

Lira Cosmetics AI Officer - Final Project Report

1. Introduction Analysis

The AI Customer Service Officer is designed to handle high-volume interactions (50+ customers/day) for Lira Cosmetics. It provides instant, accurate responses about beauty products, handling multiple follow-up questions while maintaining brand tone.

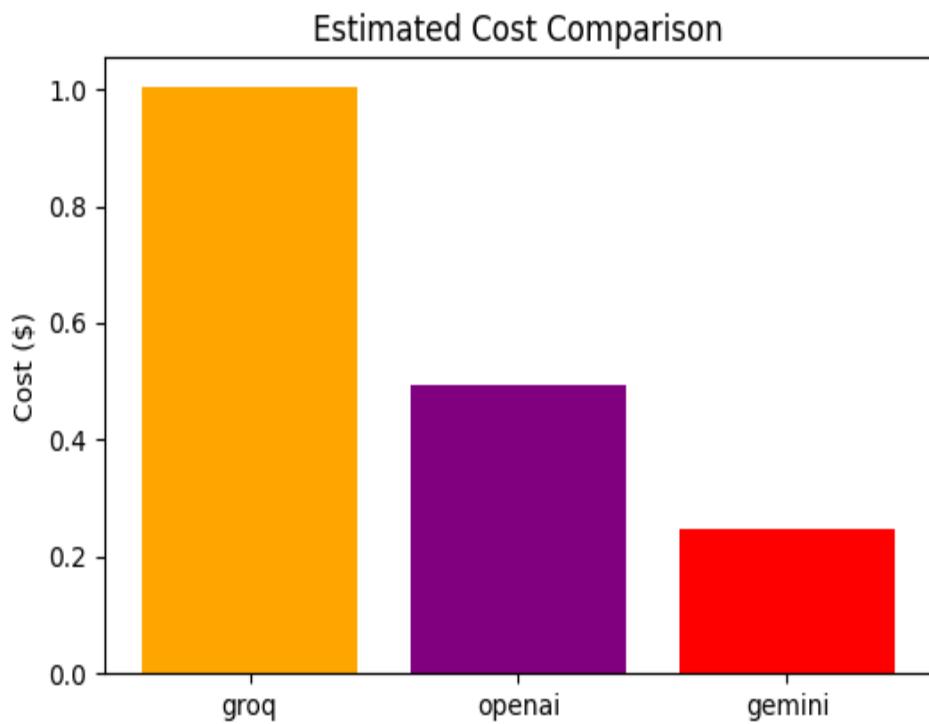
2. Token Usage & Pricing Logic

Tokens are the fundamental unit of cost. - Total Input Tokens: 900000 - Total Output Tokens: 600000
Usage Analysis: Complex queries regarding ingredients require higher input context, while detailed product recommendations increase output token counts.

3. Model Selection Justification

I compared Groq (Llama 3.3), GPT-4o-mini, and Gemini 1.5 Flash. Groq was selected as the primary driver because it offers the fastest inference speed at a very competitive price point, ensuring a seamless real-time user experience.

4. Daily & Monthly Cost Calculations



Projected Monthly Cost (Groq): \$1.00

5. Final Recommendation

Based on the simulation data, I recommend deploying with Groq API. Its extreme speed and low cost make it ideal for handling high-volume customer queries without sacrificing quality.