

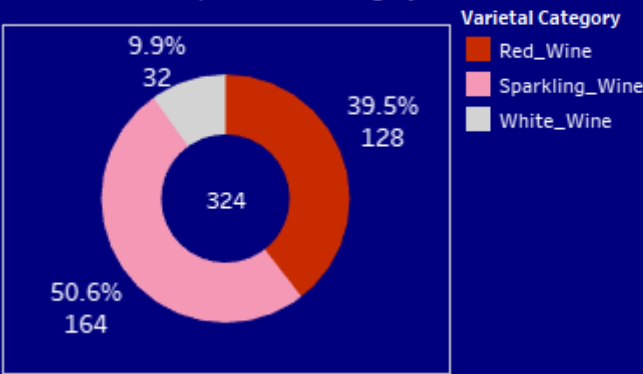
Customers Segmentation using ML (K-means, k=4) Powered by Tableau

Optimizing Wholesale Wine business by segmenting customers behavior

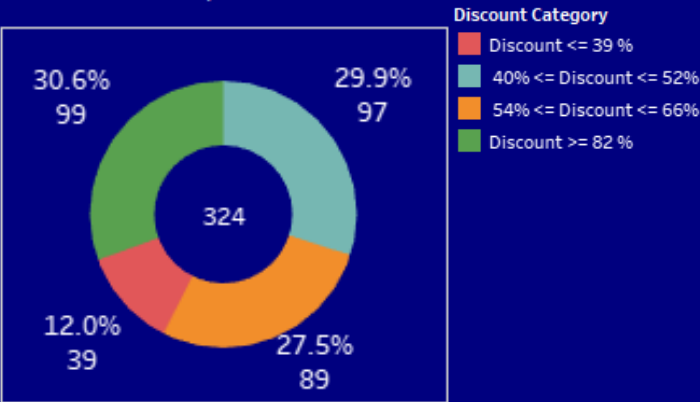
Customers Behavior from all sales perspective:

- ❖ 50.6% of the customers were only Sparkling Wine lovers: 25% Champagne, 13.3% Prosecco and 12.3% Espumante
- ❖ 39.5% of the customers were only Red Wine lovers: 13.6% Pinot Noir, 9.9% Cabernet Sauvignon , 9.99% Malbec and 6.2% Merlot
- ❖ 9.9% of the customers were only White Wine lovers: 5.2% Pinot Grigio, and 4.6% Chardonnay
- ❖ Almost ~40% of the Wine is coming from France, next Australia 12% and Chile 11.4%
- ❖ Wine Discount were almost distributed evenly above 40%:

Customers Count per Varietal Category



Customers Count per Discount



Customers Segmentation using ML (K-means, k=4) Powered by Tableau

Optimizing Wholesale Wine business by segmenting customers behavior



Customers Behavior from ML K-means (k=4) Segmentation perspective:

- Cluster_0** represents customers who loves both French Red Wine and Sparkling Wine (89% consumes >= 72 Min Qty) specifically: Cabernet Sauvignon & Champagne.
- Cluster_1** represents customers who loves Sparkling Wine (75% consumes >= 72 Min Qty) mainly Champagne but in general they enjoys French sparkling Wine.
- Customers from both Cluster_0 & Clusters_1 (More than 75% of them, consumes >= 72 Min Qty) , they love Cabernet Sauvignon & Champagne specially if there's high Discounts since they're heavy consumers (Focus group of customers to increase sales by introducing more Discounts on Cabernet Sauvignon & Champagne)
- Cluster_2** represents customers who are not heavy Wine consumers (Almost 100% of them, consumes = 6 Min Qty) but still they enjoys French Wine in general (sparkling, Red, and some white). (Focus group of customers to increase revenue by introducing more wine varieties because these guys are NOT wine specific who are not settled yet and they would try more or new varieties).
- Cluster_3** represents customers who loves Red Wine specifically Pinot Noir. These guys will buy Pinot Noir regardless if there's big Discount or not and they don't care about the origin either. They're just Pinot Noir lovers!! (Focus group of customers to increase revenue by increasing Pinot Noir price!!).