# Karmic Seed - Operations Analyst - Round 3

This round is designed to evaluate how you think through open-ended business problems, work with datasets, and translate analysis into structured, practical decisions.

## ***Pricing Strategy & Data-Driven Decision Making***

## 1. PROBLEM STATEMENT

XYZ Company is a consumer brand selling eco-friendly tableware products across online marketplaces. The company manages a diverse catalog of SKUs with varying costs, demand patterns, inventory positions, and market competition.

Over time, the company has observed that pricing decisions are often made reactively, without a structured framework to balance growth, profitability, and inventory health. Some products sell too quickly and create stock pressure, while others stagnate despite heavy advertising. In some cases, prices drift away from the broader market without clear justification.

The company wants to move toward a more systematic, data-driven pricing approach. One that can adapt to changing conditions and support better operational decisions.

You have been asked to analyze available data and propose a **pricing strategy framework** that could be applied across the catalog.

For this assignment, you will receive product-level, sales-level, performance-level information through both public API endpoints (JSON format) and CSV files.

You will implement your proposed pricing logic using a tool of your choice (e.g. Google Apps Script, Python notebooks etc), apply it to the provided datasets, and compute a **recommended selling price for each SKU**, and submit your work.

*The datasets use terminology and metrics commonly found in large e-commerce marketplaces that operate third-party fulfillment and advertising models (e.g., fulfillment fees, inventory availability states, traffic and conversion metrics).*

## 2. OBJECTIVE

Your task is to **design and explain a pricing strategy**, supported by data analysis, that could be realistically used by the business.

You are expected to:

- Study the provided datasets
- Identify key signals that influence pricing decisions
- Propose a logical framework for adjusting prices
- Demonstrate how your logic would produce recommended prices

## 3. DATA PROVIDED

You will receive **datasets** representing different aspects of the business. These will be provided in **CSV and JSON formats**.

Some datasets may:

- Contain missing or inconsistent values
- Require cleaning or interpretation

You are expected to decide **how to use (or ignore) certain fields** based on your strategy.

Datasets include:

- **Pricing_Data:** **JSON DATA**
- **Competitor_Data:** **JSON DATA**
- **Historical_Sales:** **JSON DATA**
- **Returns_Data:** **JSON DATA**
- **Inventory_Health:** **JSON DATA**
- **Ads_Performance:** **JSON DATA**

**CSV Formats:** **Drive**

**Data definitions:** **Document**

A separate reference document is provided with definitions for key fields across each dataset.

## 4. EVALUATION CRITERIA

Candidates are expected to apply independent thinking, judgment, and reasoning when analyzing the data and proposing a pricing strategy.

While modern analytical tools may be used to support calculations or visualization, the core logic, assumptions, and recommendations should reflect the candidate's own understanding of the business problem.

Submissions that rely primarily on generic, templated, or copy-pasted logic without clear linkage to the provided datasets or without thoughtful justification may be evaluated lower.

## 5. DELIVERABLES

### Submit here: Submission form

**Presentation & format guidance**

The final report should be written for an executive audience and clearly communicate insights, trade-offs, and recommendations.

Candidates may include tables, charts, or simple dashboards where they help explain the analysis. Any commonly used tools (e.g., Google Sheets, Excel, Python notebooks, slides) are acceptable.

You must submit **one PDF report** that includes:

1. Pricing strategy explanation
2. Detailed Summary of data analysis performed
3. Final pricing recommendations and key insights
4. Links to **all working files** used in the assignment (e.g. Google Sheets, notebooks, scripts etc.), including access to **all code files** used to implement the pricing logic.

**Optional (Bonus)**

As an optional enhancement, candidates may include an additional artifact that demonstrates how their pricing logic could be applied or used in practice beyond static analysis. This could take the form of a simple, usable output that translates the pricing framework into something an operating team could reasonably use or reference in practice. *(This is not a requirement)*