Categories of Data Analytics

- Descriptive Analytics
- Diagnostic Analytics
- Predictive Analytics
- Prescriptive Analytics

Descriptive Analytics

It is the simplest type of analytics and the foundation the other types are built on. It allows you to pull trends from raw data and succinctly describe what happened or is currently happening.

Descriptive analytics answers the question, “What happened?”

This type analysis is usually done using database queries or simple spreadsheet filters. We can have periodic dashboards and reports that can be used to visualize results of descriptive analytics.

Diagnostic Analytics

It addresses the next logical question, “Why did this happen?”

Taking the analysis a step further, this type includes comparing coexisting trends or movement, uncovering correlations between variables, and determining causal relationships where possible.

It needs careful examination of data from multiple sources and is little more involved and skillful exercise than descriptive analysis.

Predictive Analytics

It is used to make predictions about future trends or events and answers the question, “What might happen in the future?”

By analyzing historical data in tandem with industry trends, you can make informed predictions about what the future could hold for your company.

It assumes that certain set of conditions are met or would exist. If there are changes to those conditions, then predictive analysis may not be accurate.

Prescriptive Analytics

Prescriptive analytics takes into account all possible factors in a scenario and suggests actionable takeaways. This type of analytics can be especially useful when making data-driven decisions.

It is the most difficult out of all. It requires significant skills and time to give effective actions and results. It could also be dependent on not only the analysed data but external conditions such as social acceptability, personal or group preferences,