Power BI Assignment 1

Q.1 What do you mean by BI? Explain?

ANSWER:-

Business Intelligence (BI) is a process of analysing data through technology and presenting it to the end user(s) which help them to make an informed decision. With the use of historical and current data, a BI tool serves predictive view.

Usually a BI tool can perform tasks like data connection, data mining, data transformation, data modelling through building relationships, complex calculations, report building, dashboard creation, online analytical processing and predictive analysis.

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

ANSWER:-

Power BI is a collection of software/tools that works in synchronisation to turn unrelated sources of data into meaningful and interactive insights. Power BI support 100's of data sources including the most common one's like Excel spreadsheets, Text/CSV, SQL, Oracle etc.

Q.3 Explain Descriptive analytics?

ANSWER:-

Descriptive analytics is the process of using current and historical data to identify trends and relationships. It's sometimes called the simplest form of data analysis because it describes trends and relationships.

EXAMPLES OF DESCRIPTIVE ANALYTICS

- Traffic and Engagement Reports
- Financial Statement Analysis
- Demand Trends
- Aggregated Survey Results
- Progress to Goals

Q.4 Explain Predictive analytics?

ANSWER:-

Predictive analytics is the use of data to predict future trends and events. It uses historical data to forecast potential scenarios that can help drive strategic decisions.
Predictive analysis can be conducted manually or using machine-learning algorithms. Either way, historical data is used to make assumptions about the future.

One predictive analytics tool is regression analysis, which can determine the relationship between two variables (single linear regression) or three or more variables (multiple regression). The relationships between variables are written as a mathematical equation that can help predict the outcome should one variable change.

EXAMPLES OF PREDICTIVE ANALYTICS

- Finance: Forecasting Future Cash Flow
- Entertainment & Hospitality: Determining Staffing Needs
- Marketing: Behavioral Targeting
- Manufacturing: Preventing Malfunction
- Health Care: Early Detection of Allergic Reactions

Q.5 Explain perspective analytics?

ANSWER:-

Prescriptive analytics is the process of using data to determine an optimal course of action. By considering all relevant factors, this type of analysis yields recommendations for next steps. Because of this, prescriptive analytics is a valuable tool for data-driven decision-making.

Machine-learning algorithms are often used in prescriptive analytics to parse through large amounts of data faster—and often more efficiently—than humans can. Using “if” and “else” statements, algorithms comb through data and make recommendations based on a specific combination of requirements. For instance, if at least 50 percent of customers in a dataset selected that they were “very unsatisfied” with your customer service team, the algorithm may recommend additional training.

It's important to note: While algorithms can provide data-informed recommendations, they can't replace human discernment. Prescriptive analytics is a tool to inform decisions and strategies and should be treated as such. Your judgment is valuable and necessary to provide context and guard rails to algorithmic outputs.

EXAMPLES OF PRESCRIPTIVE ANALYTICS

- Venture Capital: Investment Decisions
- Sales: Lead Scoring
- Banking: Fraud Detection
- Product Management: Development and Improvement
- Marketing: Email Automation

Q.6 Write five real-life questions that PowerBi can solve.

ANSWER:-

1. Redution in excessive time spent on preparing for presentations
2. Data quality issues
3. improve decision-making,
4. increase accountability,
5. Benefit financial health, and help employees predict losses and
6. monitor performance