Data Science

Statistics
Data Analytics
Business Analytics
Business Intelligence
Data(base) Management
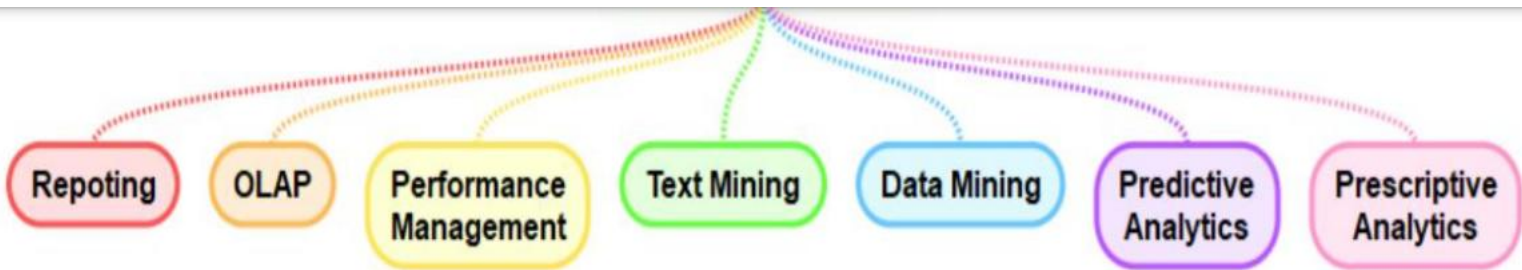Visualization
Machine Learning
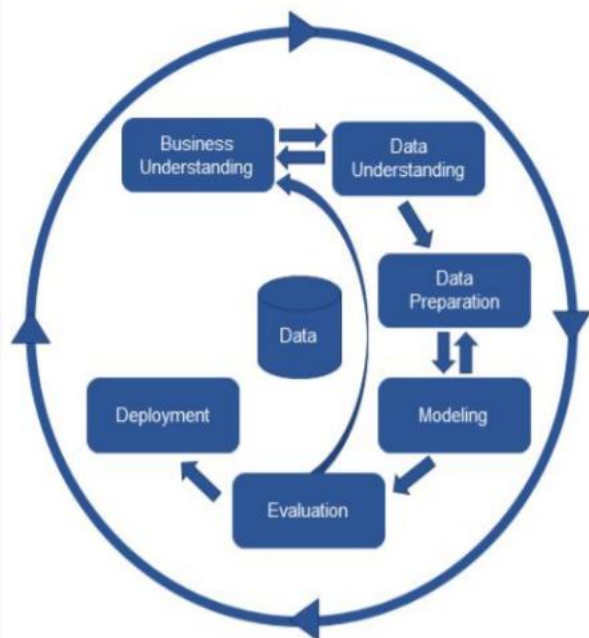Data Mining
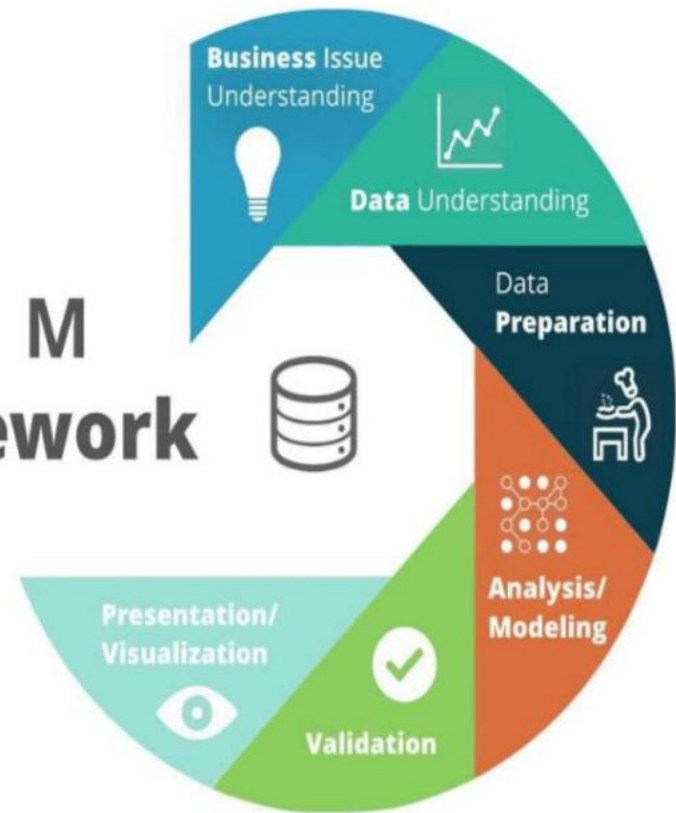Artificial Intelligence
Predictive Modelling

| Repoting | OLAP | Performance Management | Text Mining | Data Mining | Predictive Analytics | Prescriptive Analytics |

CRISP

CR P I S D M Framework

Business Issue Understanding

Data Understanding

Data **Preparation**

Analysis/ Modeling

Validation

Presentation/ Visualization
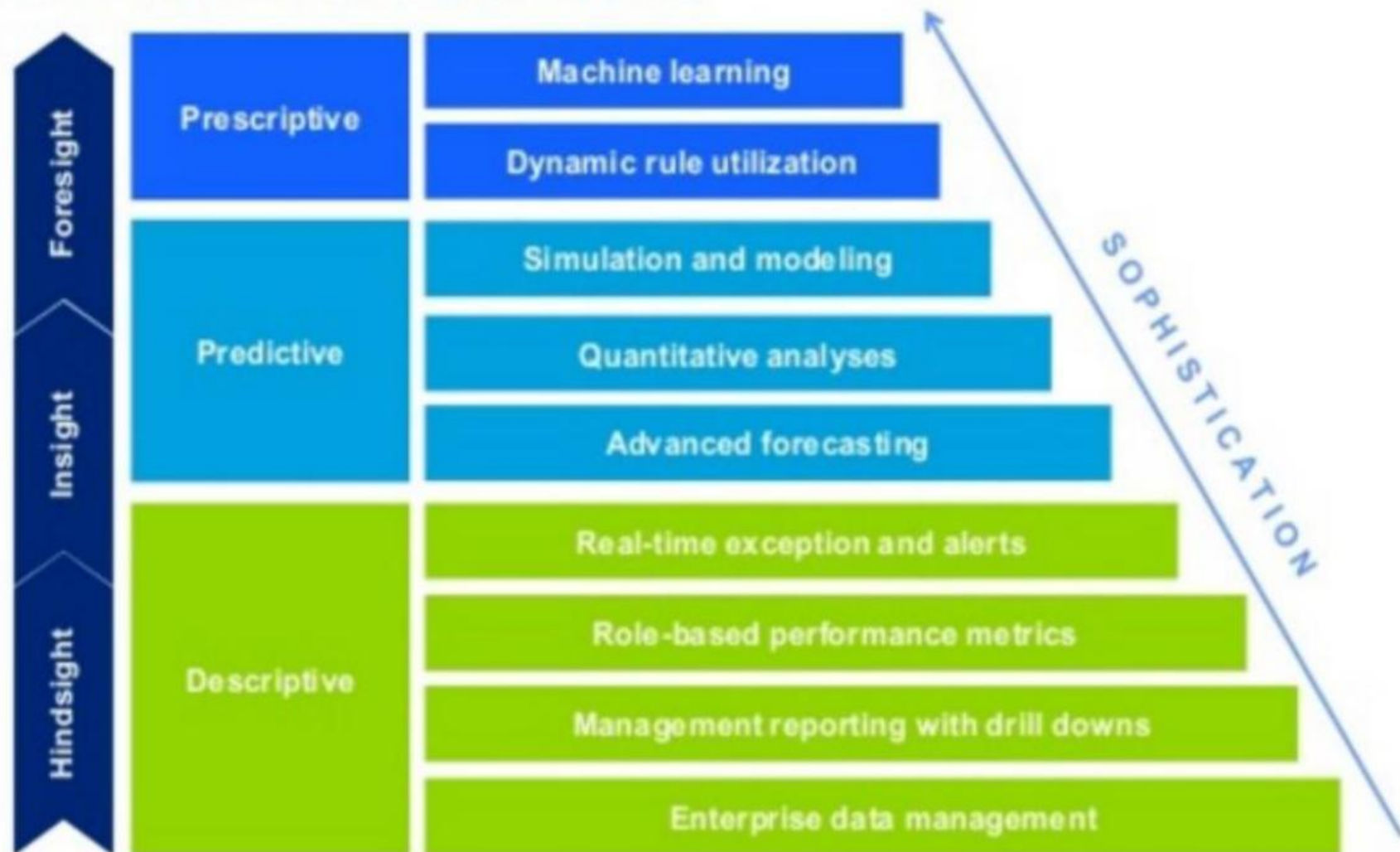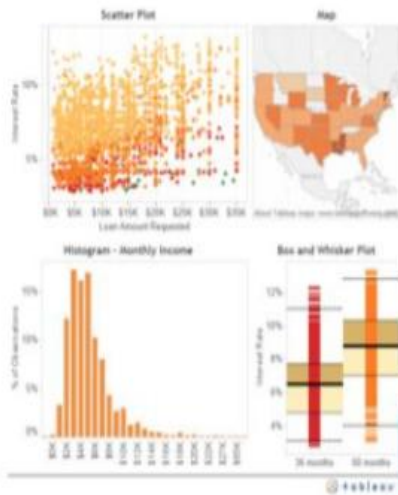
- cross-industry process for data mining.
- CRISP-DM methodology provides a structured approach to planning a data mining project.
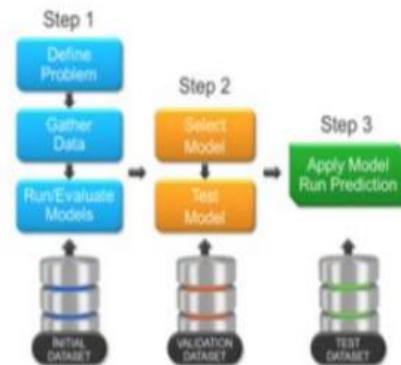
Analytics is the practice of deriving insights from data to make more effective decisions.
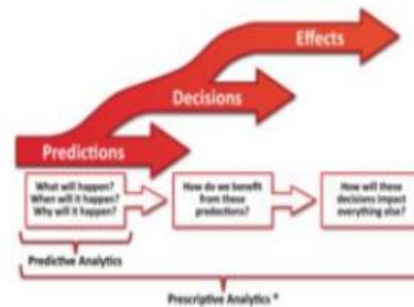
Exploratory analysis

- Use descriptive and/or diagnostic analytics to understand and characterize the data

Predictive analysis

- Extrapolate what may happen in the future based on the historical events in the data

Prescriptive analysis

- Decide on the actions based on business rules assisted with diagnostic results and predictive insights developed

Optimization

- Obtain the optimal solution based on the historical behavior, extrapolated pattern for the future and business rules in place

DOCA FRAMEWORK

To Properly Apply Statistics You Should Follow A Framework To Minimize Possible Errors

In this course, we will use DCOVA

- **D**efine the data you want to study in order to solve a problem or meet an objective
- **C**ollect the data from appropriate sources
- **O**rganize the data collected by developing tables
- **V**isualize the data by developing charts
- **A**nalyze the data collected to reach conclusions and present results

Using The DCOVA Framework Helps You To Apply Statistics To:

- Summarize & visualize business data

- Reach conclusions from those data

- Make reliable predictions about business activities

- Improve business processes