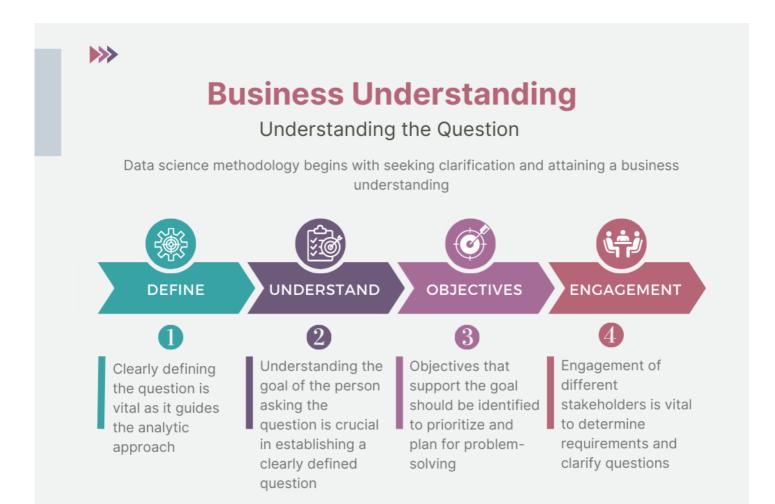
Lesson summary

Module 1 Lesson 1: From Problem to Approach



Congratulations! You have completed this lesson. At this point in the course, you know:

- Foundational methodology, a cyclical, iterative data science methodology developed by John Rollins, consists of 10 stages, starting with Business Understanding and ending with Feedback.
- CRISP-DM, an open source data methodology, combines several of the data-related methodology stages into one stage and omits the Feedback stage
 resulting in a six-stage data methodology.
- The primary goal of the Business Understanding stage is to understand the business problem and determine the data needed to answer the core business question.



TEM, DATA SCIENCE METHODOLOGY



During the Analytic Approach stage, you can choose from descriptive, diagnostic, predictive, and prescriptive analytic approaches, whether to use
machine learning with clustering associations.



Analytic Approach

Determine Appropriate Approach

The second stage of the data science methodology involves selecting the analytic approach in the context of business requirements.



PATTERN

APPROACH





MACHINE LEARNING



Identifying what type of patterns will be needed to address the question most effectively.

Different types of patterns and relationships in data require different approaches to effectively address the questions being asked



Descriptive: **Current Status** Diagnostic:

Statistical Analysis Predictive:

Forecasting Prescriptive:

Recommendations



Machine Learning enables computers to learn without explicit programming and identify patterns in data that might otherwise not be accessible



TEM DATA SCIENCE METHODOLOGY



• Decision tree classification is a predictive analytics approach that's easy for non-data scientists to implement

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Changelog

Date Version Changed by Change Description 2023-08-09 0.1 Patsy R. Kravitz Initial version created 2023-08-13 0.2 Dr. Pooja Inforgraphic included

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