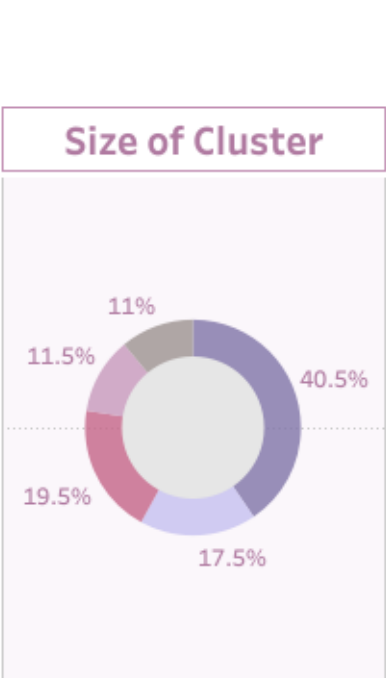
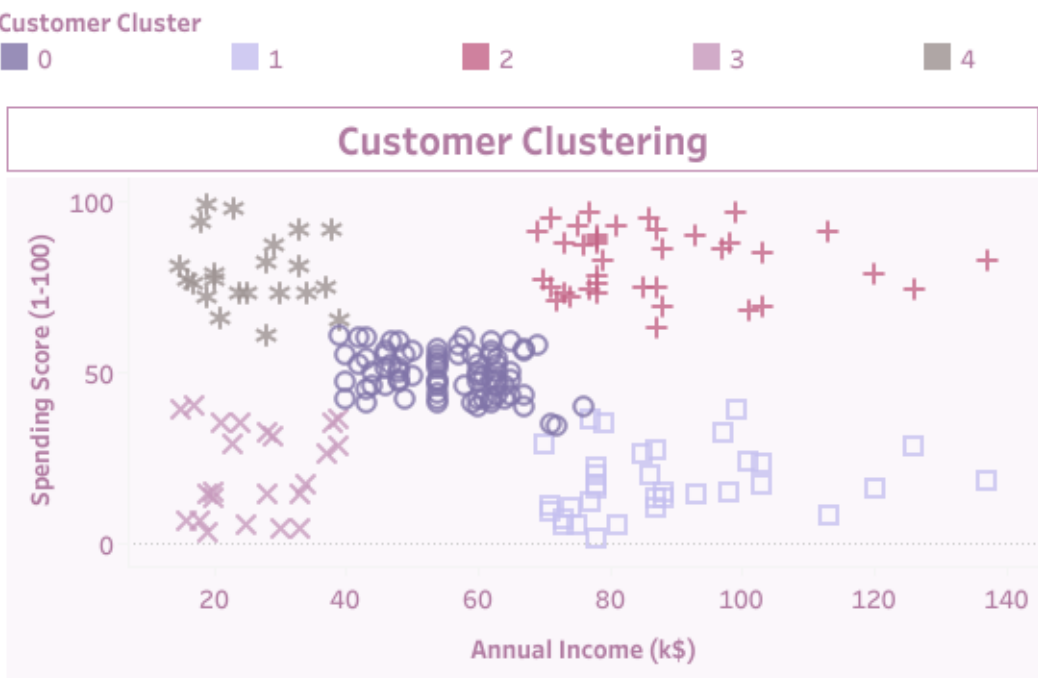
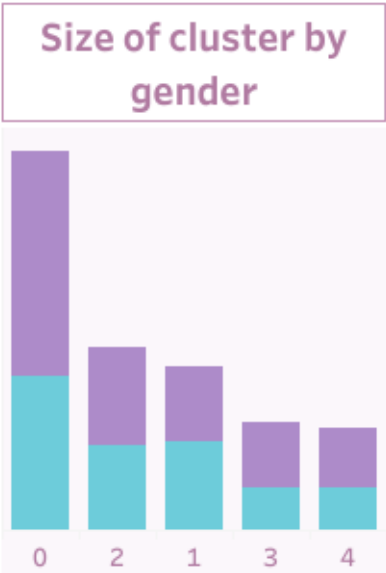
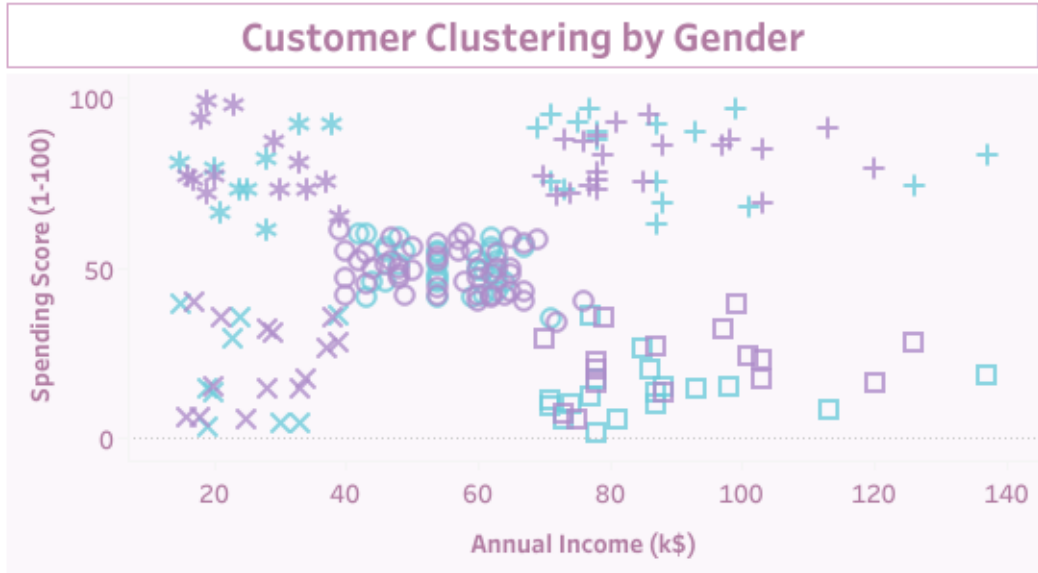


# Customer Clustering | by applying K-Means algorithm



K-Means algorithm groups Customer into **5 clusters** based on their Spending Score and Annual Income. As indicated in Customer Clustering scatter plot chart, data points at top right area is customer who have **high income and spend a lot** - cluster 2 (19.5% total customer). Whereas, **majority** of customer is **cluster 0** (40% of total customer) who have medium income and spend average amount on company product. Cluster 0 is considered as loyal customer as well.



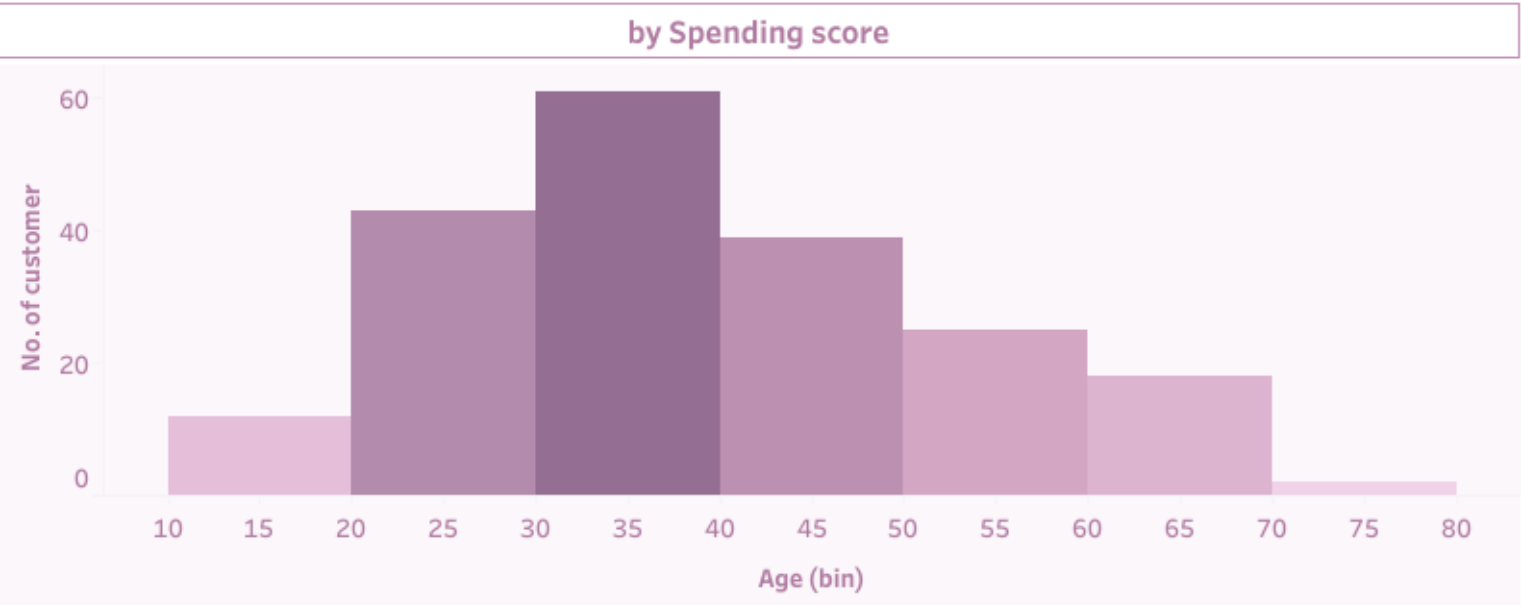
**Cluster 4** in this case is **potential customer** because: despite of low income, they still spend high on company product. In other word, it's also because they spend on high price product with low quantity each transaction.

Half of cluster 0 and cluster 2 is Female.

*Click ">" next page to see which Age is most common in ..*



# Customer Clustering | by applying K-Means algorithm



In this Age distribution by Spending Score, we can see high number of customer distribute around 20 to 50.

**Cluster 2:** valuable customer

- High spending
- Between 30 and 40, minor from 20 to 30
- Mostly Female

**Cluster 0:** loyal customer/major cluster

- Average spending
- Evenly spread across age
- Mostly Female

**Cluster 4:** potential customer

- High spending but low income
- As expected, because this group is quite young, who is around 20 to 30 years old
- Mostly Female

After defining customer cluster characteristic, now we understand our customer and ready to come up with appropriate ..

