**Power BI Assignment 1**

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

**Ans**. Business intelligence (BI) combines business analytics, data mining, data visualization, data tools and infrastructure, and best practices to help organizations to make more data-driven decisions. In practice, you know you’ve got modern business intelligence when you have a comprehensive view of your organization’s data and use that data to drive change, eliminate inefficiencies, and quickly adapt to market or supply changes.

It’s important to note that this is a very modern definition of BI—and BI has had a strangled history as a buzzword. Traditional Business Intelligence, capital letters and all, originally emerged in the 1960s as a system of sharing information across organizations. It further developed in the 1980s alongside computer models for decision-making and turning data into insights before becoming specific offering from BI teams with IT-reliant service solutions. Modern BI solutions prioritize flexible self-service analysis, governed data on trusted platforms, empowered business users, and speed to insight.

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

**Ans**. Power BI is a new cloud-based Business Intelligence service provided by Microsoft and derived from its years of experience in relational databases like Access, SQL server etc. It is a business intelligence platform that allows businesses to clean and completely transform data into meaningful data. It thoroughly analyzes data and shares powerful insights.

Microsoft is positioned in the leaders’ quadrant in the Gartner Magic Quadrant for Analytics and Business Intelligence Platforms 2018 edition which makes it the top player in the market. As per the Gartner Magic Quadrant, Power BI is considered as a go-to platform based on its vision of completeness and ability to execute BI solutions.

1. **Explain Descriptive analytics?**

**Ans**. Descriptive analytics is the interpretation of historical data to better understand changes that have occurred in a business. Descriptive analytics describes the use of a range of historic data to draw comparisons. Most commonly reported financial metrics are a product of descriptive analytics, for example, year-over-year pricing changes, month-over-month sales growth, the number of users, or the total revenue per subscriber. These measures all describe what has occurred in a business during a set period.

1. **Explain Predictive analytics?**

**Ans**. Predictive analytics is a branch of advanced analytics that makes predictions about future outcomes using historical data combined with statistical modeling, data mining techniques and machine learning. Companies employ predictive analytics to find patterns in this data to identify risks and opportunities.

Predictive analytics is often associated with big data and data science. Companies today are swimming in data that resides across transactional databases, equipment log files, images, video, sensors or other data sources. To gain insights from this data, data scientists use deep learning and machine learning algorithms to find patterns and make predictions about future events. These include linear and nonlinear regression, neural networks, support vector machines and decision trees. Learnings obtained through predictive analytics can then be used further within prescriptive analytics to drive actions based on predictive insights.

1. **Explain perspective analytics?**

**Ans**. Prescriptive analytics is a type of data analytics—the use of technology to help businesses make better decisions through the analysis of raw data. Specifically, prescriptive analytics factors information about possible situations or scenarios, available resources, past performance, and current performance, and suggests a course of action or strategy. It can be used to make decisions on any time horizon, from immediate to long term.

1. **Write five real-life questions that PowerBi can solve.**

**Ans**.

1. Resource Management

1. Financial Reporting
2. Sales Scorecard
3. Claims, billing
4. Inventory optimaztion.