# 📌 Problem Summary

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The product team wants to **improve user satisfaction and increase free-to-subscriber conversion** for their  AI platform.
 Key business questions include:

- Are **subscribers actually more satisfied** than free users?

- Which **question types cause delays** and reduce satisfaction?

- Does **response time impact user experience**?

- Which **Gemini model and device type perform best**?

- Which **user segments (country, age group, device)** need optimization?


This analysis helps stakeholders:

- Improve AI performance

- Optimize subscription strategy

- Prioritize infrastructure investments

- Identify high-value user segments

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# 📌 Dataset Overview

[https://docs.google.com/spreadsheets/d/1c6ZIxNYvKAJawKl2RlJVQNJdB44xFe6yBK2hYPynEZg/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1c6ZIxNYvKAJawKl2RlJVQNJdB44xFe6yBK2hYPynEZg/edit?usp=sharing)

- **Rows:** ~2,000 user interactions

- **Key Features:**

    - Subscription type (Free / Subscriber)

- Question category

- Response time (seconds)

- Satisfaction score (1–5)

- Country

- Device type

- Gemini model

- Age group

# Report (Key Business Questions & Insights)

# REPORT

# Key Business Questions & Insights

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## 1. Do subscribers have higher satisfaction than free users?

**Finding:**

**subscribers and free users report almost the same satisfaction score.**

- Average satisfaction score:

    - **Subscribers:** ~3.75

    - **Free users:** ~3.79

**Recommendation:**

- Promote **trial access to premium models**

- Highlight speed & quality benefits in subscription messaging

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## 2. Which question category takes the longest to answer?

**Finding:**

**Medical and Coding questions have the longest response times.**

- Avg response time:

- Medical: Highest

- Coding: Second highest

- Lifestyle / General Knowledge: Fastest

### Business Insight:

These categories require:

- Longer reasoning chains

- Higher safety checks (especially medical)

### Recommendation:

- Pre-optimized templates for medical/coding

- Model specialization per category

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# 3. Which countries have the highest AI usage?

### Finding:

Top usage comes from:

- Germany

- Netherlands

- Australia

**Recommendation:**

- Country-specific pricing strategies

- Regional performance optimization

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# 4. Do mobile users experience slower responses?

## Finding:

**Yes — mobile users face slightly higher latency.**

- Mobile avg response time > Desktop

- Mobile satisfaction slightly lower

## Business Insight:

Network variability + device constraints impact experience.

## Recommendation:

- Lightweight mobile inference

- Edge caching for mobile traffic

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# 5.Which age group is most satisfied?

## Finding:

**Users aged 36-45 are the most satisfied**

- Highest average satisfaction

- Lowest complaint frequency

**Business Insight:**

This group likely:

- Uses AI for productivity

- Understands limitations better

**Recommendation:**

- Tailor marketing toward 36-45 demographic

- Use them as beta testers for new features

# 6. Do mobile users experience slower responses?

**From "Satisfaction by Device":**

- iOS ≈ Android ≈ Web (very close)

**However (important nuance):**

- Mobile satisfaction slightly lower when response times spike

- Network dependency likely plays a role

**Conclusion:**

Device alone isn't the issue — **network latency + payload size** matter more.

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# Additional Insights

◆ **Category vs Satisfaction Heatmap**

- Coding + Education → higher satisfaction

- Medical → lower satisfaction **despite long responses**

→ Indicates **expectation mismatch**, not just latency

- ◆ **Free users ask more "General Knowledge" questions**

→ Lower complexity, lower conversion likelihood

- ◆ **Subscribers ask more "Coding" & "Medical" questions**

→ Indicates **professional usage**