Report for Plots for KMeans Clustering

Dataset : Iris

Clustering Type : KMeans Clustering

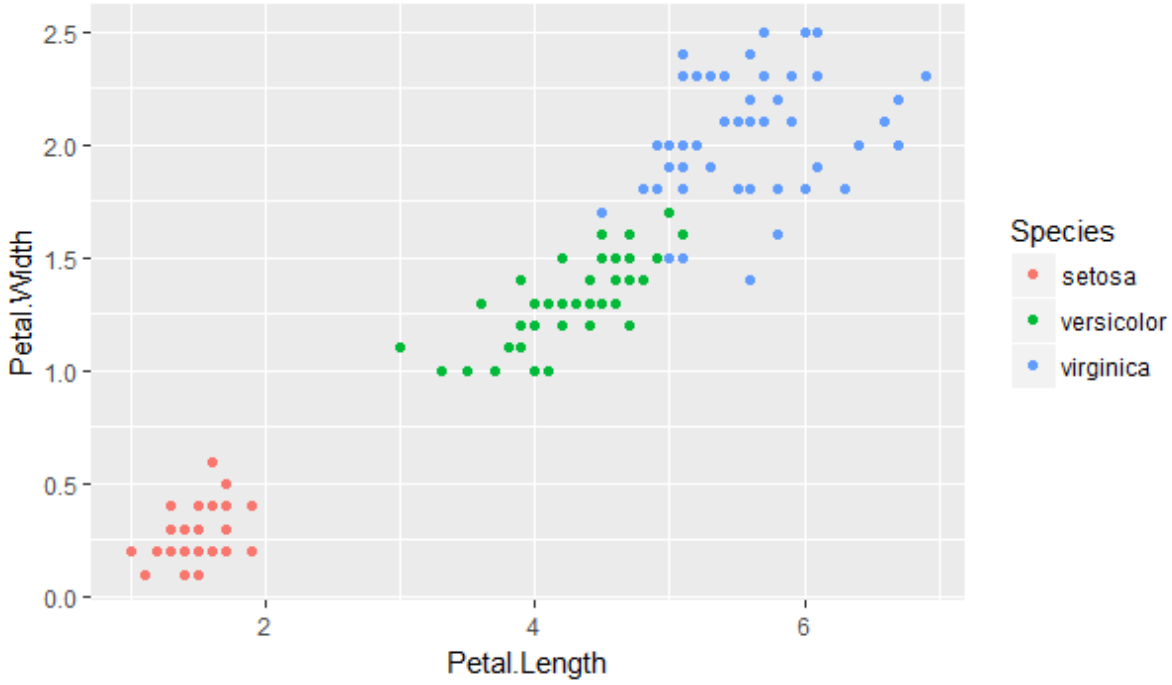
Motive: To check the clustering plots and dendograms of different linkages in KMeans Clustering

Observation :

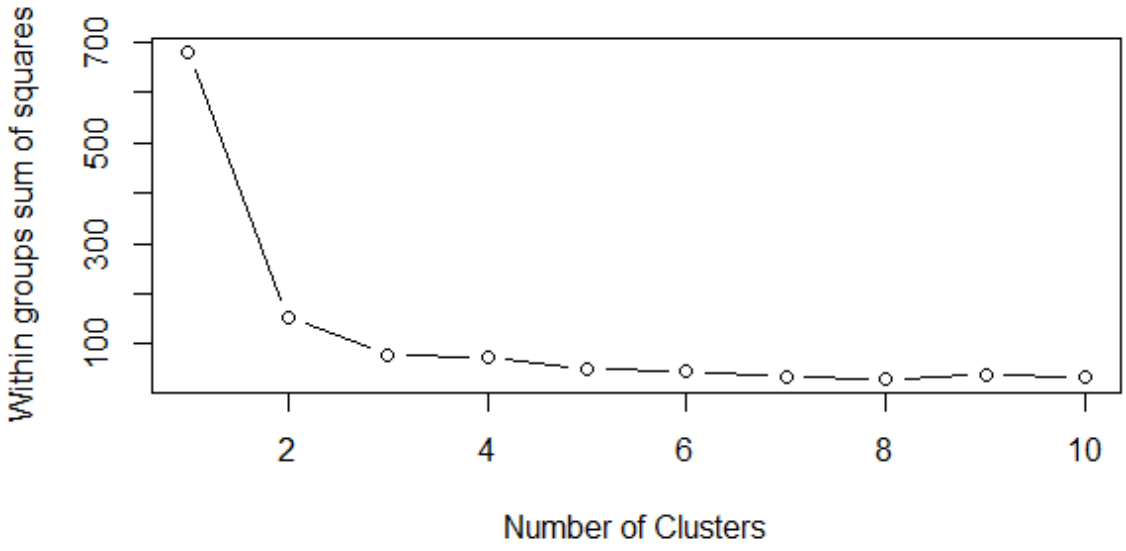
R-Studio

The given IRIS K-Means clustering shows the below result in R :

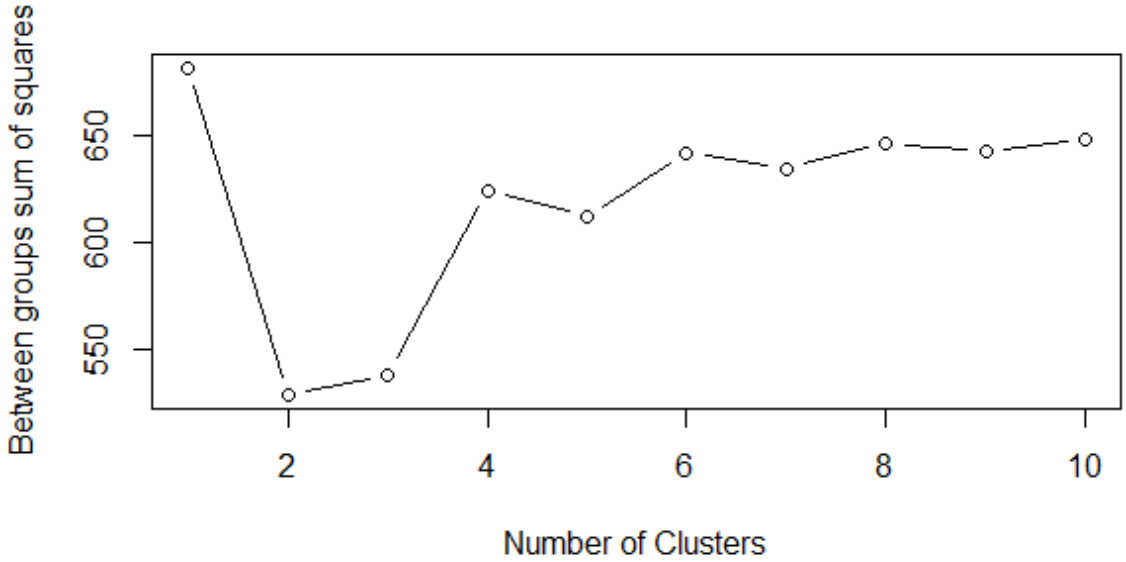
Plot for KMeans Clustering



Plot for Mapping Sum of Squares within the cluster against Number of clusters



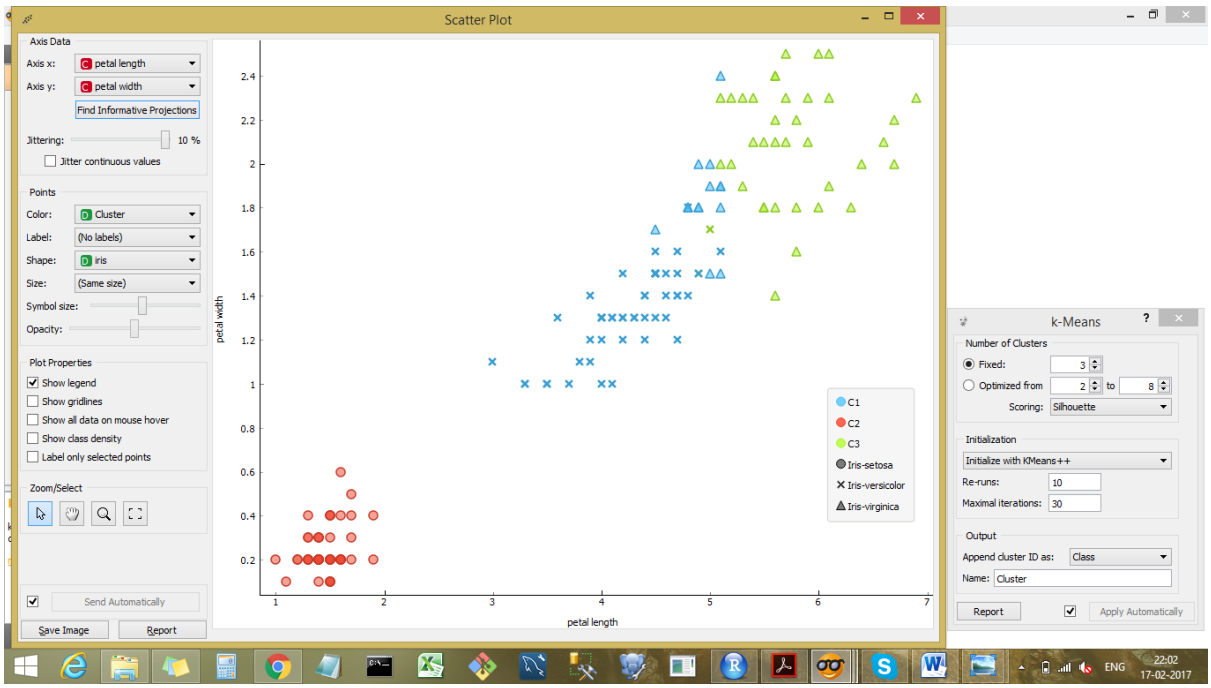
Plot for Mapping Sum of Squares within the cluster against Number of clusters



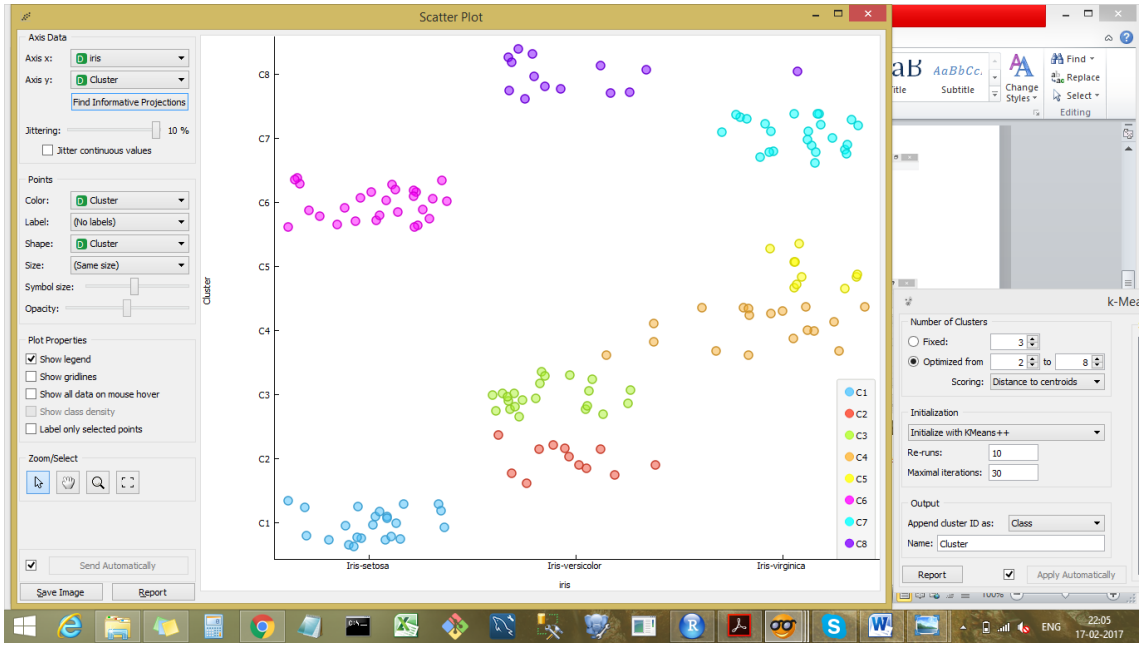
Orange

We are able to control the plot of the independent variable by choosing between fixed number of clusters or a range in the K-Means cluster widget. We are able to see a view a variety of plots depending for different factors that we choose in the K-Means widget. Below are some of the examples :

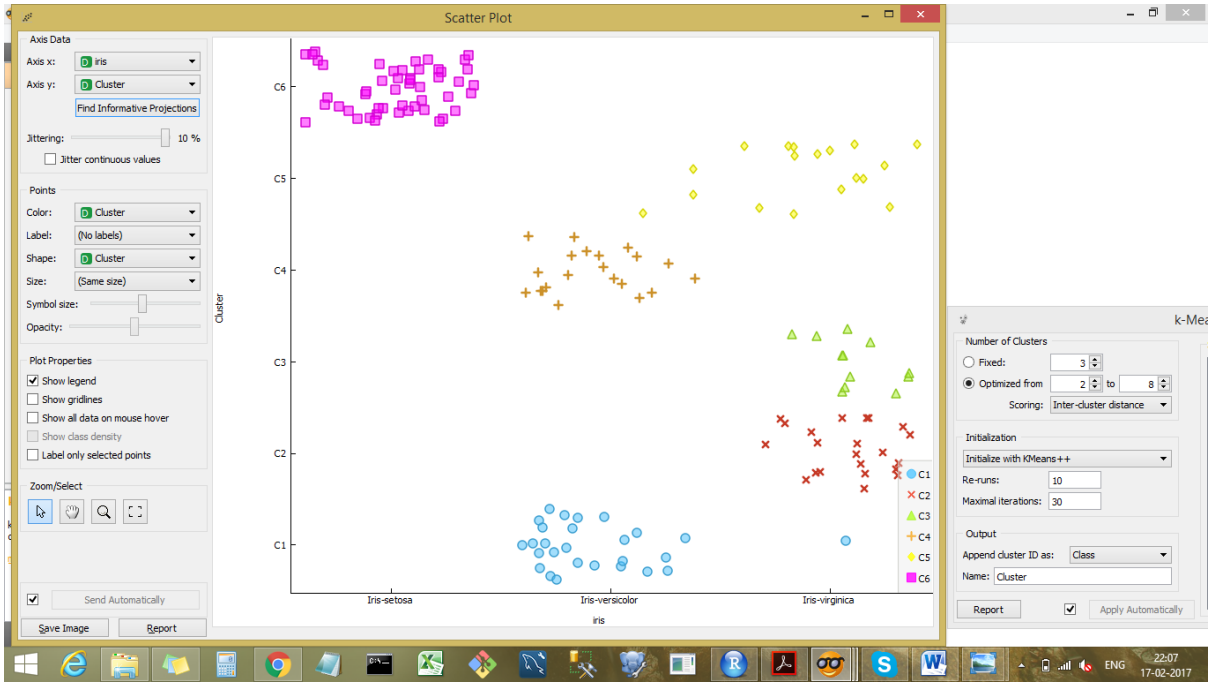
Output Plot for KMeans when the number of cluster is fixed=3



Output Plot for KMeans for the Iris when the number of cluster is ranging from 2 to 8 and within the cluster



Output Plot for KMeans for the Iris when the number of cluster is ranging from 2 to 8 and between the cluster



Conclusion :

The plots viewed on each platforms (R-studio and Orange) show that there are factors which affect the behaviour of the KMeans factor. Some of them are whether we choose to keep the clusters fixed or keep a range. Keeping a range allows us the flexibility of even further get into details by choosing between inter-cluster graph or within the cluster (as shown above).