Digital Real Initiative

Current state

March 2023

BANCO CENTRAL
DO BRASIL

Innovation in the financial system

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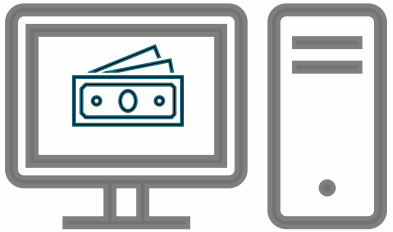
Democratization of financial services



e-money

- Broke vertical arrangements
- Fostered fintechs

pix powered by Banco Central

Pix

- Instant payments
- Digital relation

Open finance

- Breaks silos
- Fosters fintechs

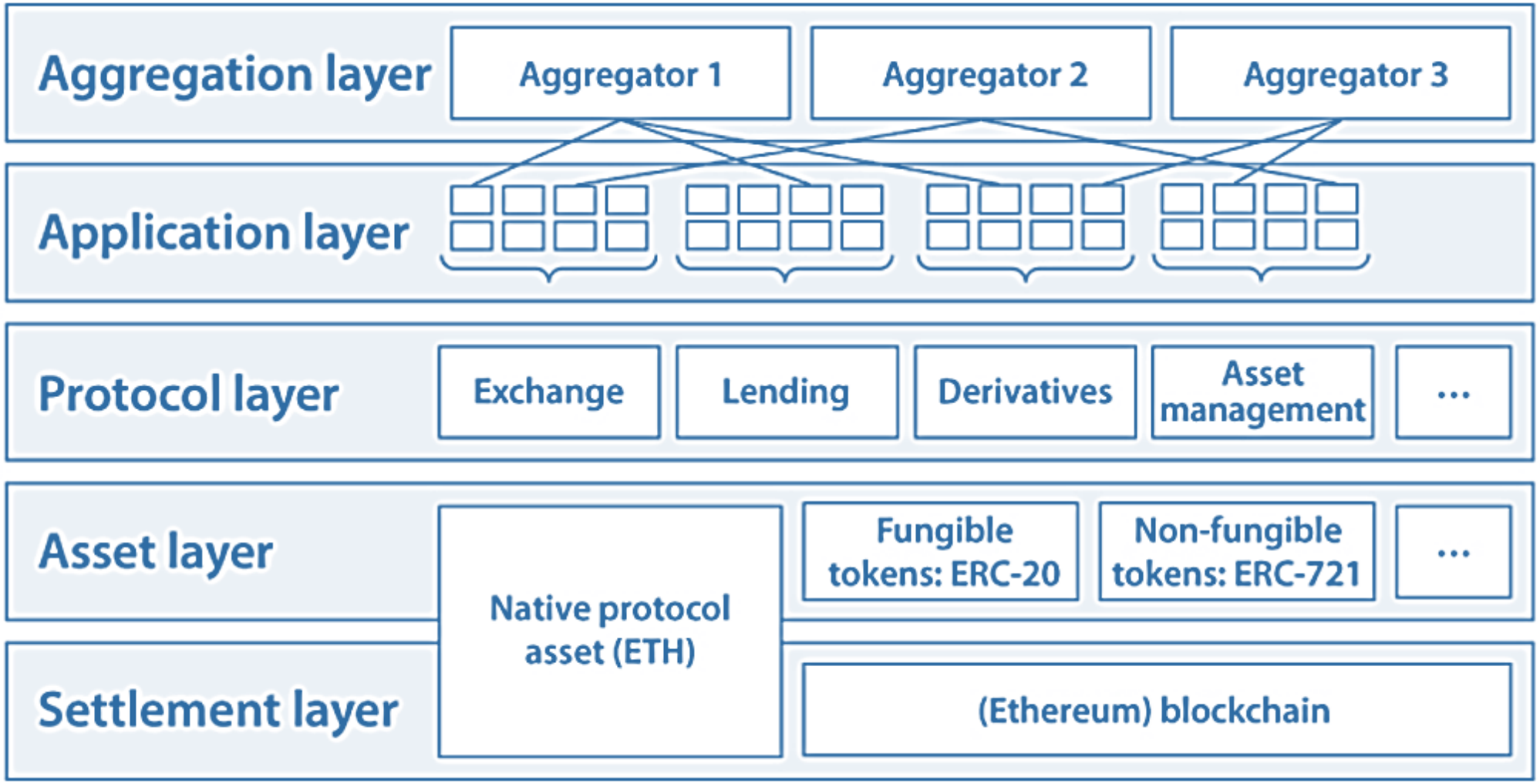
Real digital

- Programmability
- Efficiency in contracts

Payment services

Financial services

DeFi markets: a source of inspiration



Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets - by Fabian Schär

A CBDC for Brazil – The Digital Real

An instrument for BCB to fulfill its mission in a digital economy

Guidelines:

- Innovative models development
- Extension of the Brazilian real
- Retail financial services
- Guarantee of legal certainty
- Data privacy and security
- Preventing and combating money laundering
- Interoperability and integration
- High cyber resilience

- Retail
  - Take financial services based on the digital currencies' technology to the hand of the final user
  - Main role played by private authorized coins – tokenized real (deposits)
- Platform
  - Permissioned
  - Multiasset (RLN):
    - Digital and tokenized Reais, authorized assets

Forms of the Brazilian Real

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New expressions

Phisical media – *registers deposit and widraw*

- **Real Físico –** moedas e notas (dinheiro), passivo do BC.

Electronic media – *registers balances (tipicaly centralized)*

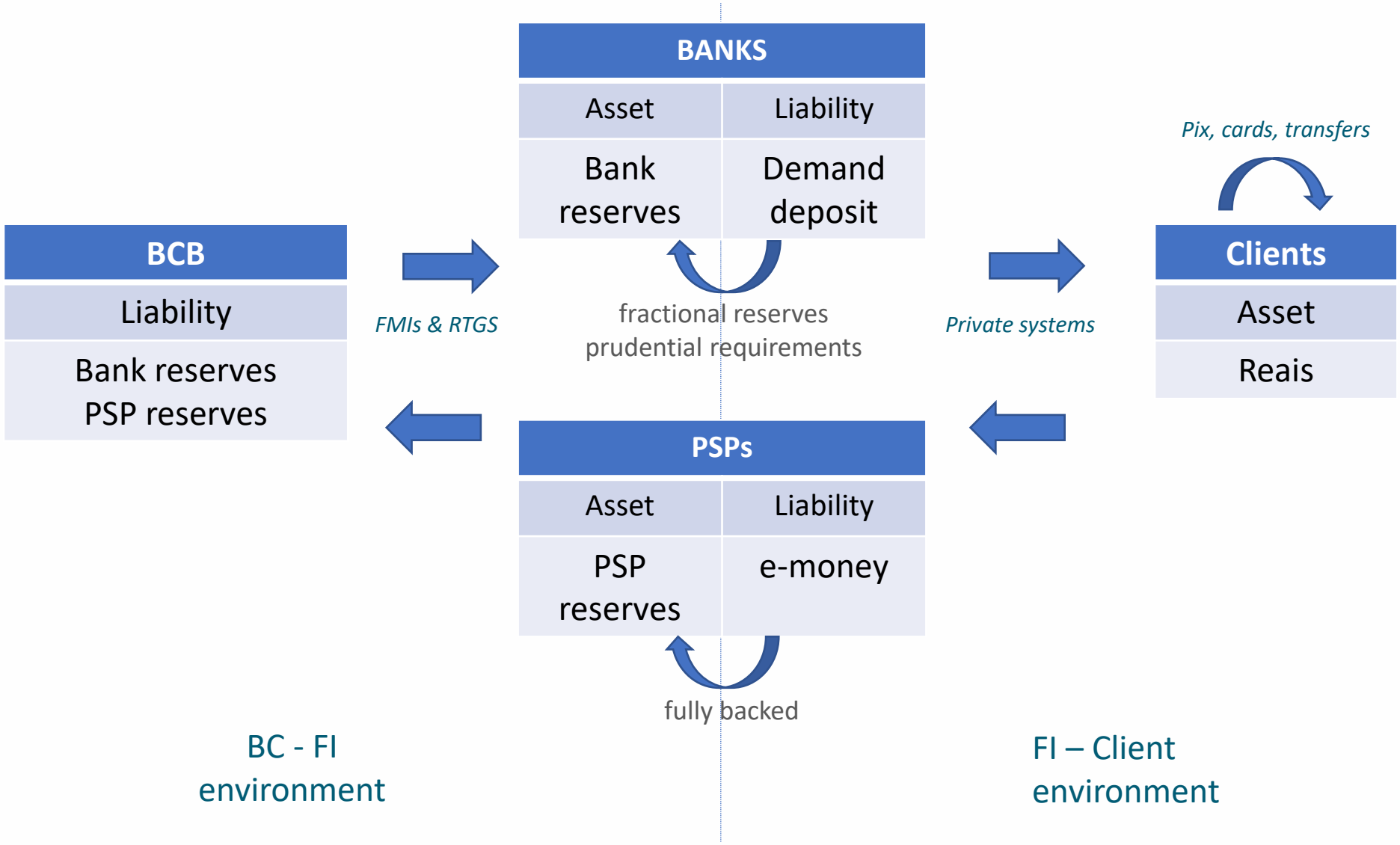
- **Central bank money –** used as reserve by authorized institutions, a cb liability.
- **Commercial bank money –** issued by FI and used by final clients, liability of the issuer.

Digital media – *registers tokens ownership (potencial descentralized)*

- **Digital Real –** to be used as reserve by authorized institutions, a cb liability.
- **Tokenized Real –** issued by FI and used by final clients, liability of the issuer.

Current sources of liquidity

Off-chain environment



Tokenization of deposits

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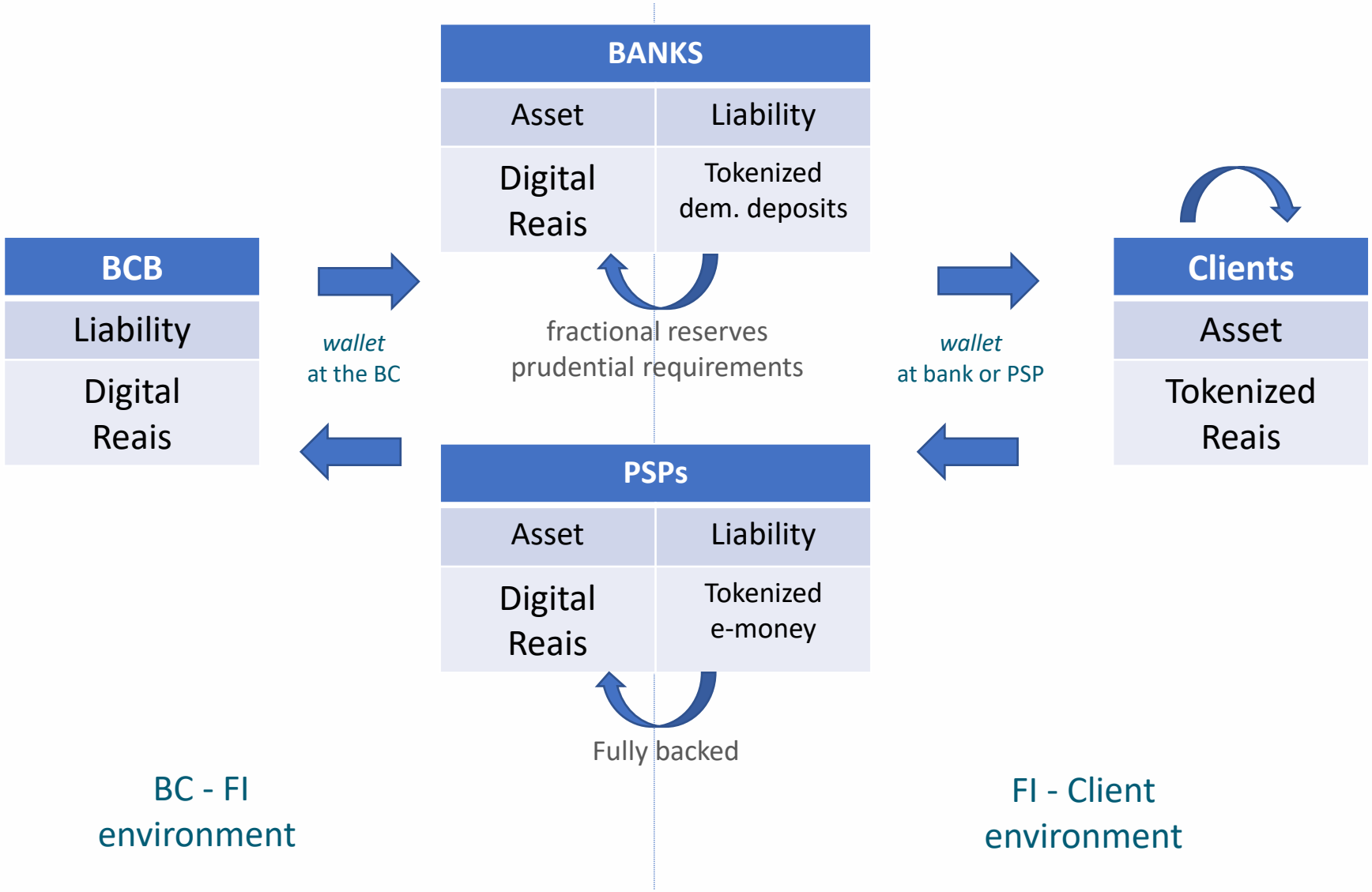
On-chain environment



Real Digital: New FMI

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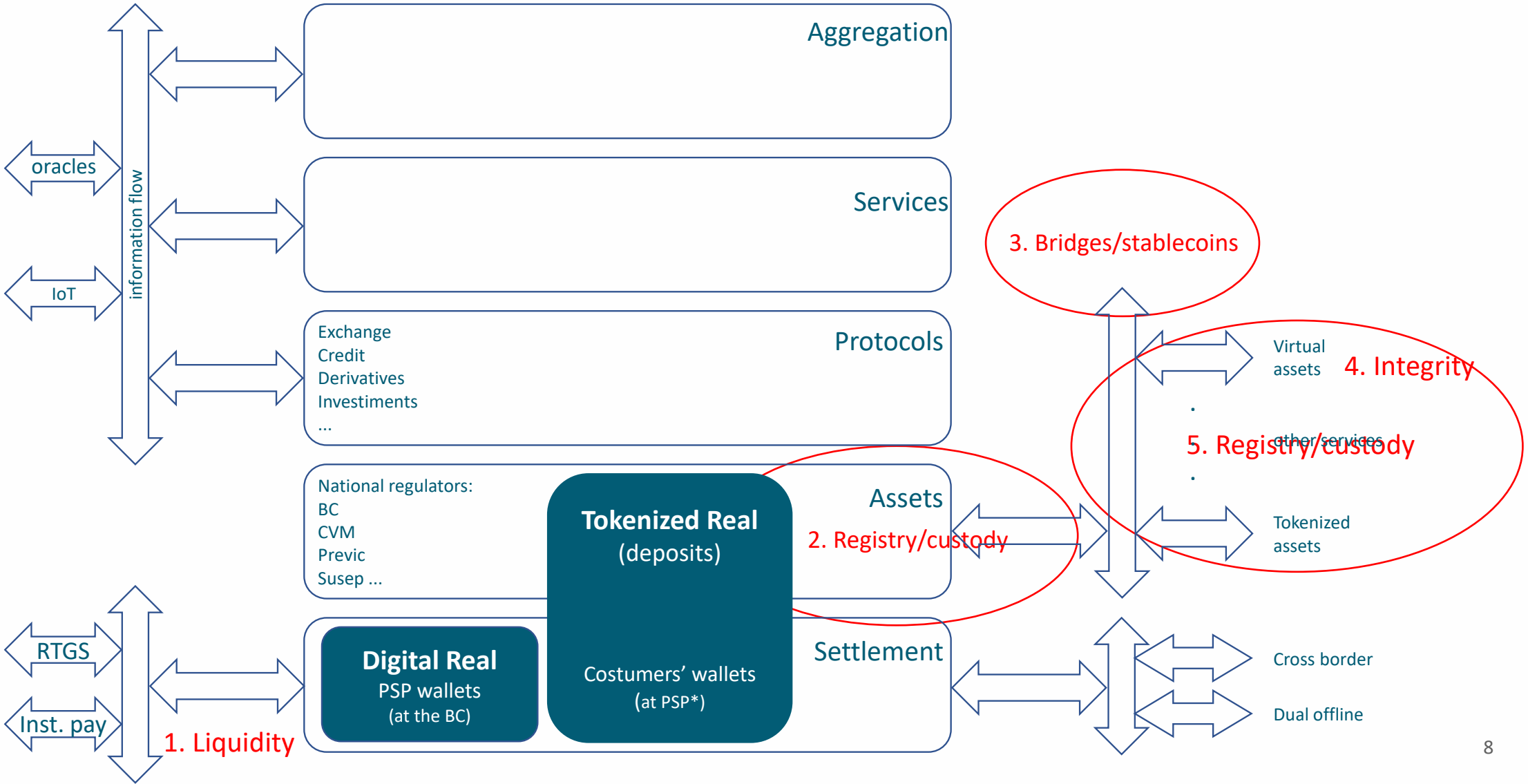
New smart settlement platform



LIFT Challenge

testing is a needed

Lift Challenge Real Digital

Wide range of use cases and participant's background

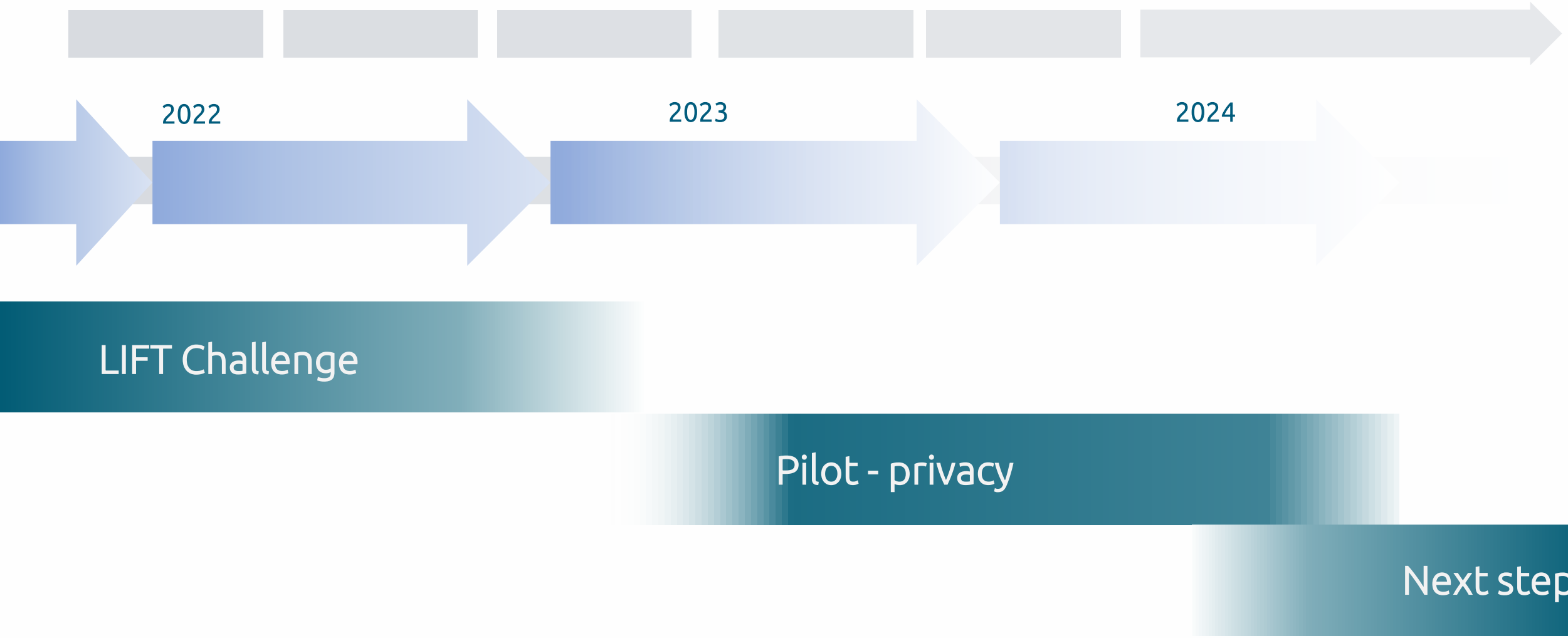
Selected proponents	Use Cases
Aave	DeFi – Liquidity pool
Banco Santander Brasil	DvP – real assets
Febraban	DvP – tokenized securities
Giesecke + Devrient	Dual offline
Itaú Unibanco, B3 e R3	PvP – Brasil and Colombia
Mercado Bitcoin, Bitrust e CPqD *	DvP – virtual assets (crypto)
Tecban e Capitual	IoT – smart lockers / e-commerce logistics
VERT, Digital Assets e Oliver Weyman	Programable money – funding for rural activity
Visa do Brasil, ConsenSys e Microsoft	DeFi – funding for SMEs

Lift Challenge Real Digital

Initial lessons

- Aave (EVM) – Liquidity pool Aave, focused on exchanging fungible tokens
- Santander (Corda & EVM) – Vehicles and real estate, regulatory shortcomes identified
- Febraban (Corda) – Tokenized bonds, conservative approach, fundamental step
- G+D – Dual offline, quintessential retail CBDC application
- Itaú (Corda) – PvP, possibilities of innovation and cooperation
- MB (Stellar) – Assets in public space
- TecBan (EVM) – Smart contract controlled IoT, oracles and web2 vs web3
- Vert (Daml) – Marketplace for rural projects
- Visa (EVM) – trading tokenized crop, micro-FDI

Next steps



Thanks

BC#

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