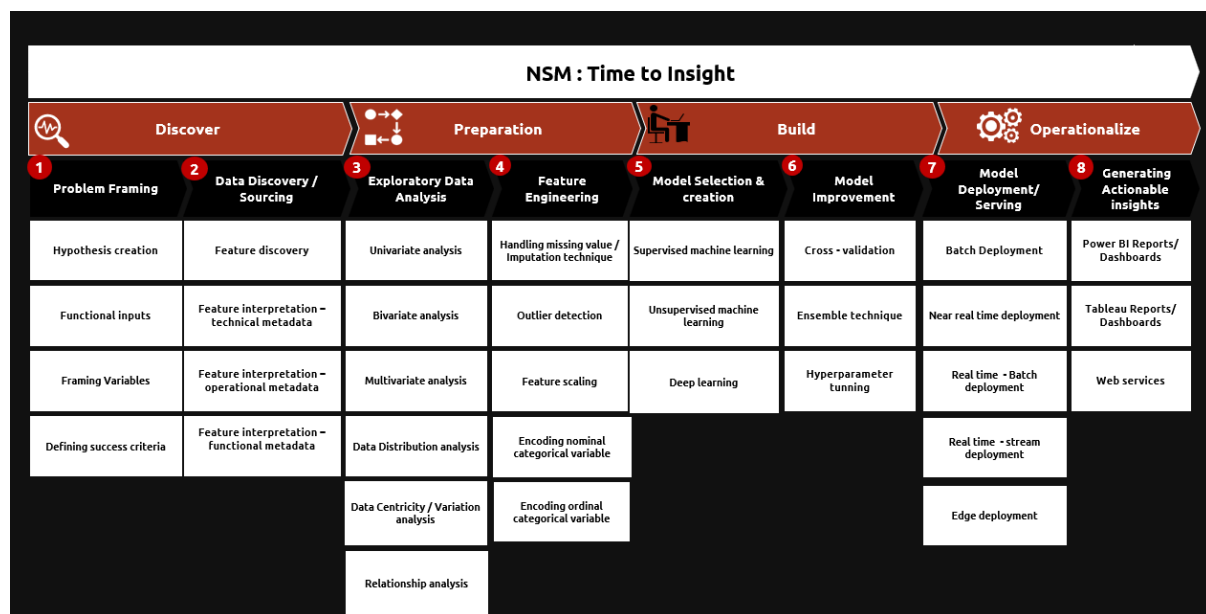


What is Data Science Life cycle ?



The data science lifecycle is a structured, end-to-end process for conducting a data science project, consisting of several key stages. It provides a framework for turning raw data into actionable insights.

The lifecycle is divided into the following main phases:

- **Discover:** This initial phase involves framing the problem, defining success criteria, and discovering and sourcing the necessary data. It includes activities like hypothesis creation and feature discovery.
- **Preparation:** This phase focuses on cleaning and transforming the data. It includes exploratory data analysis, handling missing values, feature engineering, and outlier detection.
- **Build:** In this phase, the models are created and improved. It involves model selection, creation, improvement, and hyperparameter tuning.
- **Operationalize:** This final phase involves deploying the model and generating actionable insights. It includes model deployment, serving, and creating reports or dashboards.