It was the initial phase of my journey to comprehend and work with data. I'm excited to acquire knowledge and use Power BI to gain insights and improve things. Let's take a closer look at data management.

About Dataset

Customer name, Product Info, Sales, Customer Age group, State, Customer name, etc., used for Segmentation, Customer Analytics, Clustering and More. Inspired by retail analytics. I picked up this dataset from GitHub used in Python analysis, But I found the set could be useful for Sales Power BI training.

Problem Statement

Understanding sales customer behaviour and product trends is critical for firms looking to optimise operations and boost customer satisfaction. This data collection focuses on online retail transactions. It provides an opportunity to identify critical issues that affect business performance. As a Data Analyst primary purpose is to answer the following questions. Each is intended to drive analysis towards useful, practical conclusions.

Analytics Questions:

Before we begin, let's identify some business concerns regarding data.

1. Total amount of sale over the year.

- 2. Total number of states we are currently operating.
- 3. Which state has the most sales
- 4. What age group of customers purchase products the most?
- 5. WWhich gender has higher purchasing influence?

Data Cleaning & Transformation

The next step is to clean the data in preparation for analysis. Because the information we require must be turned into an Excel file and then formatted in order to organise data in the same format, because the data we received was in an excel file, I had to inspect and clean it before organising it into several analytical questions that I needed to answer. This is especially true when working with multiple formats and tables. There was not much cleaning work required, due to which it was directly loaded into PowerBI to work on and derive insights.

Descriptive Statistics

Once the data is formatted, it is ready for analysis. I imported the converted.csv file into Power BI and started creating visualizations to answer the questions in depth.



Analysis Results

- 1. Sale had high number of orders from all over India. Total number of orders during the sale was 28 K.
- 2. When comparing gender parity for shopping, females had a much higher parity of purchase; in this case, females were 69.07% and males were 30.13%.
- 3. Comparing age groups for maximum orders, the age group of 26-35 of females and males were found to be the highest shoppers, followed 36-45 and then 18-25.
- 4. The maximum number of sales was found in Uttar Pradesh with 5K, followed by Maharashtra with 4K, Karnataka with 3.5 K, Delhi, and others.

5. According to sales data, company is able to serve major states like Uttar Pradesh, Karnataka, and Maharashtra. Currently, the company serves 16 states in country.

Recommendations for stakeholders

- 1. **Monthly Sales Analysis**: Regular sales evaluation helps in comprehending the business's monthly sales patterns. And will aid in understanding the reasons for an increase or drop in sales in specific months. This data can also be utilised to plan future activities, such as launching month-specific promotions, **gender specific** and **age specific** marketing campaigns.
- 2. **Focusing on customers in high-sales locations**: Focusing on customers in high-sales locations can help increase sales more effectively. By developing marketing plans and promotional activities appropriately keeping uttar pradesh, karnataka and other high buying areas for each market product.
- 3. **Improving Products or Services**: Analyzing the products or services that customers order most can help businesses discern trends in customer needs. To improve or develop products or services to better respond to customer needs.
- 4. **Best-selling product rankings**: Best-Selling product rankings can help businesses focus resources on developing and marketing products with the highest potential. It also helps to increase awareness and bring those products to market efficiently.

5. **Additional Products:** Focusing on the high-purchase sector and providing more freebies as needed will enhance retention and have a positive promotional effect.

I'd also like to get some helpful feedback from friends. Join every professional that comes across this post. so that I can improve it and expand my abilities.

Thank you.