SALES ANALYSIS USING POWER BI

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ABSTRACT

Sales Data Analysis provides an understanding of the product that your customers are buying and help you dissect why they are behaving in a certain way. You can analyze this behaviour and lead the further process. Many global, industry-leading brand are now using their sales data in inventive ways to make better business decision, but any company can take advantages of insights and reporting tools to achieve data-driven sales success. This project is the outcome of a descriptive research on past, present, and future of sales industry and the application of business analytics in shaping appropriate marketing strategies with data sources, DAX query language through dashboard in Power BI. The project aim to show on how we can use the Power BI with sales analysis data using SQL query for data cleaning and DAX query language and its performance on presenting the dashboard to the end users. So in this project, I have created dashboard to know the trends and business performance and also to know which product sales most, which product sales most in particular regions and market performance. The project represents the large dataset into visualization form that help to take business decision.

Keywords: Sales Analysis, research, DAX query, SQL ,dashboard, visualization.

I. INTRODUCTION

Power BI is the technical and procedural representation of data. It is an infrastructure that collects, stores and analyze the data produced by a company's activity. Power BI parses all the data generated by a business and presents easy-to-digest reports, performance measures and trends that inform management decisions. BI components and software comes in wide variety of Power query, Power map, Power pivot, Power view, Power Q&A, Power BI desktop. There are many others parts for Power Bl as well such as, Power BI.com Websites, Power BI Mobile Apps.

Power BI is cloud-based data analysis, which can be used for reporting and data analysis from wide range of data source. Power BI is simple and user friendly enough that business analysts and power users can work with it and get benefits of it. On other hand Power BI is powerful and mature enough that can be used in enterprise systems by BI developers for complex data mashup and modelling scenarios.

II. METHODOLOGY

➢ **Data Collection -**

Data Collection is the process of gathering and measuring information on targeted variables in an established systems, which then enables one to answer relevant questions and evaluate outcomes.

➢ **Data Storage** –

Power BI uses two primary repositories for storing and managing data: Data that is uploaded from users is sentto excel sheet.

➢ **Data Cleaning**-

Once the data is stored into power BI it is important to clean and transform data before you build any visualizations or reporting .This is essential step in building quality visualization. Cleaning and transforming data enables to build visualizations from sound and clean data. If it is not done diligently visualization will not behave as we except

➢ **Data Analysis**-

Data analysis is a process of inspecting, cleaning, transforming and modelling data with the goal of

discovering useful information, informing conclusions and supporting decision making

We use DAX (Data Analysis Expressions) for Data Manipulation and working on the data.

➢ **Visualization**-

In this process we convert manually data into visualization is to visually display collected data by using various charts, graphs or other visualization types.

III. FLOW CHART
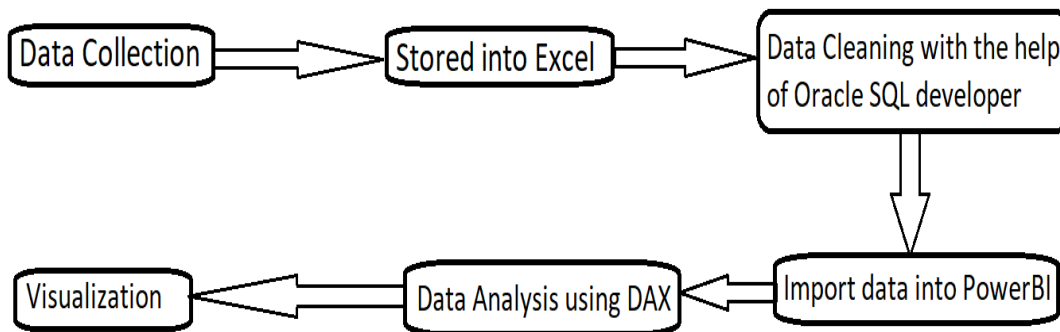
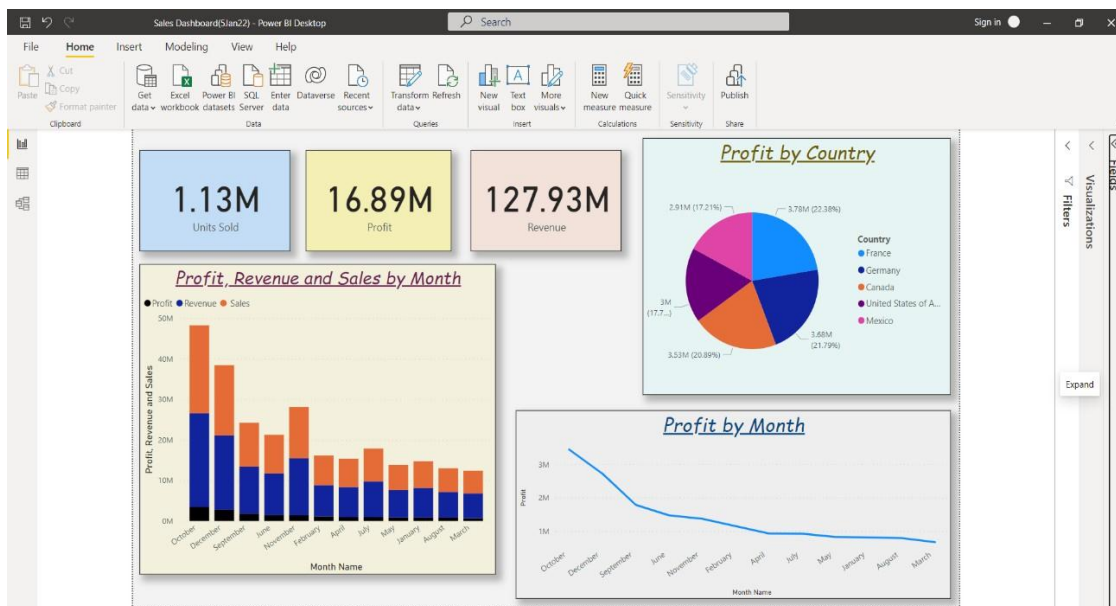## IV.   RESULTS AND DISCUSSION

Fig: Sample output of sales analysis

In above dashboard we have three cards displaying the total unit sold, total profit and total revenue. They provide direct information to user. The next visualization tool used is stacked column chart which is useful to make a very quick comparison between two or more sets of measures. Here we used this chart to create combine visual of profit, revenue, and sales by month which gives us the idea about the profit, revenue, and sales variation by month. In month of October the company has increased its profit, revenue, and sales as compared to other months. To know the profit of particular country pie chart comes into picture. It is used to illustrate the contribution of different values to a total. It gives the clear view about the country wise profit of company.

The next visual used here is Line Chart. It gives plan to understand the profit by month. It is used to show the information changes over time. It tells company head that in October company is valued and the line goes on decreasing from October to March. By one click on the any visual it gives the all information that dashboard contains.

V. CONCLUSION

A dashboard is used for presenting a real-time status of business, monitoring business performance in organizations. An effective dashboard is able to facilitate decision-making process and to quickly trigger actions by delivering information to end users. In this project, a sales department, facing a large amount of data every day, requires a visual communication from 44 data to information. To achieve a better data visualization, Microsoft power BI is integrated to visualize and display sales data through dashboard.

VI. REFERENCES

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