Harvard Undergraduate Data Analytics Group

[Scan Global Logistics]

Scan Global Logistics is a global full-service logistics provider with its headquarters in Denmark. Established in 1975, the company operates across all six continents, positioning itself as a leader in the logistics and freight forwarding sector. They offer a broad spectrum of services, including air and sea freight, road transport, warehousing, and specialized logistics solutions, catering particularly to sectors like energy, automotive, and humanitarian logistics. Their approach emphasizes flexibility, speed, and a customer-centric viewpoint, aiming to simplify complex logistics challenges for their clients. The company boasts an annual revenue of approximately $3 billion USD.

Project Description

This case will work with the financial team at Scan Global to optimize their account payable processes, particularly focusing on the efficient matching of bills. Although ideally automatic, the AP system often necessitates manual intervention to match incoming vendor invoices with records "recapped" by the operations team, leading to payment delays. Scan Global would like to better understand the differences in efficiency between different ingestion methods (EDI, OCR, and manual entry), what factors are causing matching issues (vendor #, invoice #, invoice amount, ref #, etc), and which vendors are causing the most delays (in time and number of touches).

HDAG will use historical data provided by the client detailing invoice processing, specifically who entered fields, who was the last touch on an invoice, and what was the timestamp for each action. By leveraging statistical analysis, machine learning modeling, and historical data, HDAG aims to furnish Scan Global with actionable insights to streamline and enhance their invoice processing system.

Internal Partners: Chief Financial Officer, North America

Datasets: Historical invoicing Excel sheets

Coding Languages: Python

Specific Skills

1. Machine learning modeling
2. Data visualization
3. Data wrangling/processing

Expected Technical Difficulty: **Medium**