



Future of Money

Time travel through the evolution of money from Mesopotamian accounting tokens to Web3

IMF Statistical Forum

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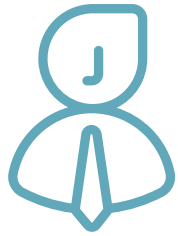
Money is a social and legal construct.

Throughout history, money experiences leaps in financial and technical changes, which in turn transforms human society.

We are currently living in such an evolutionary leap of money. (Eichengreen)



Origin of Money - Traditional View: Barter System



Goods were exchanged directly

People traded goods and services between each other without using money



Bartering was used to obtain necessities

People bartered to get food, clothing, tools etc. that they needed to survive

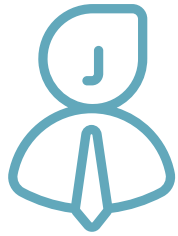


No standardized system of value

Since goods were simply exchanged, there was no standard unit to measure the value of goods

The barter system was an early inefficient stage of trade before the invention of money.

Traditional Historical View: Barter System



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People traded goods and services between each other without using money

WRONG



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Money is a form of **communication** and emerged from recording debts.

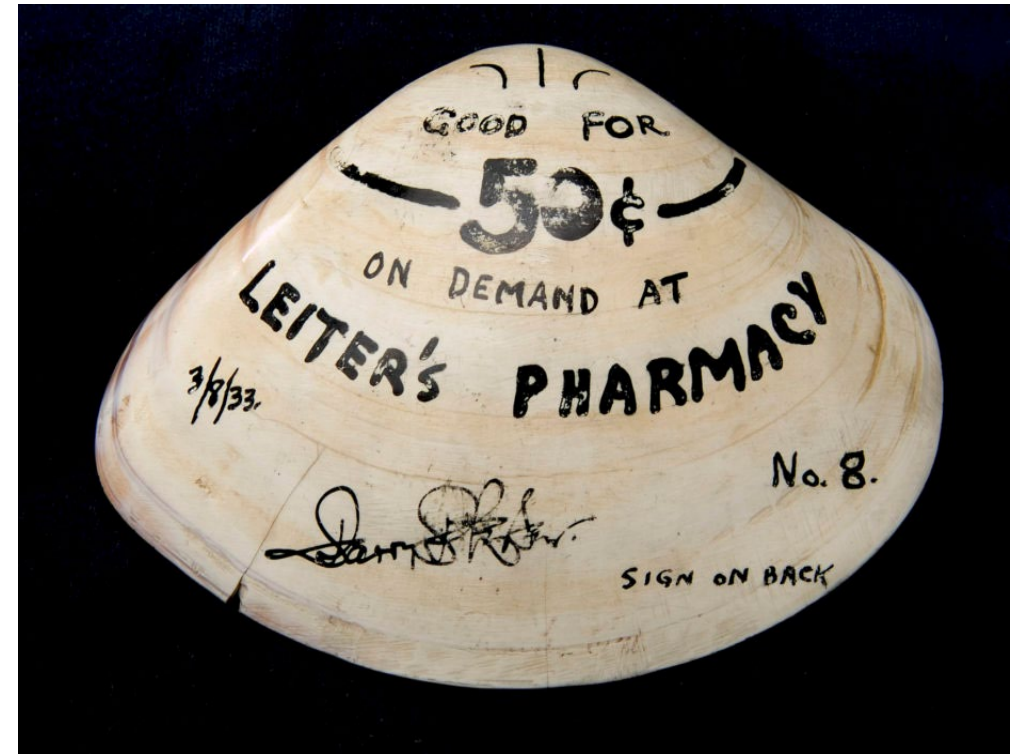
In turn, communication is based in **technology**.

Mesopotamian Accounting Tokens

- It is argued that the transition from three-dimensional tokens to two-dimensional signs served as the basis for the beginning of writing (Schmandt-Besserat). <https://www.maa.org/press/periodicals/convergence/mathematical-treasure-mesopotamian-accounting-tokens>

Historical examples of money in New England

Wampum = clam shell + technology



Electronic Transfers

Online Banking

Allows customers to perform financial transactions electronically via a bank's website.

Mobile Banking

Performing financial services through a mobile device such as a smartphone.

Digital Wallets

Allow users to make electronic transactions using a smartphone, tablet or computer.

Peer-to-Peer Payments

Transfer of funds from one person to another using mobile apps rather than cash or checks.

Cryptoassets

Digital assets that use blockchain to secure and verify transactions.

Decentralized Finance

Allow users to directly access blockchain-enabled financial services without going through traditional financial intermediaries.

The next iteration of the Internet: Web3 (Decentralized & Semantic Web)



Read
Web1



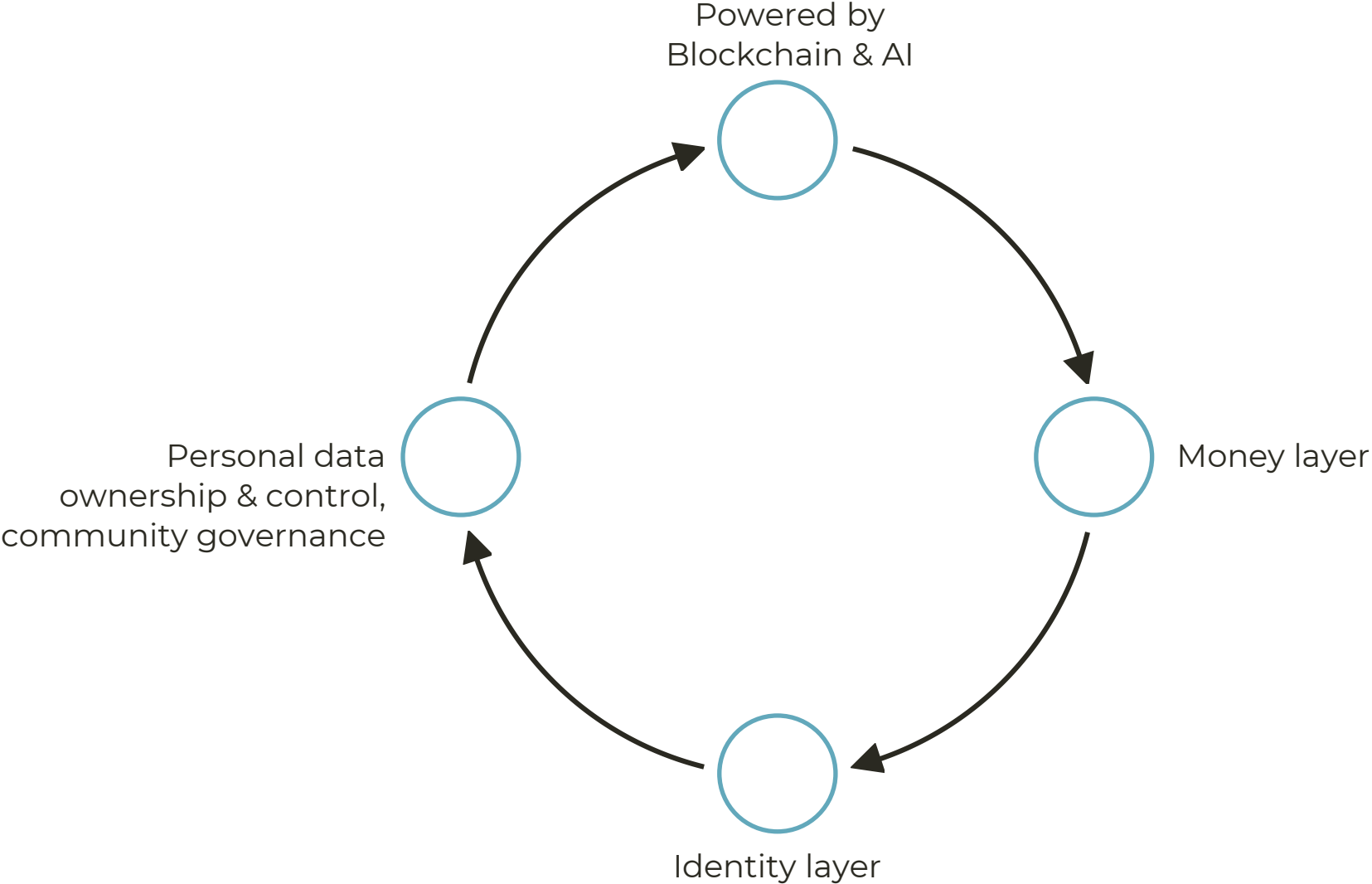
Write
Web2



Own
Web3

Peer to peer, decentralized web architecture on blockchain that's powered by AI.

Future of Money: What is Web3?



Web 2.0 vs. Web 3.0

Web 2.0	Web 3.0
Centralized Application delivery, cloud services and platforms are governed and operated by centralized authorities.	Decentralized Edge computing, peer-to-peer and distributed consensus increasingly become the norm in Web 3.0.
Fiat currency Payments and transactions occur with government-issued currency such as \$USD.	Cryptocurrency Transactions can be funded with encrypted digital currencies such as Bitcoin and Ethereum.
Cookies Using cookies helps to track users and provide personalization.	NFTs Users can get unique tokens that are assigned value or provide some form of perk.
CSS and Ajax Web 2.0 is defined by layout technologies that provide more dynamic control than Web 1.0.	AI Smarter, autonomous technologies, including machine learning and AI, will define Web 3.0.
Relational databases Databases underpin the content and applications of Web 2.0.	Blockchain Web 3.0 makes use of blockchain immutable ledger technology.
Social networks Web 2.0 ushered in the era of social networking, including Facebook.	Metaverse worlds With Web 3.0, metaverse worlds will emerge to meld physical, virtual and augmented reality.

Future of Money: Crypto-native and stablecoin assets

Bitcoin market capitalization of over \$710 billion USD (Nov. 14, 2023)

Ethereum market share of over \$244 billion USD

USDT over \$44 billion
USDC almost \$24 billion

Future of Money: Programmable Money

- Fiat-backed Stablecoins

Stablecoins backed by fiat currency issued by a private issuer

- Central Bank Digital Currencies (CBDCs)

Digital form of fiat currency issued by a central bank as legal tender

- Retail CBDCs

CBDCs designed for use by individuals for retail payments and transactions

- Wholesale CBDCs

CBDCs designed for use by banks and financial institutions in wholesale markets

- CBDC benefits

Enhanced monetary policy control, financial stability, payments efficiency and accessibility

- CBDC risks

Disintermediating banks, data privacy concerns, cybersecurity risks

JPMorgan Switches On Programmable Payments Using Blockchain Tech

- System lets companies set rules to shift cash automatically
- Germany's Siemens debuted the new feature to move funds



JPMorgan Chase & Co. headquarters in New York. Photographer: Gabby Jones/Bloomberg

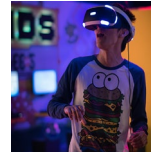
By [Anna Irrera](#)

November 10, 2023 at 4:00 AM EST

Key Themes of Money through History



Money is Communication (of debts)



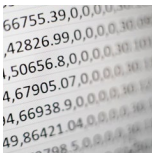
Identity is Money, vice versa
(finance relies on identity)



Money is Technology (used to communicate)



Web3 adds money & identity layers
(that facilitate ownership of digital assets on
decentralized internet)



Money is Data (form of communication)

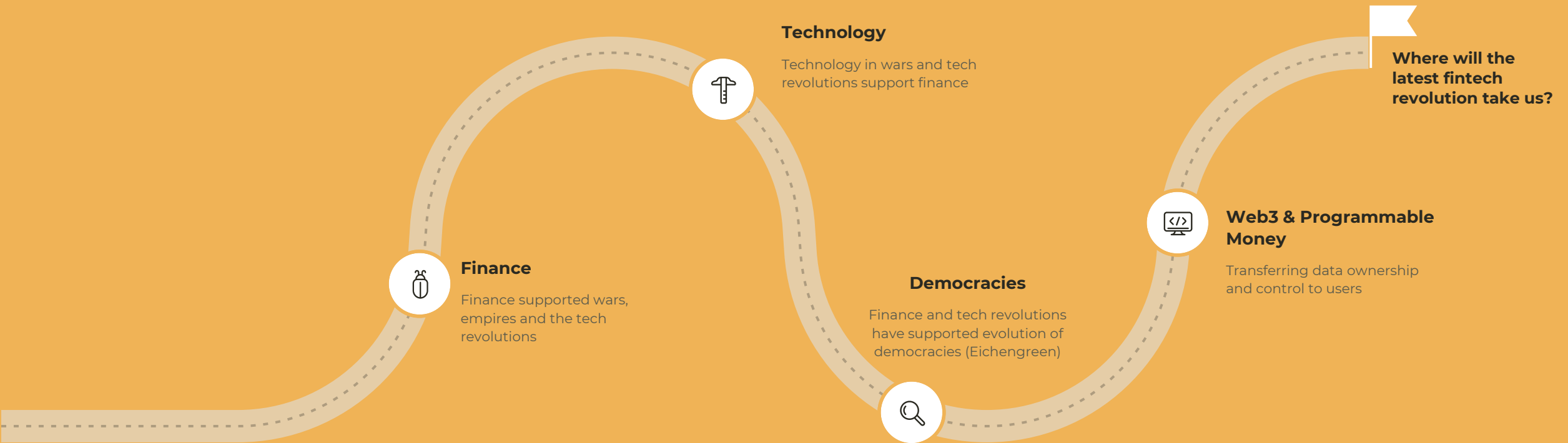


Intersection of Blockchain, AI & Open Data:
Money becomes Programmable Money
(use personal data to program money)



Identity is Data (open banking, open data)

End of Time Travel: Interconnection between money, tech and society



DS
LABS

Thank You
for time
traveling
with me!

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Crypto Council for
Innovation

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