

The background image shows a blurred scene of people in a workshop or meeting. In the foreground, a person's hand is pointing at a tablet screen. Another person is holding a smartphone displaying a QR code. A tablet is also visible on a stand. The overall atmosphere is professional and tech-oriented.

Banco Central do Brasil's Innovation Agenda

Valor Capital's Crypto Workshop

Governor of Banco Central do Brasil
Roberto Campos Neto

June 2nd, 2023





What is happening in the digital world

- People look for a digital representation of value
- Assets are becoming encrypted
- Distributed ledgers allow assets to be verifiable and transferable, with divisibility

So, what is the real debate?

- Are we moving towards a tokenized economy?
- Tokenizing assets for negotiation is the main transformation
- To extract value from an asset in its digital form
 - Art, pictures, properties, ideas and even money

Metaverse

W6C9A6L26

Even virtual reality is being monetized



If the tokenization thesis holds true, then the 21st Century may see the creation of regulated, global, token-based, multi-asset networks*

* The Regulated Internet of Value, Citi's Digital Policy, Strategy and Advisory, Jun/21.

It's only the beginning!



Technology Agenda

Complete digitalization of financial intermediation

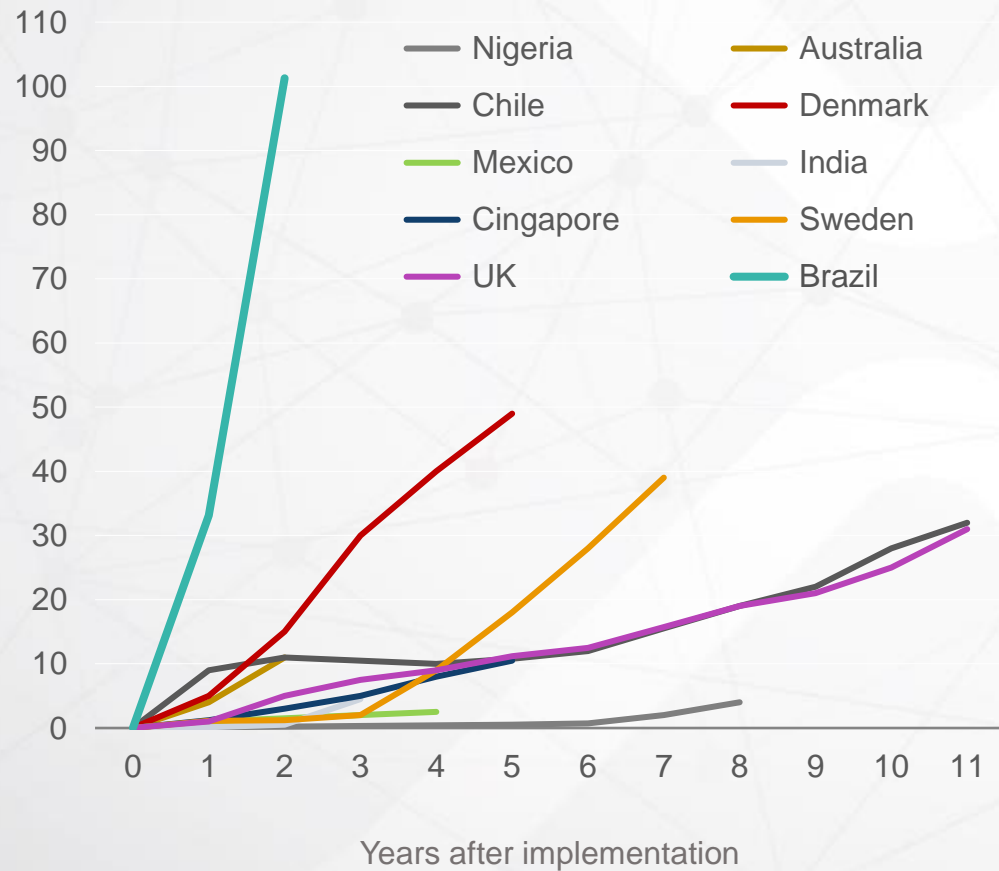
- The 4 fundamental blocks: **Pix, Open Finance, currency internationalization** and **Digital Real**

Goals:

- Greater inclusion
- Lower cost of intermediation
- More competition, with reduced entry barriers
- Risk control efficiency
- Data monetization
- Complete tokenization of financial assets and contracts

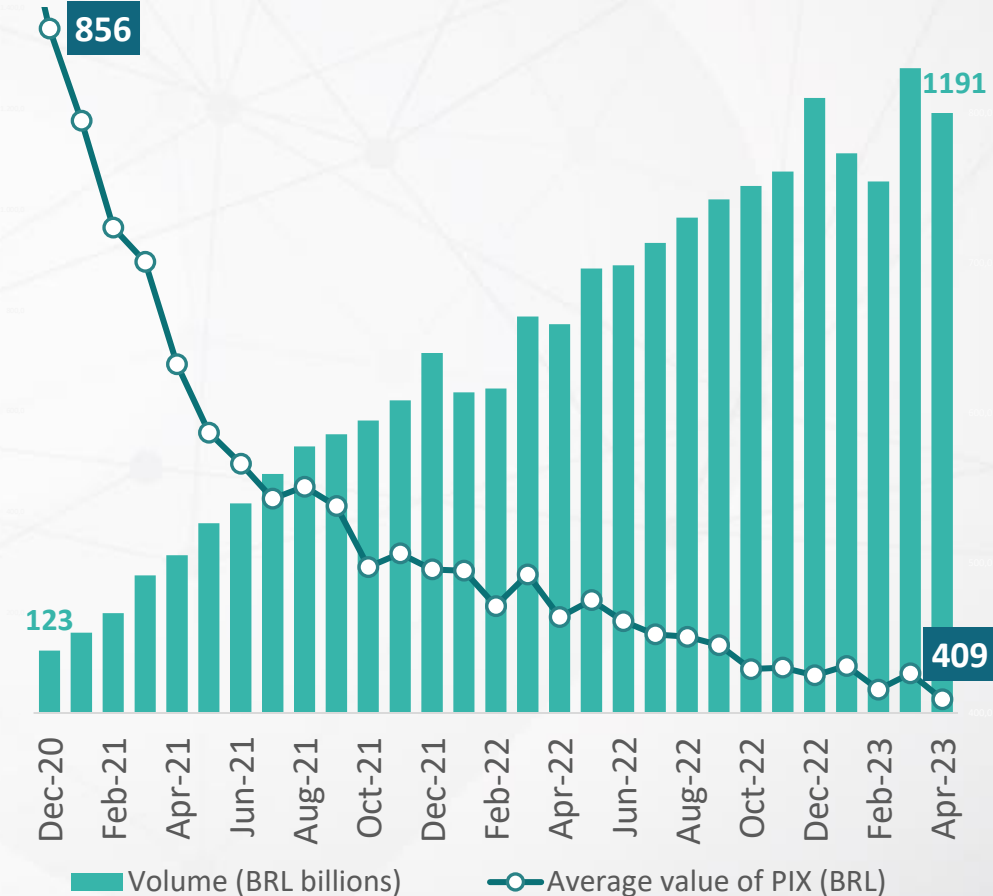
Pix popularity increases

Per capita transactions – by country



PIX registered keys
Total : 601,6 mi
Apr/2023

Pix transactions volume and average value



Pix – New frontiers

Evolution agenda



Pix charge enhancements

- Integration via standardized file;
- Centralized base to facilitate the management of charges.

Pix Automatico launch

- Similar to direct debit;
- End of bilateral agreement paradigm;
- New alternative for recurring payments.

Pix by PISP in Open Finance

- Studies for a more user-friendly journey;
- Simplicity with fewer “clicks”.

Buy Now Pay Later

- Market initiatives of BNPL using Pix;
- Integration with Open Finance

Pix International

- Technical cooperation event with more than 30 countries: Deep Dive into Pix.
- Bilateral meetings: Uruguay, Colombia, Ecuador and Peru.

- **Gradual implementation**

Goals:

- To promote competition, efficiency and data security.

Open Finance in figures:

- 13 API developed and 16 under development for the next months.
- More than 31 millions of consents to share data.
- Average higher than 800 millions API calls (data phase) per week.
- More than 24 billions API calls (data phase).
- More than 800 participating institutions (data phase and payments initiation phase).

Brazilian model is a world reference



“ Two years ago I'd have said the UK would definitely emerge as the global leader in this space. Now I'm looking closely at Australia, Brazil and Singapore. ”

Amit Mallick
Managing Director, Global Open Banking and APIs Lead,
Accenture

\$1.7bn raised by Brazilian fintechs in 2022

50+ markets analysed

400+ expert respondents

150+ secondary data points

“ Open Finance will be successful in Brazil, due to three factors: a very broad scope for data sharing, a local willingness to share data and high-quality of the regulation provided by the Central Bank. Standardisation was also key for success in both user experience and APIs. ”

Carlos Carneiro
Head of Open Finance Strategy, Itaú

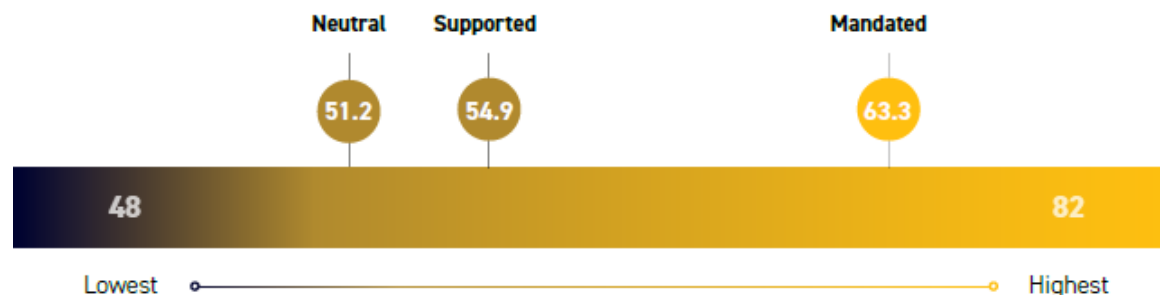


Image shows avg Consumer score of markets by Government Open Banking approach.

Valor | Finanças

Brasil deve passar Reino Unido e assumir a liderança mundial no 'open banking', diz estudo

Britânicos são considerados pioneiro e, até agora, mantêm a liderança global no que diz respeito à implementação do sistema

” Por Mariana Ribeiro, Valor — São Paulo
26/01/2023 12h25 - Atualizado



UK
0 - 5 million connections
5 years

Brazil
0 - 5 million connections
1 year

A CBDC for Brazil: The Digital Real



Opportunities

- Reduced transaction costs and friction for:
 - designing, distributing, negotiating and settling financial deals
- High degree of
 - standardization and functional interoperability, reuse and composability of financial services
 - auditability, traceability and transparency
 - accountability: software-based governance
- Financial inclusion
 - automatic tools available to everyone, with transparency and non-discriminatory execution

Challenges

- Scalability and settlement fees
 - blockchain platforms are limiting
- Limited interoperability
 - blockchains \Leftrightarrow traditional financial services
- Lack of maturity
 - Governance: potential for facilitating the crime of money laundering
 - Technology: operational risks, poor implementation choices, failed software execution and interdependencies

The Digital Real project enters a new phase

Pilot Project

Purposes

- Digital Real platform pilot development
- Consultation channel with society on its development

Guidelines

1. Multi-Asset DLT – Hyperledger Besu
2. Simulation of retail transactions
3. Fractionalization of assets
4. Access to services through financial and payment institution



Pilot Project – Next Steps



**Development and
tests**

Other protocols

Mar ○ — **Launch of Pilot Project**
Apr ○ — **Workshop**
May ○ — **Onboarding of participants**

Dec/23 ○ — **Digital Real & Tokenized Real**

Feb/24 ○ — **Government bonds**







Mar ○ — **Evaluation**

Phases of the integration process




1. Pix and Open Finance
 - Payment initiator
2. Pix and other products
 - Ex.: Credit, etc.
3. Pix and currency internationalization
4. Pix and Digital Real (CBDC)
 - Digital wallet and non-digital wallet
5. Digital Real (CBDC) and Open Finance
6. Financial aggregator
 - Competition by channel
7. Build of a digital wallet

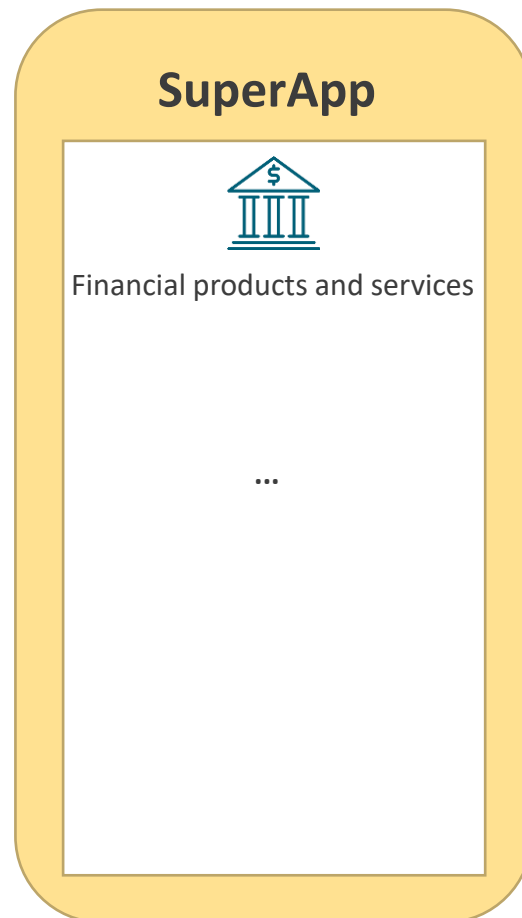
Integrated solutions - “Super App”

Traditional products and financial services

-  Credit
-  Payments
-  Investments
-  Insurances
-  Private pension
-  Exchange
- ...







New solutions

-  Data aggregation
-  Payment initiation
-  Recurrence
- ...






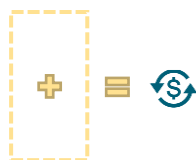
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**Recurring
payments**






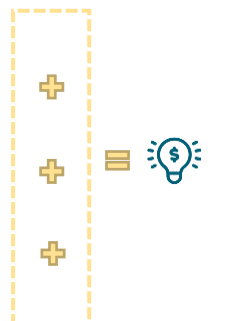
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**Intelligent
investments**






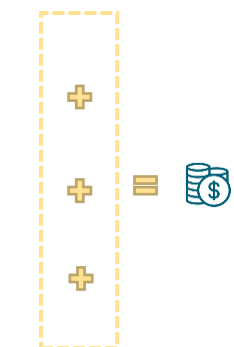
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**Investment
redemption for
payments**






Integrated solutions - “Super App”

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New solutions







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**Flexible cash
management for
companies**






Integrated solutions - “Super App”

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New solutions







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Payment of
foreign suppliers






Integrated solutions - “Super App”

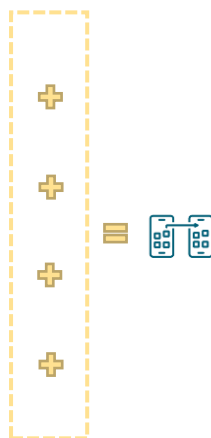
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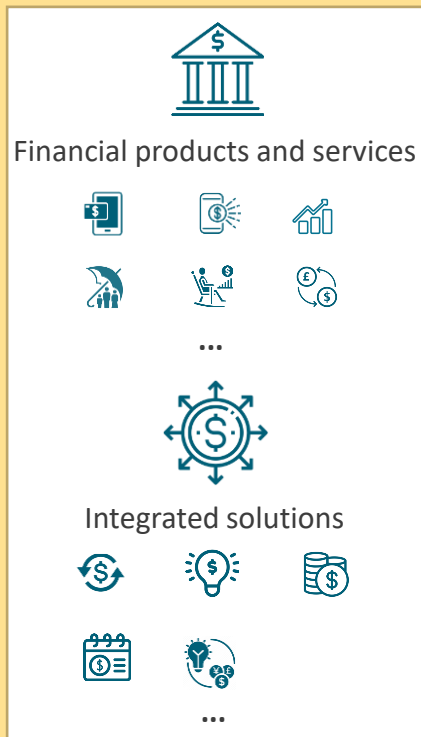
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Credit portability



SuperApp



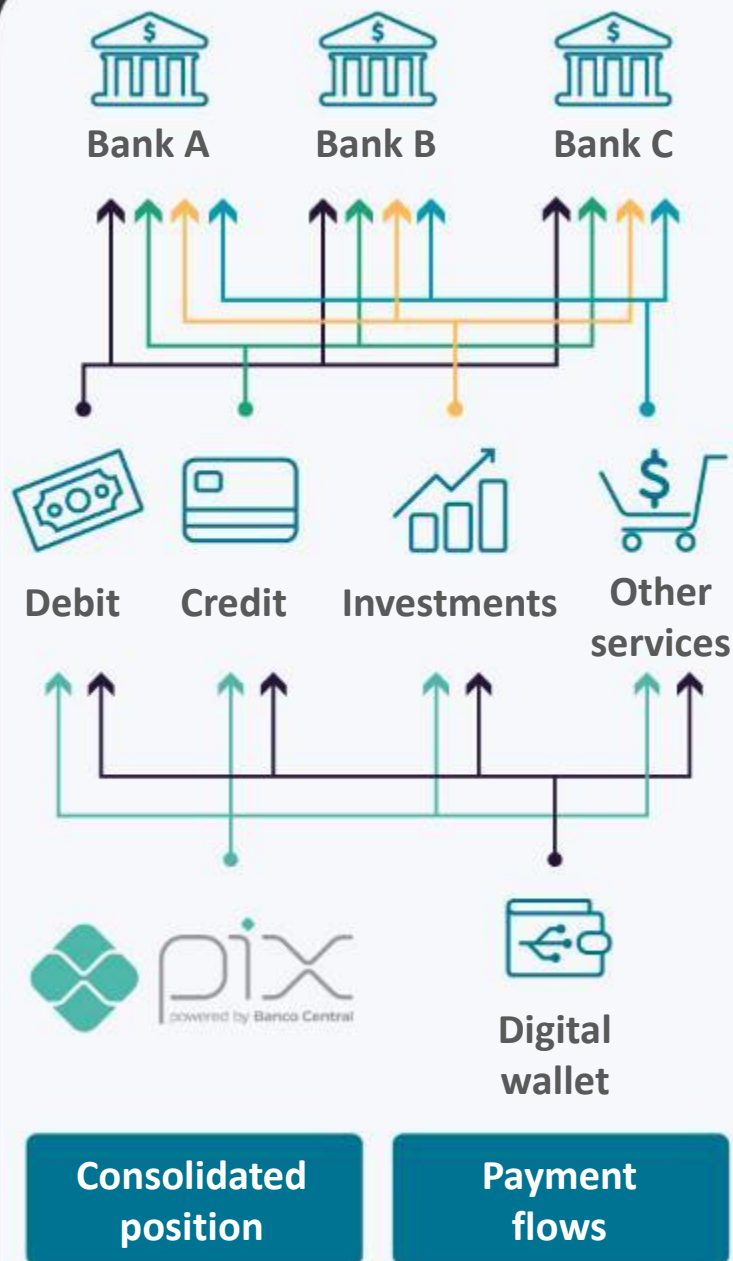
Consumers



Super App: an example

Offline ———

Online —



➤ Data wallet





BANCO CENTRAL DO BRASIL

Thank you!

Roberto Campos Neto
Governor of Banco Central do Brasil
June 2nd, 2023

