

# **PROJECT-Mining Data Features Based on Retail Data**

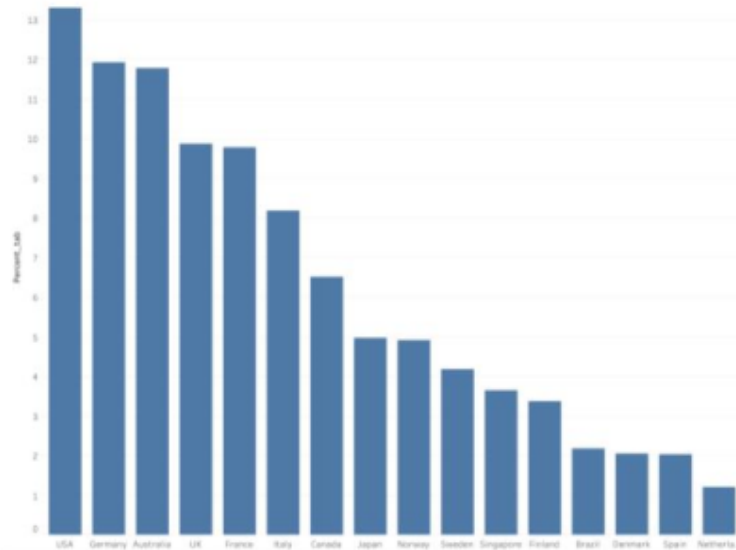
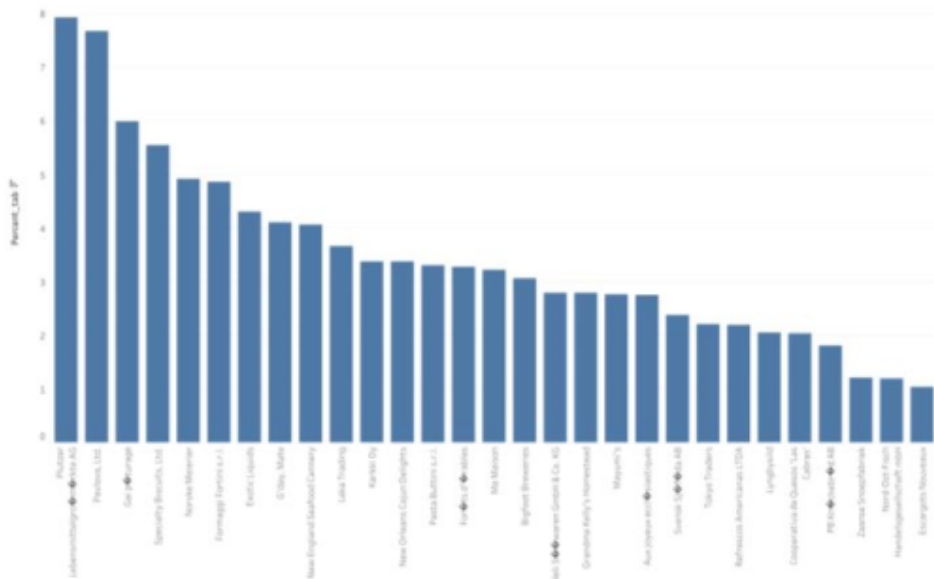
Analysis dimension: products

# What are the characteristics of the five most popular products ?



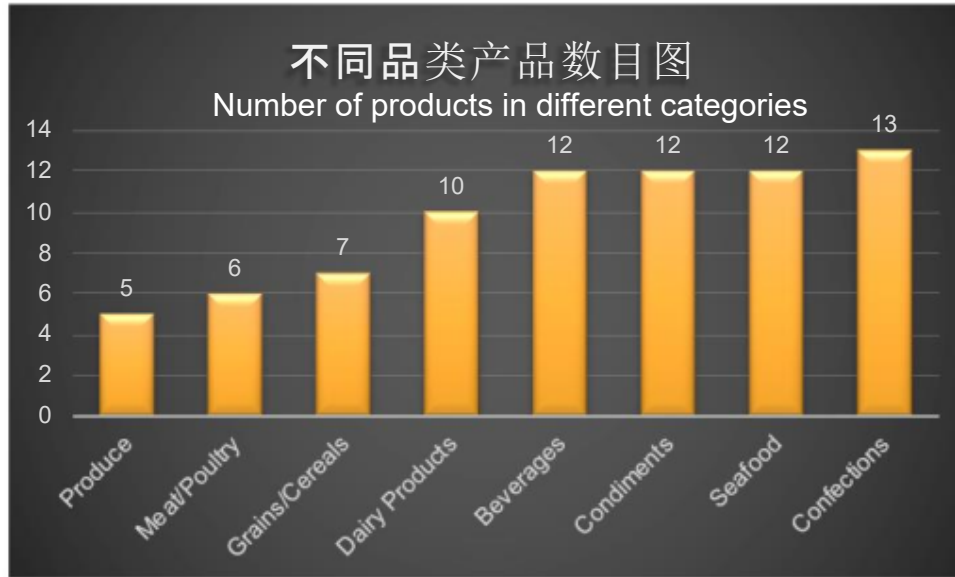
I used Tableau to analyze the search results of the top five products, and found that the top three belonged to Dairy Products, the fourth place belongs to Grains / Cereals, and the fifth place belongs to Confections. Moreover, the first two were produced in France, the third and fourth products were produced in Italy, and the fifth was produced in Australia. In conclusion, the dairy products from France are the most popular ones.

# What are the characteristics of the five most popular products?



We counted the proportion of sales volume of all suppliers in the total sales volume, and used Tableau to draw images. The first two suppliers were Plutze (abbreviated name, number 12). Their product sales accounted for 7.93% of the total sales, and the second Plalova (No. 7) 's product sales accounted for 7.67% of the total sales, and all other suppliers' sales accounted for no more than 6%. I aggregated them by country and found that the most products from the United States stood at 13.31%. Products from the United States, Germany, Australia, the United Kingdom and France accounted for 56.68% of the total sales (Note: Some company names contain non-Latin letters, query in sql. The result is displayed as blob, and its csv file can display the part of the Latin alphabet).

# What is the category with the largest number and the smallest number of products?



According to the figure, we can see that the category with the largest number of products is Confections, which corresponds to 13 products, and the least is Produce, which corresponds to 5 products.

# Which categories have more sales than the average value ?



Through SQL AVG calculation, I can get the average value of its sales is 269.375, and through the subquery and the HAVING condition, there are 4 categories that are greater than the average, namely Beverages, Confections, Dairy Products and Seafood.