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## Introduction: Digital Disruptions' Speakers



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We are a US-based strategy and design innovation consultancy which focuses exclusively on the digital financial services sector, where our services extend from concept to launch.

**STRATEGY** 



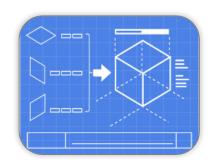
**DESIGN** 



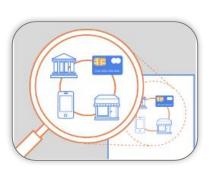
#### **BUILD & LAUNCH**

## PAYMENTS RESEARCH AND INNOVATION TRAINING

















































## Our discussion today

#### **Initiatives**





Technology

Business Model User Experience





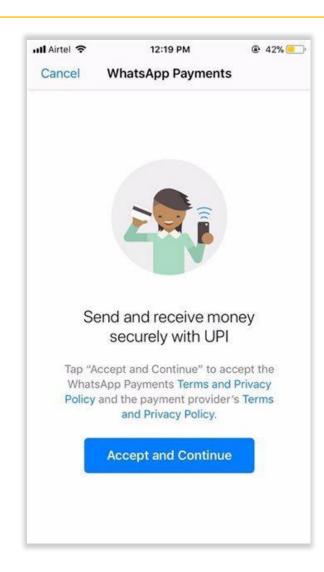


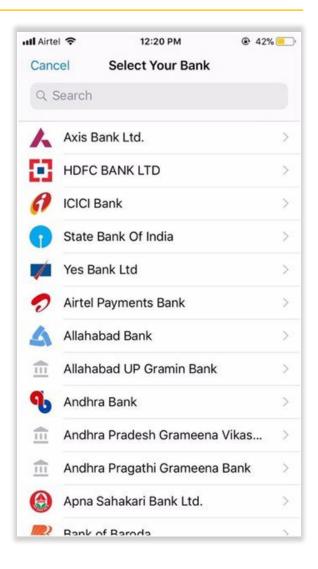


Leveraging its 400 million WhatsApp users, Facebook's initial launch of WhatsApp Pay was in India – but it has yet to resolve its regulatory issues.

- Built to be a P2P payment feature based on the country's Unified Payments Interface (UPI) infrastructure, and includes more than 150 banks' participation.
- Beta version launched in 2018 with 1M users

   quite low compared to current figures:
   Google (75M monthly average users),
   Walmart's PhonePe (60M MAUs), and
   Softbank-backed PayTm (30M).\*
- Currently stuck in a regulatory maze that has prevented it from expanding, mainly concerns of data storage (outside of India) and data sharing with parent company Facebook.





Source: TechCrunch, June 2020

Facebook chose Brazil, the second-largest market for WhatsApp with 120 million users, to launch a second iteration of payments via WhatsApp – both for P2P transfers as well as P2M payments targeting small businesses.





June 15 June 23

Because Facebook is not a regulated financial services company, WhatsApp Pay in Brazil had been designed to operate through Visa and Mastercard's licenses with the Central Bank. The suspension, therefore, is not directed to WhatsApp but to Visa and Mastercard.



The Central Bank's decision was made to "preserve an adequate competitive environment" in the mobile payments space and ensure "functioning of a payment system that's interoperable, fast, secure, transparent, open and cheap."



Roberto Campos Neto, President of Brazil's Central Bank

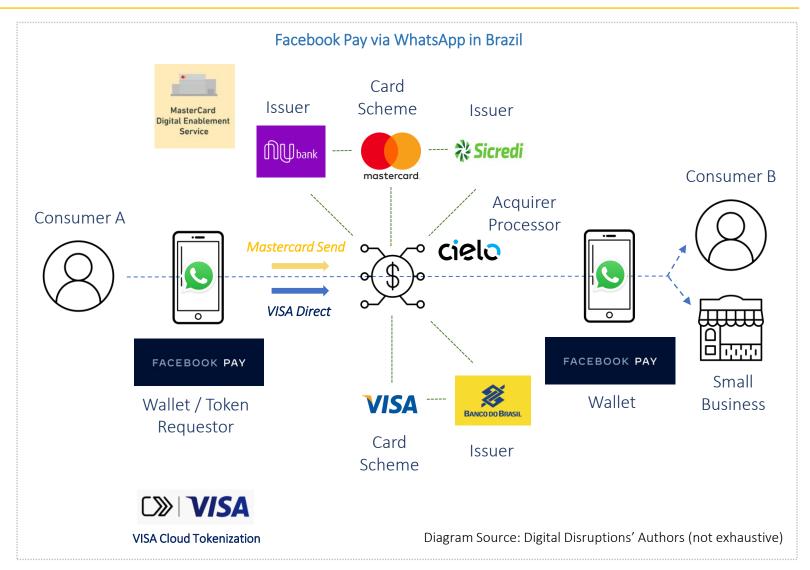
Image source: Agência Brasil

- June 2020

## Technology



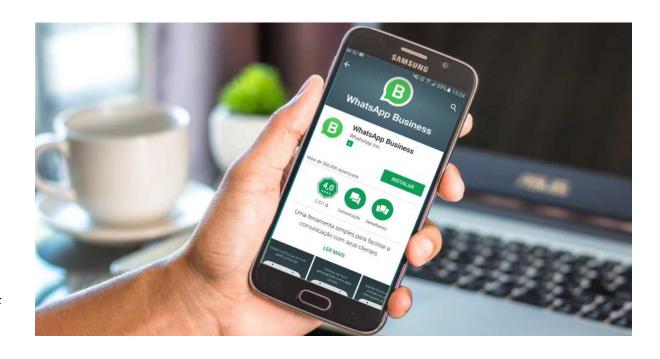
- Payments will be done with debit or credit cards issued by Banco do Brasil (working with Visa), Nubank, or Sicredi (working with Mastercard).
- Uses push payments technology (Visa Direct and Mastercard Send) and tokenization initiatives by card networks (Visa Cloud Tokenization and Mastercard Digital Enablement Service)
- Facebook Pay will request payment tokens, which will be processed by Cielo.
- Cielo will capture, transmit and settle the credit or debit card transactions.
- No information has been provided about data ownership.







- For consumers, making payments to businesses or transfers to each other will be free.
- Merchants will need to pay a 3,99% fee per transaction ("MDR"). This is higher than most competing options, which varies from 1.99% (for debit) to 3.49% (for credit).
- Cielo maintains centrality as transaction processor, card networks (MC/V) remain relevant through tokenization and push payments standards.
- Issuing banks (Banco do Brasil, Nubank and Sicredi) are largely 'in the background', but content with the additional channel of enabling digital payments.
- Strategically, Facebook is looking to add a commerce feature to complement its Facebook and WhatsApp Business platform and be more relevant to micro and small businesses, many of whom use Facebook as online storefronts.



Ultimately, Facebook might be less interested in direct revenue cut from the MDR, and more about boosting consumer engagement and generating powerful payment data for microtargeting – including for small business clients themselves.





#### Pre-requisites

#### End-users:

- Smartphone with WhatsApp app
- Bank account with Nubank, Sicredi, or Banco do Brasil.
- Debit or credit card from Visa or Mastercard.

#### Merchants:

- Smartphone with WhatsApp Business
- Account with payment processor Cielo.

## Types of transactions

- Transfer and payments
- P2P or P2M
- Initiated by the payee or requested by the recipient

#### Settlement timelines

- One business day for transfers and payments via debit cards
- 30 days for credit cards.

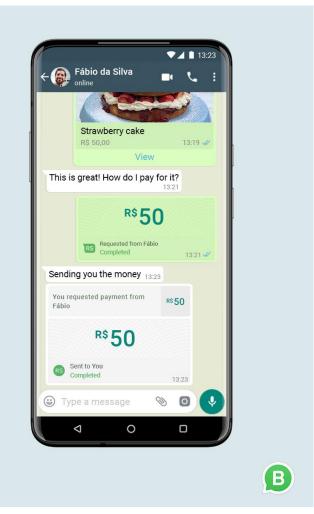
#### Cost

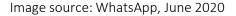
- End-users: free
- Merchants: 3.99% per transactions, but no cost hiring or purchasing POS.

#### Restrictions

For P2P

- Transfers only with debit cards
- Up to R \$ 1,000 (US\$ 195) per transaction
- 20 transactions per day
- Up to R\$ 5,000 (US\$ 980) per month







PIX is the Central Bank of Brazil's own interoperable, instantaneous and low-cost payment platform that is planning to be launched in November.



Image source: Banco Central do Brasil

## Technology



- The Central Bank of Brazil will act as "owner / operator" of the Instant Payment System.
- Two participants types: direct (settle transactions directly on platform) and indirect (settled via direct participants)
- Most regulated financial institutions (commercial banks, savings, etc.) will be direct; non-licensed payment providers will be indirect.
- Unlike current systems, transactions will be settled within a few seconds, and available 24/7. PIX also emphasizes QR code for merchant payments, although it is not the only modality.

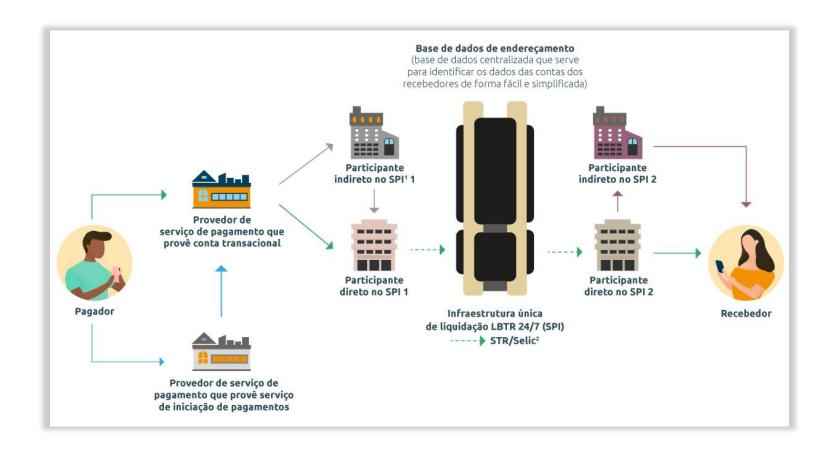
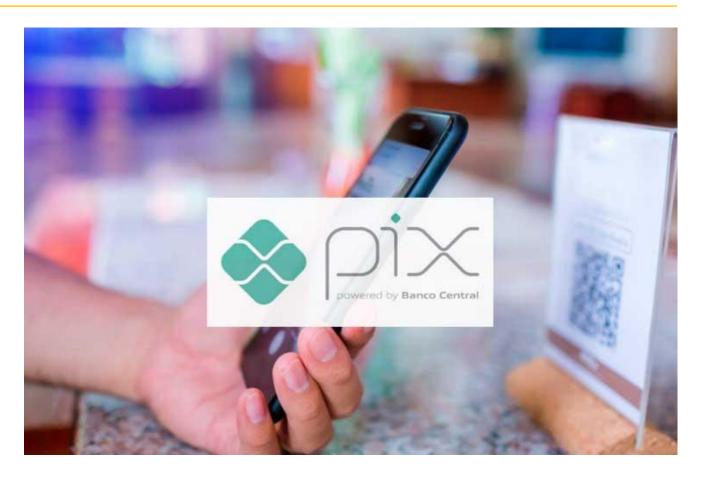


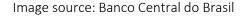
Diagram source: Banco Central do Brasil





- Following the "Faster Payments" trend worldwide, the Central Bank sees PIX as the initiative to digitally transform electronic payments in the country, and also allow for greater innovation via open banking.
- In that light, the Central Bank has mandated that all licensed financial and payment institutions with over 0.5 M accounts must participate in PIX, and allow the service to their customers.
- Participants are permitted to define the price, although the Central Bank will step in if it feels there are abuses. The Central Bank will charge participants a small fee per transaction to cover operating costs.
- The card networks (MC/V) and acquirers (mainly Redecard, Cielo) are not "part of the equation" in PIX.







### Pre-requisites

End-users and Merchants:

- Any kind of account, either at a bank, fintech, or financial institution.
- Use cases are heavily based on smartphones and QR code, but other platforms are also possible.

## Types of transactions

- Transfers or payments using keys like mobile numbers, e-mail addresses, CPF or CNPJ, either static or dynamic OR codes.
- Withdraw cash at participant retailers.
- P2P, P2B, B2B, P2G, B2G, G2P, and G2B payments.

#### Settlement timelines

 Transactions will be executed 24/7, with a processing time of up to 10 seconds and immediate settlement.

#### Cost

 Participants are permitted to define the price, although the Central Bank will step in if it feels there are abuses.

#### Restrictions

- There will be no pre-established transaction limits
- Institutions can define policies to avoid money laundry, fraud and terrorism funding.

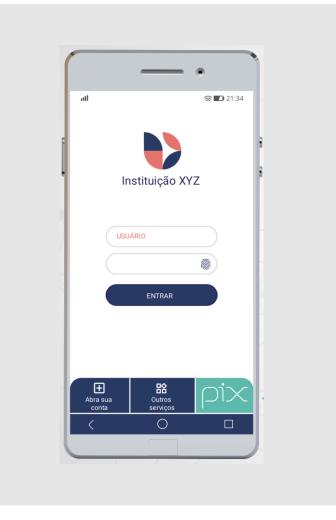


Image source: Banco Central do Brasil



In terms of desired outcomes with Level One system, we believe that the current design of PIX is well positioned, while WhatsApp Pay lags in the areas of financial access and enablement.

# Desired outcomes with a Level One system



## WhatsApp Pay and PIX assessment with Level One system desired outcomes

Low Medium High Financial Access Digital Liquidity Financial Enablement Participation in Digital Economy



What happened? Our assessment is that the Central Bank chiefly saw WhatsApp as a threat to their own long-standing initiative, and reacted negatively to the 'surprise' launch by a Big Tech company.

1

The Central Bank sees WhatsApp Pay as a threat The Central Bank sees WhatsApp Pay is seen as a threat to their almost 2 decades of work to increasing competition and access to financial services. It fears going back to a duopoly or oligopoly scenario with Facebook and Cielo dominating the market to the detriment of PIX.

2

WhatsApp Pay was launched without permission from the Central Bank

Facebook took a chance by launching WhatsApp Pay without a formal permission from the Central Bank (although licensed via Visa and Mastercard). The regulator is still defining how to deal with the Big Tech in this entirely new set up.

The Central Bank has no deadline to reply to Mastercard and Visa's proposal

The Central Bank's president recently declared he was committed to regulating the WhatsApp Pay as quickly as possible, following the institution's standard process. However, he repeated that Facebook would need to demonstrate it is safe and competitive.

4

Facebook looking for greater integration of its apps, starting with commerce

Facebook has intentionally not pursued a "SuperApp" strategy such as those in China (Tencent and Alibaba). But Mark Zuckerberg has made clear he wants greater integration of the apps (Facebook, Instagram, Messenger, WhatsApp) – Facebook Pay is a common thread.

What's next? We speculate that WhatsApp Pay and PIX – and ideally an integration of both – should stimulate the payments sector in Brazil to the benefit of the end-user.

1

Overall pressure on price and margins across payment transactions.

As a low-cost platform, PIX will, by design, put downward pressure on prices charged to customers for all type of non-PIX transactions, thus payment profit margins for both issuers and acquirers will trend downwards.

2

PIX will be offered as part of WhatsApp Pay, next to debit and credit card options.

Offering PIX next to credit and debit cards in WhatsApp Pay will be a main requirement (together with data security) to allow the feature in the country. However, Facebook will choose its bank partners, and there is no guarantee it will be accessible to other fintechs.

3

Other banks will eventually join WhatsApp Pay

Other banks will root for WhatsApp Pay to gain traction and join the scheme, as it preserves much of the current (and profitable) infrastructure.

4

The customer stands to benefit the most from increased competition

Despite the level of sophistication in the market, Brazilian consumers have little choice among providers, and overall costs are high. Both PIX and WhatsApp Pay will shake up the market, and encourage more entrants and innovations to flourish.

What does this mean for us? Expect a Big Tech payment play eventually in your market – but it may represent an opportunity, not a threat.

1

"Big Tech" payment models are not a one size fits all

WhatsApp Pay in Brazil, WeChat / Tencent in China, and Apple Pay in the US are wildly different business models, technologies, and consumer experiences. And even WhatsApp adjusted its launch approach in Brazil from the one in India, based on current infrastructure and market conditions.

Mojaloop infrastructure should be designed with customer needs in mind

If the PIX design is successfully implemented, it can be a game-changer for Brazilian consumers and small businesses. If Mojaloop implementations are similarly designed in a way that places customer needs at the center, then the entry of a Big Tech payment play will not be a threat but welcome competition.

Interoperable payment infrastructure should aim to work with them

While any additional payment option technically represents a threat, since the ultimate goal is to provide greater choice, quality, pricing, and convenience to the customer, Big Tech's entry should provide additional options for the end-user — and ideally integrated into a Mojaloop infrastructure.



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## **About The Firm**

Digital Disruptions is a US-based strategy and design innovation consulting firm, with a focus on fintech in emerging markets.

Since 2014, we have been providing training, research, and advisory services to financial institutions, mobile operators, payment networks, international organizations, technology vendors, governments, and start-ups involved in the intersection of technology and financial services.

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Please see www.digital-disruptions.com to learn more how we can help.

