Sil_Width: (Silhoutte score for K-means clustering)

Indirect model evaluation techniques which we can verify once clustering procedures are completed namely the K-means model which is distance based

$$Sil\_Width = \frac{b - a}{Max(\ a,\ b\ )}$$

1. If the sil_width is +ve then the mapping to current cluster is correct.
2. If the sil_width is -ve then the mapping to current cluster is incorrect.
3. Sil_Width will have minimun -1 to maximum +1.
4. if sil_width = 1 , That means, the values are separated well.
5. if sil_width = -1 , That means, model not doing do.
4. if sil_width = 1 , That means, the values are in equiy distance from all centroids.

CLUSTER2

CLUSTER1

x_{c_2}

x_{c_1}

b

a

x_{c_3}

Y

X