ZOO MEGASTORE

BLACK
FRIDAY

Summary

Business Report

During recent Black Fridays, various actions were taken to increase sales; however, no detailed analysis of the results was performed. To support the strategic decisions of the project management team, the data analysis team compiled this report featuring the key data regarding this subject.

Objectives

1. Show the role of categories, brands, and suppliers in the figures of recent Black Fridays.

2. Present metrics that demonstrate the effect on sales for this year.

Analyses

I. Supplier NebulaNetworks

Supplier NebulaNetworks had the worst performance of last year, with only **529 sales** during the previous year's Black Friday. Analyzing the sales performance of this supplier's products over **the last 4 years** reveals a decline.

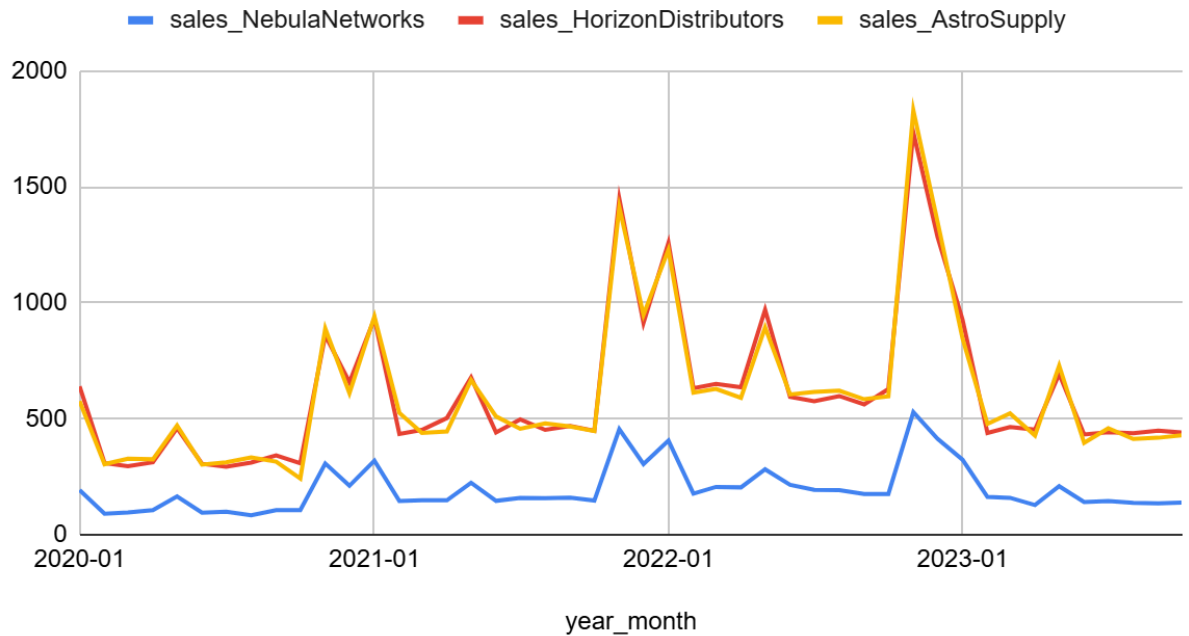NebulaNetworks: Sales Performance Over the Last 4 Years
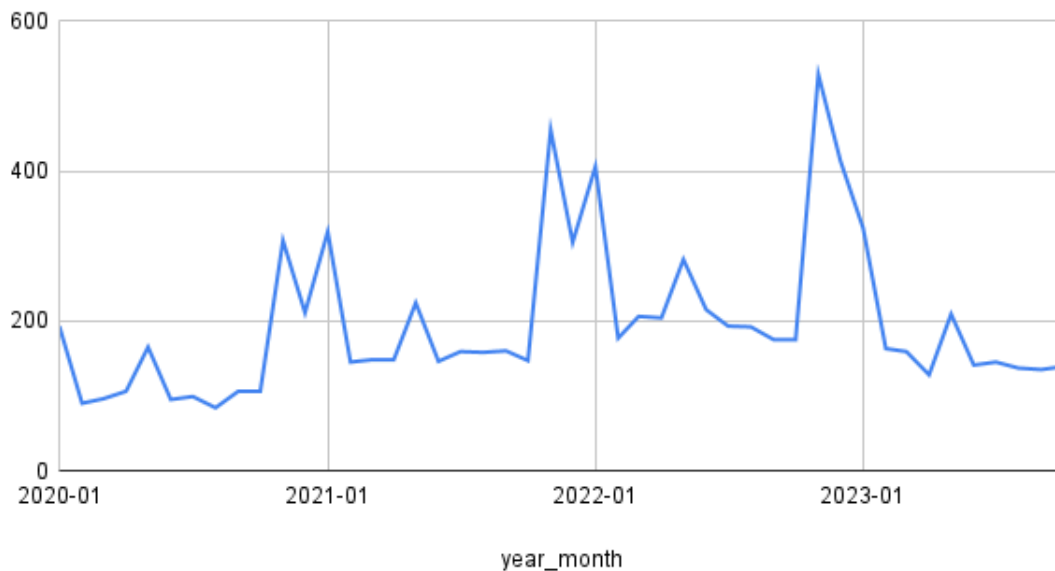
Source: Author.

II. Comparing Main Suppliers

Analyzing the main suppliers, we observe very similar sales behavior over the years. This indicates that the selling price of no specific supplier was significantly altering sales behavior.
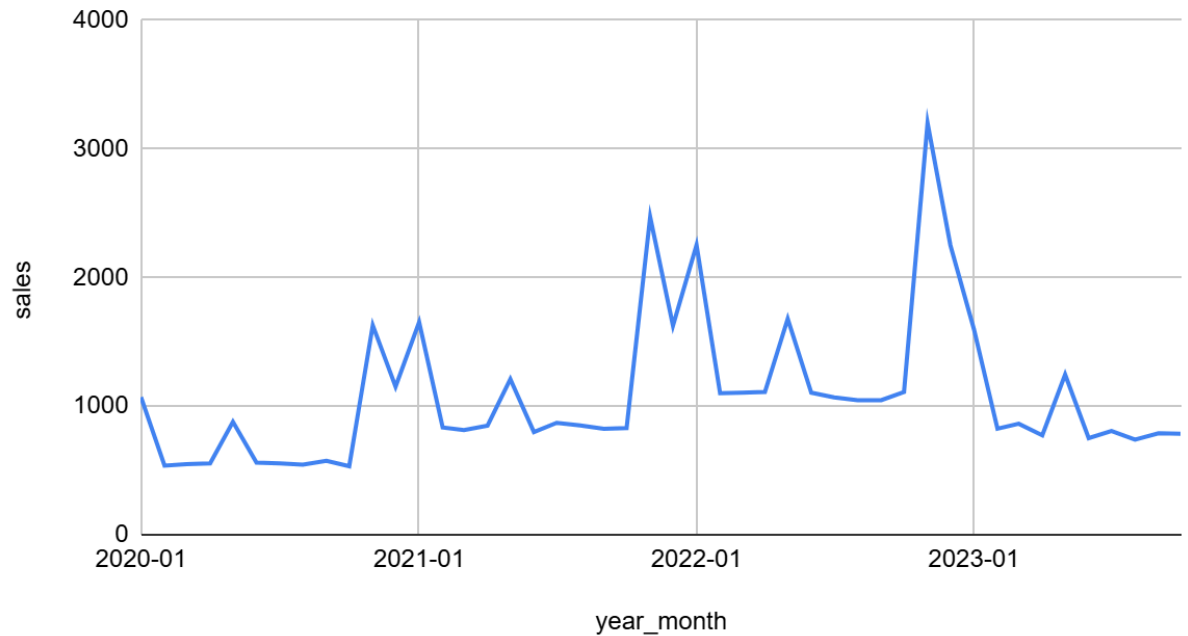

Source: Author.

III.   General Sales in the Last 4 Years

        Over the last 4 years, we have seen a downward trend in general sales, which may be driven by various external factors. This information is important to consider when evaluating this year's Black Friday results.

Total Sales Performance

Source: Author.

IV.   Seeking Sales Patterns Across Months

To understand buyer behavior throughout the year, we created a chart to compare whether sales stand out in specific months. We found a higher number of sales in months 1, 11, and 12, as expected. However, month 5 also stands out, showing a sales increase every year.

Monthly Sales Comparison (2020–2023)
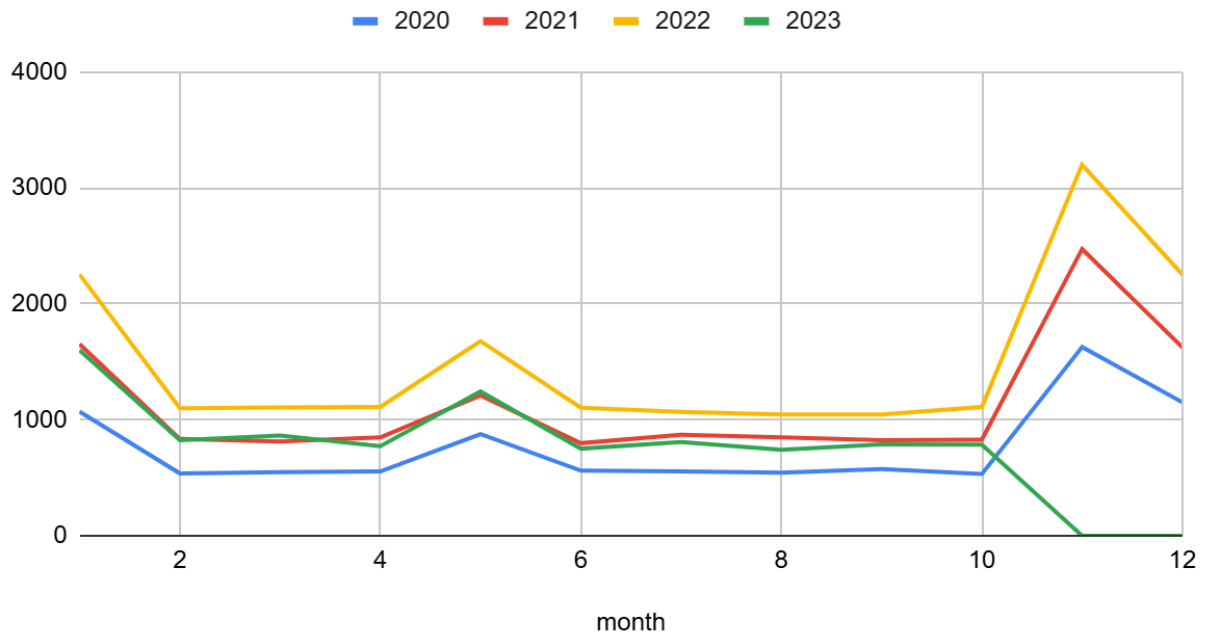
Source: Author.

Metric

For this year's Black Friday, we have an SQL query that can be used to compare current results with previous averages, allowing for a quick perception of performance.

```sql
WITH avg_sales AS (
    -- CTE 1: Calculates the average sales volume for November across all years,
excluding 2022.
    SELECT
        AVG(sales) AS avg_historical_sales
    FROM (
        SELECT strftime('%Y', v.data_venda) AS year, COUNT(*) AS sales
        FROM vendas v
        -- Filter for November (month '11') and exclude the current comparison
year (2022)
            WHERE strftime('%m', v.data_venda) = '11' AND strftime('%Y',
v.data_venda) != '2022'
        GROUP BY 1
    )
),
act_sales AS (
    -- CTE 2: Captures the actual sales volume for the target comparison year
(November 2022).
    SELECT
        sales AS actual_2022_sales
    FROM (
        SELECT strftime('%Y', v.data_venda) AS year, COUNT(*) AS sales
        FROM vendas v
        -- Filter specifically for November 2022
```

```
                WHERE  strftime('%m',  v.data_venda)  =  '11'  AND  strftime('%Y',
v.data_venda) = '2022'

        GROUP BY 1

    )

)

SELECT

    avg_va.avg_historical_sales,

    va.actual_2022_sales,

    -- Calculation: ((Actual - Average) / Average) * 100 to find the percentage
variance.

            ROUND(((va.actual_2022_sales   -   avg_va.avg_historical_sales)   /
avg_va.avg_historical_sales * 100), 2) AS percentage_variance

FROM avg_sales avg_va, act_sales va;
```

This command will return a table as follows:

Previous_Sales_Average	Current_November_Sales	Increase_Percentage
2049.5	3200	56.14%

Conclusion

This report focused on the impact of suppliers on sales, and no supplier was found to have a major negative impact on performance.

We recommend designing a second report focusing on product categories and brands.

While we created a metric to monitor Black Friday, others should be developed for a more in-depth follow-up.