Power BI Assignment 1

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1. What do you mean by BI? Explain.

BI typically stands for Business Intelligence. It refers to the process of collecting, analyzing, and presenting data to make informed business decisions. Business intelligence involves a combination of technologies, tools, and processes that enable organizations to gather and analyze data from various sources, including databases, software applications, and external data providers. The data is then transformed into actionable insights that can help organizations make informed decisions and improve their overall performance.

BI involves using tools such as data warehouses, dashboards, and reports to gather and analyze data. This data can include sales figures, customer behaviour, market trends, and other relevant information. The insights gained from BI can help organizations identify areas for improvement, optimize business processes, and increase efficiency.

2. How Power BI helps in BI, and how does it help Analysts? Explain.

Power BI is a powerful data visualization and business intelligence tool developed by Microsoft. It helps in BI by providing a user-friendly interface for connecting to various data sources, transforming the data, and creating interactive visualizations and reports. Power BI allows analysts to easily import data from a variety of sources, including Excel spreadsheets. Once the data is imported, analysts can use Power BI's data transformation tools to clean, shape, and model the data to fit their needs.

Analysts can create interactive charts, graphs, and dashboards that allow them to explore the data in real time and gain valuable insights. The visualizations can be customized to fit the needs of the organization and can be shared with others through Power BI's collaboration and sharing features.

Power BI is a valuable tool for analysts in BI as it provides a streamlined process for data visualization and analysis, and allows for collaboration and sharing of insights across the organization.

3. Explain Descriptive analytics?

Descriptive analytics is a type of business intelligence (BI) that involves analyzing past data to understand what happened in a particular time period or situation. It helps organizations to gain insights from historical data and identify trends, patterns, and relationships among variables. It involves using statistical methods and data visualization techniques to present the data in a way that is easy to understand. descriptive analytics is a useful tool for gaining insights from past data and identifying trends and patterns that can help organizations make informed decisions.

4. Explain Predictive Analytics?

Predictive analytics is a type of business intelligence (BI) that involves analyzing historical data and using statistical algorithms and machine learning techniques to make predictions about future events or outcomes. It helps organizations to anticipate what may happen in the future and make more informed decisions based on those predictions. predictive analytics is a valuable tool for organizations looking to gain a competitive advantage by anticipating future events and making data-driven decisions. It requires a strong understanding of statistical methods and machine learning techniques, as well as access to high-quality data and powerful analytics tools.

5. Explain Perspective Analytics?

Prescriptive analytics is the use of advanced processes and tools to analyze data and content to recommend the optimal course of action or strategy moving forward

6. Write five real-life questions that Power BI can solve?

- 1. What are our top-performing products or services by region, and how do sales trends compare to the previous period?
- 2. How effective are our marketing campaigns, and which channels are driving the most conversions?
- 3. What are the most common reasons for customer churn, and how can we reduce churn rates?
- 4. How are our inventory levels trending, and which products are at risk of stockouts or overstocking?
 - How are our financials performing, and what is the breakdown of revenue and expenses by department or product line?