

29th ANNUAL

PAUL J. HARTMAN
STATE AND LOCAL TAX FORUM

VANDERBILT UNIVERSITY LAW SCHOOL

A Beginner's Guide to Crypto

Introduction

- Trevor Jones, SALT Manager RSM US LLP
- California CPA

Quotes on Crypto and Blockchain

“What the Internet did for communications, blockchain will do for trusted transactions.”

– Ginni Rommetty, Former CEO of IBM

Quotes (continued)

“[Virtual currencies] may hold long-term promise, particularly if the innovations promote a faster, more secure and more efficient payment system.”

—Ben Bernanke, Former Chairman of the Federal Reserve

Quotes (Continued)

“Stay away from it. It’s a mirage, basically. In terms of cryptocurrencies, generally, I can say almost with certainty that they will come to a bad ending.”

—Warren Buffett, CEO of Berkshire Hathaway

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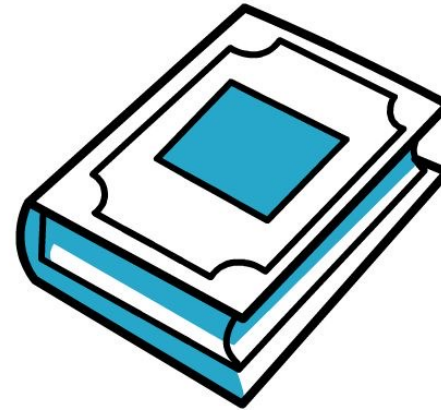
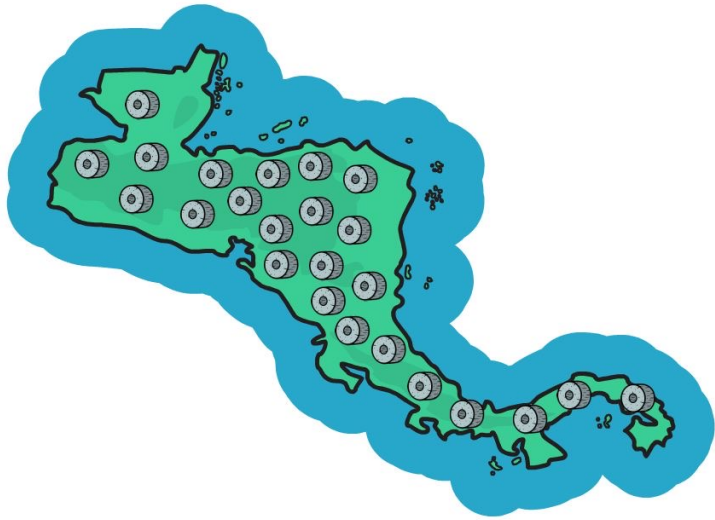
Island of Yap

Island in the South Pacific

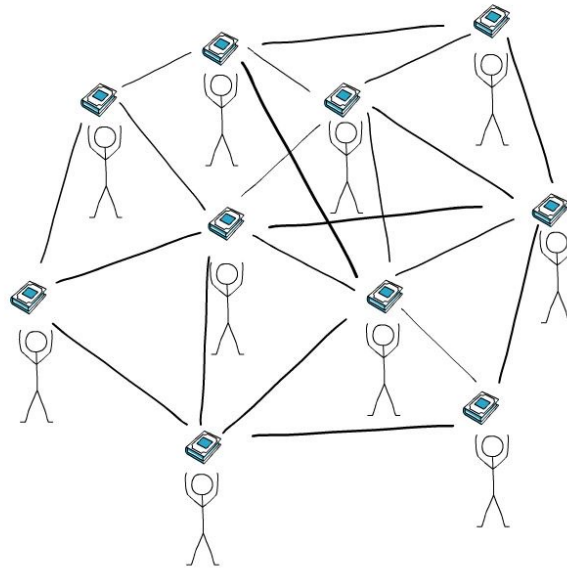
Large Disks



Tracking Ownership



Distributed Ledger System

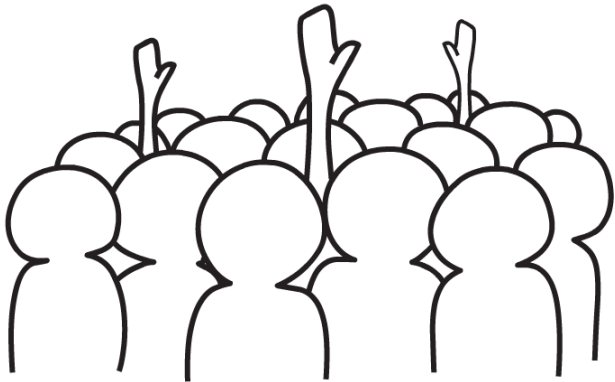


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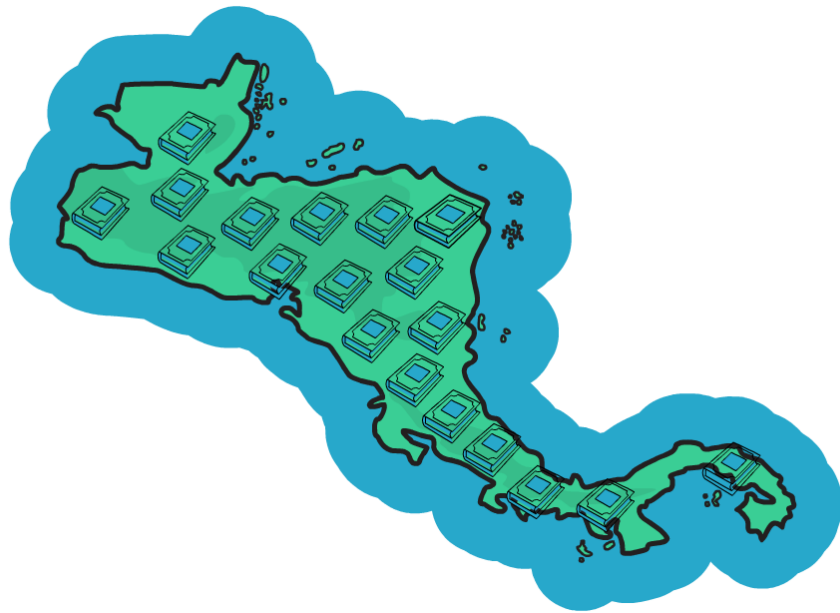
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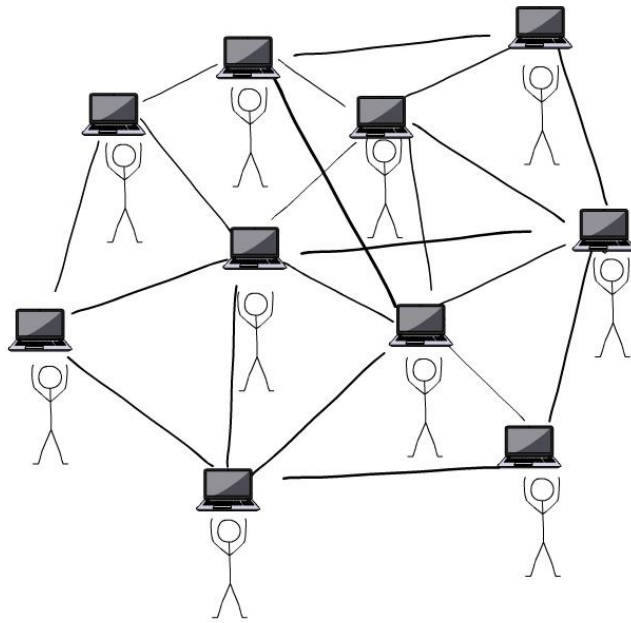
Voting



Secured By Distribution



Blockchain



If blockchains are ledgers, then bitcoins are the



A Modern Day History of Money



Roman Empire



Still even more forms of money...



The Gold Standard



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What does money do?



Characteristics of Money

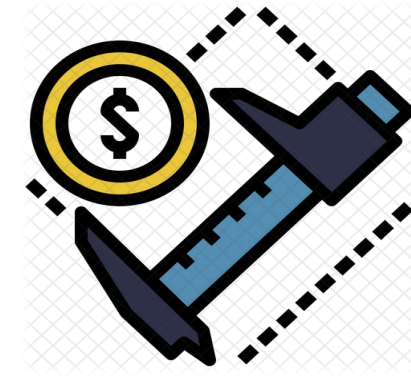
Medium of Exchange



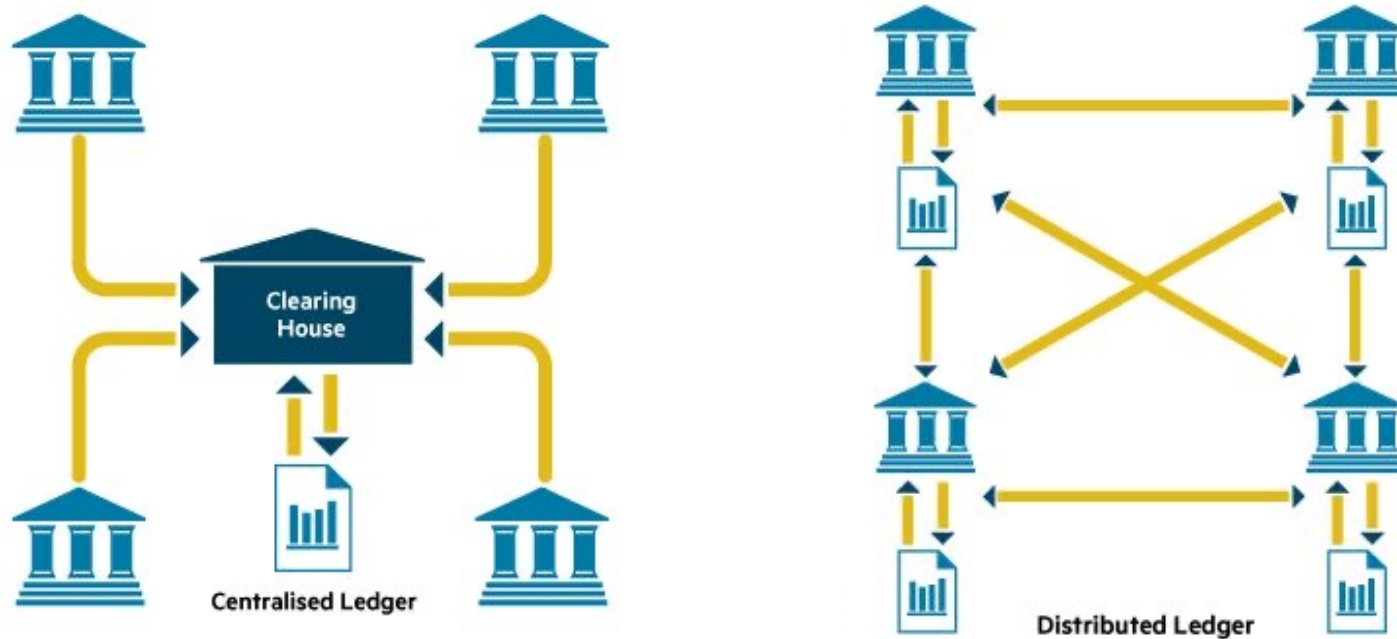
Store of Value



Unit of Account



Centralized vs. Distributed Ledger



FT graphic. Source: Santander InnoVentures, Oliver Wyman & Anthemis Partners

It all starts with a transaction

Blockchain.com

Wallet

Exchange

Explorer

Buy Bitcoin

Trade

Home

Prices

Charts

DeFi

NFTs

Academy

Developers

Assets

Bitcoin

Ethereum

Bitcoin Cash

BTC Testnet

BCH Testnet

Blockchain.com

Wallet

Exchange

Explorer > Ethereum Explorer > Transaction

USD

Search your transaction, an address or a block

Summary ⓘ

USDETH

This transaction was first broadcast to the Ethereum network on October 14, 2022 at 12:05 AM PDT. The transaction currently has 4,424 confirmations on the network. At the time of this transaction, 0.001506909178583806 ETH was sent with a value of \$2.00. The current value of this transaction is now \$1.95.

Hash

0x0869b5419c59f20516ada326bdfc2335620362c26b974bd6159c4e174a4c50ff

2022-10-14 00:05

0xb4c6e3d5dddfc60b58fd422a490dfd0b5cd9b25a

➔

0x84a90e21d9d02e30ddcea56d618aa75ba90331ff

Fee

0.000348394596963 ETH
(21000 GAS - 16590218903 WEI)

0.001506909178583806 ETH

Details ⓘ

Status	Confirmed
Received Time	2022-10-14 00:05
Included in Block	15744747
Confirmations	4,424
From	0xb4c6e3d5dddfc60b58fd422a490dfd0b5cd9b25a
To	0x84a90e21d9d02e30ddcea56d618aa75ba90331ff
Amount	0.001506909178583806 ETH
Nonce	1
Gas Price	0.000000016590218903 ETH

Block 15744747 ⓘ

USDETH

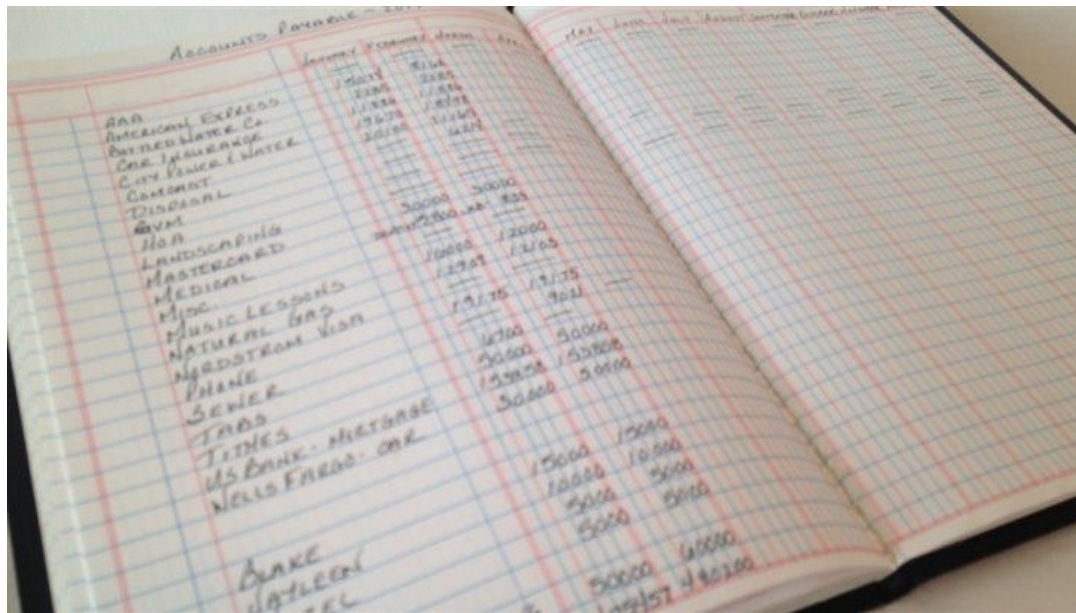
This block was mined on October 14, 2022 at 12:05 AM PDT by [0xdafea492d9c6733ae3d56b7ed1adb60692c98bc5](#). It currently has 4,603 confirmations on the Ethereum blockchain.

The miner(s) of this block earned a total reward of 2.387258436506012525 ETH (\$3,085.79). The reward consisted of a base reward of 2.387258436506012525 ETH (\$3,085.79) with an additional 0.387258436506012525 ETH (\$500.57) reward paid as fees of the 198 transactions which were included in the block. The Block rewards, also known as the Coinbase reward, were sent to this [address](#).

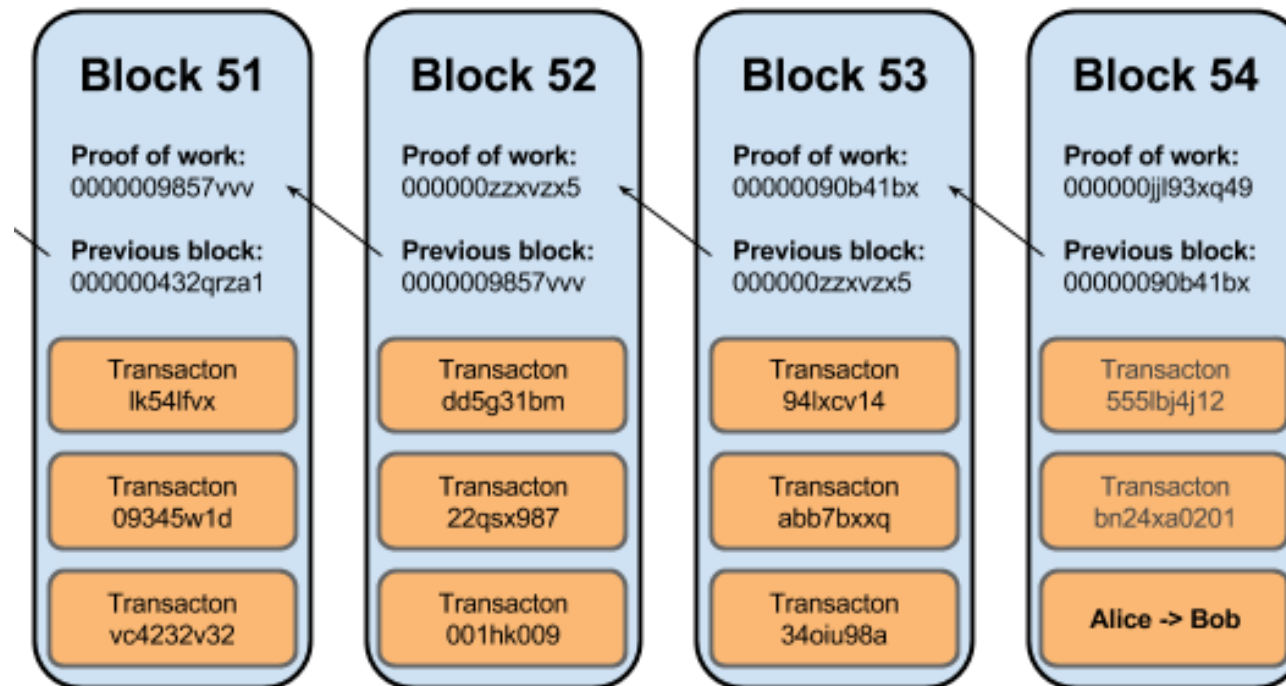
A total of 58.8230049285982 ETH (\$76,035.20) were sent in the block with the average transaction being 0.29708588 ETH (\$384.02).

Hash	0xdf713285eee268d1fc50c12308eb7abea7bc7eb2b648c288c8775ea59e83d3e ⓘ
Confirmations	4,603
Timestamp	2022-10-14 00:05
Height	15744747
Miner	0xdafea492d9c6733ae3d56b7ed1adb60692c98bc5 ⓘ
Number of Transactions	198
Number of Internal Transactions	81
Difficulty	0.00
Total Difficulty	58,750,003,716,598,352,816,469
Size	106,717 bytes
Nonce	0x0000000000000000
Sha3Uncles	0x1dcc4de8dec75d7aab85b567b6ccd41ad312451b948a7413f0a142fd40d49347
Number of Uncles	0
Gas Limit	30,000,000

Ledgers and Blocks



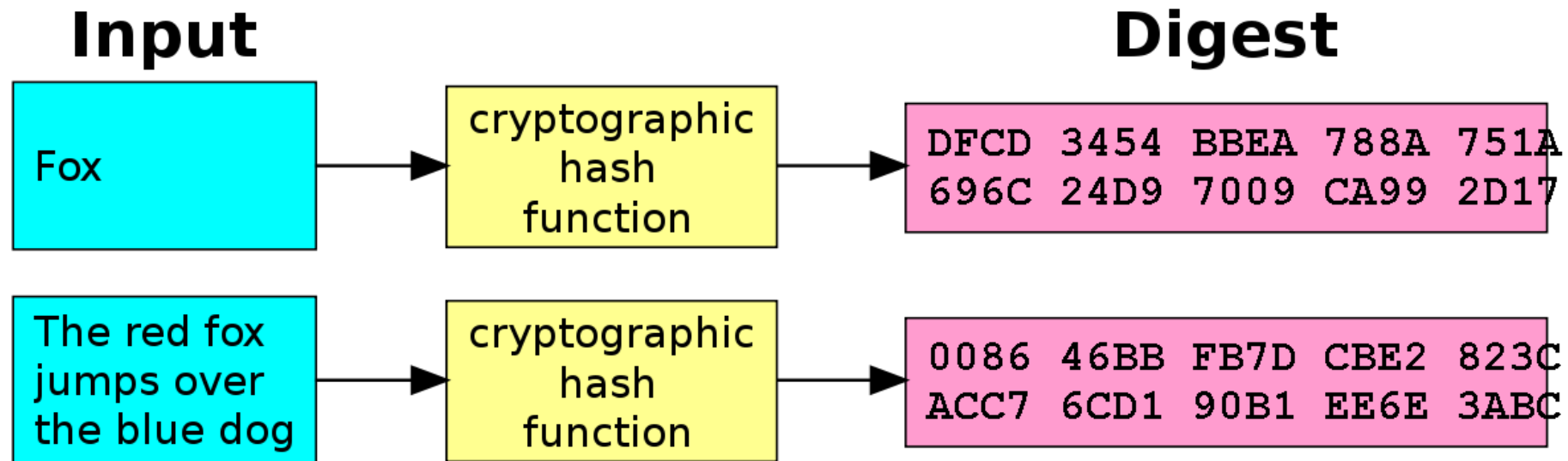
What Might a Blockchain Look Like?



Immutability (Append Only)



Hashing



Hashing (Cont.)

John agrees to pay \$1000 for a car

Hash algorithm

Ac49e74434a64c247aa145gef83f205

Account Balances

Sam:	\$1,004,000
Tim:	\$100,500
Jack:	\$317,000
Tammy:	\$45,010
Sally:	\$7,513

Wallet Addresses





Wallet Address

0xe7d522ab06a2df8b5bd651f737d7d9fd9e644b74

Wallet Address

Wallet Address	Digital Asset Balance
 0xe7d522ab06a2df8b5bd651f737d7d9fd9e644b74	\$1,004,000
 0xz5b612ac17a2vb9b5bd651f924d6d5fe2u832b81	\$100,500
 0xa9m011cb06a9df8b5aa651f737d7d9fd9e134b00	\$317,000
 0xf8z3514cb08a6df5l5md651f737d7d9fd9e644b58	\$45,010

Wallets Continued...

Wallet Address	Digital Asset Balance
 0xe7d522ab06a2df8b5bd651f737d7d9fd9e644b74	\$1,004,000
 0xz5b612ac17a2yb9b5bd651f924d6d5fe2u832b81	\$100,500
 0xa9m011cb06a9df8b5aa651f737d7d9fd9e134b00	\$317,000
 0xf8z3514cb08a6df5l5md651f737d7d9fd9e644b58	\$45,010



Similar to Cash

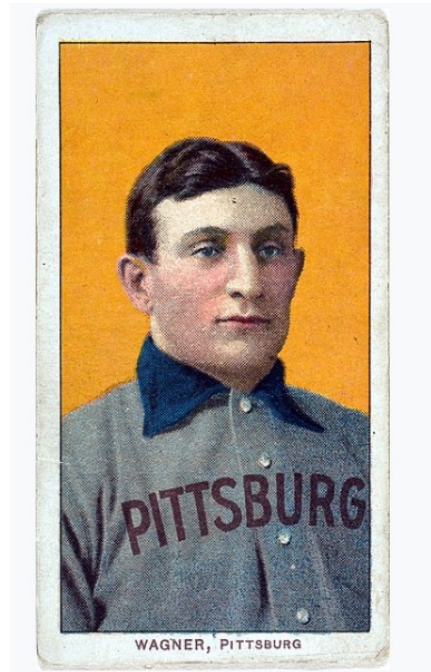


Non-Fungible Tokens (NFTs)



| Bored Ape number 4,418

Similar to trading cards with a digital certificate of authenticity



Blockchains are International



Really Tracking Information About Ownership

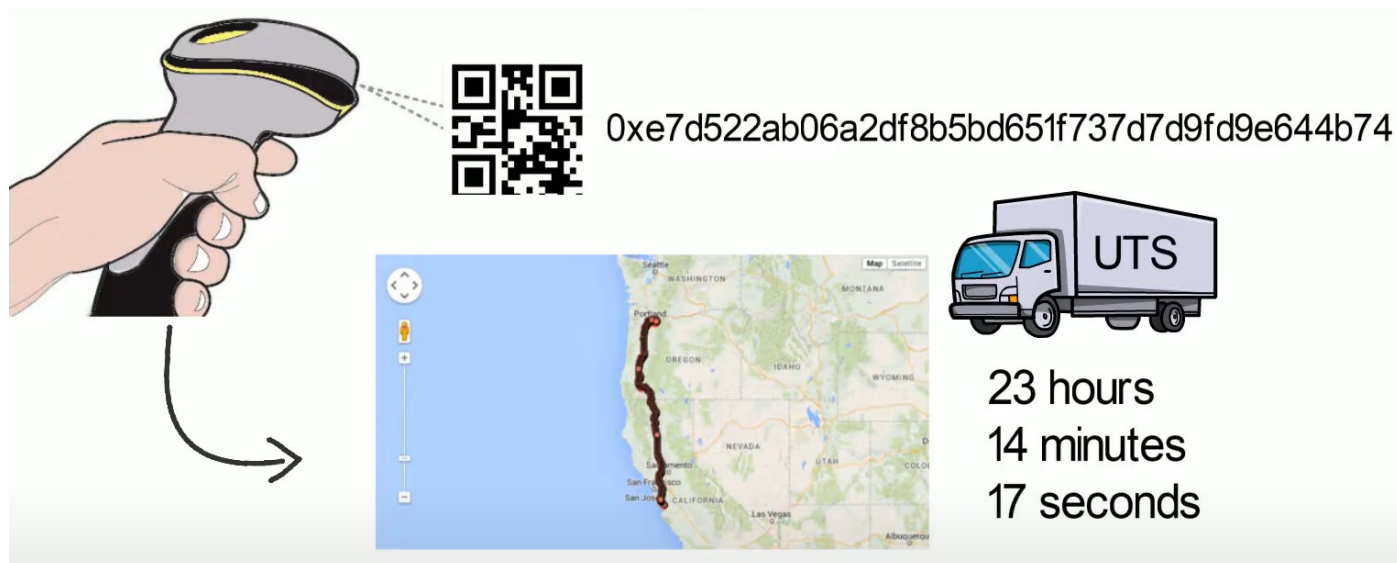


QR (quick response) Codes and Wallet Addresses



0xe7d522ab06a2df8b5bd651f737d7d9fd9e644b74

Product Information is Stored



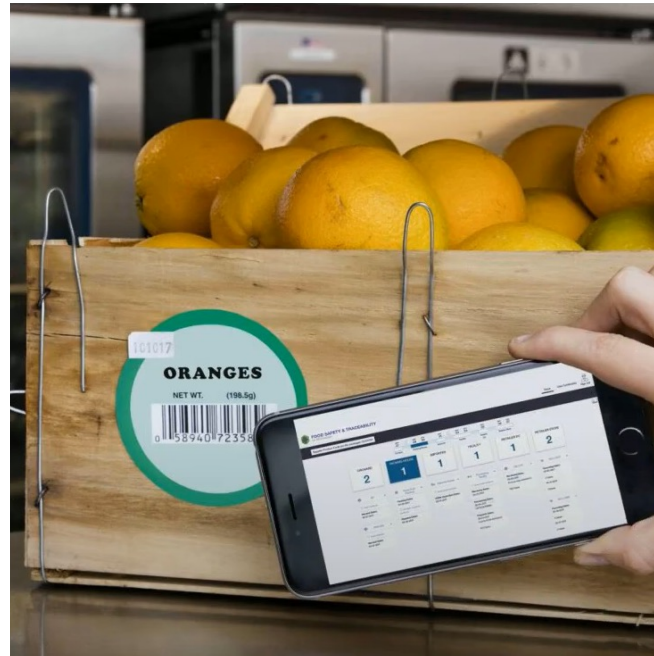
Is this really useful?



Understanding Where the Issue Occurred



Already in Use Today



Digital Assets and Taxes

Form **1040**

Department of the Treasury—Internal Revenue Service (99)

U.S. Individual Income Tax Return

2021

OMB No. 1545-0074

IRS Use Only—Do not write or staple in this space.

Filing Status
Check only one box.

☐ Single ☐ Married filing jointly ☐ Married filing separately (MFS) ☐ Head of household (HOH) ☐ Qualifying widow(er) (QW)

If you checked the MFS box, enter the name of your spouse. If you checked the HOH or QW box, enter the child's name if the qualifying person is a child but not your dependent ▶

Your first name and middle initial		Last name		Your social security number	
				. . .	
If joint return, spouse's first name and middle initial		Last name		Spouse's social security number	
				. . .	
Home address (number and street). If you have a P.O. box, see instructions.			Apt. no.		Presidential Election Campaign Check here if you, or your spouse if filing jointly, want \$3 to go to this fund. Checking a box below will not change your tax or refund. <input type="checkbox"/> You <input type="checkbox"/> Spouse
City, town, or post office. If you have a foreign address, also complete spaces below.		State	ZIP code		
Foreign country name		Foreign province/state/county		Foreign postal code	

At any time during 2021, did you receive, sell, exchange, or otherwise dispose of any financial interest in any virtual currency?

☐ Yes ☐ No

Standard Deduction

Someone can claim: ☐ You as a dependent ☐ Your spouse as a dependent

☐ Spouse itemizes on a separate return or you were a dual-status alien

Digital Assets and Taxes

- *Draft 1040 for 2022 with expanded language

Form **1040** Department of the Treasury—Internal Revenue Service
U.S. Individual Income Tax Return **2022** OMB No. 1545-0074 IRS Use Only—Do not write or staple in this space.

Filing Status ☐ Single ☐ Married filing jointly ☐ Married filing separately (MFS) ☐ Head of household (HOH) ☐ Qualifying surviving spouse (QSS)
 Check only one box. If you checked the MFS box, enter the name of your spouse. If you checked the HOH or QSS box, enter the child's name if the qualifying person is a child but not your dependent:

Your first name and middle initial	Last name	Your social security number
If joint return, spouse's first name and middle initial	Last name	Spouse's social security number
Home address (number and street). If you have a P.O. box, see instructions.		Apt. no.
City, town, or post office. If you have a foreign address, also complete spaces below.		State
Foreign country name		Foreign postal code
Foreign province/state/county		

Digital Assets At any time during 2022, did you: (a) receive (as a reward, award, or payment for property or services); or (b) sell, exchange, gift, or otherwise dispose of a digital asset (or a financial interest in a digital asset)? (See instructions.) ☐ Yes ☐ No

Standard Deduction **Someone can claim:** ☐ You as a dependent ☐ Your spouse as a dependent ☐ Spouse itemizes on a separate return or you were a dual-status alien

Digital Assets and Taxes (Virtual Currency - US)

- For US Federal Income Tax Purposes, virtual currency is treated as property and general tax principles applicable to property transactions apply to transactions using virtual currency.
- When you sell virtual currency, you must recognize any capital gain or loss on the sale, subject to any limitations on the deductibility of capital losses.

Digital Assets and Taxes (NFTs)

- States Issuing Specific Guidance on NFTs for sales/use tax (WA, PA, MN)
- Marketplace facilitator rules and payment processors
- Sourcing
- True object

Closing

- Blockchain technology has numerous applications. Including cryptocurrency, digital assets, and logistics.
- The technology is evolving, so is the use of the tech and the tax implications.

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Thank you

A decorative horizontal bar at the bottom of the slide, consisting of a thin blue line above a thicker black line.