**Data Analysis Report**: Pharmacy OTC Sales Data

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**Executive Summary**

This report contains an Exploratory Data Analysis of a dataset containing information about pharmacy sales over different countries with the intension of finding out which is the best sales person, which product and country needs more attention. The key finding was most of the customers come from USA, United Kingdom and Canada.

**Introduction**

The dataset has sales data for drugs over 5 countries. The main aim of this analysis is to track the performance of the different aspects of the activity such as product, date, sales person, revenue, number of boxes and the country.

**Dataset Overview**

The dataset is assumed to have the following columns:

1. Date
2. Product
3. Sale person
4. Boxes shipped
5. Amount
6. Country

The dataset has a total of 332 records of data from January 2022 to August 2022.

**Methodology**

The analysis combines a mixture of descriptive analysis and trend analysis with the main objective being to track the performance of different aspects of the business.

The Questions here were:

1. Which countries were the top buyers?
2. Which sales person is selling the most?
3. Which product is the best performing?
4. What is the overall trend in sales throughout the year?

**Analysis and Findings**

1. **Descriptive analysis**

**Dates:** The data ranged from January 2022 to August 2022

**Boxes shipped**: On average 10 boxes were transported to each country over the year, with a minimum of 1 box and a maximum of 9 boxes

**Revenue**: On average the business generated an average of 177 dollars with a maximum and minimum of 494 dollars and 8.09 dollars respectively.

1. **Trend Analysis**
2. **Product Performance**

The best performing product over the years was Digestive Enzyme with a total revenue of $11057 selling 51 boxes in total. The least performing product is Pain Relief Tablets $5993 selling a total of 39 boxes.

Different countries have different needs with India and USA demanding more of the antiseptic cream while United Kingdom wanting cough syrups, Canada wanting Digestive enzymes, and Australia wanting more of the nasal spray.

1. **Sales person Performance**

Rajesh Patel and Nikhil Batra are the best performing sales persons with total revenues of $11023.53 and $10416.34 respectively both selling an average of 53 boxes.

1. **Country Performance**

Most of the demand is coming from USA, United Kingdom and Canada with total revenues of $14109.48, $12032.30 and $11967.08 respectively.

1. **Monthly performance**

There is a substantial increase in revenue as the months progresses, it is more of price fluctuations with highs of $8885 in May 2022 and lows of $5536 in January 2022.

**Key Insights**

1. Most of the demand originates from USA, UK and Canada
2. The top performing products are Digestive Enzymes, Antiseptic cream and nasal spray
3. The best performing sales persons are Rajesh Patel and Nikhil Batra.
4. There isn’t any substantial increase in revenue but fluctuations.

**Recommendations**

1. Pay rises should be given to Rajesh Patel and Nikhil Batra.
2. Increase the supply of Digestive Enzymes, Antiseptic creams, and Nasal spray
3. Have a ready supply by May each year.
4. Focus to fulfilling the demand in USA, UK and Canada

**Conclusions**

Most of the supply is consumed by USA, UK and Canada growing the demand of Digestive enzymes, Antiseptic creams and Nasal spray with Rajesh Patel and Nikhil Batra making up the majority when it came to meeting the demands.