



香港金融科技行業協會

eCNY & Fintech: Trends and Opportunities

14May2025

Paul Li (李國樑)

President

Hong Kong Fintech Industry Association

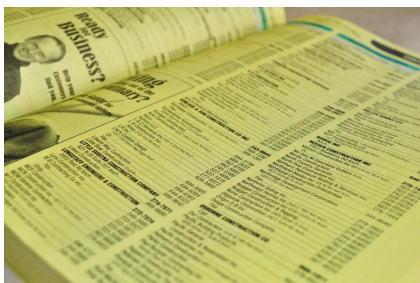
<https://www.hkfia.org/>

Information is moving in speed of light

获客

转化

管理



黄页



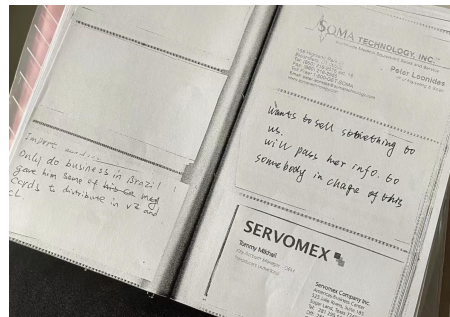
在线平台



传真



邮件/即时通讯



复印名片



订制CRM系统

But money moves very slow...



What is Fintech?

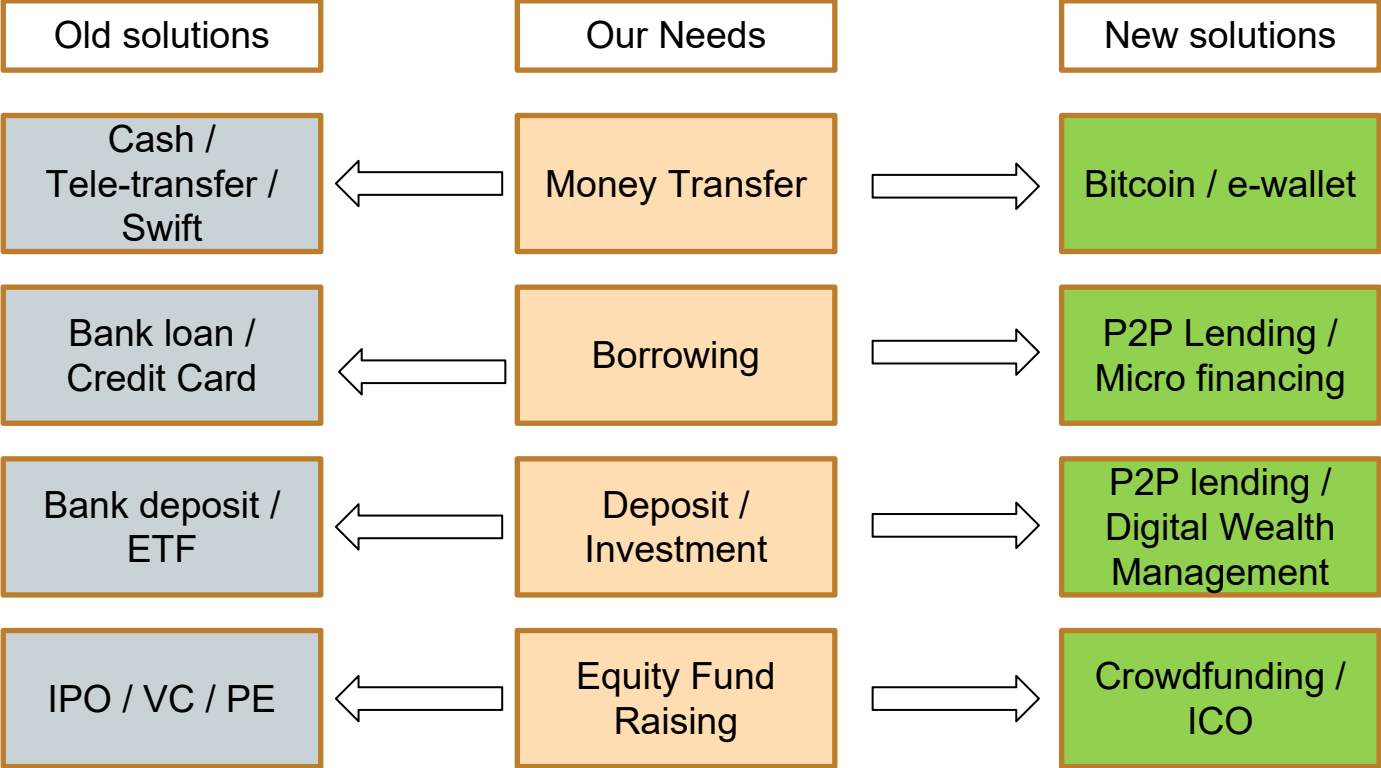
According to PwC: *Financial technology—FinTech for short—describes the evolving intersection of financial services and technology.*

The term can refer to startups, technology companies, or even legacy providers. The lines are blurring, and it's getting harder to know where technology ends and financial services begin.

Translation to human language:

Whatever technology that enables financial services.

Doing old things in new ways



"Banking is Essential,
Banks are Not"

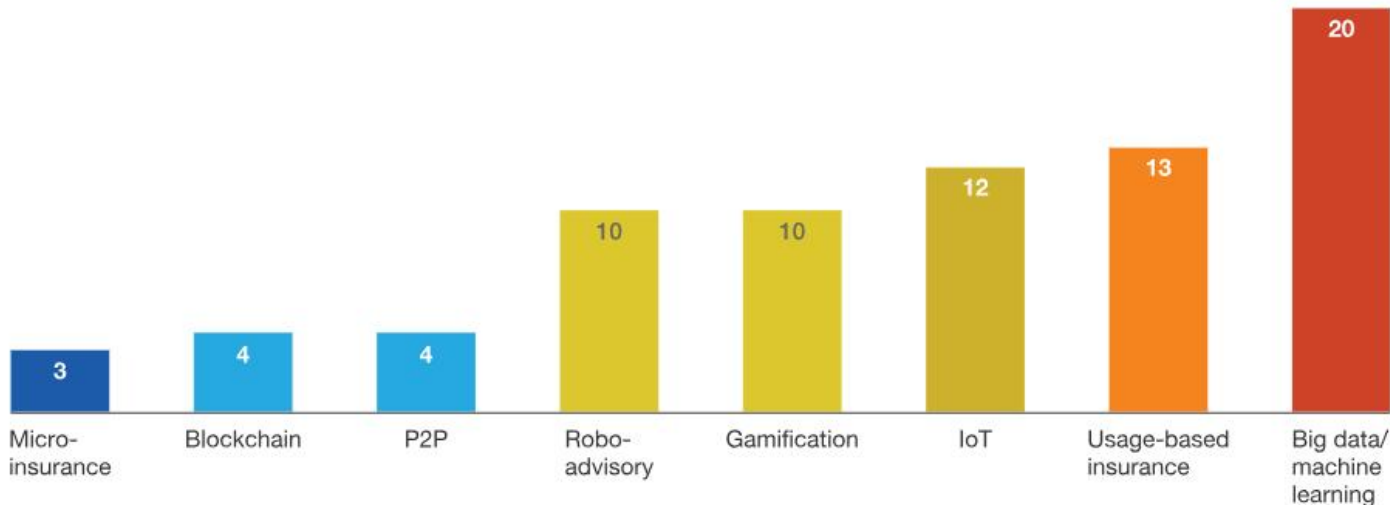
by Bill Gates



What mean by Insurtech?

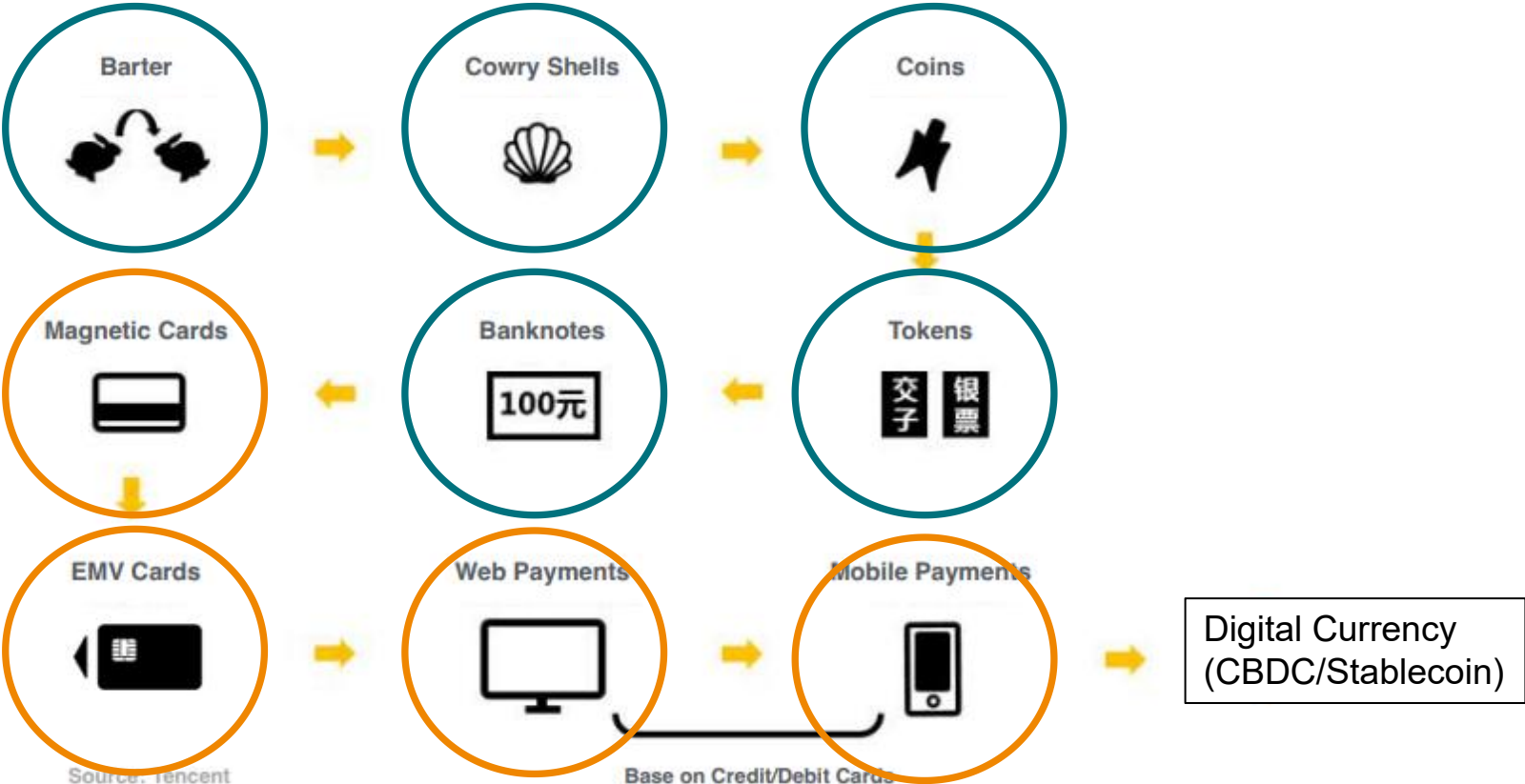
Insurtechs are adopting new technology and concepts, especially within big data and machine learning and usage-based insurance.

Insurtech adoption of new technology and concepts,¹ %



¹~500 commercially most well-known cases registered in the database.

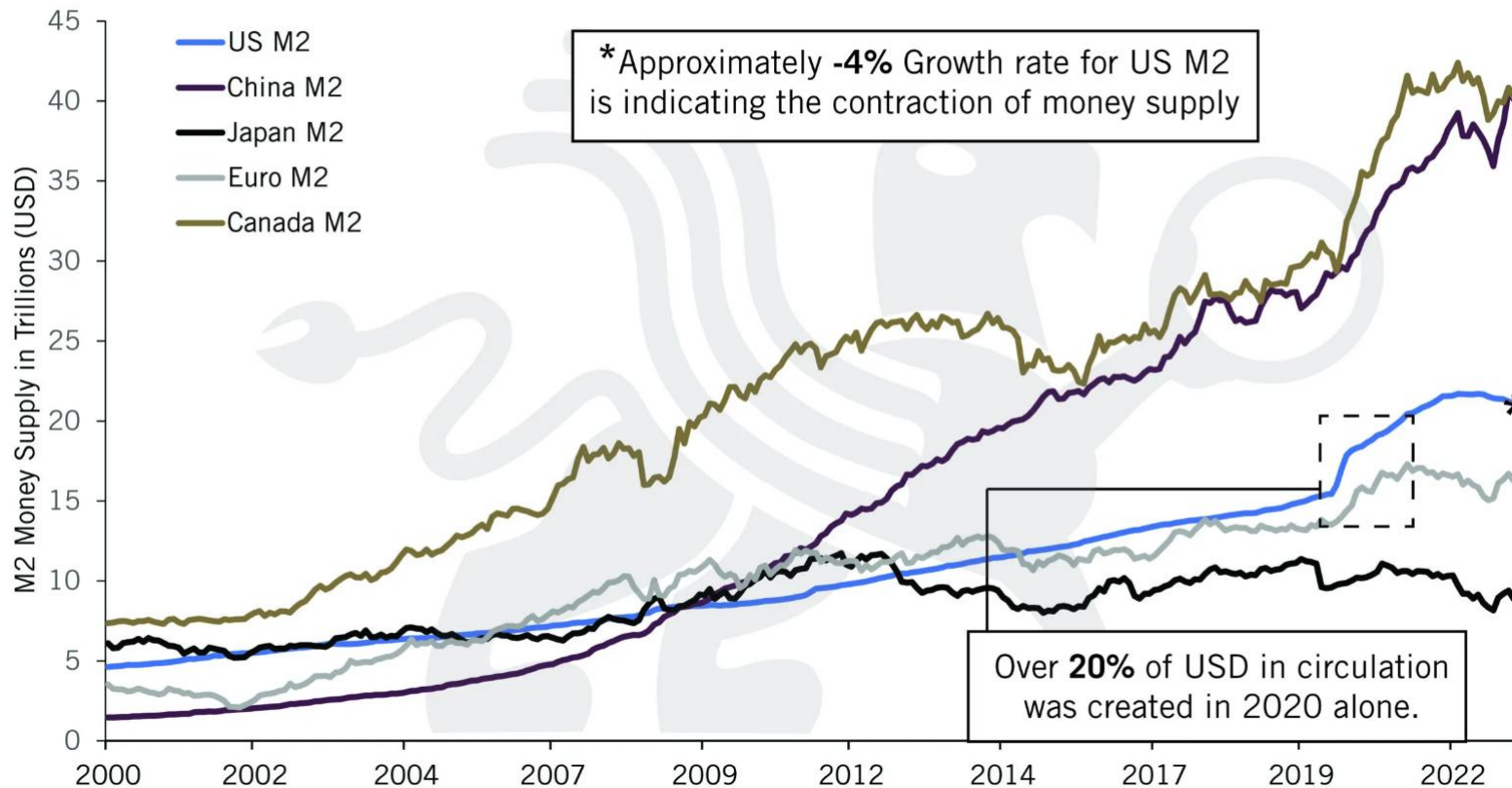
Money History



Source: Tencent

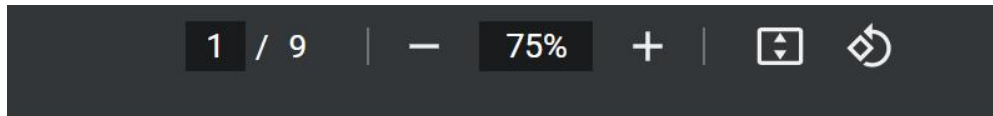
Base on Credit/Debit Cards

M2 Money Supply : Global Comparison



Source: [Ycharts](#); [fred.stlouisfed.org](#); [BOJ](#); [Quandl](#); [BMG Group Inc.](#)

The Beginning of the Beginning



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.

IEA

Denationalisation of Money

F. A. HAYEK



HOBART PAPER SPECIAL

£1.80

70

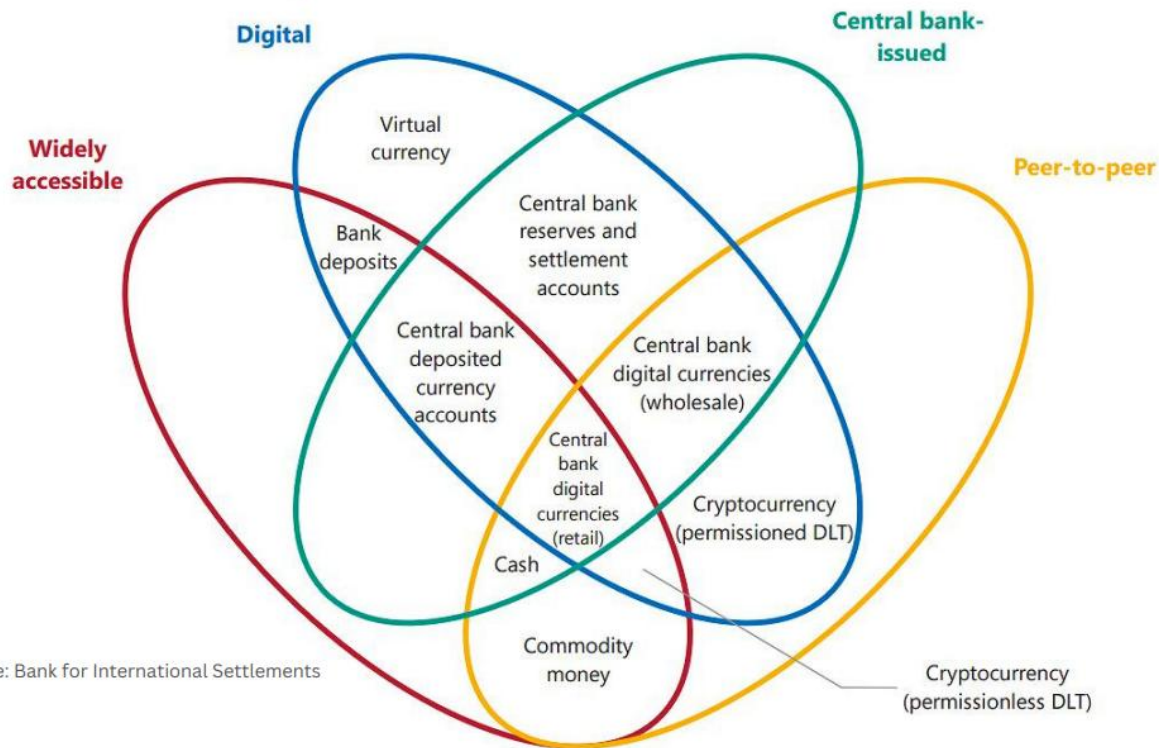


Friedrich Hayek 哈耶克

Hundred flowers bloom at the same time

百花齐放

#BIS #MoneyFlower



Source: Bank for International Settlements (BIS)

Web1



Read

Decentralization
of location

Web2



Read, Write

Decentralization of
media and content

Web3



Read, Write, Own

Decentralization of
finance, governance
and ownership

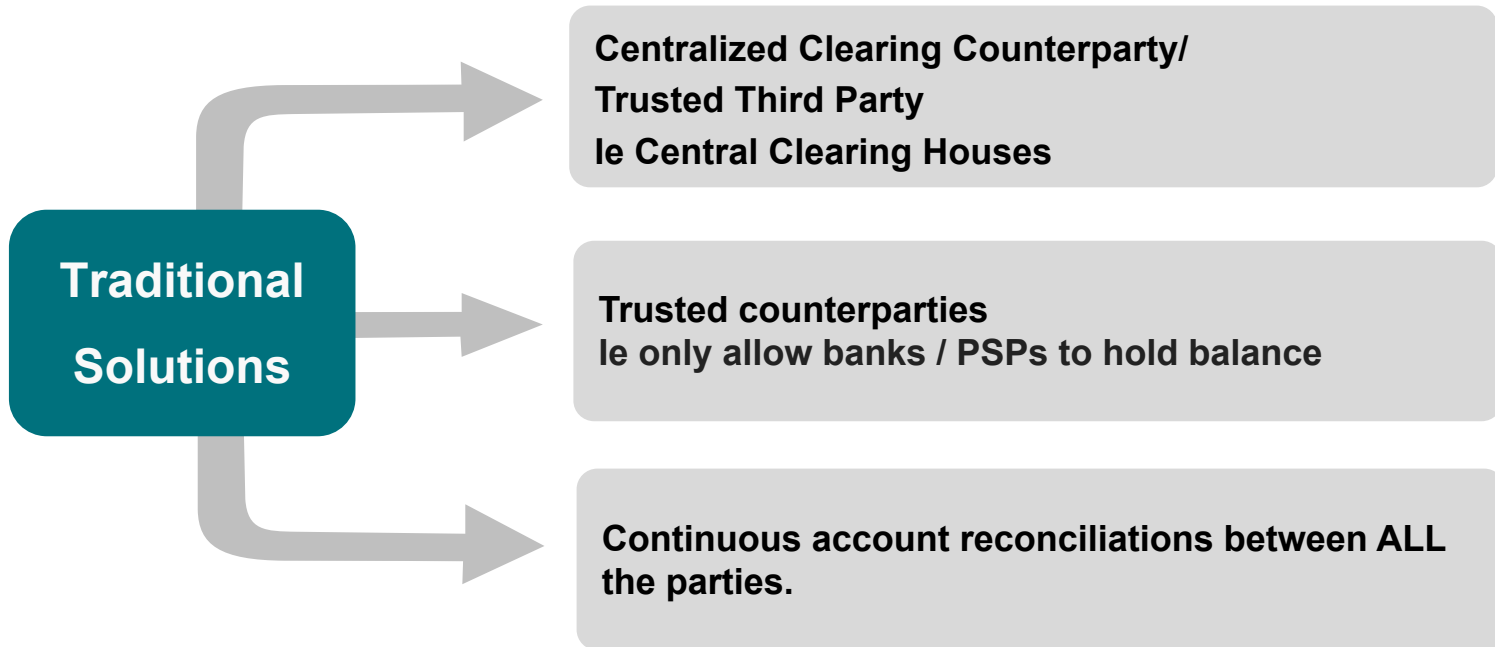
Right time, right place, right people

Why clearing & settlement?

Double Spending

Double-spending is a problem that arises when transacting digital currency that involves the same tender being spent multiple times. Multiple transactions sharing the same input broadcasted on the network can be problematic and is a flaw unique to digital currencies. The primary reason for double-spending is that digital currency can be very easily reproduced.

How to solve? In the old way



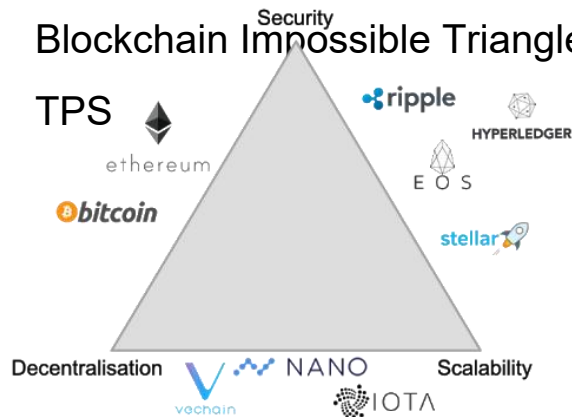
How blockchain solve “double spending”?

Payment == Settlement (支付即结算)

- Transaction is on the chain ie achieved swift GPI by default
- Distributed Ledger eg easy reconciliation
- Unified timestamp for all transactions

New Problems

- 51% Attack
- Forking
- Finney attack – wait for 6 confirmations
- Blockchain Impossible Triangle: Low



What is CBDC (“Central Bank Digital Currency”) ?

CBDCs are digital currencies issued by central banks. Their value is linked to the issuing country’s official currency.

Various types of use cases:

- Retail vs Wholesale
- Domestic vs Cross-border

A digital currency backed and governed by a central bank

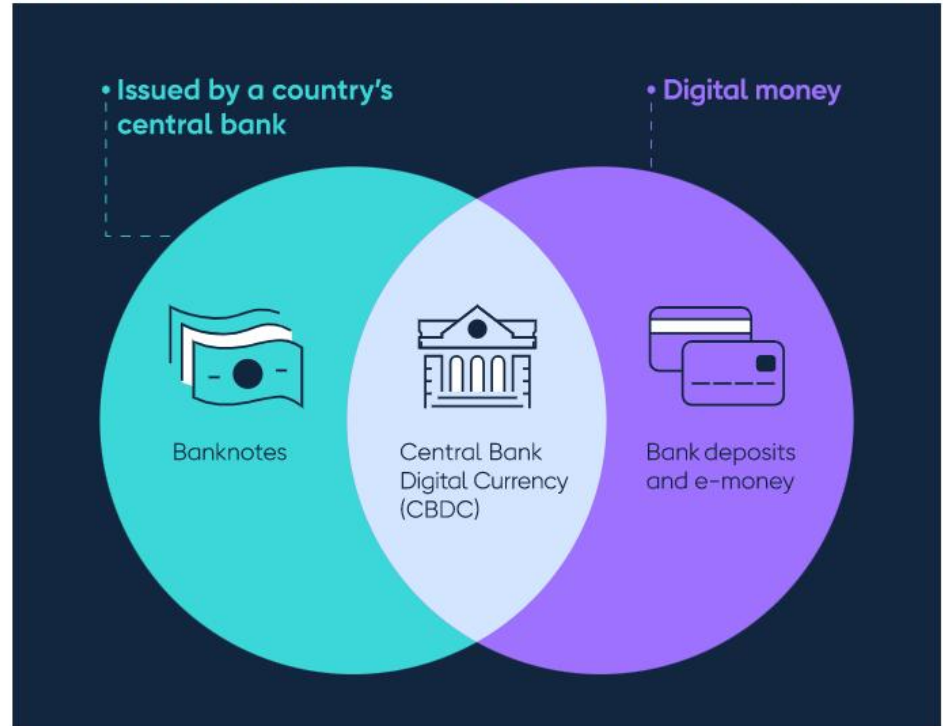


Universally accepted; can be used to make payments

More secure and less volatile than other digital currencies



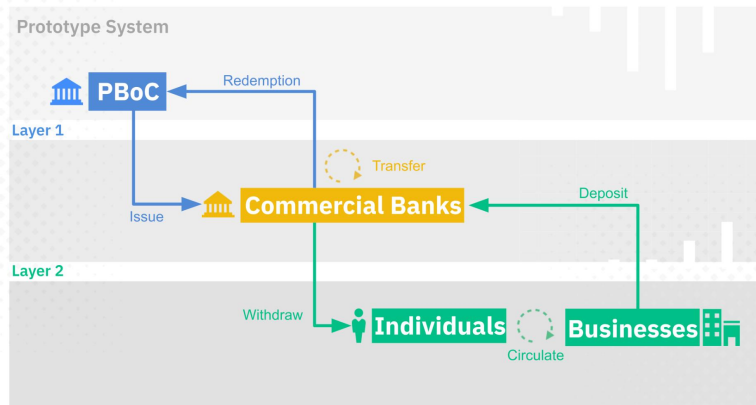
Central bank digital currency is a type of digital money



CBDC : E-CNY

Key Features:

- Centralised Management 中心化管理
- Two layers operation 双层运营
- Technology neutral 技术中性设计



数字人民币定位M0



What is stablecoin?

Types of Stablecoin

Fiat Backed



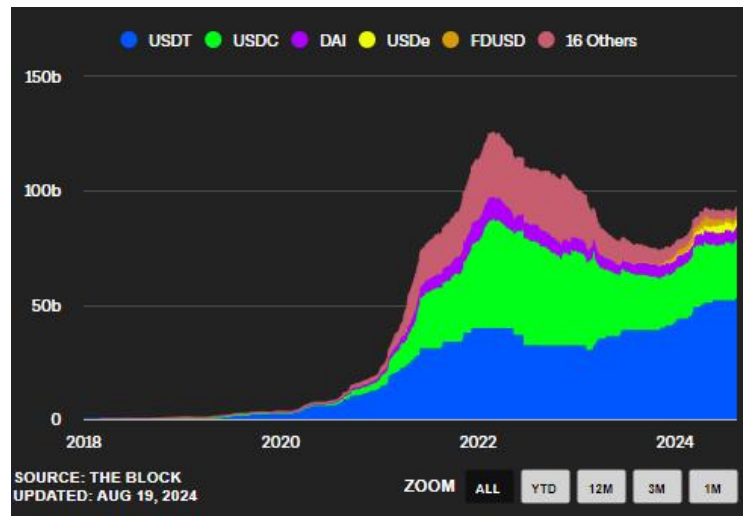
Commodity Backed



Crypto Backed



Algorithmic Backed



HKD: oldest stablecoin & CBDC, just not digital

The Hong Kong government has authorized three commercial banks to issue bank notes (except Ten-dollar polymer note) in Hong Kong through the Monetary Authority. The three banks are:

- HSBC
- Standard Chartered Bank
- Bank of China
- When the note-issuing bank issues banknotes, it must surrender US dollars to the Exchange Fund at the specified exchange rate in accordance with the linked exchange rate system, that is, 1 US dollar to 7.80 Hong Kong dollars;
- **When redeeming issued bank notes, the corresponding US dollars must also be withdrawn from the Exchange Fund at the same exchange rate.**
- Banknotes issued by Note Bank are printed in Hong Kong by Hong Kong Note Printing Limited (Hong Kong Note Printing).

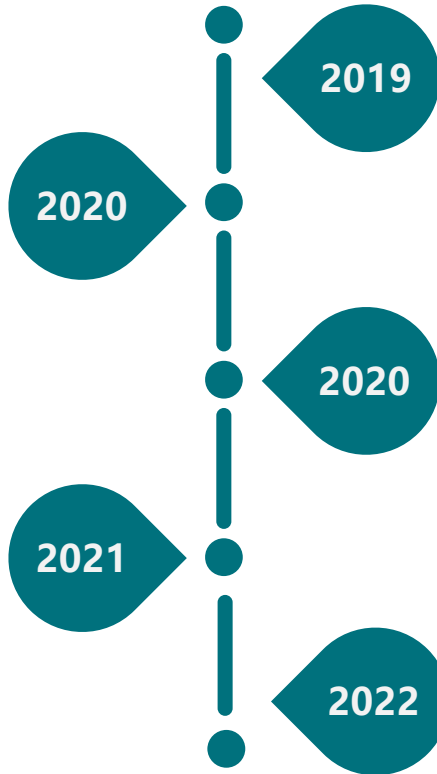


Facebook Libra (aka Diem)

Apr: adjustments to the Libra project, which will support multiple versions of digital currencies, that is, "stable coins" backed by a single currency.

Facebook's original plan was for Libra to be backed by a mix of currencies (the U.S. dollar, euro, Japanese yen, British pound and Singapore dollar) and government bonds.

End of 2021, Diem's founder David Marcus left Facebook.



2019

Jun: Facebook released a digital cryptocurrency called "Libra". Libra was originally planned to be officially launched in 2020, and is expected to provide digital transactions and payment services to billions of potential users.

2020

Dec: rebrands "Libra" to "Diem". The name change was made to emphasize the independence of the project, leading to regulatory approval.

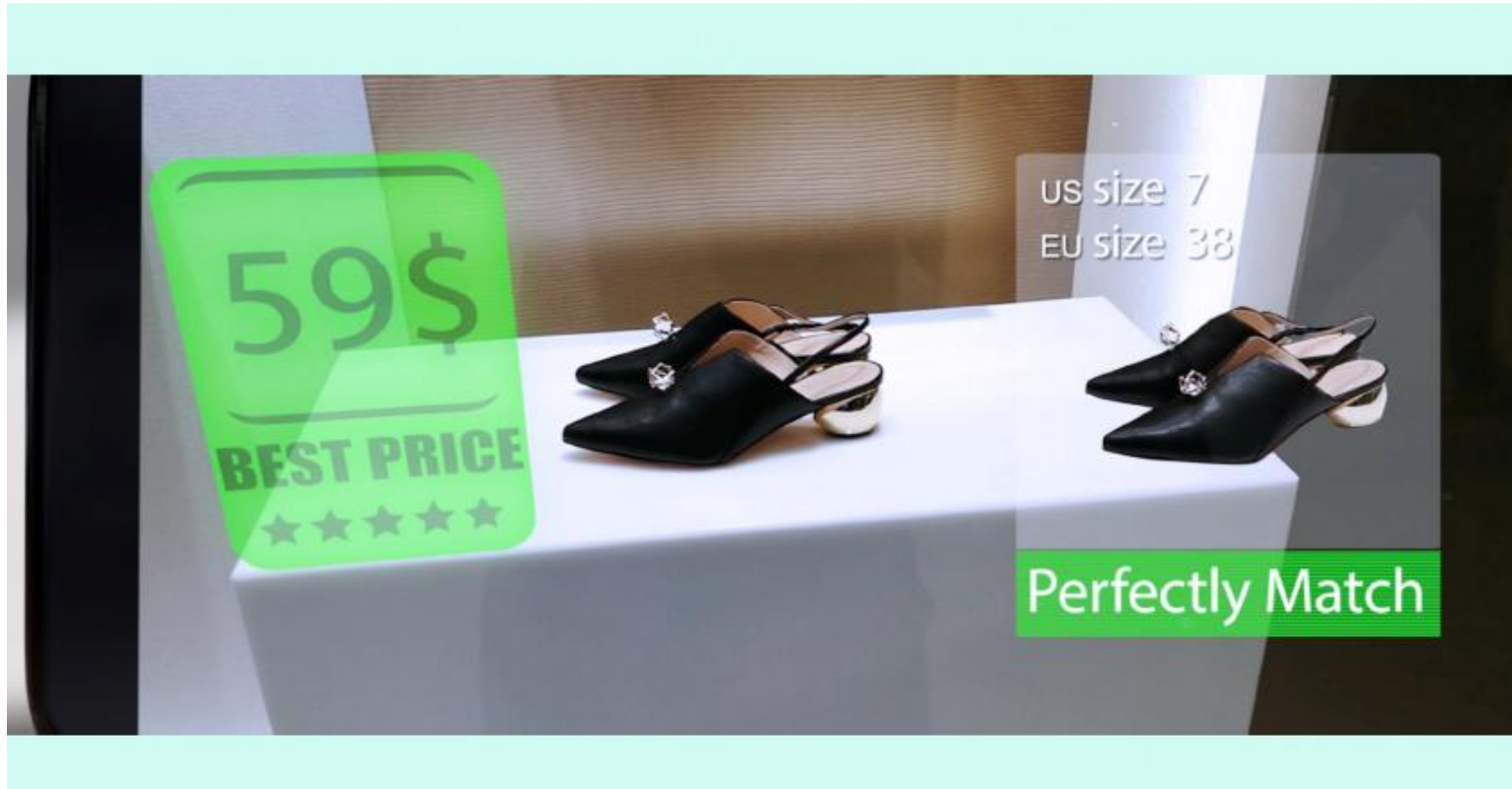
2020

2021

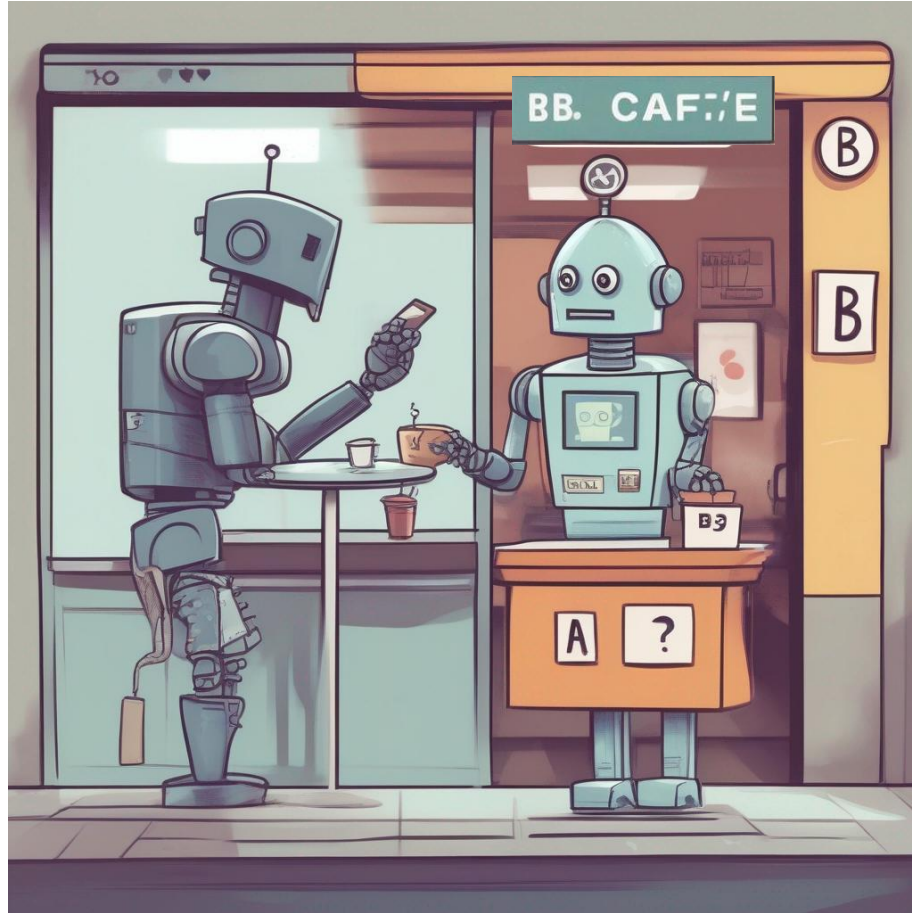
Jan: Facebook decided to drop the "Diem" project. The buyer for the project is Silvergate Bank, a California-based chartered bank, for \$200 million.

2022

Shopping Experience Reimagine



Commerce in the Future: Program Entity





“The future is already here, it’s just not evenly distributed.”

William Gibson

Thank you !

Q&A