

# Airlift Technologies

**Analytics Lead -- Case Study**

**General Instructions on the Recruitment Process:**

Airlift’s culture is built around a few core values that define the behaviors and attitudes that we seek in teammates:

* **Hyper bias to action** -- we seek to partner with **true doers**
* **Be an obsessive learner --** we love candidates who are **eager to learn** and grow
* **Move at lightning speed** -- we view speed as our greatest advantage

As you go through the recruitment process, our suggestion is to incorporate the above value system into your approach.

# Specific Instructions for the Case Study:

Two things that we greatly value at Airlift and look forward to reviewing in your case study are a high degree of intellectual curiosity and an extreme commitment to excellence.

# Problem 1 -- Pricing and Pricing Operations Strategy Relevant Context

Pricing is one of the most powerful and highly leveraged instruments in the retailing business. It is critical to get the pricing exactly right otherwise if you’re underpriced you would be losing money and if you’re overpriced, you wouldn’t be able to sell your stock,

At Airlift, our biggest challenge is to manage pricing at scale, which in the near term means managing the pricing of our entire catalogue across 20+ cities across three continents.

Airlift’s overall strategy is to rapidly grow and win market share in the ecommerce market whilst being capital efficient and having positive gross margins comparable to the retail sector.

# Problem

At a high level, how should Airlift think about pricing strategy in accordance with the mentioned company strategy?

How would you go about implementing your proposed pricing strategy in the short-term (when resources are constrained) and long-term (leveraging product, automation, and analytics)?

You have been provided with sales data for 4 products across one month [here](https://docs.google.com/spreadsheets/d/1vtlg82lZE_G8izQRQGQqkc_oSlQBZ9TS4x9e0Y2j068/edit#gid%3D0). We want to increase our Gross Margins by increasing overall revenue. How should we change the pricing for each of the 4 products?

# Problem 2 -- Assortment Strategy Part (I) – Measuring success

Airlift views its business in terms of the categories that are offered on the platform. All SKUs on the platform are categorized across categories and sub-categories. We are looking to understand the key metrics that could help us ascertain the health of a category.

Please propose a dashboard view of key performance metrics that should be measured in order to gauge the performance of a category and how each of these metrics should be prioritized.

When launching in a new country, we have to begin with an initial assortment before we can make our platform open for customers.

How should Airlift approach its initial assortment for launch in a new country, say South Africa? What should the decision-making framework look like for the assortment at launch and how should it evolve in the coming months?

# Part (II) – Analysis

The data linked [here](https://docs.google.com/spreadsheets/d/1mvTYNrDXUqkPzGAqRQfluTN1Cxy5WXaeuBic6hzasL0/edit#gid%3D0) shows category-level sales for the last 3 weeks. We are trying to identify the best performing categories and the worst performing ones during this period.

Please share your analysis which helps us understand which categories are performing well and which ones are not.

Are there any observations which can be utilized to improve performance for the ones that are not performing well?

# Problem 3 -- Growth:

While we have experienced exponential growth, there came a point when we saw a significant drop in our sales volumes. You are tasked with:

1. Figuring out when this major drop in growth occurred
2. Determining the major drivers behind this drop in growth

Please use the [provided dataset](https://docs.google.com/spreadsheets/d/1yd92rjhFV8dyYrXN7tsKYB7dGEJqXR615cduNArZJQU/edit?usp=sharing) to show your analysis and substantiate your response.

You are free to use Excel or any other scripting language like R, Python etc to help you in your analysis. You can submit your findings in a Document or Slides, whichever you feel best serves to communicate your findings. Please share your working files that include the sample data you created and outline the methodology you used to analyze the data. Please explicitly specify any assumptions that you make in narrowing the scope of the problem.

Please feel free to email [mehras@airlifttech.com](mailto:mehras@airlifttech.com%20) with any questions as needed. Neither in this case study nor on the job would we expect you to be alone in tackling problems. We are looking for responses that show effort and thoughtfulness.