prosus

Leveraging AI Across the Prosus Ecosystem

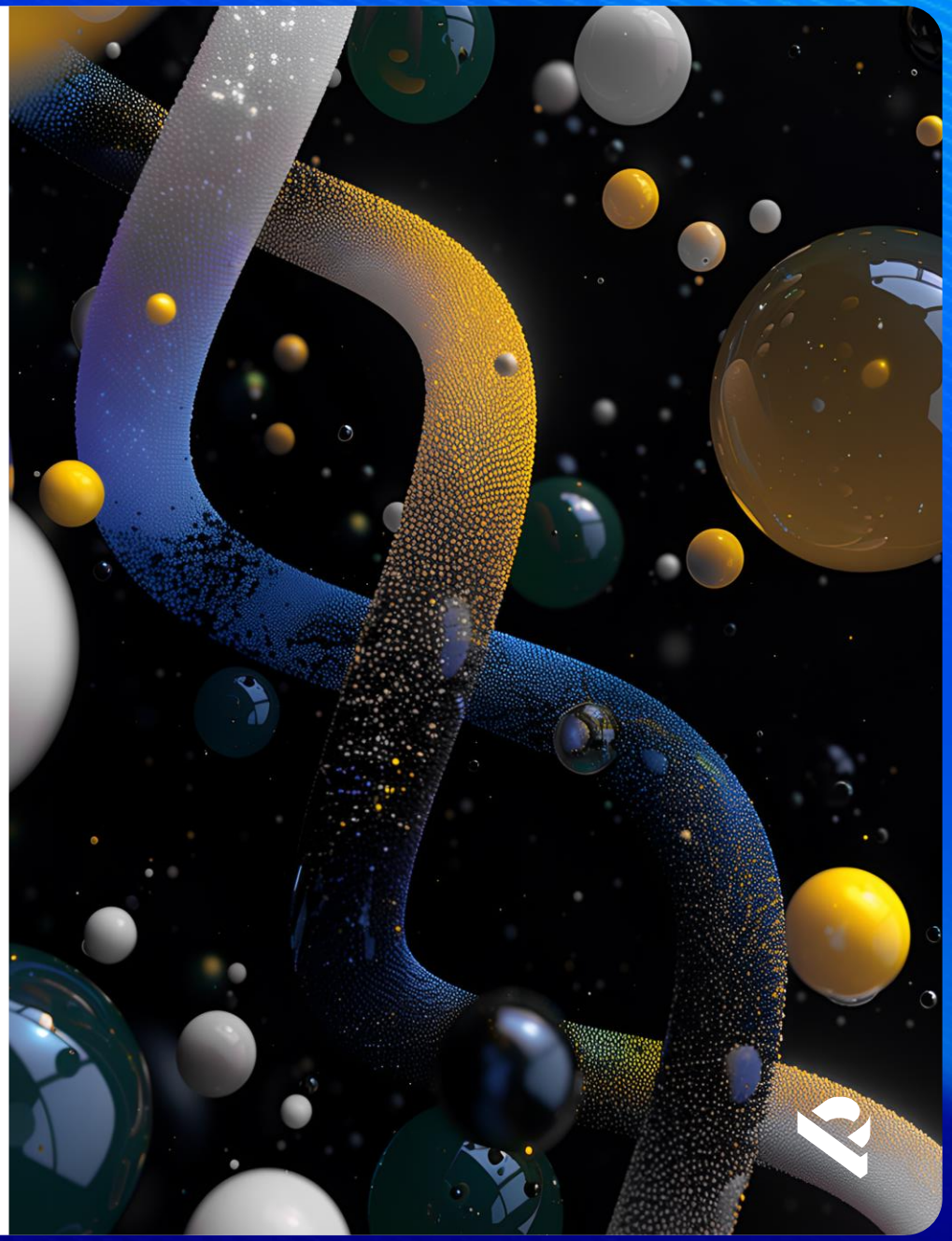
iFood Customer Acquisition & Fraud Prevention

AI in use at Prosus

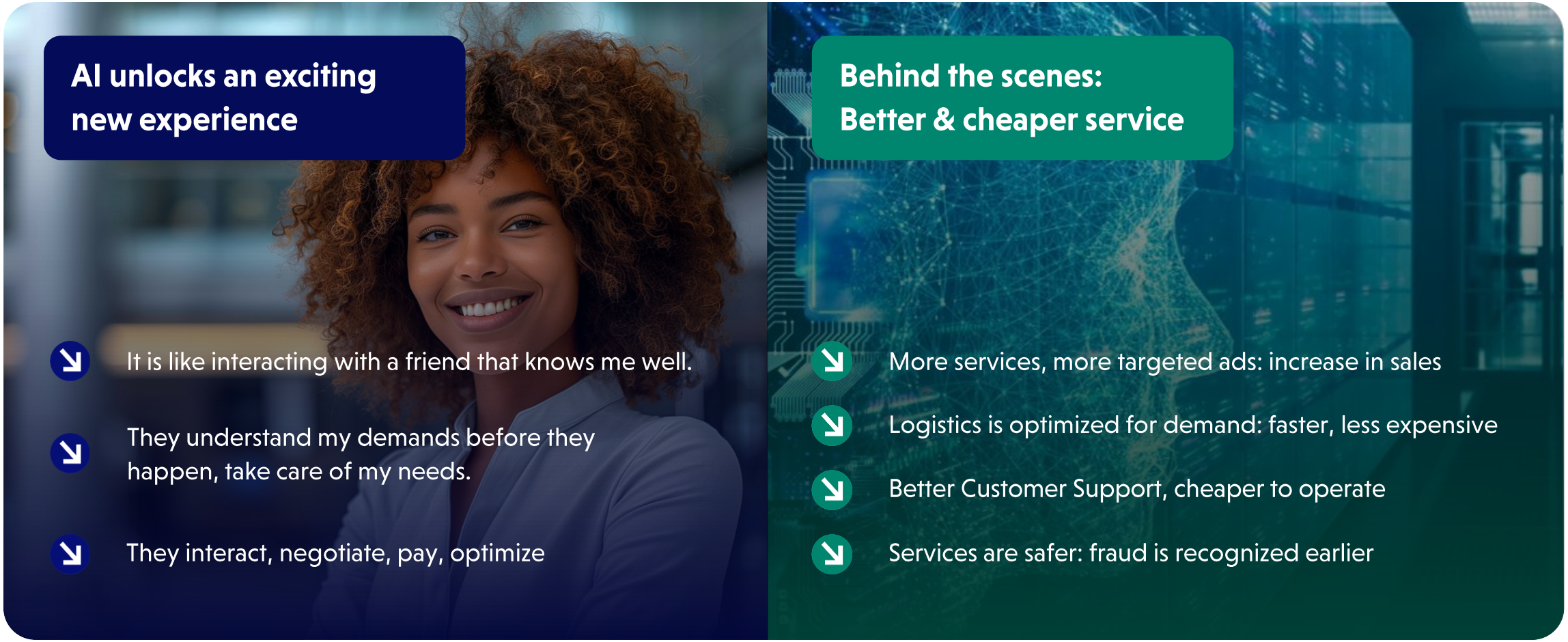
Innovation is in our DNA, and we are unlocking the future of technology in an AI-first world.

Prosus has been deploying AI and Machine Learning across our global portfolio of 90+ companies for 2 years. It is fully integrated into the services we offer to our 2bn+ customers, with hundreds of models in production.

With a team of approximately 1,000 data scientists across our portfolio, we are at the forefront of how AI is revolutionising the world of ecommerce.



AI First: Better Services, Better Business



AI unlocks an exciting new experience

- It is like interacting with a friend that knows me well.
- They understand my demands before they happen, take care of my needs.
- They interact, negotiate, pay, optimize

Behind the scenes: Better & cheaper service

- More services, more targeted ads: increase in sales
- Logistics is optimized for demand: faster, less expensive
- Better Customer Support, cheaper to operate
- Services are safer: fraud is recognized earlier

AI in use at Prosus

Specific ways we are deploying AI to **improve efficiency and effectiveness**, include:

E-commerce recommendations

At OLX and eMAG, AI algorithms analyse user behaviour, purchase history, and browsing patterns to provide personalised product recommendations.

Content Personalisation

At PayU and iFood, AI is used to personalise content for users. In food delivery, AI can recommend restaurants and dishes based on a user's past orders, dietary preferences, and time of day. Similarly, in financial services, AI suggests relevant financial products and services based on a user's financial behaviour and goals.

Personalised Marketing Campaigns

AI helps Prosus companies to create targeted marketing campaigns. Personalised marketing messages are more likely to resonate with users, increasing engagement and conversion rates.

Personalised Learning Paths

At Brainly, AI is creating personalized learning paths for students. By analysing a student's performance, strengths, and weaknesses, AI can recommend specific study materials, practice exercises, and learning strategies tailored to their individual needs, improving their learning outcomes.

Fraud Detection and Security

AI enhances security by detecting and preventing fraudulent activities in real-time. By continuously monitoring transactions and user behaviour, AI can identify suspicious activities and take immediate action to protect customers' accounts and personal information, building trust and confidence.

AI in use at Prosus

CASE STUDY: iFood Part 1: Customer Acquisition & Fraud Prevention

iFood has a long history of investing in AI and embedding it in its workflows, including in how it acquires customers more efficiently, reduces and prevents fraudulent activity and how it supports its customers and partners across its platform.

In the attached case study, we focus on how iFood uses AI to acquire customers efficiently and prevent fraud across its platform. Here you will see how through the deployment of AI iFood is achieving:

- A **30%** reduction in customer reacquisition costs, by deploying **75%** of its advertising budget using AI strategies
- A reduction in its charge back rate from **2.6%** to **0.1%** (0.5% is generally accepted as a "good" rate) and an increase in its credit card acceptance rate to **97%**

In subsequent case studies we will focus on how iFood and other Prosus companies deploy AI across their businesses.

AI First @ iFood

Case Study: Customer Acquisition & Fraud Prevention

How did we get here?

2018

Creation of the Data Team

From centralized Data Warehouse to Data Lake using Databricks + AWS with 1PB of data.
28 Databricks clusters online during working hours + EMR on-demand clusters

2020

Company wide training and certification for Business Analysts to become data users

Democratization of SQL use cases across every department

2 Acqui-hires specialized in AI

Assembling a centralized team with Data Analysis, AI, Data Engineering

2022

AI in every major area

- 30% of employees using Databricks
- 50% of employee dashboards users
- 6% of employees in DataX team

2023

Prosus + Open AI dedicated capacity

GenAI: whole company as AI creators. Prosus AI Assistant (Toqan) + GenAI Platform (generative AI API hub, 50MM requests/month)

91% of employees using our Prosus AI Assistant (Toqan)

Today

Outcome:

A company with AI as an Engine

Big Numbers

+150
Proprietary AI models

~14PB
Real-time monthly predictions

~16PB
of data in Datalake

~1000
Re-training and model updates per month

800,000
Machine hours
Processing data per month

~30%
Estimated impact of EBITDA using AI

Case Study 1: Marketing and Growth

75% of budget deploying AI strategies with 30% reduction in user reacquisition costs

Description

Before

- Manually created and managed audiences and campaigns.
- Campaigns targeted at broad groups, less personalization, less efficiency.
- Low flexibility for recommendations in push notifications.

Thesis

- <u>Automating budgets & creating customer segmentations will allow us to invest more effectively:</u>
- **Segmentation:** AI-based segmentation to predict which users are susceptible to investments, investing in those users and reduce cannibalization.
- **Smart Rollout**: AI system for allocating campaigns to users, defining the rollout strategy for available campaigns. Choosing the right campaigns reduces CPO.

After

- More targeted campaigns with smaller, more precise audiences.
- Immediate increase of strategies managed by a person from 9 to 37.
- 75% of budget invested using AI.
- ~30% reduction in reacquisition costs with no conversion impact.
- ~19% of the total budget in monthly savings.
- Doubled the number of managed campaign variants experimented.

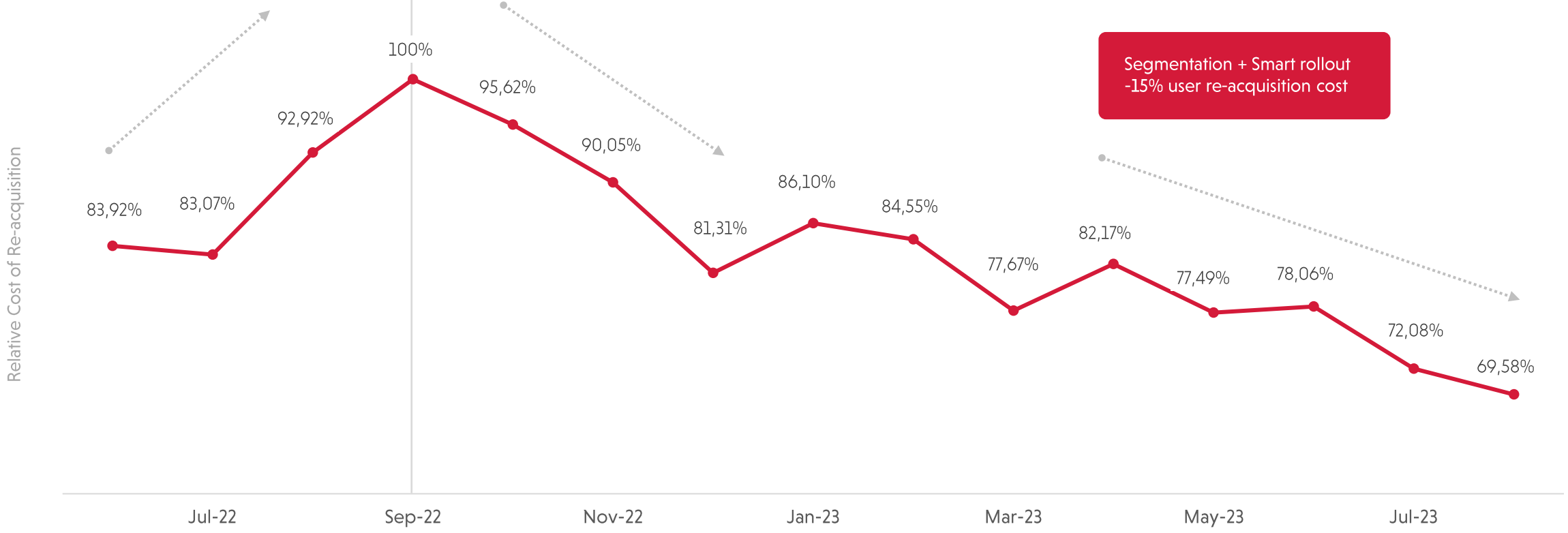
Without AI

Increase in User Reacquisition Costs (CrAC) to drive MUB growth

With AI

Rollout AI segmentation, -20% user re-acquisition cost

Segmentation + Smart rollout -15% user re-acquisition cost



Case Study 2: Fraud Prevention

-0.1% chargeback rate and approval rate* of 97%

Description

Before

- Hard rules used only for chargeback fraud prevention. No action in other fraud sources (subsidies, refunds, etc.).
- **Reached 2.6% chargeback rate in losses in a single month. A 0.5% chargeback rate is considered healthy.**
- No risk scores for users, merchants, and drivers.
- No rules or models to identify fake merchants.

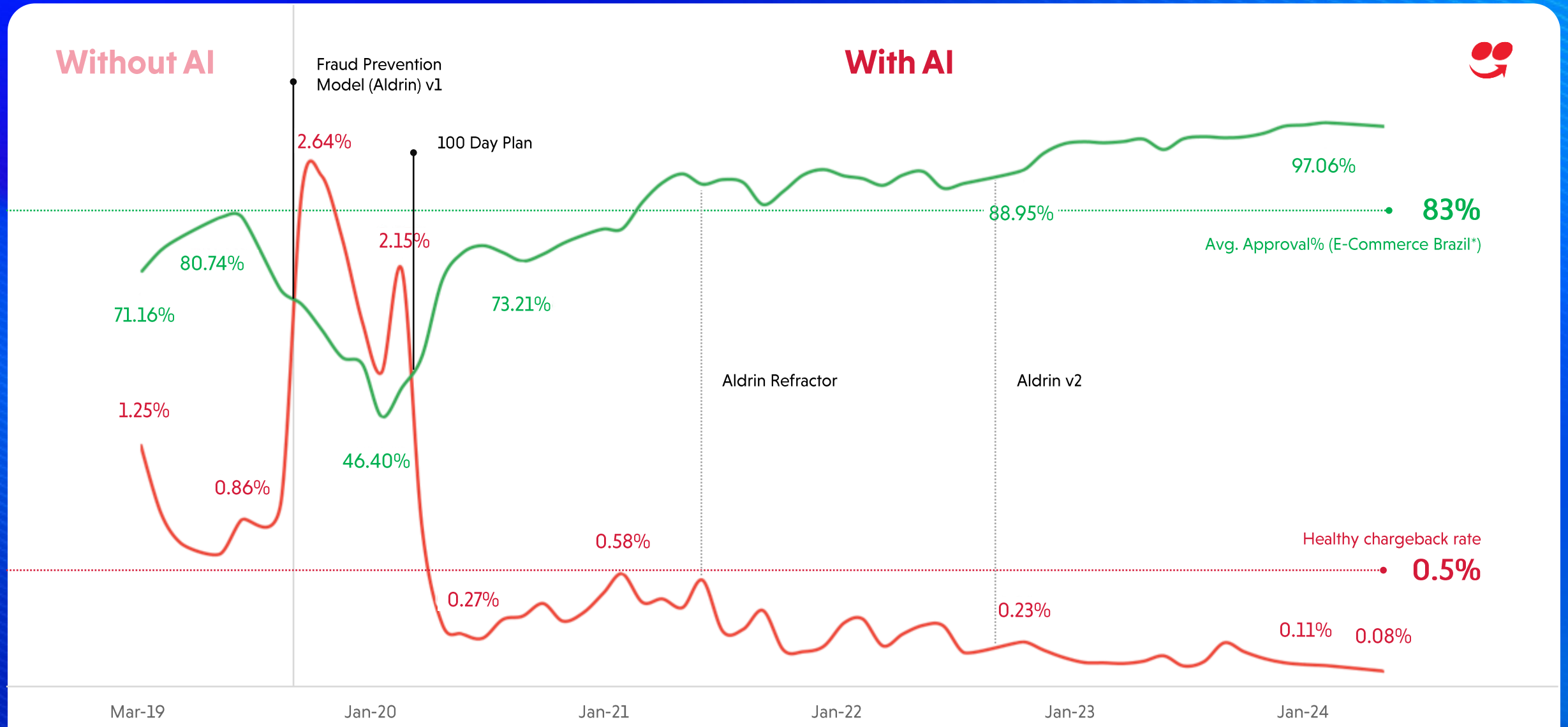
Thesis

- Use AI to detect probable frauds in online transactions, and significantly reduce losses.
- **Chargeback prediction**: model that computes the probability of a given transaction being a fraud. The transaction is then denied.
- **Risk scores**: different risk scores for different entities/scenarios: user, merchant, driver, promotion abuse, and refund abuse.
- **Fake merchant detection**: model that identifies behavior anomalies that indicate a fake merchant, triggering a "proof of life" test.

After

- **Reached ~0.1% chargeback rate and approval rate* of 97% (R$ 5B GMV in Jun-24)**
  - AI Model (Aldrin) responsible for 60%+ of all decisions in the payments engine
- Saving of ~4% per month of total investment in vouchers not sent to promotion abusers.
- Saving of ~5% of total refund costs per month with refund abuse prevention (user + driver).
- ~0.1% saved per month of total payout of interest in payments withheld from fake merchants.

**Approval rate before card issuer.*


Without AI
With AI
Fraud Prevention Model (Aldrin) v1
100 Day Plan
Aldrin Refractor
Aldrin v2
2.64%
2.15%
1.25%
0.86%
0.58%
0.27%
0.23%
0.11%
0.08%
71.16%
80.74%
46.40%
73.21%
88.95%
97.06%
83%
Avg. Approval% (E-Commerce Brazil*)
Healthy chargeback rate
0.5%
Mar-19
Jan-20
Jan-21
Jan-22
Jan-23
Jan-24

For further information:

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