

Redundant Data

 Features can be highly interrelated. Not all features are related to the target. Select representatives from clustered / grouped features Use dimensionality reduction techniques (PCA, GLRM, MCA, MDS)

Real Data

Solutions







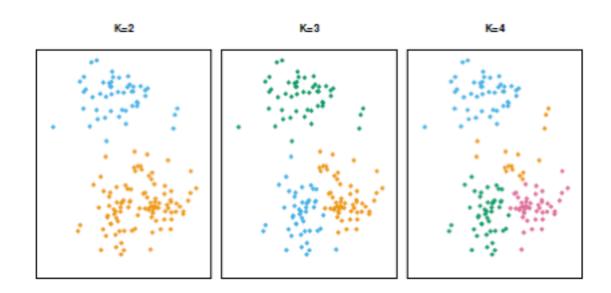
Too much of the same is not a good

thing

 Leads to numeric instability in machine learning algorithms (GLM) Overweights importance of redundant features (RF, GBM)

K-Means Clustering

- K-Means clustering groups observations based on numeric features
 - Assumes clusters are roughly the same sized hyperspheres
 - Minimize Euclidean distance between observations and cluster centers
- Number of methods for choosing the number of clusters, k
 - Choose several and evaluate performance
 - Use business rules





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