

Airlift Technologies BizOps Analyst -- Case Study

General Instructions on the Recruitment Process:

Airlift's culture is built around a few core values that define the behaviours 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. The BizOps Analyst is expected to solve critical challenges that an early-stage company regularly faces. Oftentimes they wouldn't have any prior experience for that challenge. Therefore, the skills, that we're looking to test with the case study, and that would be a big part of the role, would be advanced problem solving, analytical and communication skills,

Problem -- Inventory Replenishment Strategy

Relevant Context

It is extremely important for Airlift Express to have an efficient supply chain. As a retailing company, Airlift makes money on the products it sells, customers come to Airlift Express to order products on-demand that have to be delivered to them within 45 minutes.

At Airlift Express our biggest challenge is to manage the replenishments of our 4000+ products at scale across a network of multiple warehouses. The main objectives are:

- 1. We never want to be Out of Stock for any items in our inventory since that leads to bad customer experience and lost revenue.
- 2. We do not want to overstock and have too much of our financial capital tied up in stored inventory.

Airlift Express'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.

Airlift is currently following a very manual replenishment process for ordering products from suppliers. We feel that there's a lot of room for data-driven

Problem

improvement in the process.

We're looking for an extremely smart analyst that can look at our Inventory Sales and Purchase data here and recommend to us a data-driven process or formula that can be scaled up to all 4000 products.

- 1) The Sales and Purchase data for 2 products is provided in the link.
- 2) Please analyse this data and identify if there are any problems in the replenishment process of these 2 products.
- 3) What learnings can you derive from the data of these 2 SKUs that can be used to create a replenishment formula that can apply to all products?
- 4) What would that replenishment formula look like?
- 5) What would be a short-term approach to solving the root problem and what would the long-term roadmap look like?

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.

We are looking for responses that show effort and thoughtfulness.

Please feel free to email Hassan Ali Akhter at hassanaliakhtar@airlifttech.com with any questions as needed. Neither in this case study nor on the job would we expect you to be alone in tackling problems.

Please submit the case study by replying to the email thread in which it was received.