

**DATABRICKS TRACK**  
**SERIES US**  
**Business Point of**  
**View:** Scaling Real  
Time monitoring for  
Big Brother Brasil

# Who am I?



## Raphael Dayan

Head of Data @PicPay  
Director of Career @ Coderhouse

Passionate about people management, fanatic about how Data can impact business and in a long-term marriage with crypto



[rdayan.com](http://rdayan.com)



[/raphaeldayan](https://www.linkedin.com/company/raphaeldayan)



[@rdayan](https://www.picpay.com)

**PicPay**

PicPay? Tell me more.



We were born to transform the way people deal with money, shop and communicate, aiming to make their daily lives easier. :)

We are a Tech company and the largest payment App in Brazil!



**+65 million users**

It is the largest number of users of a payments app in Brazil.

**U\$ 1.5 billion in transactions**

It is the amount that PicPay users make every month.

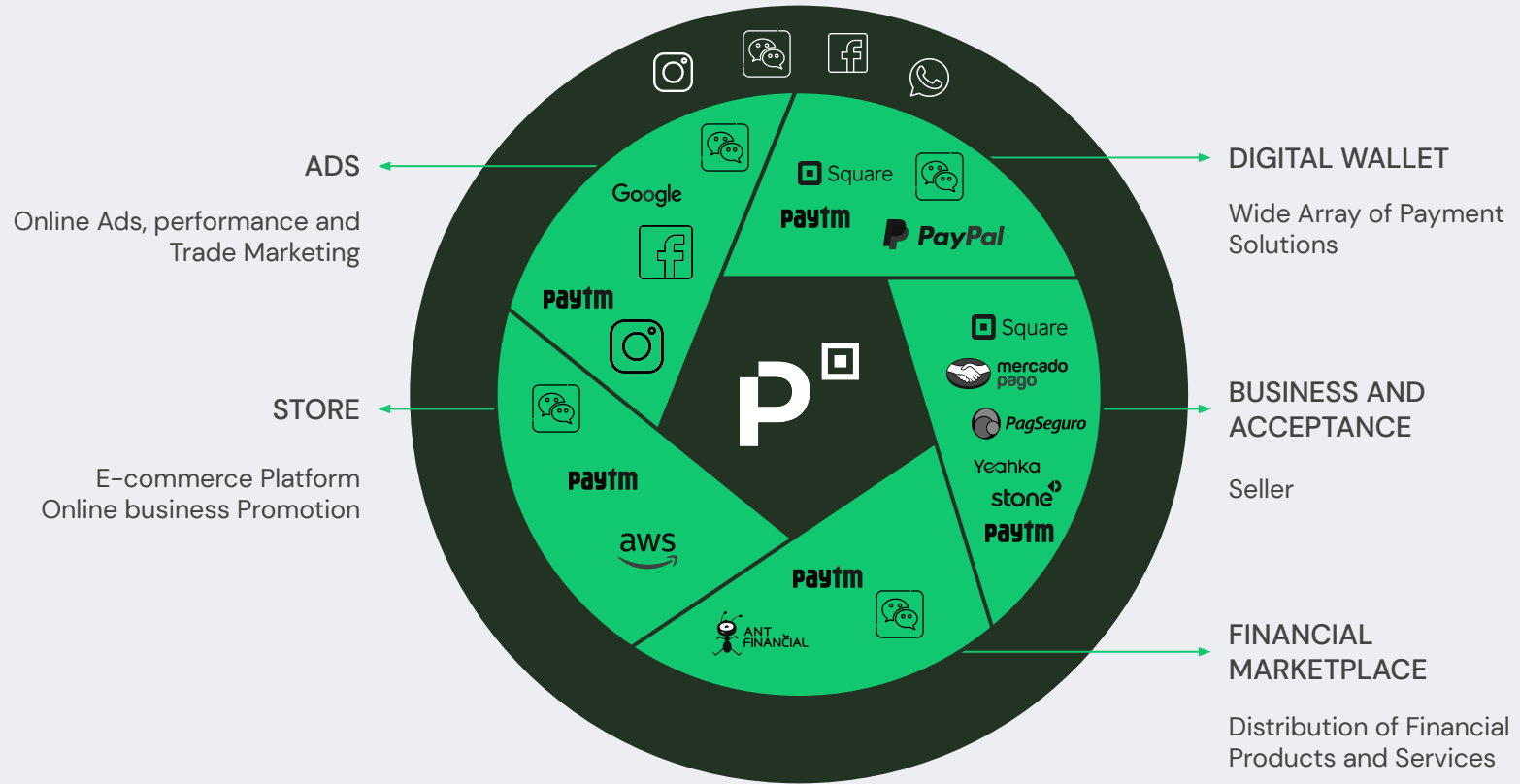
**+ 5 million commercial establishments**

Every place accepts PicPay: either through partner establishments, or through our acceptance network with Cielo, Rede and Getnet POS machines.

**+ 3600 employees**

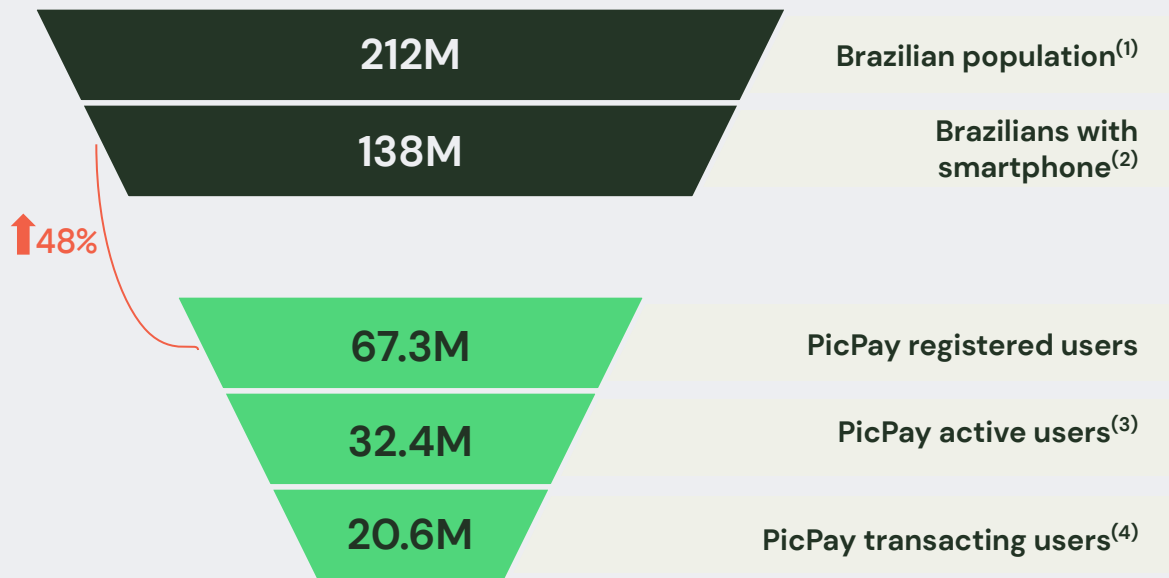
We have the best! We welcome our people in our offices in São Paulo, Vitória and in all corners of the world.

# Social Communication Networking



# Brazil has a lot of growth potential

And PicPay aims to be on every Brazilian Smartphone



Source: IBGE, e-Bit, ABECS and Locomotiva Institute

Notes: (1) As of 2020, (2) PNAD/IBGE 2018, (3) Users that made use of at least one feature over the last 12 months; (4) Users that made at least one transaction over the last 12 months

Unit standard: K (thousand), M (million), B (billion), T (trillion)

## CONCENTRATION IN TOP 5 BANKS<sup>(1)</sup>

**78%** Credit card volume<sup>(2)</sup>

**84%** Total credit operations in 2019<sup>(2)</sup>

**81%** Total Assets<sup>(2)</sup>

## UNDERSERVED POPULATION

**45M** people are unbanked or underserved by financial institutions  
(25% of adult population)<sup>(4)</sup>

## FAVORABLE REGULATORY TAILWINDS TO OPEN BRAZILIAN MARKET

Brazilian Central Bank main initiatives boost new players to reduce banks' concentration

 Open Payment Schemes  
2009-2010

 Payment Institution Regulation  
2013

 #BC: Facilitate Market Access  
2016

 Open Banking  
Kicked-off in 2017

 PIX (instant payment)  
2019

### OPPORTUNITIES:

Go Live on 15 July 2021

- Connection between PicPay's Digital Wallet and users' bank accounts
- Access to more user data and intense use of AI to leverage PicPay complete ecosystem

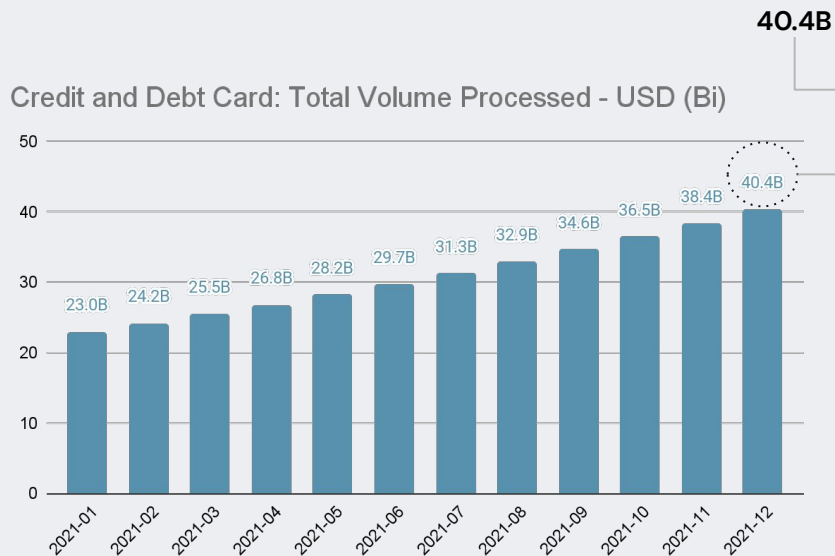
### OPPORTUNITIES:

- Engagement boost (users who cash in through PIX spend 2x more and perform 2.3x more transactions)
- Frictionless and free of charges cash-in
- New MDR revenue stream from merchants



# 45M BRAZILIANS ARE UNBANKED OR UNDERSERVED

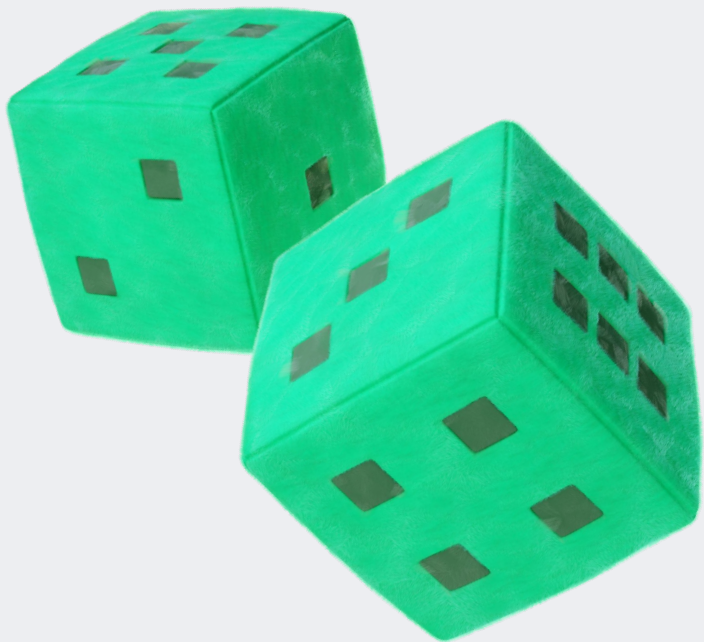
Which leads to huge opportunities in financial services



And how does all this materialize  
in the **world of data**?



Every bit of our application is monitored, stored and studied



## Big Data, real deal

+6Bi events per day

+220TB in the data lake

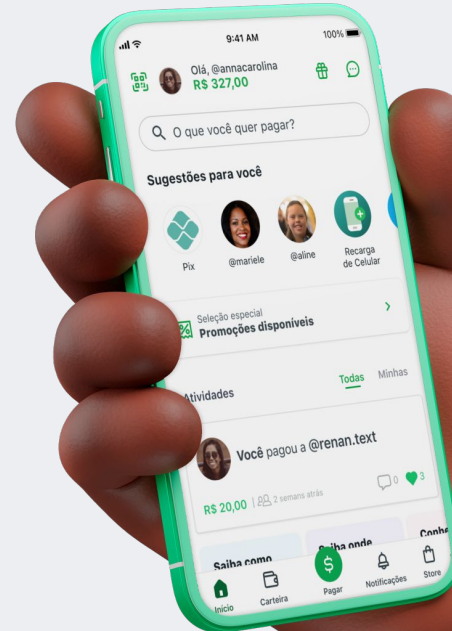
+1Bi gateway requests

+20 EKS' clusters

+6k deployments

**Okie dokie.** And what are the challenges of this volume of data?

1. **Multiple data sources:** management and governance become complex → cost management too
2. **Latency:** What to do with business problems that need Near Real time data?
3. **Monitoring:** how to guarantee the reliability and quality of the data being ingested?
4. **Best Practices:** Difficulty in adopting standards for all sources being created/updated
5. **Growth:** how to be agile in the delivery of new pipelines while maintaining the existing ones?!



# PicPay

# Big Brother Brasil

@ Big Brother Brasil

Despite **data complexity**, PicPay **keeps growing** and **expanding** Brand Awareness

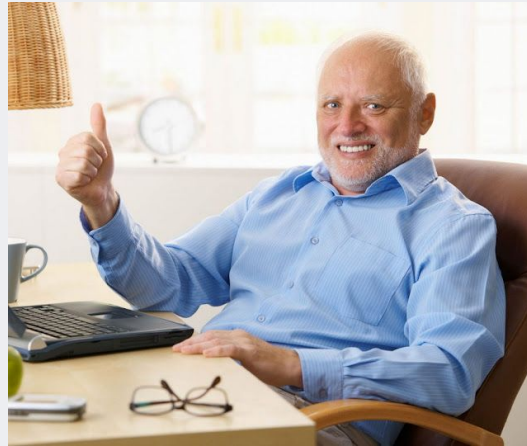
Big Brother Brasil in numbers:

- 2-3 months of Reality Show
- Average of 40M spectators
- Peak 3.6M votes per minute
- More than 170M tweets in the last edition
- More than U\$20M in sponsorships

**Now what, Data?!**



# Now what, Data?





# Big Brother Brasil: giant challenges

A nationwide campaign creates challenges of keeping the entire architecture running



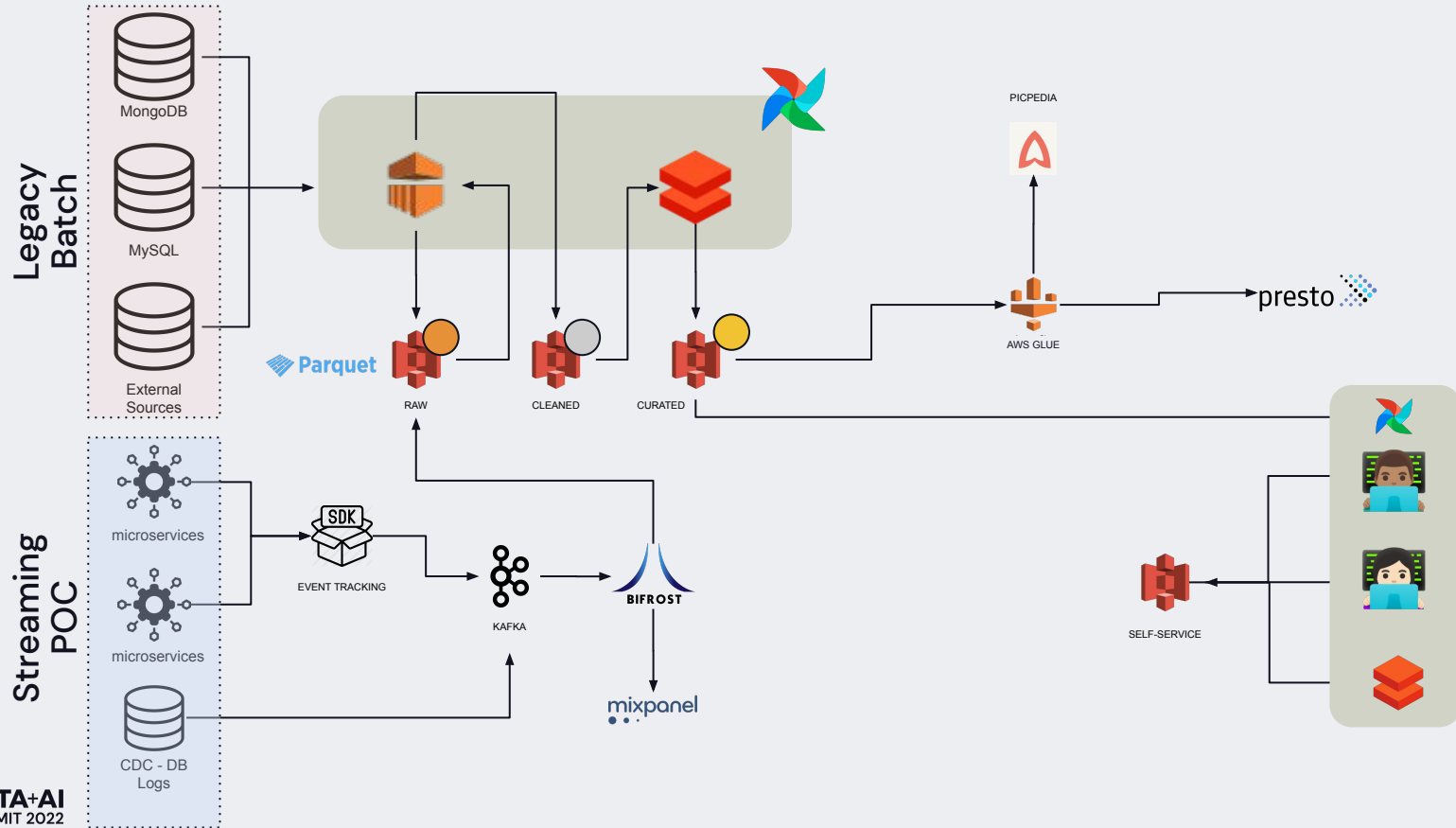
Real time Data

Monitoring

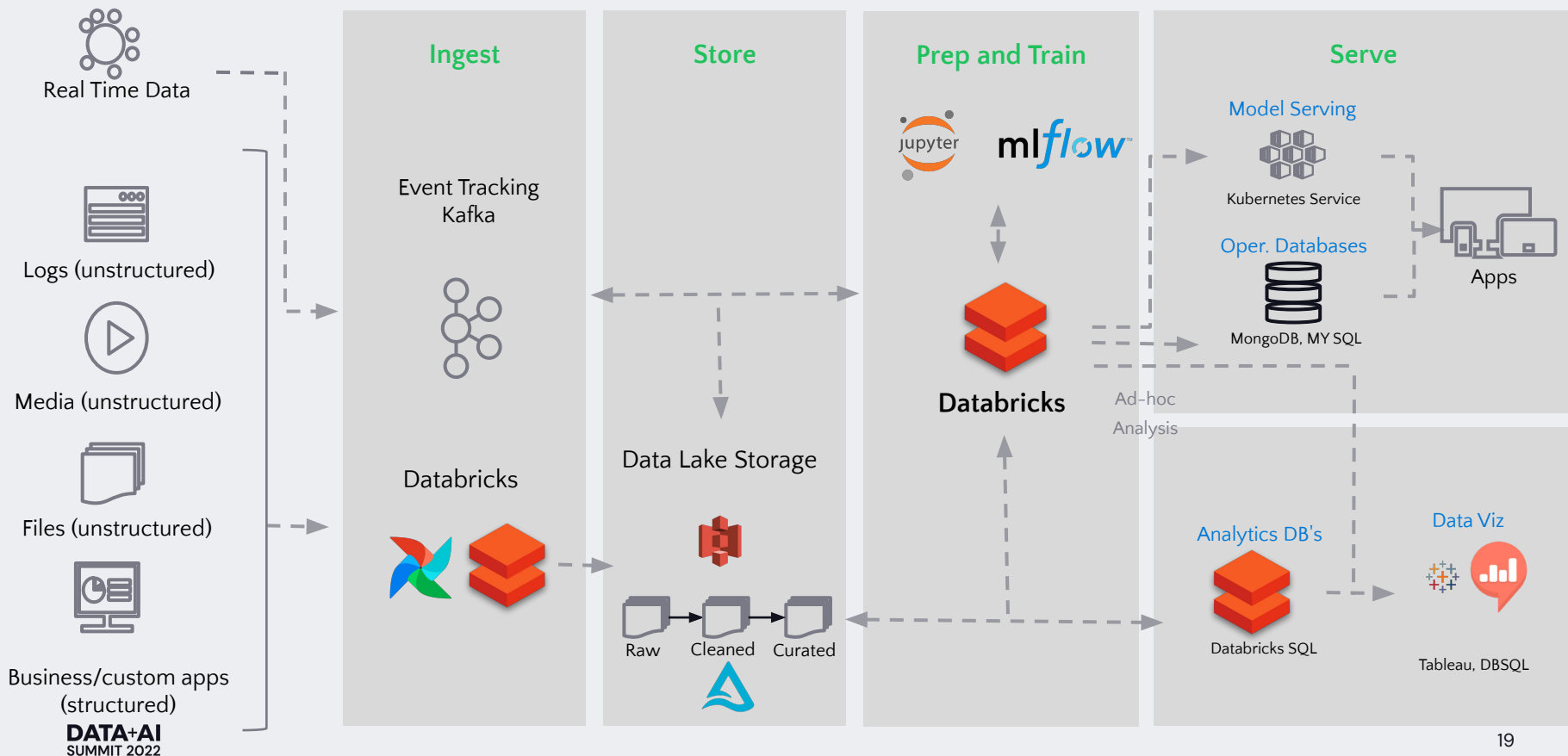
Business Impacts

Learn to improve next  
campaign

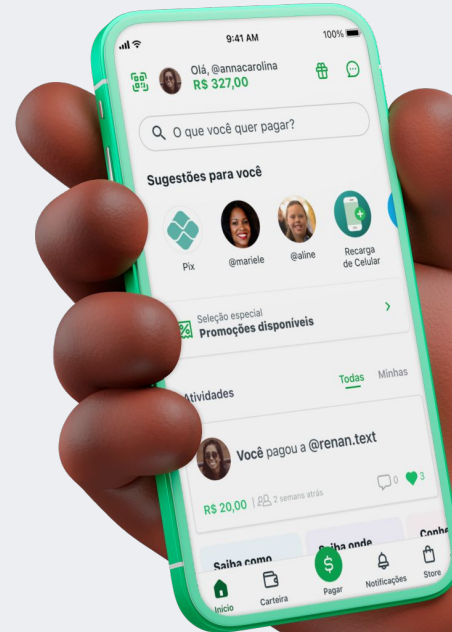
# AS IS : Ingestion Platform Architecture



# How we did it for BBB → POC that was reference to-be



1. **Fewer data sources:** micro services take the complexity out of processing (multiple sources) data → costs
2. **Latency:** Near Real Time data
3. **Monitoring:** situation control
4. **Best Practices:** creation of best practices for rollout of new products, features, campaigns
5. **Growth:** National campaign scale helps create data guidelines

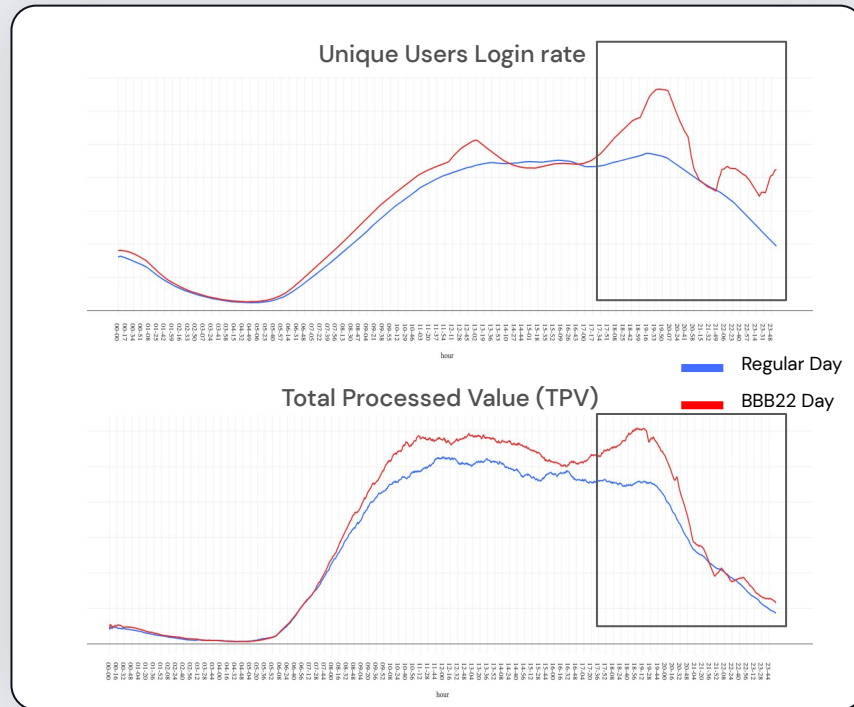


# Big Brother Brasil

## Some Impacts



- **+40% increase** in user logins compared to a normal day
- **+30% increase** in total processed value during program

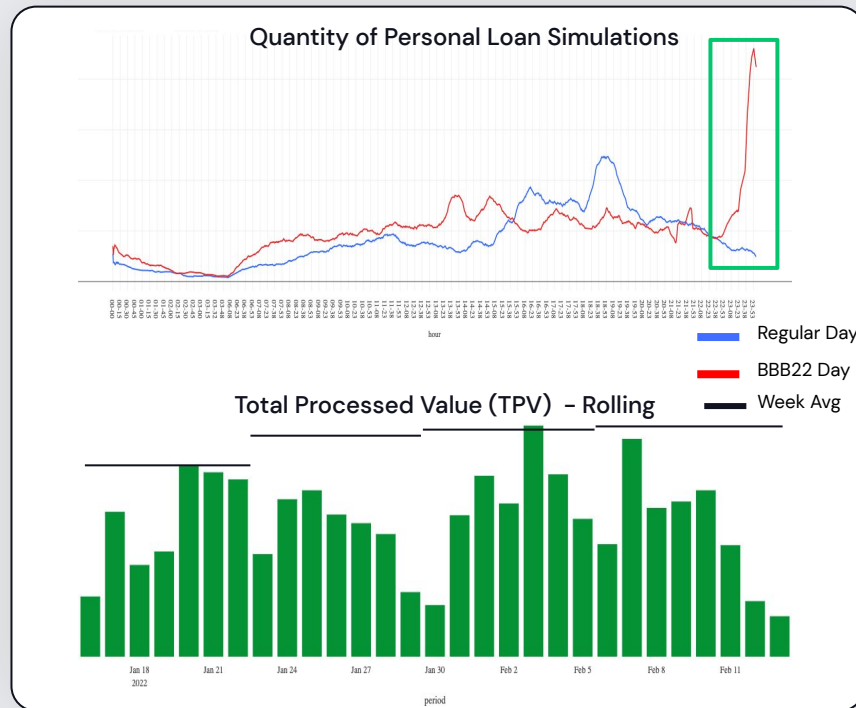


# Big Brother Brasil

## Some Impacts



- **+20% increase** in the number of simulations in personal loan (campaign focus)
- **+18% WoW increase** in TPV after BBB22 started



# Tips

**Rethink** your processes in short, medium and long term goals

**Monitor**, learn and evolve

**Statistics** will be a part of your day to day job

**Do not** isolate data teams

**Business problems** has to be the guide

**Try a lot!**



**Imagine what we can do  
together!**

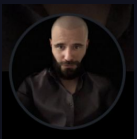
We transform the way you handle money to  
make every day of your life easier.





**DATA+AI**  
SUMMIT 2022

Thank you



Raphael Dayan

Making people's lives easier @ PICPAY