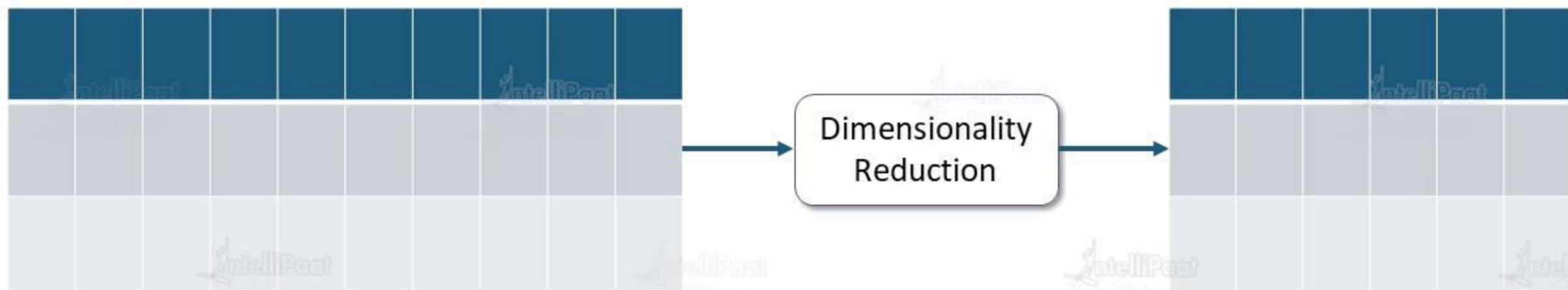


# What is Dimensionality Reduction?

# What is Dimensionality Reduction?

Suppose, we have a table with 10 columns, but around 6 columns might be useless for our analysis. Thus, we can remove the columns using dimensionality reduction



# What is Dimensionality Reduction?

Feature Elimination

Feature Extraction

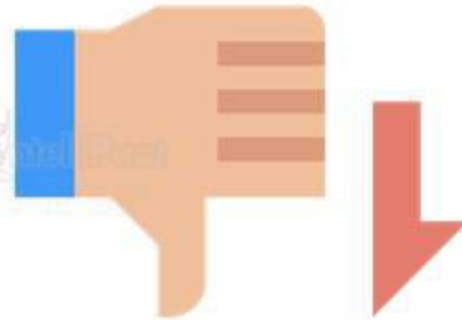
**Removing some variables completely if they are:**

- Redundant with other variables
- Not providing any new information

Sets a smaller dataset



Might lose some data



# What is Dimensionality Reduction?

Feature Elimination

Feature Extraction

**Extracting new variables from old variables**

PCA works based on feature extraction. This is the first step we do on our preprocessed dataset

