

Marketing Performance Analysis

Case · Analytical Capability

62,405

Generated Trials

7,163

Confirmed Payments

\$147.8K

Total Investment (20 months)

11.5%

Global Conversion Rate (binary)

Executive Summary

20-month data view · 4 acquisition channels · 62,405 trials

62,405

Generated Trials (20M)

7,163

Confirmed Payments

\$2.37

Average CAC per Trial

11.5%

Average Conversion (binary)

Brand Campaigns

Best channel: CAC \$0.99/trial · 14.7% conversion rate

Partners

Highest prob. conversion (46%) · pay-per-payment model

Facebook

CRITICAL: \$56k invested · only 44 confirmed payments

CAC Year 2

CAC dropped 49% from peak: \$3.38 (M5) → \$1.72 (M16)

Proposed KPIs

Metrics to evaluate the Marketing team — overall level and by channel

CAC per Trial

Total Cost ÷ Generated
Trials per channel

Measures capture efficiency
Target: below avg \$2.37

CAC per Payment

Total Cost ÷ Confirmed
Payments

Real customer cost
Target: minimum per channel

Conversion Rate

Payments ÷ Trials × 100
Binary (≥0.75) + Prob.

Lead quality by channel
Ref: 11.5% global

Trial Volume

Trial stores generated
per month per channel

Scale indicator
Target: MoM growth

Conv. by Device

Desktop vs Mobile
Conversion split

Identifies UX gap
Desktop 18.2% · Mobile 1.2%

ROI by Channel

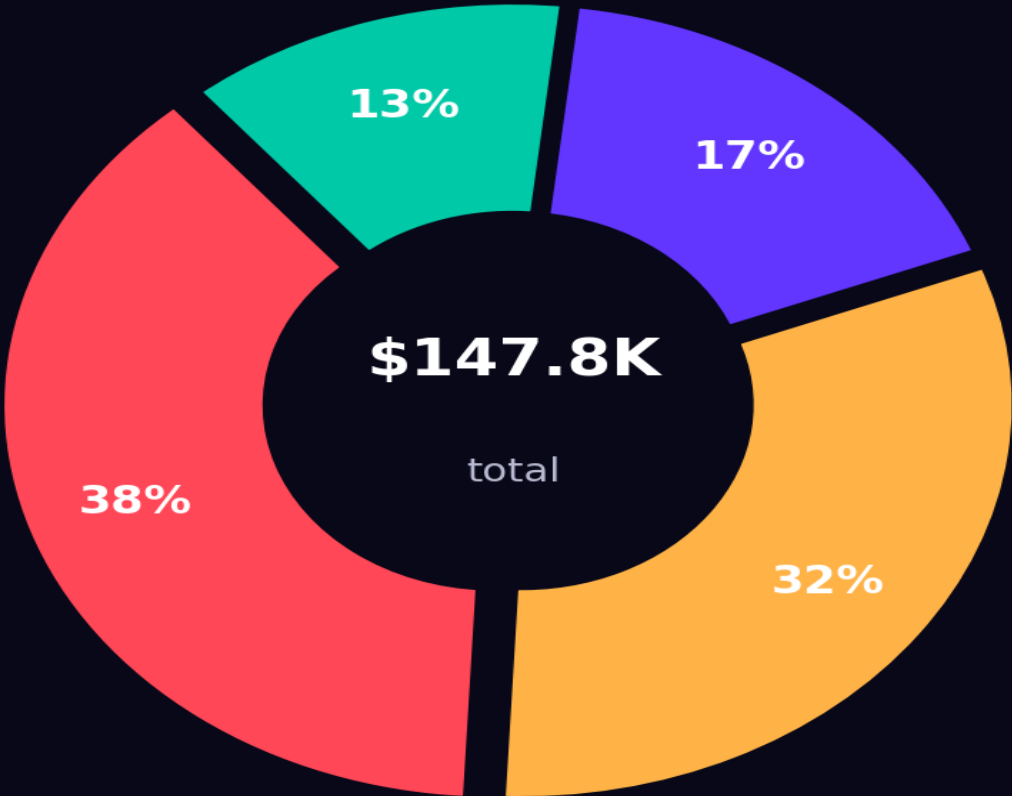
Payments ÷ Cost
Invested

Efficiency ranking
Guides budget reallocation

Investment Distribution by Channel

\$147,841 invested over 20 months · 4 active channels

Budget Distribution by Channel · 20 Months



- Facebook Campaigns \$56,352
- Non-Brand Google \$46,761
- Brand Google \$25,648
- Partners \$19,080

\$56,352 · 38.1%

Facebook Campaigns

44 conf. payments · CAC \$1,280/payment

\$46,761 · 31.6%

Non-Brand Google

1,065 payments · CAC \$43.91/payment

\$25,648 · 17.3%

Brand Google

3,807 payments · CAC \$6.74/payment

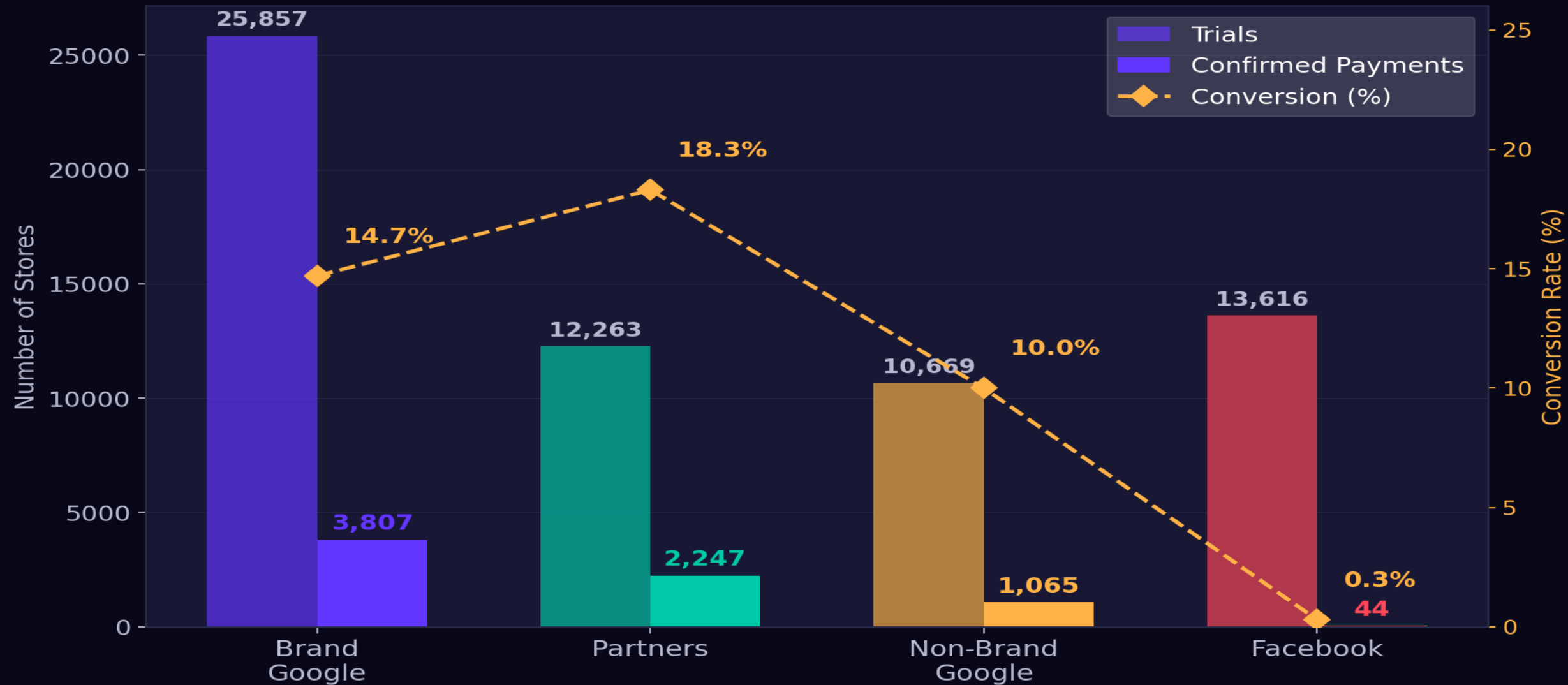
\$19,080 · 12.9%

Partners

2,247 payments · CAC \$8.49/payment

Trials, Payments and Conversion Rate by Channel

Trials, Confirmed Payments and Conversion Rate by Channel

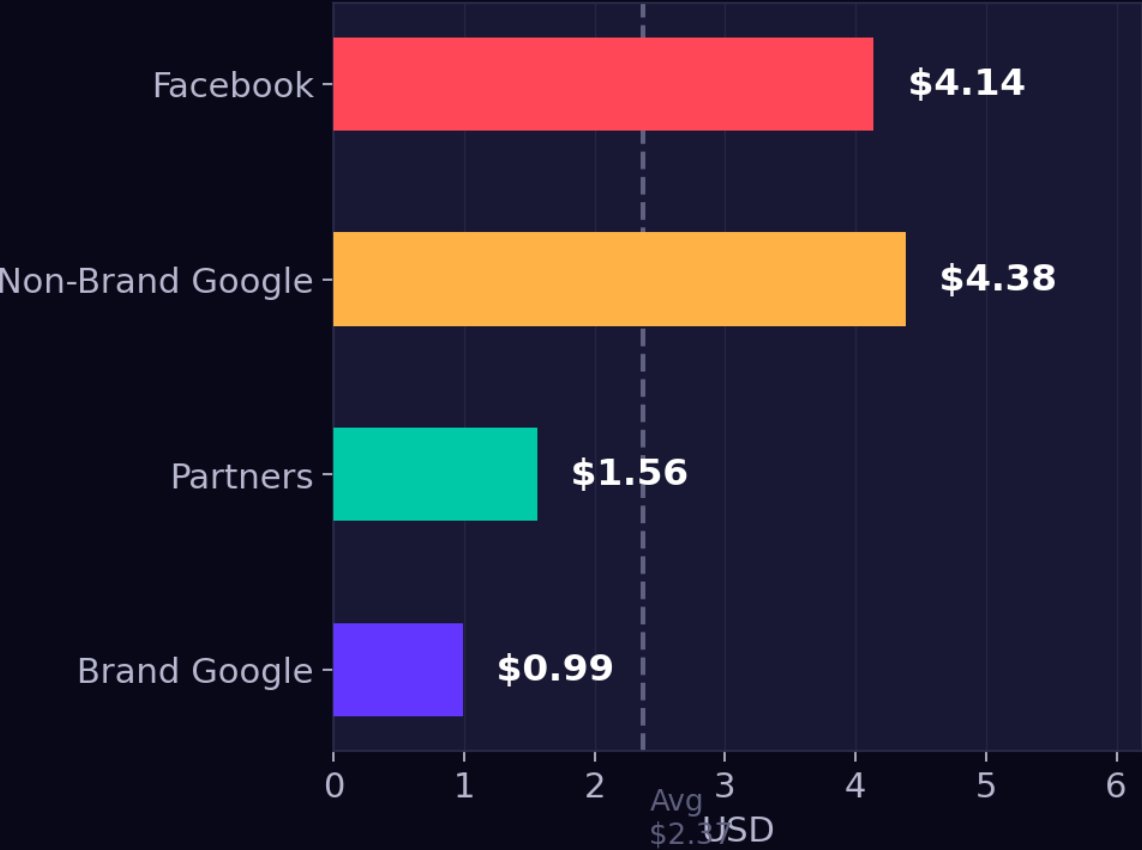


CAC — Customer Acquisition Cost

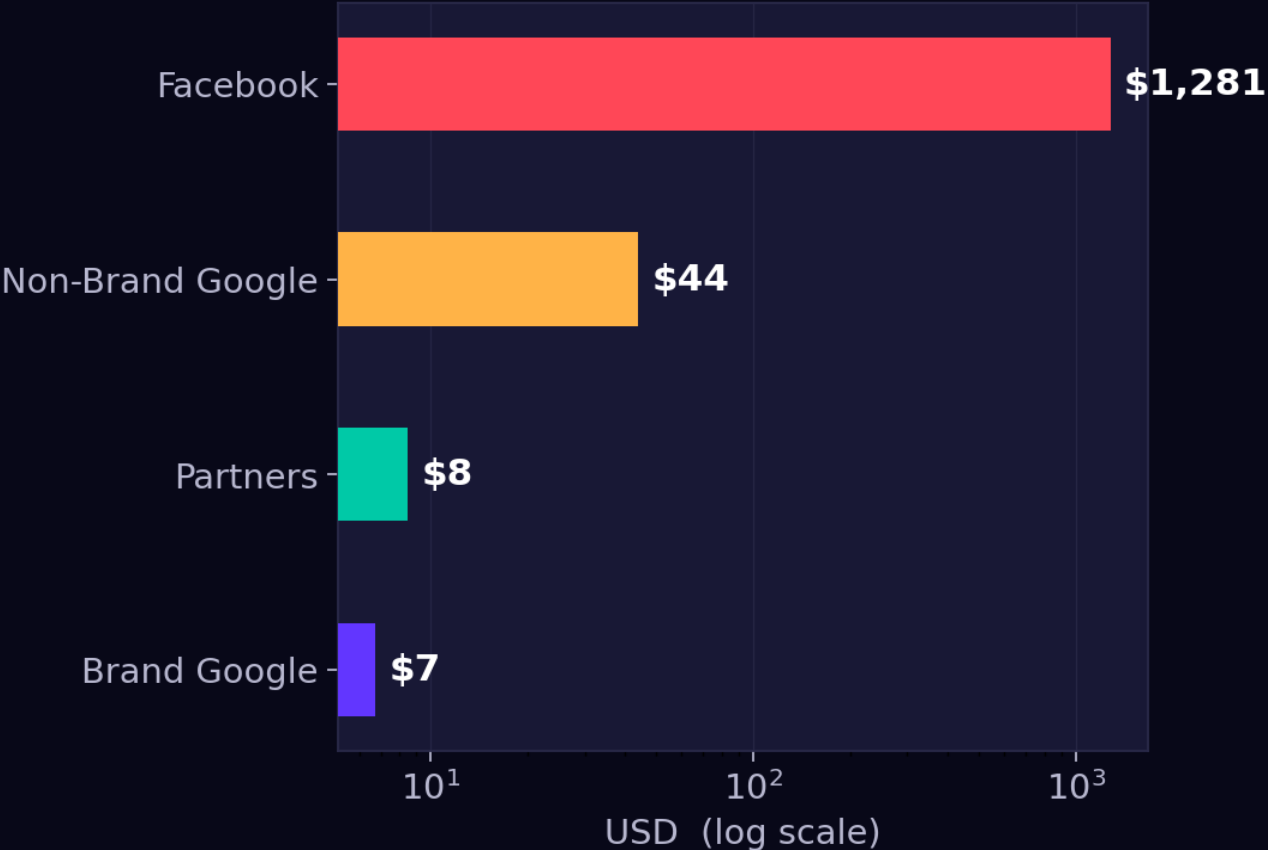
Cost per generated trial vs cost per confirmed payment

Customer Acquisition Cost (CAC) — Channel Comparison

CAC per Generated Trial



CAC per Confirmed Payment

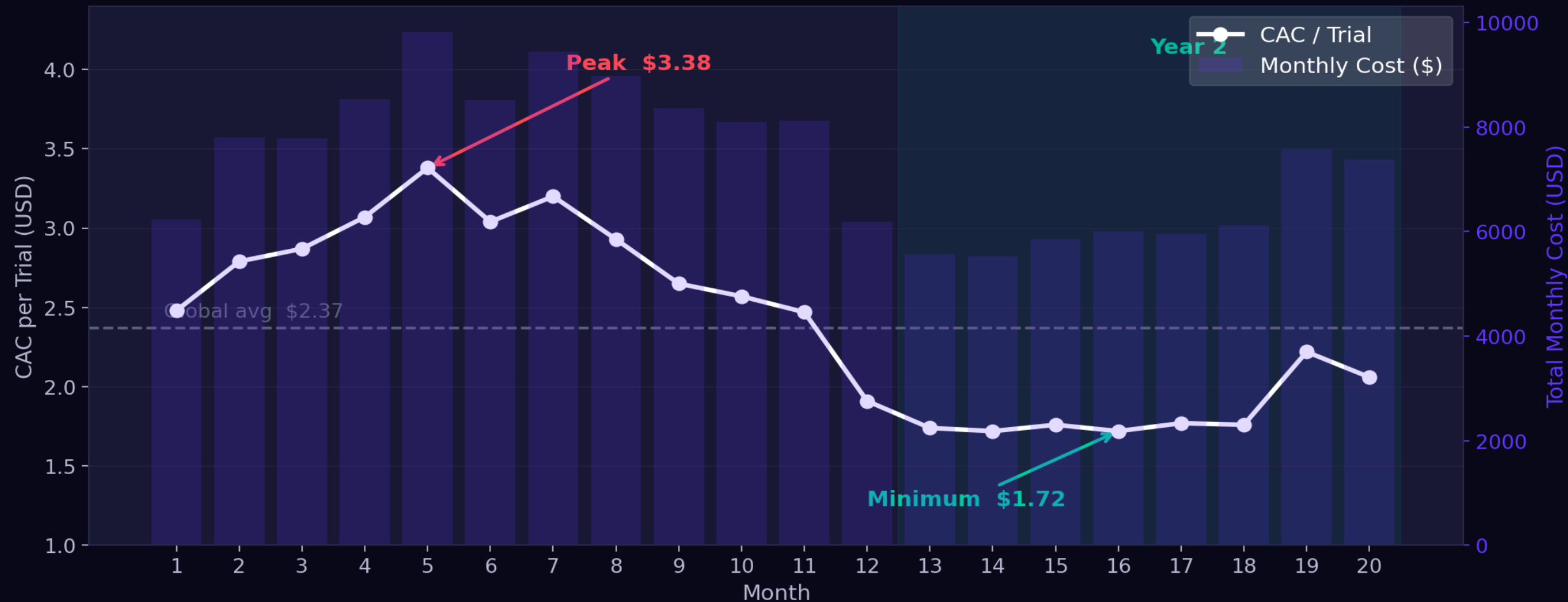


Facebook spends \$56,352 and generates only 44 payments (CAC = \$1,280/payment) · Brand spends \$25,648 and generates 3,807 payments (CAC = \$6.74/payment)
· Efficiency gap: 190×

Monthly CAC Evolution

Year 2 with CAC consistently below the historical average of \$2.37

Monthly CAC Evolution — 20 Months



Months 1–5 · Rising CAC · peak \$3.38

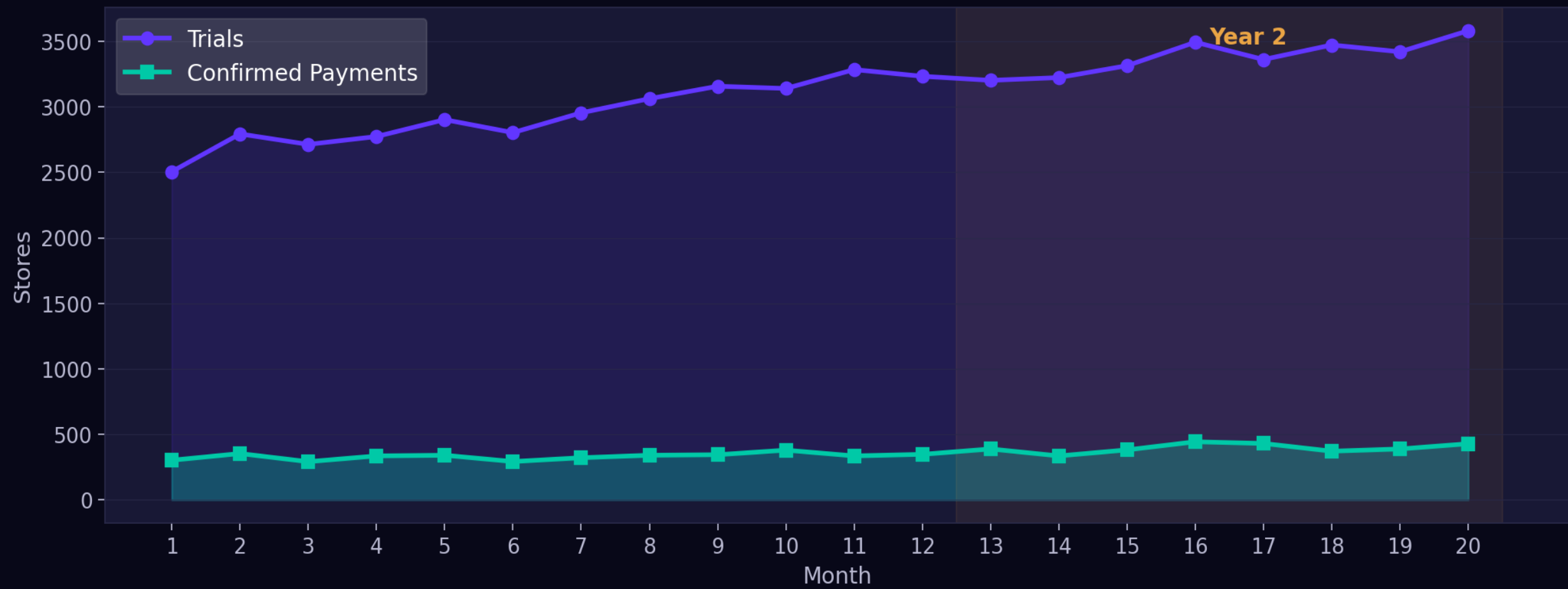
Months 6–11 · Stabilization and gradual decline

Months 12–17 · Minimum \$1.72 · -49% vs peak

Months 18–20 · Slight increase · monitor trend

Monthly Growth of Trials and Payments

Monthly Evolution · Trials and Confirmed Payments



+43%

Trial Growth
M1 → M20

11.5%

Avg Conversion
Stable over 20
months

444

Payment Peak
Month 16

\$20.65

Avg CAC
per Confirmed
Payment

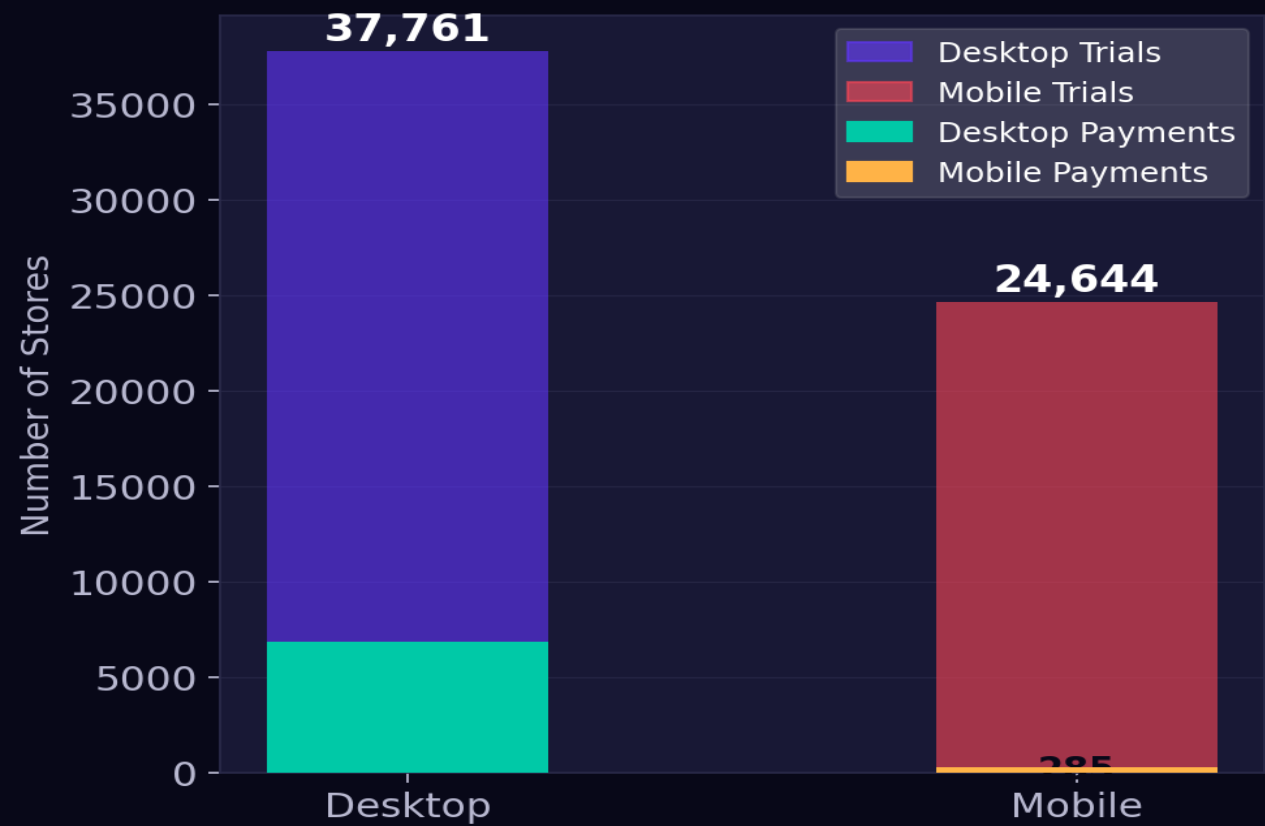
Device Analysis: Desktop vs Mobile

NS

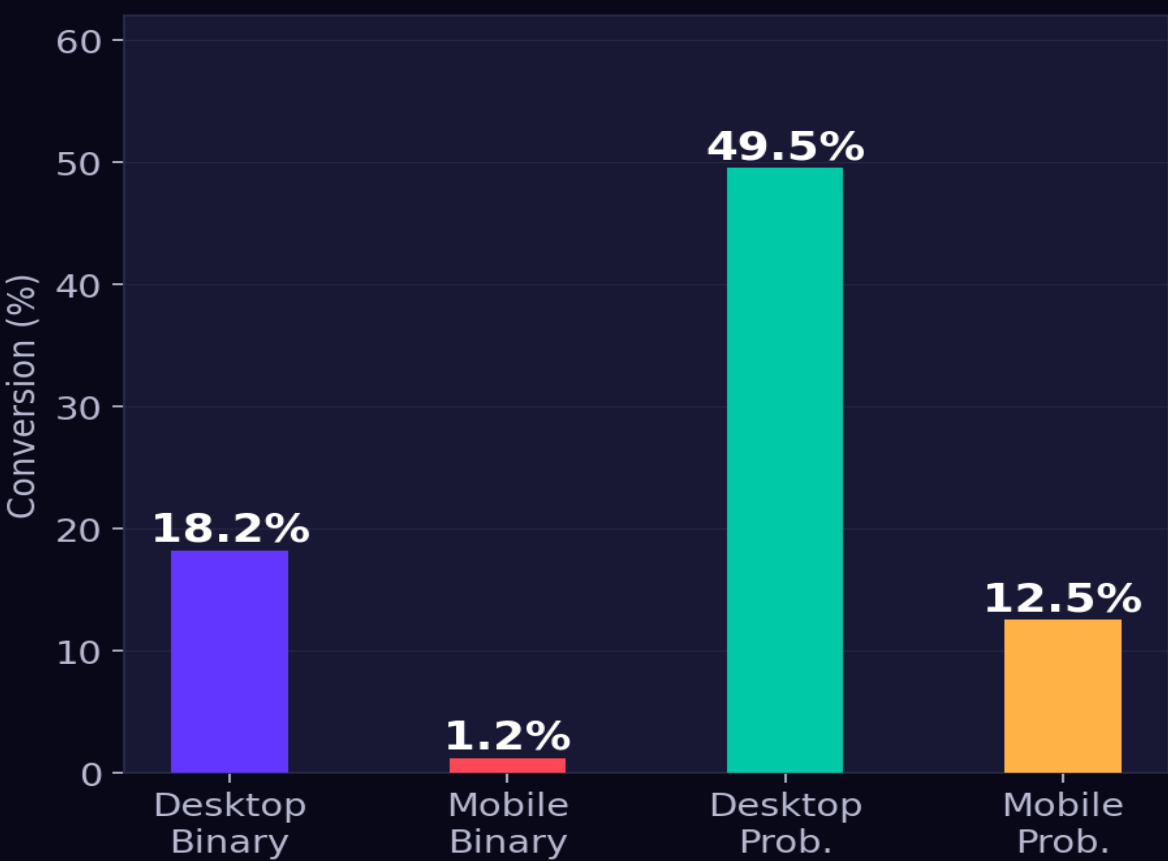
Desktop converts 15× more than Mobile — a critical gap that must be resolved

Desktop vs Mobile — Critical Conversion Gap

Trials and Payments by Device



Conversion Rate by Device



Mobile = 39% of trials but only 4% of payments · Desktop conversion (18.2%) vs Mobile (1.2%) = 15× gap · Likely causes: mobile sign-up UX, traffic quality and payment flow

Facebook Campaigns — Critical Issue

Largest budget allocation · worst absolute return · urgent reallocation needed

\$56,352

Invested over 20 months

44

Confirmed payments

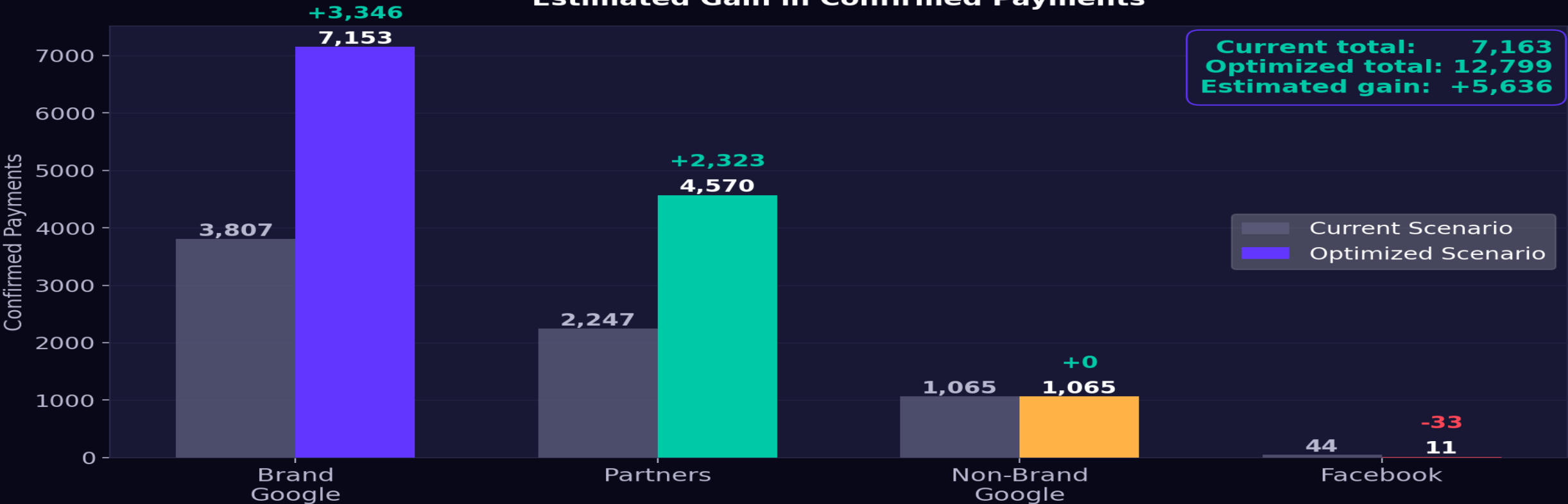
\$1,280

CAC per payment

0.3%

Binary conversion rate

Simulation: Reallocation of 75% of Facebook Budget
Estimated Gain in Confirmed Payments



Strategic Recommendations

Six prioritized actions to optimize acquisition and reduce cost per customer

0

Cut Facebook 50–75%

1

CAC of \$1,280/payment · 0.3% conversion
Redirect budget to Brand and Partners

0

Double Brand Investment

2

Best CAC (\$0.99) · 14.7% conversion
Lowest risk, highest proven return

0

Expand Partnerships

3

Aligned model: pay-per-payment
Highest prob. conversion (46%) in portfolio

0

Fix Mobile Gap

4

12% conversion vs Desktop 18.2%
Sign-up UX + device-specific targeting

0

Create CAC Alert

5

Recent rise in months 18–20
Auto-alert if CAC > \$2.50/trial

0

Optimize Non-Brand

6

CAC \$4.38 but prob. conv. 43.1%
A/B keywords + dedicated landing pages

Exercise 2 — SQL

Schema: STORES · ORDERS · ORDER_DETAIL

Q1 — Monthly order evolution in 2022 (count and value)

```
SELECT
  DATE_FORMAT(o.date, '%Y-%m') AS month,
  COUNT(o.id) AS order_count,
  SUM(od.price * od.quantity) AS total_value
FROM ORDERS o
JOIN ORDER_DETAIL od ON od.order_id = o.id
WHERE YEAR(o.date) = 2022
GROUP BY 1
ORDER BY 1;
```

Q2 — Stores with more than 3 orders in 2021

```
SELECT s.store_name, COUNT(o.id) AS total_orders
FROM STORES s
JOIN ORDERS o ON o.store_id = s.id
WHERE YEAR(o.date) = 2021
GROUP BY s.id, s.store_name
HAVING COUNT(o.id) > 3
ORDER BY total_orders DESC;
```

Exercise 2 — SQL (cont.)

Average · cumulative window · ranking

Q3 — Average products per order in October 2023

```
SELECT AVG(od.quantity) AS avg_products_per_order
FROM ORDERS o
JOIN ORDER_DETAIL od ON od.order_id = o.id
WHERE YEAR(o.date) = 2023 AND MONTH(o.date) = 10;
```

Q4 — Cumulative products sold per store (window function)

```
SELECT s.store_name, o.date, SUM(od.quantity) AS products_sold, SUM(SUM(od.quantity)) OVER ( PARTITION BY s.id ORDER BY o.date) AS cumulative_products_sold
FROM STORES s
JOIN ORDERS o ON o.store_id = s.id
JOIN ORDER_DETAIL od ON od.order_id = o.id
GROUP BY s.id, s.store_name, o.date
ORDER BY s.store_name, o.date;
```

Q5 — Store with most products in a single order (2023)

```
SELECT s.store_name, SUM(od.quantity) AS products_in_order
FROM STORES s
JOIN ORDERS o ON o.store_id = s.id
JOIN ORDER_DETAIL od ON od.order_id = o.id
WHERE YEAR(o.date) = 2023
GROUP BY o.id, s.store_name
ORDER BY products_in_order DESC
LIMIT 1;
```

Analysis Review — Gabriel Gregório

Identified strengths and areas for improvement

✓ Strengths

- Probabilistic approach to payments — more reliable than pure binary methodology
- Correctly identified Brand Campaigns as the champion channel (lowest CAC per trial)
- Flagged Facebook as a problematic channel
- Desktop vs Mobile analysis with relevant device insight
- Clear structure: introduction · channel analysis · actionable conclusions

⚠ Areas for Improvement

- CAC per payment missing — most revealing metric: \$1,280 for Facebook not highlighted
- Budget reallocation simulation not quantified
- Monthly seasonality not explored: peak at M5, consistent decline from M12
- Partners model (pay-per-payment = aligned incentive) not highlighted as structural advantage
- Recommendations could include numerical targets to measure impact

Conclusion & Next Steps

The team grew +43% in trials and reduced CAC by 49% in year 2. The core issue is budget allocation: Facebook consumes 38% of investment and generates less than 1% of confirmed payments. Reallocating 75% of that budget to Brand and Partners projects +1,100 additional payments with no increase in total spend.

1

Cut Facebook

Reallocate 75% to Brand and Partners — immediate

2

Scale Brand

Best proven ROI
CAC \$0.99 per trial

3

Expand Partners

Aligned incentive model
Prob. conv. 46%

4

Fix Mobile

15× gap vs Desktop
UX + targeting

Data → Decision → Results