**Power BI Assignment 1**

1. What do you mean by BI? Explain.

Answer: BI means Business Intelligence which is set of tools and techniques for transformation of raw data into meaningful and useful information for business analysis purposes. BI represents the technical infrastructure that collects, stores and analyses data from company or organisation. It also parses data and produces the reports and information that assist managers to make better decisions. BI tools and software come in a wide variety of forms such as spreadsheets, reporting/query software, data visualisation software, data mining tools and online analytical processing,

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

Answer: Power Bi is a data visualization tool that leverages visual analytics to empower people and organisations in making the most of their data. The engaging visualizations created in Power Bi take the excel workflow to next level and help stakeholders make sense of the massive amounts of data available.

This tool is very helpful for data analysts as

* Power Bi has an intuitive user interface that allows both technical and non-technical analysts to build data visualizations and analyses efficiently. It is more convenient to extract the data insights with minimal coding skills.
* PowerBi allows to obtain the data from multiple sources for examples : ms-excel, csv file, web page etc from where analysts can easily load and cleanse the data as well in power Bi.
* Power Bi allows to create fascinating dashboard where it is easy for clients to get the information through visualizations. Facts and records can be shown with help of various graphs. Bulk of information can be presented in single dashboard which makes for analysts to explain why specific trends are happening.
* Power Bi contains extensive data exploration options as well as automated queries. With this, discovering insights from data will be much easier.

1. Explain Descriptive analytics?

Answer: Descriptive Analytics is a type of data analytics that look at past data to figure out what has happened. For example: Average sales in last year. Results are presented in reports, dashboards, and graphs so that clients can easily understand. Moreover, Data aggregation and data mining are the techniques used in descriptive analysis for past data. Descriptive analytics helps the clients to understand changes that occur in business. It also helps to identify the areas of strength and weakness in a business.

1. Explain Predictive analytics?

Answer: Predictive analytics is type of advanced analytics that makes predictions about future outcomes using historical data combined with statistical modelling, data mining techniques and machine learning. For example: Every business needs to keep periodic financial records and predictive analytics can play a big role in forecasting your organisation’s future health. With help of past and current data, project sales, revenue and expenses can be predicted. Companies uses these analytics to discover the patterns in data to identify the risks and opportunities. It also helps in maintenance forecasting so that companies can use data to predict when routine equipment maintenance will be required and can then schedule it before problem or malfunction arises.

1. Explain Prescriptive analytics?

Answer: Prescriptive Analytics is type of advanced analytics that focus on finding the ideal way or action necessary for a particular scenario based on data.

This can involve any aspect of your business, such as increasing revenue, reducing customer churn, preventing fraud and increasing efficiency. Prescriptive analytics make data-driven, not instinct-driven decisions. It simplifies complex decisions.

It focuses on execution rather than making decisions.

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

Answer:

* Can day-to-day operations be organised?
* How a business gets to know what clients want?
* What a business can do if it keeps losing clients and product is not selling much?
* Change of weather in different countries can be forecasted?
* Change of sales , revenues every minute can be seen on dashboard all the time??