Revolutionizing data management for a major Amazon seller with DIRECTION solution

Solution implemented

Our company was approached by a major Amazon seller from Germany who faced a significant challenge in their daily transaction data management. The seller was grappling with the manual process of downloading Excel sheets from Amazon every day and analyzing the data using a reporting tool. This time-consuming process was draining their valuable resources and hampering their business growth.

We implemented the solution using Python and Amazon SP-API, which enabled the seller to fetch data from Amazon automatically. We also created a PostgreSQL database that acted as a warehouse for their sales data, and connected it to their Power BI report, streamlining their data analysis process.

The Need for an upgrade

The Amazon seller from Germany was struggling with the inefficiency of their manual process of downloading Excel sheets from Amazon for their daily sales data. The process was time-consuming, tedious, and resource-intensive, which resulted in delays and inaccuracies in their sales analysis. The seller realized that they needed an upgrade to their current process and sought a more efficient and automated solution to manage their daily sales data.

An upgrade to their process was imperative to eliminate the manual downloading of data and the potential errors that could occur during the process. The seller required a more professional and streamlined system that would provide them with accurate and timely sales data, enabling them to make informed business decisions. Therefore, a data automation solution was necessary to help the seller manage their sales data more efficiently, freeing up their time and resources to focus on other areas of their business.

The Solution

Python Amazon SP-API

To provide a solution to the Amazon seller's problem, our team developed Python scripts that utilized the Amazon SP-API. These scripts were specifically designed to automate the process of fetching data from Amazon, eliminating the need for manual downloading of Excel sheets. The data was then stored in a PostgreSQL database that acted as a warehouse for the sales data.

DIRECTION
Software LLP

Solution implemented

Our company was approached by a major Amazon seller from Germany who faced a significant challenge in their daily transaction data management. The seller was grappling with the manual process of downloading Excel sheets from Amazon every day and analyzing the data using a reporting tool. This time-consuming process was draining their valuable resources and hampering their business growth.

We implemented the solution using Python and Amazon SP-API, which enabled the seller to fetch data from Amazon automatically. We also created a PostgreSQL database that acted as a warehouse for their sales data, and connected it to their Power BI report, streamlining their data analysis process.

The Need for an upgrade

The Amazon seller from Germany was struggling with the inefficiency of their manual process of downloading Excel sheets from Amazon for their daily sales data. The process was time-consuming, tedious, and resource-intensive, which resulted in delays and inaccuracies in their sales analysis. The seller realized that they needed an upgrade to their current process and sought a more efficient and automated solution to manage their daily sales data.

An upgrade to their process was imperative to eliminate the manual downloading of data and the potential errors that could occur during the process. The seller required a more professional and streamlined system that would provide them with accurate and timely sales data, enabling them to make informed business decisions. Therefore, a data automation solution was necessary to help the seller manage their sales data more efficiently, freeing up their time and resources to focus on other areas of their business.

The Solution

Python Amazon SP-API

To provide a solution to the Amazon seller's problem, our team developed Python scripts that utilized the Amazon SP-API. These scripts were specifically designed to automate the process of fetching data from Amazon, eliminating the need for manual downloading of Excel sheets. The data was then stored in a PostgreSQL database that acted as a warehouse for the sales data.

Scheduling and Flow

To ensure that the seller's sales data was always up-to-date and accurate, the Python scripts were set up to run automatically every day. This ensured that the seller had access to the most recent and relevant data for their analysis. Additionally, we used Airflow DAG (Directed Acyclic Graph) to maintain the flow and scheduling of the scripts, ensuring that they were executed accurately and on time.

Database integration with Power BI

The PostgreSQL database was connected to the seller's Power BI report, enabling them to analyze their sales data more efficiently. This integration streamlined the seller's sales analysis process, saving them time and resources, and providing them with the ability to make informed business decisions.

DIRECTION
Software LLP

Normalizing and Data Storing

In addition to automating the data fetching process, our team also took care of data cleaning and normalization for the Amazon seller. The seller had data from different marketplaces with varying currencies, which we converted to a standardized currency using Python scripts. We also normalized the dates and created an SQL function to map items with daily sales, making it easier for the seller to analyze their sales data.

To store the cleaned and normalized data, we created a robust data warehousing system using PostgreSQL. We designed and created different tables to store data in separate categories, ensuring easy accessibility and management of data.

Scrapping

Furthermore, for some Datasets, we also developed an email scraping BOT. This BOT was designed to scrape data from emails and populate it into the PostgreSQL database, ensuring that the data was always up-to-date and accurate, even in the case of an API error or other issues.

In conclusion, our team provided a fully automated and professional solution to the Amazon seller's problem, streamlining their sales data management process and providing them with timely and accurate sales data for their analysis. The use of Python scripts, PostgreSQL database, and Airflow DAG ensured the seamless execution of the solution, providing the seller with a fail-safe process.

What the DSS provided

DSS solution provided the following benefits to the Amazon seller:

- **Fully automated system:** The solution utilized Python scripts and Amazon SP-API to fetch data from Amazon automatically, eliminating the need for manual downloading of Excel sheets.

- **Efficient data management:** The fetched data was stored in a PostgreSQL database that acted as a warehouse for the sales data. The database was connected to the seller's Power BI report, enabling them to analyze their sales data more efficiently.

- **Timely and accurate data:** The Python scripts were set up to run automatically every day, ensuring that the seller had access to the most recent and relevant data for their analysis. Additionally, the email scraping BOT provided a fail-safe solution, ensuring that the data was always up-to-date and accurate.

- **Cost-effective solution:** The DSS solution was a cost-effective way to manage the seller's sales data, saving them valuable time and resources that could be used to focus on other areas of their business.

- **Streamlined process:** The integration of the Python scripts, PostgreSQL database, and Airflow DAG ensured the seamless execution of the solution, providing the seller with a streamlined process for managing their sales data.

In conclusion, our Direction solution provided the Amazon seller with an efficient and cost-effective way to manage their sales data. The solution utilized the latest technology, enabling the seller to automate their daily tasks, saving them valuable time and resources, and allowing them to focus on other areas of their business. Furthermore, Direction solution not only automated the daily tasks for the Amazon seller but also streamlined their data management process. By taking care of data cleaning, normalization, and warehousing, we ensured the accuracy and accessibility of their sales data, enabling them to make informed decisions and drive business growth.