

Unsupervised Learning



- Supervised Learning
 - Using historical **labeled** data, predict a label on new data (regression or classification).
- Unsupervised Learning
 - Using unlabeled data, discover patterns, clusters, or significant components.





- Unsupervised Learning:
 - Clustering:
 - Using features, group together data rows into distinct clusters.
 - Dimensionality Reduction:
 - Using features, discover how to combine and reduce into fewer components.

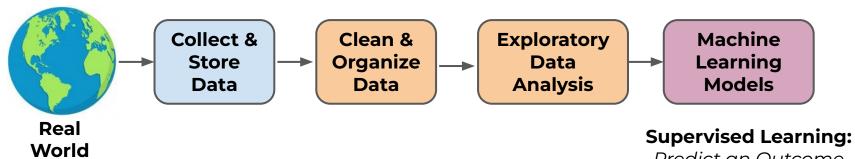




- Paradigm shift for supervised to unsupervised learning:
 - Supervised performance metrics will not apply for unsupervised learning!
 - How can we compare to a correct label answer, if there was no label to begin with?







Predict an Outcome
Unsupervised Learning:
Discover Patterns in Data

PIERIAN 🈂 DATA



