**PARCH AND POSEY PAPER COMPANY**

My name is **Akinfe Taiwo Oluwabamise**. I am a data analyst tasked with performing a detailed analysis of the data of Parch and Posey . I have critically analyzed the data set and I have the confident that these actionable insights will help the company achieve its goal of strategic decision making.

**INTRODUCTION**

Patch & Posey is a paper selling company located in the United States of America. This company has 50 sales reps across four regions in the United States where it operates. It deals on 3 major types of paper: Standard Paper, Gloss Paper and Poster Paper.

An analysis of its data is important to be able to understand important trends, their revenue and their profit analysis which will help in making best business decision.

**Data**

Parch and Posey's data was stored in the company’s database. This database contains the following tables .

* accounts: all accounts from Parch and Posey
* orders: all orders made from 12-03-2013 to 01-01-2017
* regions: the four regions in the United States where Parch and Posey operates
* Sales\_Reps: Sales Representative information
* Web events: can also be called channel where Parch and Posey made their sales

**Tools**

* PostgreSQL: This was used to communicate with the database. Ten Queries were generated to answer analytical questions to give insight and explorative analysis
* Excel: Generated results from SQL queries were stored as excel files.
* Power Bi This served as the visualization tool

**Data preparation**

This data was thoroughly cleaned before analysis was carried out. All null and duplicates values were removed, the data type was checked in order to aid the data modeling.

**Data processing**

Exploratory data analysis was carried out using PostgreSQL with the aim generating revenue and sales. Results from the SQL queries were saved in excel format and loaded into Power Bi as the visualization tool.

**Data Analysis and Visualization**

1. A query to generate Sum of total amount of paper sales in USD, the total sales generated from 2013-2017 from the three different papers in Parch and Posey.

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| **[Total Sales](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage)** |
| 1. Query to generate total paper quantity sold for the period of five years in Parch and Posey  |  | | --- | |  | |
|  |
| [Total Paper Quantity](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) |
| 1. Query to generate total amount of Postal paper sales in Parch and Posey, this is to give insight on which type of paper has the highest sales in the period of that five years.  |  | | --- | | [Total Postal Amount](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | | 1. Query to generate total amount of Standard paper sales in Parch and Posey, this is to give insight on which type of paper has the highest sales in the period of that five years.  |  | | --- | | [Total Standard Amount](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | |  | |  |  1. Query to generate total amount of Gloss paper sales in Parch and Posey, this is to give insight on which type of paper has the highest sales in the period of that five years.  |  | | --- | | [Total Gloss Amount](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | | 1. Query to generate each paper type by revenue per year, this is to see how each paper type generate the revenue for the company. |  |  | | --- | | [Paper Type by Revenue per year](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | | 1. Query to pull the average of each type of paper revenue in the period of the five years.  |  | | --- | | [Average Revenue for Paper Type](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | |  | | | |

1. Query to generate the top five performing sales rep with the total revenue generated. Earlie Schleusner is the best sales rep which generated total sales of $1,098,137 for the company.

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| --- |
| [Top 5 Performing Sales Rep](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) |
| 1. Query to generate the average total sales for each sales rep, the reason for this is because some of the sales reps might not meet with sum of total sales requirement but their average sales still proof they have been working effortlessly to generate more revenue for Parch and Posey.  |  | | --- | | [Average Total for Top Sales Rep](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | | 1. Query to show the region that generated the highest revenue, this is to make the company know the region that has made most of the sales in the states. Northeast happened to be the most performing region with 33.47% sales.  |  | | --- | | [Revenue by Region](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) |      1. Query that shows the number of times each channel was used by the customers by showing the total number of times each channel was used.  |  | | --- | | [Most used Channel](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | |  | |  1. Query to show the year with the highest total revenue in the period of that five years.  |  | | --- | | [Total Sales by Year](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | | 1. Query to demonstrate the month with the highest total sales made in the period of the five years.  |  | | --- | | [Total Sales by Month](https://app.powerbi.com/MobileRedirect.html?action=OpenReport&reportObjectId=fda1efd0-cf24-4d25-877d-918b0cb2e66a&ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&reportPage=ReportSection&pbi_source=copyvisualimage) | |  | | |

**Insights and Recommendations**

* The Standard Paper has the highest sales with $9.67M in year 2013 to 2017 respectively , consider allocating additional resources to further promote this product and capitalize on its strong performance.
* The Postal paper has the lowest sales with $5.88M which signify strong customer demand, there is need to promote the quality and versatility of this product to attract customer and generate larger revenue.
* Patch and Posey experienced exponential growth in sales from 2013 to 2016. Sales significantly dwindled from 2016 to 2017.The standard paper made more sales than others from 2014 to 2016. Monthly revenue has been observed to climb steadily at the beginning of the year and peak at the end of the year. This trend was observed from 2014 to 2017.There should be further analysis to observed the causes of the sales dwindling. Advertisement should be carried out at the beginning of the year as low sales.
* The most used channel is Direct which has the total count of 5298, the social media manager should work on improving advertisement of sales on other channels.
* Most Productive Sales representative is Earlier Schleusner with about $1,098,137 in revenue and 335 orders has brought in the highest revenue compared to other sales representatives. The chart also show several other high performing sales representatives such as Tia Amato ,Venita Plump, Georgianna Chisholm, and Moon Torian. High performing sales representatives should be rewarded while lower performers should be encouraged to do better.

**CONCLUSION**

Further analysis is required for more insights and in-depth solutions for this company.

**DASHBOARDS**

**A screenshot of a graph

Description automatically generated**

**LINK TO DASHBOARDS:**

https://app.powerbi.com/links/AvGGXHA3iQ?ctid=eba7dee4-b2c3-44ab-9a9e-84d87c3b7f98&pbi\_source=linkShare&bookmarkGuid=a36659ac-ce21-48b8-a8c9-576a66e457a8