



BANCO CENTRAL  
DEL URUGUAY



*e-Peso*

# Central Bank Digital Currency

## A central banker perspective

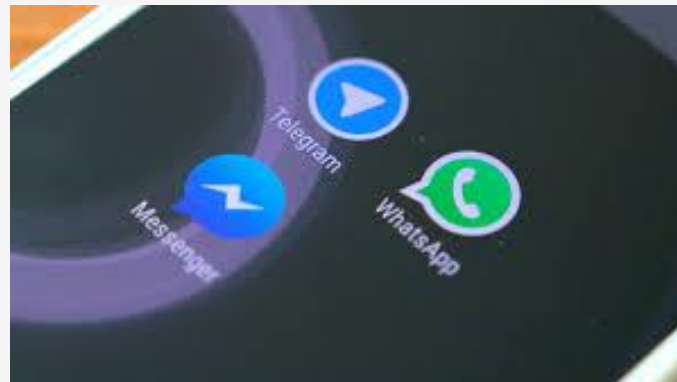
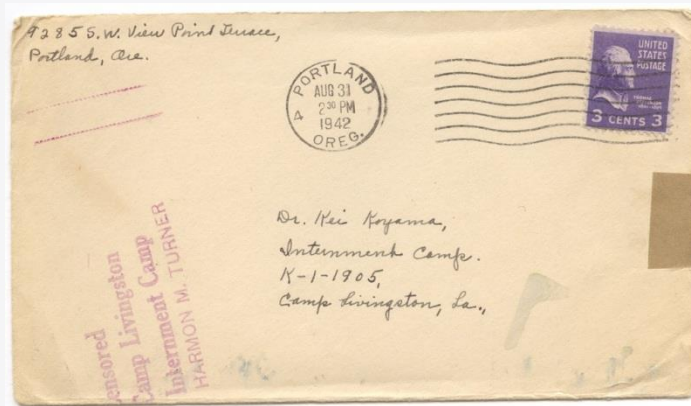
Jorge Ponce

“The changing nature and geography of  
global finance”

Cusco, Peru, 18-19 July 2019

(The views in this presentation are those of the author and not of the Banco Central del Uruguay)

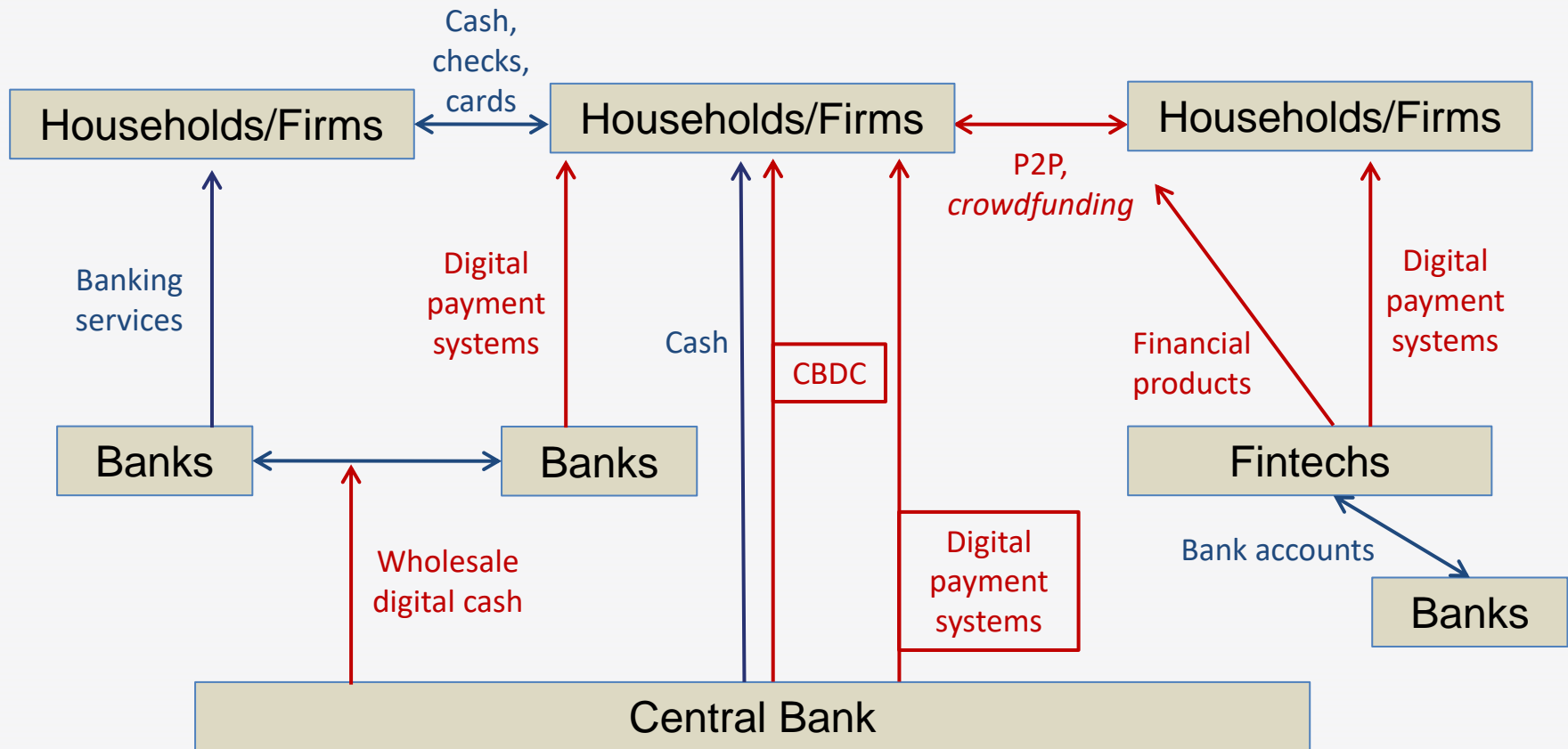
# CBDC: Is this the future?



# Challenges and opportunities

- Maybe physical cash will not be the future
  - cashless economies
  - decentralized payment and settlement systems
- How to secure price and financial stability (even a safe payment system) without cash?
- New technologies would imply efficiency gains
  - cost of cash
  - financial inclusion
  - security in payments
- Need to balance efficiency gains in normal times against potential technological vulnerabilities and loss of confidence in stress times

# Central banking in a new technological era



Blue: traditional financial channels

Red: new, digital channels

# What has Banco Central del Uruguay done?

- Issue, put in circulation and test in the real world a Central Bank Digital Currency (CBDC) called e-Peso
- e-Peso is the Uruguayan Peso in digital
  - legal tender
  - security



# A pilot plan for CBDC

- Objectives:
  - test a digital currency issued by the Central Bank
  - identify relevant issues for further analysis
  - keep risks under strict control
- Preliminary assessment:
  - legal framework is sufficient
  - cyber-security and related risks are under control
  - business continuity



# The pilot plan



**6 months**  
**Nov. 17 to Apr. 18**  
**(e-Peso bills are being  
destroyed now)**



**Limited bill  
issuance**  
**(20 million)**

**antel**

**10.000 mobile phone  
users**

**Limited**

**\$30000 per wallet**  
**(aprox. 1000 USD)**  
**\$200000 for registered  
business**



**Payment transactions**  
**in registered stores  
and business**



**Transfers P2P among  
registered users**

# Participants



**Issues digital bills**

**antel**

**Provides telecom network**

**RGC**

**GSMT (Global Solutions for Money Technologies)**

**IBM**

**Storage, management,  
control of circulation and call  
center**



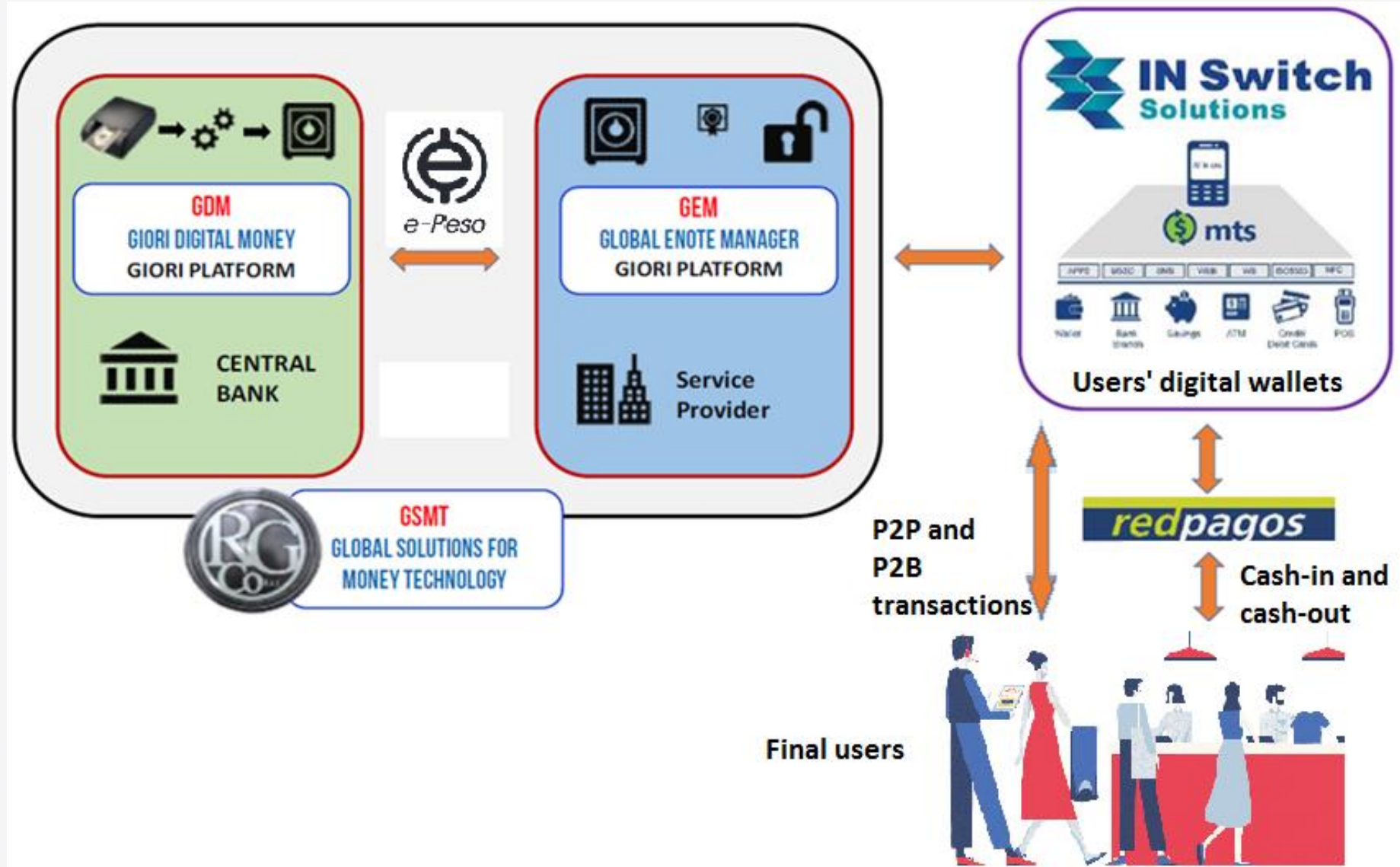
**Management of users,  
transfers and transactions**

***redpagos***

***Cash-In and  
Cash-Out***



# Description of the system



# Characteristics of the system

- Instantaneous settlement
- Does not require internet connection (just a mobile phone)
- Anonymous but traceable
  - users' wallets and encrypted Global E-note Manager (GEM)
- Security improved
  - e-Pesos are secured at GEM even if users lose their phones or password of digital wallet
  - Unique, traceable bills prevent double-spending and falsification
- Unique bills would difficult exchangeability
  - but GEM makes change automatically

# Experience and preliminary evaluation

- Very positive experience
- Develops according to expectations
- No technical incidents
  
- Mostly P2P transactions
- Increasing number of stores and business
- Banks interested in entering
  
- Potential prolific field for further innovation by banks and *fintechs*
- Potential to promote
  - financial inclusion
  - security, transparency and efficiency in payment systems

# Future steps

- Further steps are under consideration
- Evaluation of potential impacts
- Assessment of other technologies
- Analysis to inform decisions regarding design and parameterization



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# Thank you!