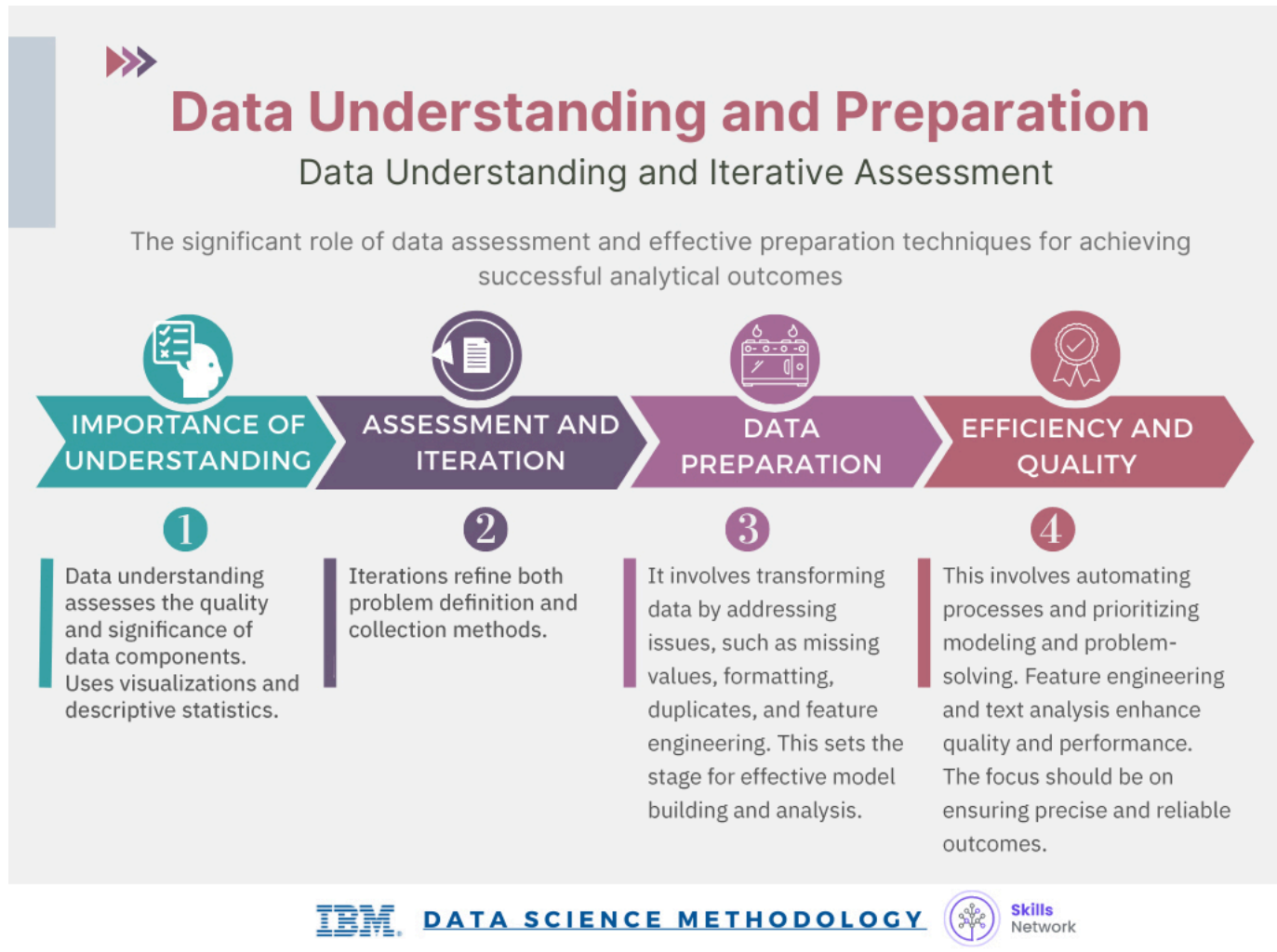


## Lesson summary

### Module 2 Lesson 1: From Understanding to Preparation

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

- The Data Understanding stage encompasses all activities related to constructing the data set and answers the question as to whether the data you collected represents the problem to be solved.
- During the Data Understanding stage, scientists might use descriptive statistics, predictive statistics, or both.
- Data scientists commonly apply Hurst, univariates, and other statistics on each variable, such as mean, median, minimum, maximum, standard deviation, pairwise correlation, and histograms.
- Data scientists also use univariates, statistics, and histograms to assess data quality.



- During the Data Preparation stage, data scientists must address missing or invalid values, remove duplicates, and validate that the data is properly formatted.
- Feature engineering, also part of the Data Preparation stage, uses domain knowledge of the data to create features that make the machine learning algorithms work.
- Text analysis during the Data Preparation stage is critical for validating that the proper groupings are set and that the programming is not overlooking hidden data.

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