCAST" HOSTED BY ARROWROOT FAMILY OFFICE** FEATURED ON KITCO NEWS **ISREAL 360 INNOVATION EXPERIENCE PARTICIPANT FALL 2023**

What is a bitcoin?

- Provide you with a fundamental understanding of what a blockchain is and how it works.
- How is it affecting my clients?
 - Share with you some common issues that I see in my practice that you will see as well as the digital asset world expands.
- What is happening now/next?
 - Share with you developments in the industry and how it is currently being implemented.
 - Brief Chat about Artificial Intelligence and the "tech stack"

WHAT IS OUR GOAL TODAY?

Bitcoin: A Peer-to-Peer Electronic Cash System

Satoshi Nakamoto satoshin@gmx.com www.bitcoin.org

Abstract. A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

WHAT IS A BITCOIN AND WHERE DID IT COME FROM? A SOLUTION TO THE DOUBLE SPEND PROBLEM.

WHAT IS A BLOCKCHAIN AND WHAT IT IS USED FOR?

> What is a blockchain:

- A blockchain is a database. Databases have some common problems that Blockchains can address.
- Problems in databases and how the blockchain solves them
 - Dirty data Blockchains are Pre-validated by miners or nodes
 - > Changing data Blockchains are immutable "feature not a bug"
 - Bad actors Bad Actors are disincentivized on blockchains
 - Siloed information Blockchains can be decentralized

- Scarcity There will only be ever 21 million bitcoin.
- > Autonomy Bitcoin is Psuedo-anonomous
- Excellent for large transactions
- Easy to pass down and Store More on this later.
- The final Bitcoin will be mined in 2140 What happens then?
- > The story is really about the blockchain.

IS BITCOIN A FAD? WHO KNOWS, HERE ARE SOME FACTS.

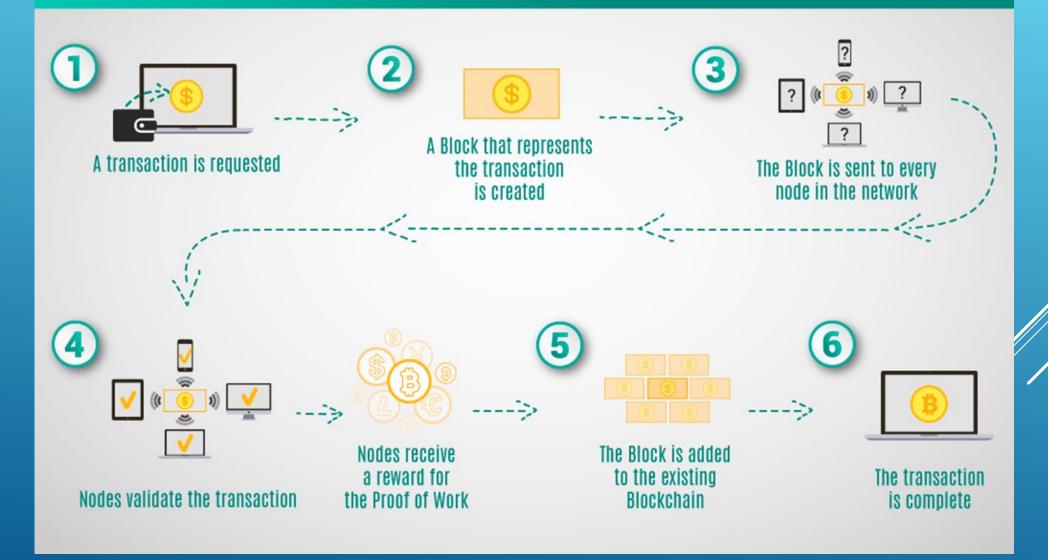




WASHINGTON, June 7 (Reuters) - The Justice Department on Monday recovered some \$2.3 million in cryptocurrency ransom paid by Colonial Pipeline Co, cracking down on hackers who launched the most disruptive U.S. cyberattack on record.

Deputy Attorney General Lisa Monaco said investigators had seized 63.7 bitcoins, now valued at about \$2.3 million, paid by Colonial (COLPI.UL) after last month's hack of its systems that led to massive shortages at U.S. East Coast gas stations.

HOW BLOCKCHAIN WORKS





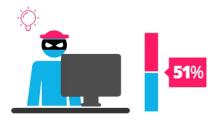
VS.

Proof of Work

Proof of Stake



To add each block to the chain, miners must compete to solve a difficult puzzle using their computers processing power.



In order to add a malicious block, you'd have to have a computer more powerful than 51% of the network.



The first miner to solve the puzzle is given a reward for their work.



There is no competition as the block creator is chosen by an algorithm based on the user's stake.



In order to add a malicious block, you'd have to own 51% of all the cryptocurrency on the network.



There is no reward for making a block, so the block creator takes a transaction fee.



Bitcoin – Proof of work

Ethereum – Proof of work with smart contracts to now Proof of stake

Ripple Federated Byzantine Agreement

Binance Smart Chain Proof of Stake

Uniswap Proof of Stake

Polkadot Proof of Stake

Avalance Proof of Stake

Solana Proof of Stake

Cardano Proof of Stake

Polygon Proof of Stake

Chainlink - Proof of Stake

IBM logistics Blockchain (Tradelens) - many different models Lets Explore

Public vs. Private vs. Permissioned Blockchains

The list continues...But why so many...

BLOCKCHAIN 1.0 TO NOW...

B2B BLOCKCHAIN

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WHAT IS OUR GOAL TODAY?

CLIENTS ARE LIKELY TRADING TOKENS... WHICH IS THE GATEWAY TO SO MUCH MORE

- Trade tokens then I find a new one that I believe in
- Need an esoteric wallet
- Start mining the token
- Staking income
- It works and I buy another token with it
- Purchase an NFT to see what that was all about
- I have 4 exchanges that I used because I wanted to try different blockchains
- Yes, that is why you need to know the different blockchains...

Initial Consultation is Key...

- Ask questions about where they trade and their philosophy
 - are they buy and hold or active traders
- -Request how many wallets they own and how many exchanges they trade on
- We need to know how frequently they trade as well
- Do they have a hardware or offline wallet?
- We need public addresses to each wallet they own
- What is the transaction path.
- I always attempt to use a "reasonable method Consistently applied that accurately represents the economics of the situation".
- We are dealing in assets that do not have history to lean on. We are using tech that did not exist a year ago. We have to do our best and less than being "creative" (no one likes creative accounting) We need to be through and use all the tools at our disposal. This presents an opportunity.

- Zenledger
- ► TaxBit
- Cointracker
- TokenTax
- Coinmetrics
- And many more... including excel
- Consistency is key in my opinion

COMMON TOOLS FOR CRYPTO TAX

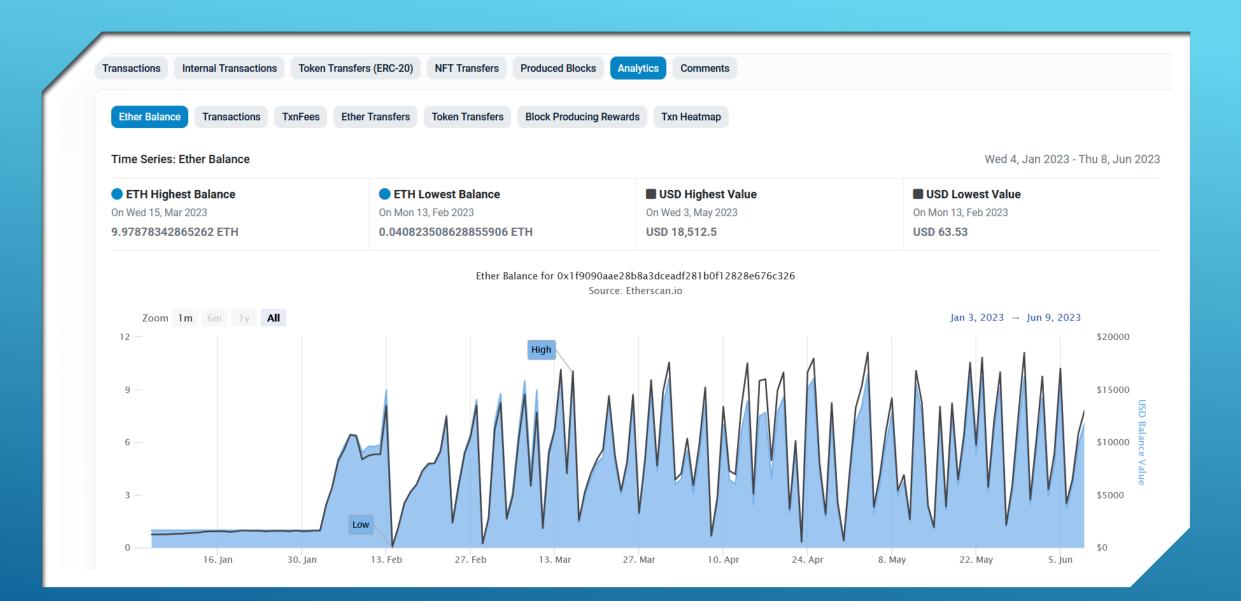
- Knowing what to do and knowing how to do it are two different things. We all know that the goal is to hit a 6. Doing it is a totally different story.
- Establishing a basis and then the accurate proceeds can often be a real trick in and of itself. Often we must use public sources of information.
- > Yahoo and Coinmarketcap downloads.
- > Average prices and analytics.

ISN'T IT JUST BASIS FROM PROCEEDS? YES, YOU ARE CORRECT, BUT... WHERE DO I GET THE DATA TO START?

BLOCKCHAIR	Search for transactions, addresses	Explorers Features ENG USD (0)			
Win 100 ETH Dealer Explorers Bitcoin A Biocks 793,671	25,686.00 USD ~ 3.11%	sored • Advertise here • Turn off ads Circulation 19,397 Market cap 498.5 Dominance 45.53	525 billion USD	Awesome Bitcoin services Exchanges Wallets Crypto processors Savings accounts Tax calculators Derivatives Market data Mining pools	
All time Blockchain size	487.36 GB 🗹	Mempool Transactions	128,452	Faucets Entertainment Get on this list →	
Network nodes	7,157	Transactions per second	2		
Latest block Difficulty	793,670 · 20 minutes ago 51,234,338,863,443 🗠	Outputs Fees	1,182,063 185,817.37 USD	Daily Data dumps for Bitcoin Explore Data Dumps	
Next estimated difficulty	50,307,529,300,864 < 1%	Size	244 MB		
Next readjustment	4 days from now	Suggested transaction fee	43 satoshi per byte	1 API for 17 Blockchains Rest API with a high uptime, SQL-	

rice: \$1,774.11 (-3.57%) 🕒 Gas: 46 Gwei				*
D Etherscan	Home	Blockchain ~ Tokens ~	NFTs ~ Resources ~ Developers ~ More	e 🗸 🕘 Sign
The Ethereum Blockchain Explorer All Filters Search by Address / Txn Hash / Block / Tok eatured: Elevate your website with curated name tags and labels			BC.GAME BC.GAM	
ETHER PRICE \$1,774.11 @ 0.06929 BTC (-3.57%)	TRANSACTIONS 1,995.09 M (13.6 TPS)	med gas price 46 Gwei (\$1.71)	TRANSACTION HISTORY IN 14 DAYS 1 300k	
				Jun 9
 \$1,774.11 @ 0.06929 BTC (-3.57%) MARKET CAP 	1,995.09 M (13.6 TPS)	46 Gwei (\$1.71) LAST SAFE BLOCK	1 300k	Jun S

D Etherscan	Home	Blockchain 🗸 🛛 Tokens 🗸	NFTs ~ Resources ~ Developers	s ∽ More ∽ ∣ @ Sig
Address 0x1f9090aaE28b8a3dCeaDf281B0F12828	e676c326 🕩 🏭 🛒		Exct	nange ~ Play ~ Gamin
Featured: Build Precise & Reliable Apps with Etherscan APIs	Learn More!			
Sync-builder ☑ Sync-builder.eth ③ # MEV Builder				☆ Mo
Overview	More Info		Multi Chain	
ETH BALANCE	PRIVATE NAME TAGS		MULTICHAIN ADDRESSES	
\$ 2.025485100090666554 ETH	+ Add		14 addresses found via Blockscan	~
ETH VALUE	LAST TXN SENT		CRYPTOSLOTS	6 -1
\$3,593.43 (@ \$1,774.11/ETH)	0xb7ca66289f662 from 38 secs a	go		PLAY NOW
TOKEN HOLDINGS	FIRST TXN SENT			
\$0.00 (11 Tokens) ~	0x317907eeece0 from 155 days	13 hrs ago		
Transactions Internal Transactions Token Transfers (ERC-2)) NFT Transfers Produced Blocks Analytic	cs Comments		



Auditors Spurn Crypto After FTX, Misleading Reserve Estimates



Amanda lacone Reporter



Nicola M. White Reporter

In the rush to reassure customers and the markets, crypto exchanges like Kraken and Binance Holdings Ltd. in 2022 touted auditor-provided tests of their reserves testing to show customer deposits were safe.

But those reports—point-in time snapshots of reserves that don't reflect fund volatility or outstanding obligations—failed to reassure jittery customers and regulators, including Securities and Exchange Commission Chair <u>Gary Gensler</u>. Instead of offering a lifeline to crypto firms, the practice of vetting collateral triggered renewed scrutiny from regulators and provided fresh ammunition for auditor critics.

Risk-adverse auditors are now rethinking their relationship with crypto players after the risks of working with the industry were laid bare in the <u>bankruptcy filings</u> for collapsed exchange FTX, whose founders face criminal charges.

<u>Mazars Group</u>, <u>Marcum LLP</u>, and Armanino LLP have said they would reconsider their crypto industry work after the implosion of FTX and a flurry of bankruptcies including bitcoin miner <u>Core Scientific</u> Inc. created panic in the market. Pulling back on crypto could limit the firms' reputational and <u>legal risks</u> that could undermine investor confidence in work auditors provide for their publicly traded clients.

> Things to know

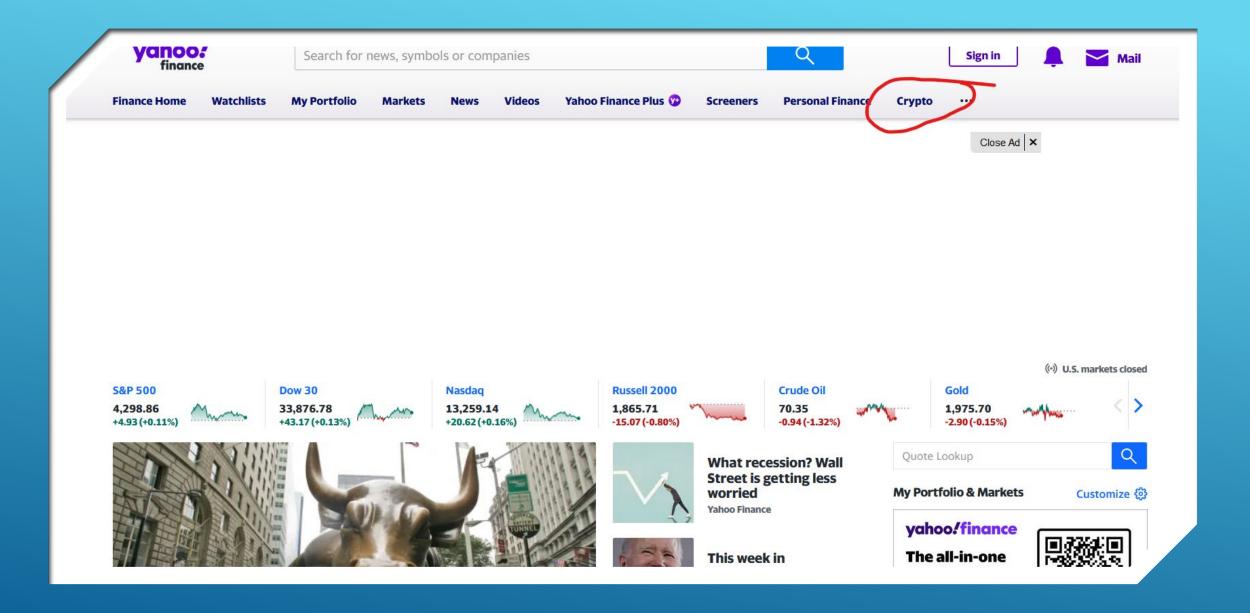
- Coinbase Primary US exchange
- Voyager (Bankrupt)
- > Blockfi (Bankrupt)
- FTX This was SBF
- Kraken
- > Binance Under suit by SEC
- > Celsius (Exchange) defunct
- Ripple vs. SEC

HOW DO CLIENTS USE IT?

- The low hanging fruit is trading Clients will trade into and out of digital assets. However, until we go into another asset most often we don't have a taxable event.
- ►What is an API KEY?
- >How to request a read only key
- ⊳Zenledger
- ►International options
- Developing expectations
- >How to use a blockchain explorer
- >From one pocket to the next
- >What is an airdrop?

TOOLS THAT WE CAN USE...

- Cointracker
- Tokentax
- > Zenledger
- Taxbit
- ► Koinly
- Accointing
- ► Excel
 - Advanced users need only apply
- Blockchain explorers
- Custom tools
- Global Blockchain Business council
- Glassnode Advanced analytics
- > Yahoo for crypto



yahoo!

Search for news, symbols or companies



Sign in

Results List Heatmap View

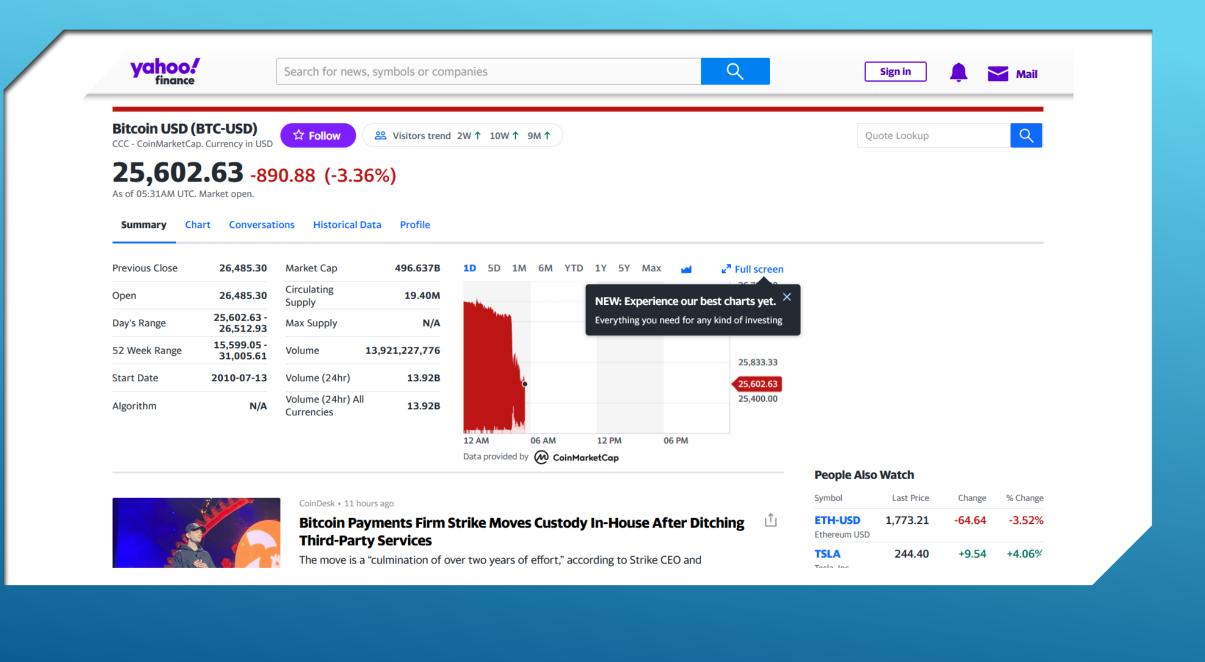
Matching Cryptocurrencies 1-25 of 10198 results 🖞 Add to Portfolio 📋 Share

🐼 CoinMarketCap

Mail

() Results were generated a few mins ago. Pricing data is updated frequently. Currency in USD

Symbol	Name	Price (Intraday)	Change	% Change	Market Cap ∽	Volume in Currency (Since 0:00 UTC)	Volume in Currency (24Hr)	Total Volume All Currencies (24Hr)	Circulating Supply		52 Week Range	Day Chart
🗌 🤔 BTC-USD	Bitcoin USD	25,626.62	-866.71	-3.27%	497.103B	13.902B	13.902B	13.902B	19.398M	15,599.05	31,005.61	7
🗌 🔶 ETH-USD	Ethereum USD	1,775.46	-62.35	-3.39%	213.46B	6.212B	6.212B	6.212B	120.228M	896.11	2,137.45	7
🗌 🚭 USDT-USD	Tether USD	1.0005	+0.0003	+0.03%	83.396B	26.957B	26.957B	26.957B	83.357B	0.98	1.03	
🗌 🎯 BNB-USD	BNB USD	242.18	-18.55	-7.12%	37.745B	784.816M	784.816M	784.816M	155.855M	184.54	388.72	7
🗌 🌀 USDC-USD	USD Coin USD	1.0002	+0.0002	+0.02%	28.339B	3.648B	3.648B	3.648B	28.335B	0.88	1.01	₩
🗌 🔀 XRP-USD	XRP USD	0.505320	-0.019878	-3.78%	26.27B	1.774B	1.774B	1.774B	51.987B	0.29	0.58	7
🗌 🍪 STETH-USD	Lido Staked ETH USD	1,773.69	-51.66	-2.83%	12.704B	19.984M	19.984M	19.984M	7.163M	828.67	2,121.02	7
🔲 🕷 ADA-USD	Cardano USD	0.251704	-0.067332	-21.10%	8.785B	922.828M	922.828M	922.828M	34.904B	0.23	0.61	7
🗌 🙆 DOGE-USD	Dogecoin USD	0.061713	-0.006150	-9.06 %	8.622B	737.805M	737.805M	737.805M	139.705B	0.05	0.16	7
-	Wrapped										•	MAR



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 - Brief Chat about Chat GPT

WHAT IS OUR GOAL TODAY?



Get on board with the FedNowSM Service

The new instant payments service will be here in July 2023. Get ready now. Help 🗸

Contact 🗸



Administration

BRIEFING ROOM

FACT SHEET: White House Releases First-Ever Comprehensive Framework for Responsible Development of Digital Assets

SEPTEMBER 16, 2022 · STATEMENTS AND RELEASES

Following the President's Executive Order, New Reports Outline Recommendations to Protect Consumers, Investors, Businesses, Financial Stability, National Security, and the Environment

The digital assets market has grown significantly in recent years. Millions of people globally, including 16% of adult Americans, have purchased digital assets—which reached a market capitalization of \$3 trillion ↗ globally last November. Digital assets present potential opportunities to reinforce U.S. leadership in the global financial system and remain at the technological frontier. But they also pose real risks as evidenced by recent events in crypto markets. The May crash of a so-called stablecoin and the subsequent wave of insolvencies wiped out over \$600 billion of investor and consumer funds.

WHAT DOES THE WHITE HOUSE SAY.

- Bitcoin policy conference 4/26 at the White House Press club Ballroom.
- There are 100+ countries working on central bank digital currencies(CBDCs)
- The Bank of International Settlements (BIS) has advised that CBDCs should be explored.
- Central bank digital currencies are coming soon!

The digital pound

We are looking at the case for issuing a digital pound. This type of money is known as a central bank digital currency (CBDC). It would not replace cash.

Related links

- Consultation Paper on the digital pound
- > Technology Working Paper on the digital pound

On this page

- We're looking at the case for a digital pound
- ✓ A digital pound is likely to be needed to fulfil our mission
- \checkmark Your questions answered
- ✓ We're asking people for their views
- ✓ We're engaging with businesses and communities

- ✓ CBDC Engagement Forum
- ✓ CBDC Technology Forum

Bank of England

Topics - About - News and publications - Museum Contact





of design choices for it.

How might it work?

A day in the life of a digital pound user



7am

Check your balance on the digital pound wallet.



10am

Buy a cup of tea with digital pounds using your smartphone – just tap it on the same device used for credit and debit cards.



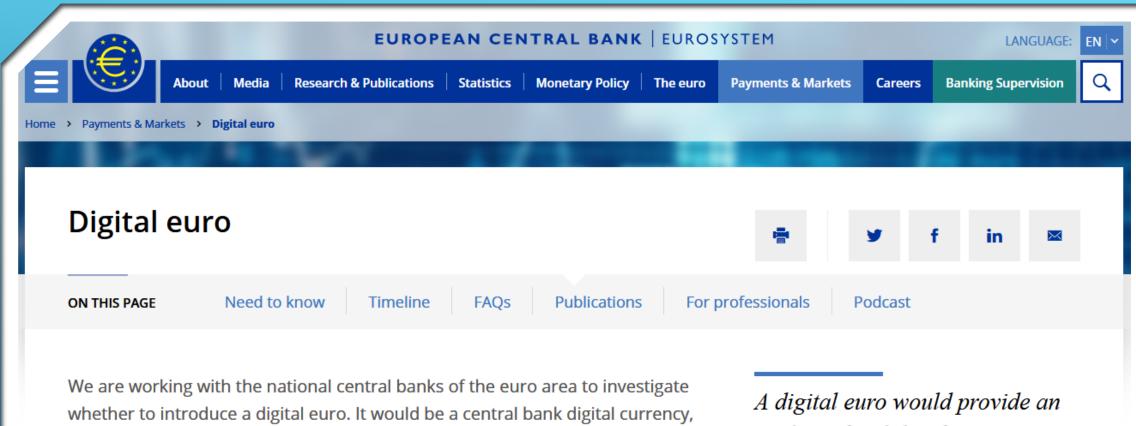
Pay the electrician in digital pounds – both of you get an instant notification that the payment is complete.



Order groceries online and pay for them using the digital pound option on the website checkout.



Transfer money from your bank account into your digital pound wallet.



an electronic equivalent to cash. And it would complement banknotes and coins, giving people an additional choice about how to pay.

A digital euro would provide an anchor of stability for our money in the digital age.

What would it be?

A digital euro would offer an electronic means of payment that anyone could use in the euro area. It would be secure and user-friendly, like cash is today. As central bank money issued by the ECB, it would be different from "private money", but you could also use a card or a phone app to pay with digital euro.

The digital euro and the importance of central bank money

What would be the advantages and challenges?

As we are still investigating, we don't have all the details of the final proposal yet. But we have reflected quite a lot on the concept of a digital euro and its pros and cons. What is clear already is that a digital euro should be accessible, robust, safe, efficient and compliant with the law. We would also ensure the highest level of privacy.

Report on digital euro

Why might we need a digital euro?

We are thinking about launching a central bank digital currency in Europe to respond to the increasing demand for safe and trusted electronic payments. Having digital money issued by the central bank would provide an anchor of stability for the payment and monetary systems. A digital euro would also strengthen the monetary sovereignty of the euro area and foster competition and efficiency in the European payment sector.

Key objectives and design considerations

Where do we stand?

This investigation phase started in October 2021 and is expected to take around two years, concluding in October 2023. We are looking at how a digital euro could be designed and distributed, as well as the impact it could have on the market. Then, we will decide whether to start the process of actually developing it.

🖄 Project timeline



- Smart contracts
 - Real estate closing
 - **Titles**
 - **Voting**
- **Logistics**
- Identity
- ▶ Finance
 - Stablecoins
 - Tokenization
- Healthcare records
- ► Telecom
- Accounting

DO WE WANT CBDC? WHAT CAN IT DO FOR US?

- When might a blockchain be useful?
 - Stable data
 - Historical events are important
 - Security is critical
 - Many middlemen
 - Inventory management

- > What is Artificial General Intelligence
 - is a type of hypothetical intelligent agent. The AGI concept is that it can learn to accomplish any intellectual task that human beings or animals can perform.
- Reactive machines
 - ChatGPT is a natural language processing (NLP) AI Chatbot
- ► Will it replace our jobs?
 - Chat GPT passes the CPA exam...
- > We are adopting technology faster...and we must keep up.

CHAT ABOUT CHAT GPT



DAVID K. SPENCER C.P.A. DKS TAX AND CONSULTING & CLEAR VISION GLOBAL CONSULTING

Please reach out for additional training for groups and one on one sessions.

Educating in one of my passions.

I also serve clients internationally with inbound and outbound tax advisory and general business consulting.

David.spencer@dks-tax.com

+1 813-812-1950

www.dks-tax.com