William Hendrick

Logistics Optimization for International Freights

https://github.com/willhendrickk/isba-4715-sql-s24.git

Job Description:

- Why did you select the job?

  I selected this job because it aligns perfectly with my passion for supply chain optimization. I believe that using data to make decisions speaks directly to my strengths as an analyst.

- Relevance of the job to your career goals:

  This job is highly relevant as supply chain analytics is one of the areas I would like to specialize in. It offers the perfect opportunity for me to apply my analytical skills to solve real world challenges.

- Explanation of why the job is of interest to you:

  Developing and automating tools for monitoring as well as reporting particularly interests me, with the ultimate goal of serving as a consultant to provide recommendations to the company.

Problem:

- The problem you plan to solve:

  I intend to discover the most cost-effective shipping method as well as freight trends to provide cost-saving opportunities.

- Relevance of the problem to the job:

  This problem is directly relevant as it addresses the core responsibilities of using data analysis to reduce cost.

- Feasibility of the problem to be solved with SQL and a visualization tool:

SQL can be used to aggregate and analyze shipping data from various sources and visualization tools like Tableau or PowerBI can be used to present insights.

Data Sources

- API: Obtaining shipping rates and other critical information from major shipping companies through APIs.
- Web Scraping: Scrape international freight indices from websites to obtain current trends and rates in global shipping.
- Relevance of the data sources to the job and problem

  These data sources allow us to compare pricing from different carriers, and understand the global shipping trends, which are crucial for planning.

Solution

- How you plan to solve the problem with the data:

  By finding the most cost-effective shipping modes.
- General description of the SQL queries and visualizations used to address the problem

  Finding the carrier with the lowest average shipping cost within a certain requirement for each route.