Financial Analysis Project

eCommerce Sales Data

Revenue and Profitability

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INTRODUCTION

The revenue and profitability analysis of an e-commerce store is a crucial undertaking for businesses aiming to understand their financial performance and drive strategic decision-making. In this analysis, we will delve into the financial aspects of the e-commerce store, focusing on revenue generation and profitability metrics. I aim to gain comprehensive insights into the store's financial health, customer behavior, and operational efficiency. This analysis will provide valuable information for the proverbial stakeholders, enabling them to make informed decisions, optimize revenue streams, and enhance overall profitability. Through a systematic exploration of these key indicators, I will uncover opportunities for growth and identify areas of improvement to drive the e-commerce store's success.

ANALYSIS STATEMENT

In this analysis, our primary objective is to evaluate the financial performance of the e-commerce store within the specified timeframe of April 30, 2022, to May 30, 2022. We will focus on several key aspects, including total revenue, revenue breakdown by categories, identification of the primary drivers of revenue, fulfillment ratios between independent merchants hosted on the site and the e-commerce platform itself, average order value, and order fulfillment rate. To streamline the process of retrieving specific information, I imported the data into Google BigQuery's SQL server environment. By utilizing SQL queries, I was able to efficiently extract the required information from the dataset.

DATA SOURCE

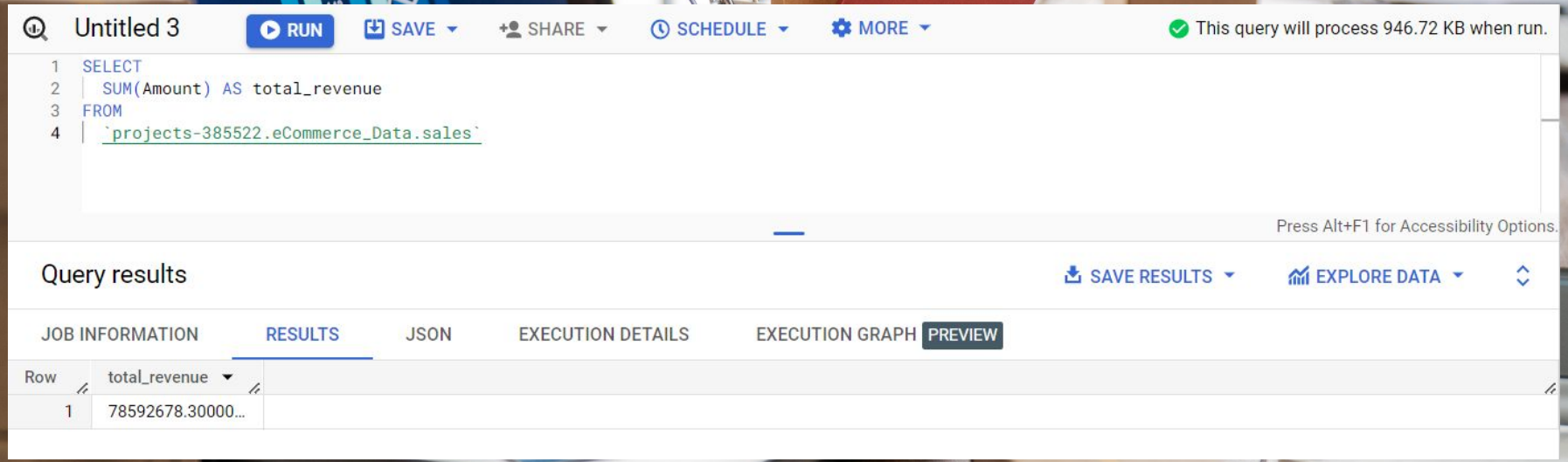
The selected data source for the analysis is the e-Commerce Sales Dataset available on Kaggle.com. You can access the dataset using the following link: E-Commerce Sales Dataset | Kaggle. This dataset serves as the foundation for conducting a comprehensive analysis of various aspects related to e-commerce sales. By leveraging this dataset, we can gain valuable insights into sales performance, customer behavior, and other relevant factors that contribute to the success of an e-commerce business. The dataset offers a reliable and extensive collection of data points that will facilitate a professional and thorough analysis of e-commerce sales trends and patterns.

Original Data Author [ANil's datasets | page 1 | data.world]

PROBLEM STATEMENT QUESTIONS AND ANSWERS

What was the total revenue generated by the e-commerce store between April 30, 2022, and May 30, 2022?

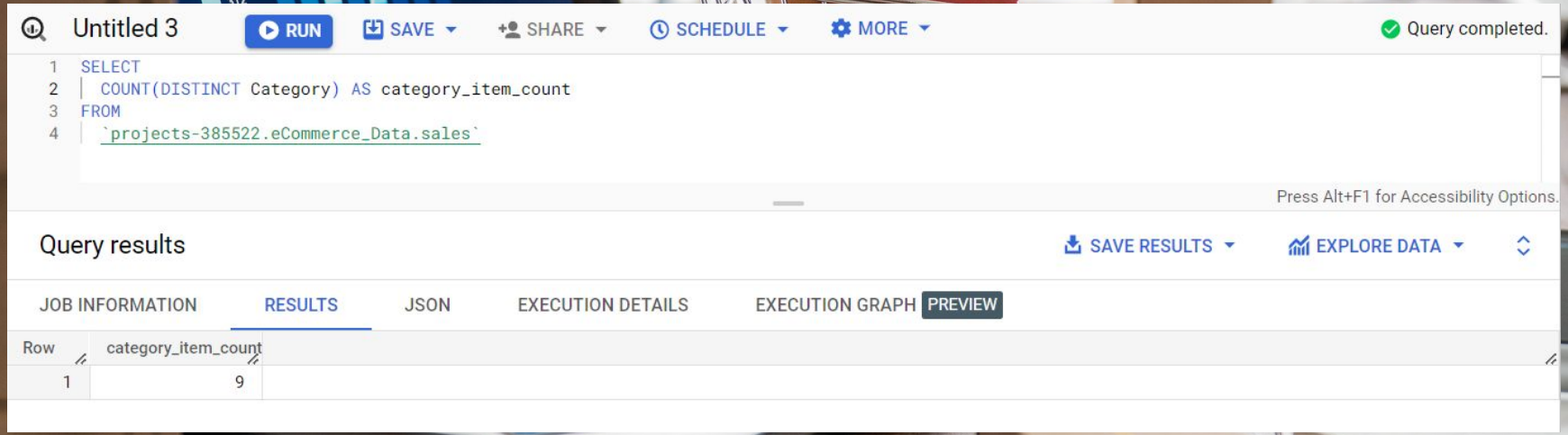
During the period of April 30, 2022, to May 30, 2022, the e-commerce store generated a total revenue of $78,592,678.30. This significant revenue figure highlights the store's strong performance and showcases its ability to attract customer transactions and drive sales within the specified timeframe.



PROBLEM STATEMENT QUESTIONS AND ANSWERS

How does the revenue breakdown by different product categories during the analysis period?

Within the timeframe of April 30, 2022, to May 30, 2022, the e-commerce store focused exclusively on the clothing/apparel product category. Despite having a single category, the store witnessed the purchase of nine distinct items during this period. This diverse range of items demonstrates the store's ability to offer a variety of choices to customers within the clothing/apparel category, catering to their preferences and meeting their individual needs.



PROBLEM STATEMENT QUESTIONS AND ANSWERS

To gain a more granular understanding of the revenue generated by individual items within the clothing/apparel category, an additional query was executed..

Untitled 3 RUN SAVE SHARE SCHEDULE MORE Query completed.

```
SELECT
  Category, COUNT(*) AS item_count, SUM(DISTINCT Amount) AS item_category_revenue
FROM
  `projects-385522.eCommerce_Data.sales`
WHERE
Category IN ('Blouse', 'Bottom', 'Dupatta', 'Ethnic Dress', 'kurta', 'Saree', 'Set', 'Top', 'Western Dress')
GROUP BY
Category;
```

Press Alt+F1 for Accessibility Options.

Query results SAVE RESULTS EXPLORE DATA

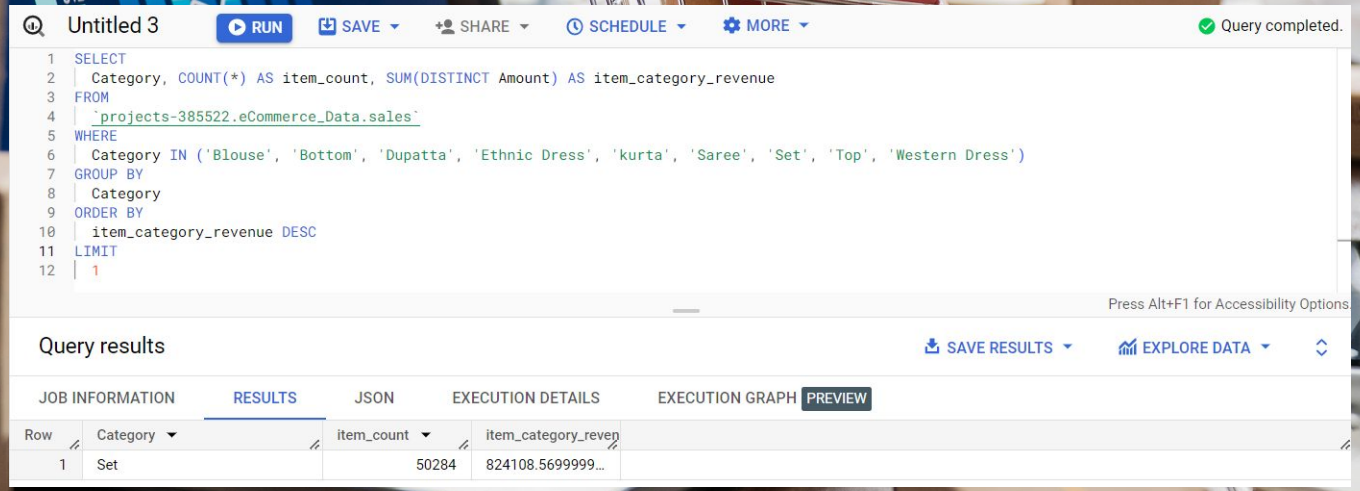
JOB INFORMATION | RESULTS | JSON | EXECUTION DETAILS | EXECUTION GRAPH PREVIEW

Row	Category	item_count	item_category_reven
1	Bottom	440	15240.99
2	Western Dress	15500	207806.0500000...
3	kurta	49877	367475.9899999...
4	Top	10622	150859.88
5	Ethnic Dress	1159	53264.95000000...
6	Set	50284	824108.5699999...
7	Blouse	926	37503.0
8	Dupatta	3	305.0
9	Saree	164	36984.19

PROBLEM STATEMENT QUESTIONS AND ANSWERS

Which specific product categories and primary revenue driver contributed the most to the overall revenue of the e-commerce store?

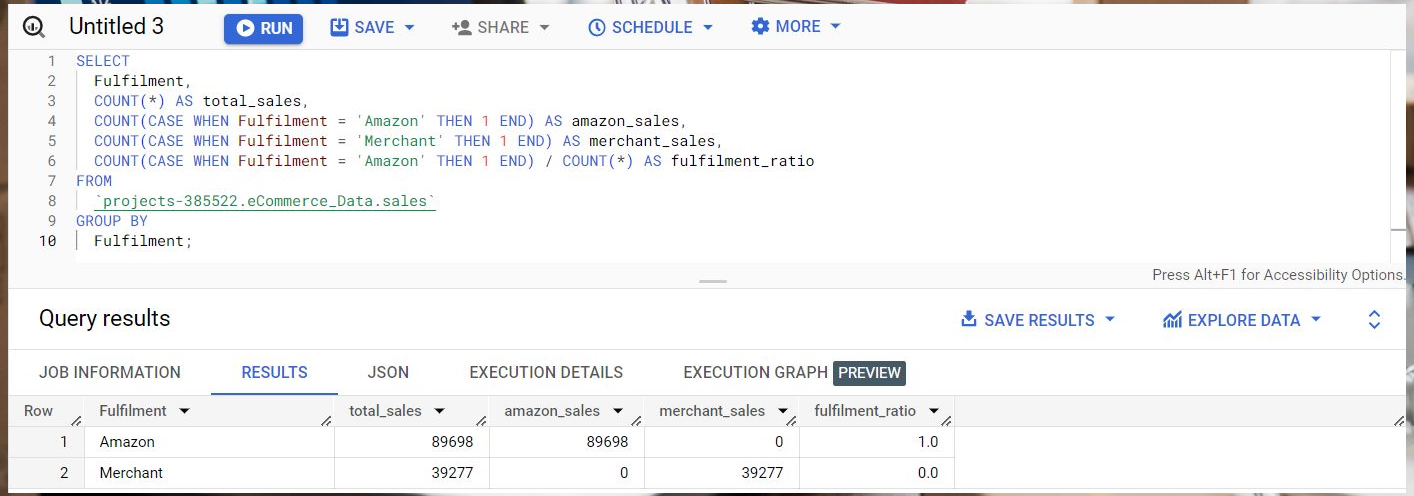
Among the distinct items within the clothing/apparel category, the "Set" item emerged as the primary revenue driver for the e-commerce store during the specified timeframe of April 30, 2022, to May 30, 2022. This particular item generated an impressive total revenue of $824,108.56, demonstrating its strong demand and customer appeal. Furthermore, it was purchased a noteworthy 50,284 times, reflecting its popularity among shoppers. The significant revenue contribution and high purchase frequency of the "Set" item highlight its significance in driving the overall financial performance of the e-commerce store.



PROBLEM STATEMENT QUESTIONS AND ANSWERS

What is the fulfillment ratio between independent merchants hosted on the site and the e-commerce platform itself?

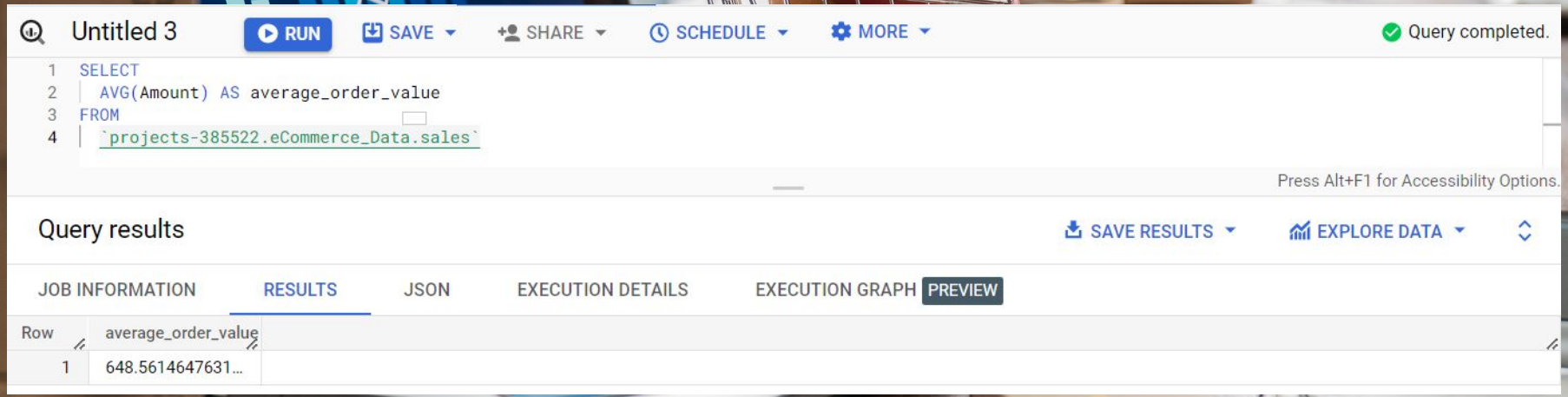
Using SQL calculations, the fulfillment ratio between the platform sales and the independent merchant sales was determined. The results indicate that the e-commerce store itself achieved a fulfillment ratio of 1.0, implying that all orders hosted on the site were successfully fulfilled within the specified timeframe. However, in contrast, the fulfillment ratio for the independent merchants was calculated as 0.0, indicating that none of their orders were fulfilled during the same period. This finding suggests a disparity in the fulfillment capabilities between the e-commerce platform and the independent merchants, and may warrant further investigation into the reasons behind the merchant fulfillment challenges.



PROBLEM STATEMENT QUESTIONS AND ANSWERS

What is the average order value for the e-commerce store within the specified timeframe?

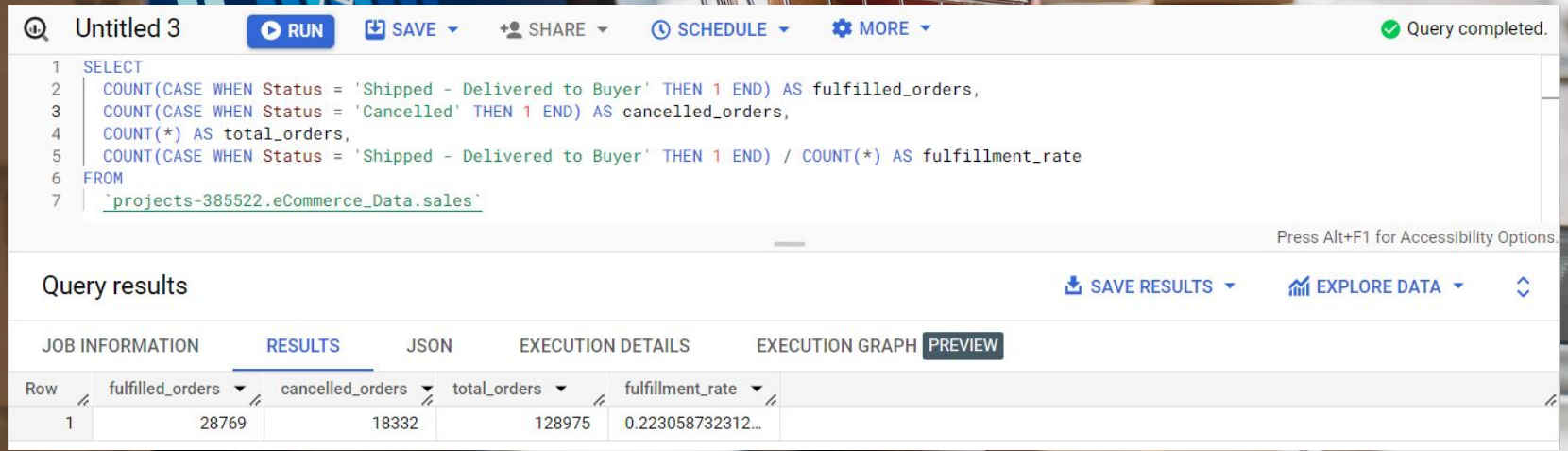
Utilizing the AVERAGE function in SQL resulted in the determination of the overall average order amount. The calculated average order value was $648.56, reflecting the typical expenditure per transaction within the specified timeframe. This metric provides valuable insights into customer purchasing behavior and serves as a key indicator of the store's revenue potential per order. Understanding the average order value enables businesses to optimize pricing strategies, identify up-selling opportunities, and enhance overall revenue generation.



PROBLEM STATEMENT QUESTIONS AND ANSWERS

What is the order fulfillment rate for the e-commerce store within the specified timeframe?

Through the execution of the provided query, a comprehensive evaluation of the e-commerce store's order fulfillment was accomplished. The analysis yielded crucial information regarding the number of orders that were successfully fulfilled and the number of orders that were canceled within the specified timeframe. Additionally, based on these figures, the fulfillment rate was calculated as 0.223, representing the proportion of fulfilled orders out of the total number of orders. This fulfillment rate serves as a key performance indicator, reflecting the e-commerce store's ability to meet customer expectations and ensure timely order fulfillment.



CONCLUSION

In conclusion, this revenue and profitability analysis of the e-commerce store has provided valuable insights into its financial performance and operational efficiency. By examining various key indicators such as total revenue, revenue breakdown by categories, primary drivers of revenue, fulfillment ratios, average order value, and order fulfillment rate, we have gained a comprehensive understanding of the store's performance during the specified timeframe. These insights are crucial for businesses aiming to make informed decisions, optimize revenue streams, and enhance overall profitability. By identifying areas of improvement and leveraging opportunities for growth, organizations can drive success in the dynamic and competitive e-commerce market.