

# Ramen Rating and Analysis

## **Group 2**

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# Background



Introduced to the public in 1972, Ramen (instant noodle to be more specific), successfully won the affection and admiration of people from diverse socio-economics backgrounds...

In the recent decades, numerous types of Ramen created difficulty for the customers to find their best match...

Q1: Which factors affect more about the rating, Brand or Country?

Q2: Global vs local Consistency in flavor

Q3: Global vs local Consistency in Seasoning

Q4: Which size do people like best?

The dataset consists of over 2500 reviews rated by so-called hardcore ramen enthusiast from the Ramen Rater website. Each review indicates the brand, variety (the product name), country, style (Cup, Bowl, Tray...) and most importantly, the quality rating on a 5-point scale...

Table 1 First 8 rows of the data

Review #	Brand	Variety	Style	Country	Stars	Top Ten
2580	New Touch	T's Restaurant T	Cup	Japan	3.75	
2579	Just Way	Noodles Spicy H	Pack	Taiwan	1	
2578	Nissin	Cup Noodles Ch	Cup	USA	2.25	
2577	Wei Lih	GGE Ramen Sn	Pack	Taiwan	2.75	
2576	Ching's Secret	Singapore Curry	Pack	India	3.75	
2575	Samyang Foods	Kimchi song Sor	Pack	South Korea	4.75	
2574	Acecook	Spice Deli Tanta	Cup	Japan	4	
2573	Ikeda Shoku	Nabeyaki Kitsun	Tray	Japan	3.75	

The analysis is visualized as

- *bar charts*
- *boxplots*
- *heat maps...*

...with the help of packages including

- *pandas*
- *seaborn*
- *matplotlib...*

## Example:

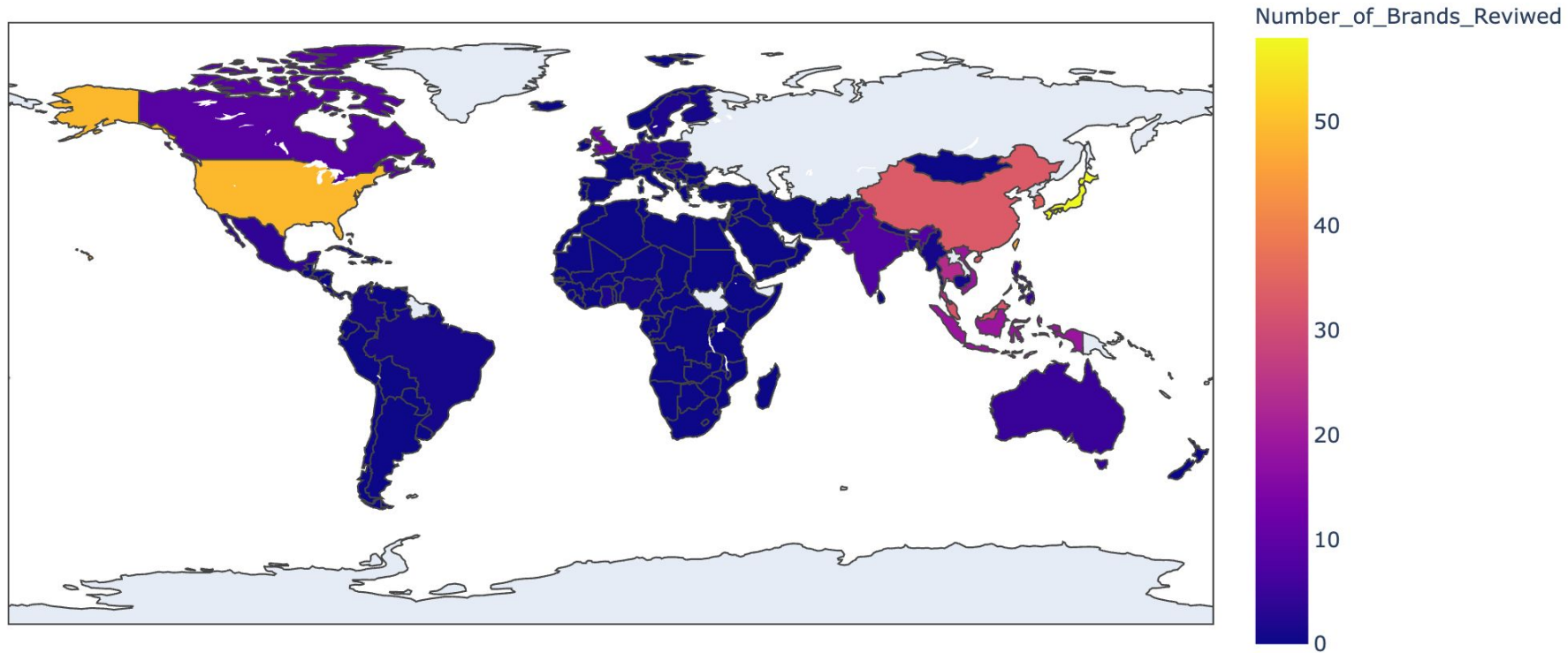
Aim: Among the top 10 countries, find the consumers' bias on different flavours.

Idea: Input the country and get the number of kinds of ramen with different flavours

Input: (country=Japan)

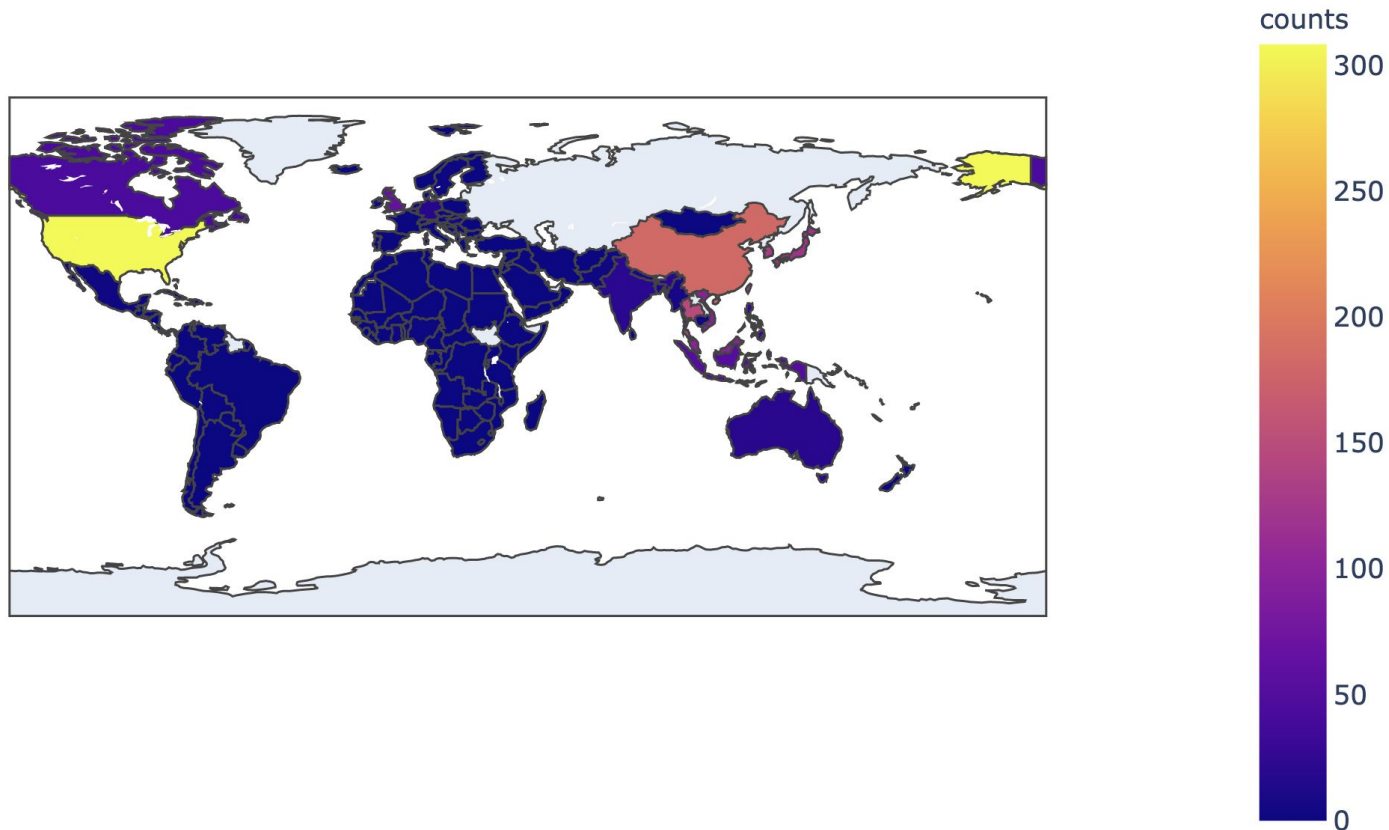
Output: {'beef': 3, 'chicken': 10, 'mushroom': 2, 'laksa': 1, 'crab': 5, 'chilli': 2, 'pepper': 3, 'tom yam': 0, 'seafood': 11, 'spicy': 14...}

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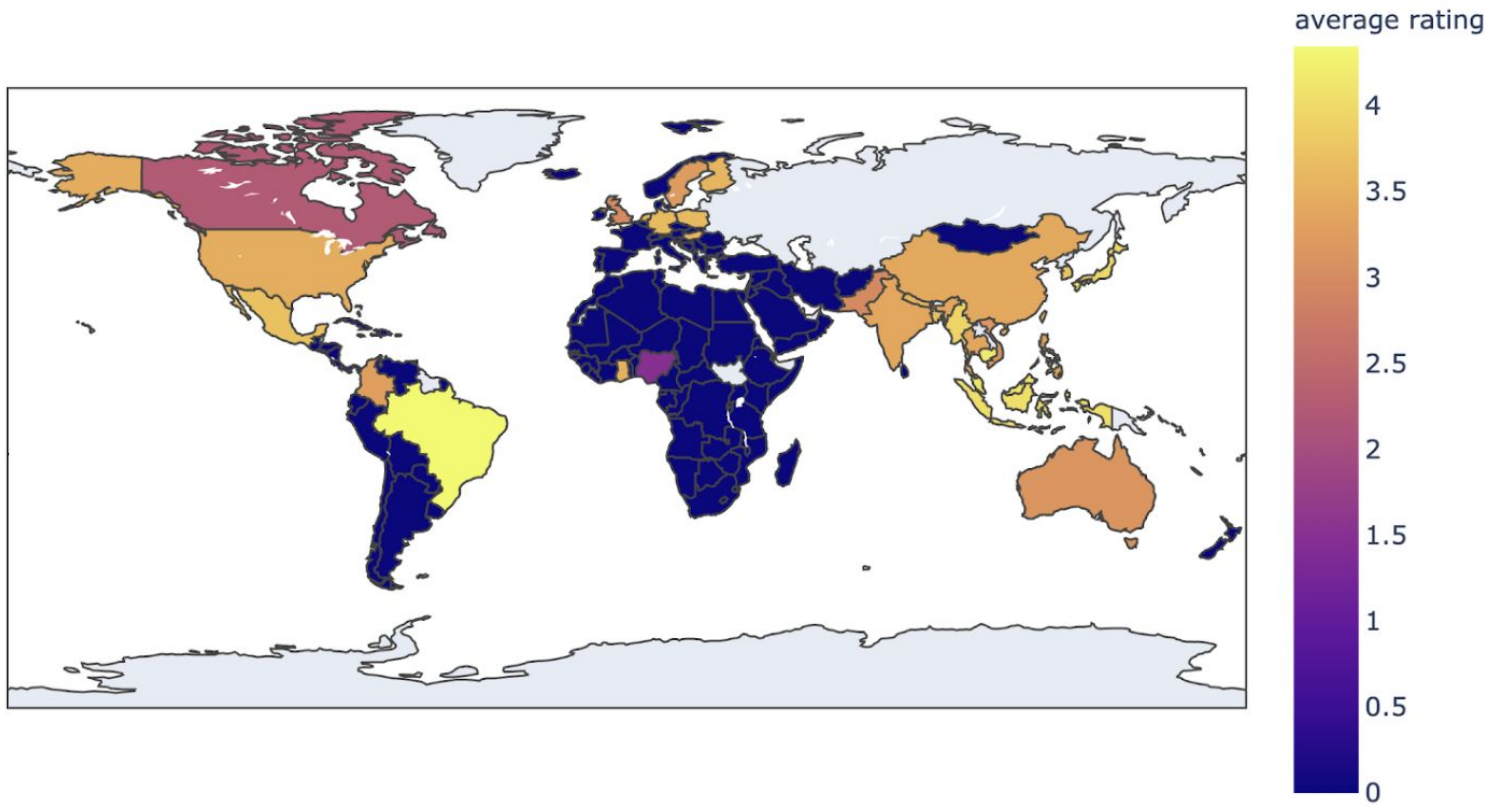
As we can tell from this heat map and the previous one, the amount of ramen products is correlated to the amount of brand.





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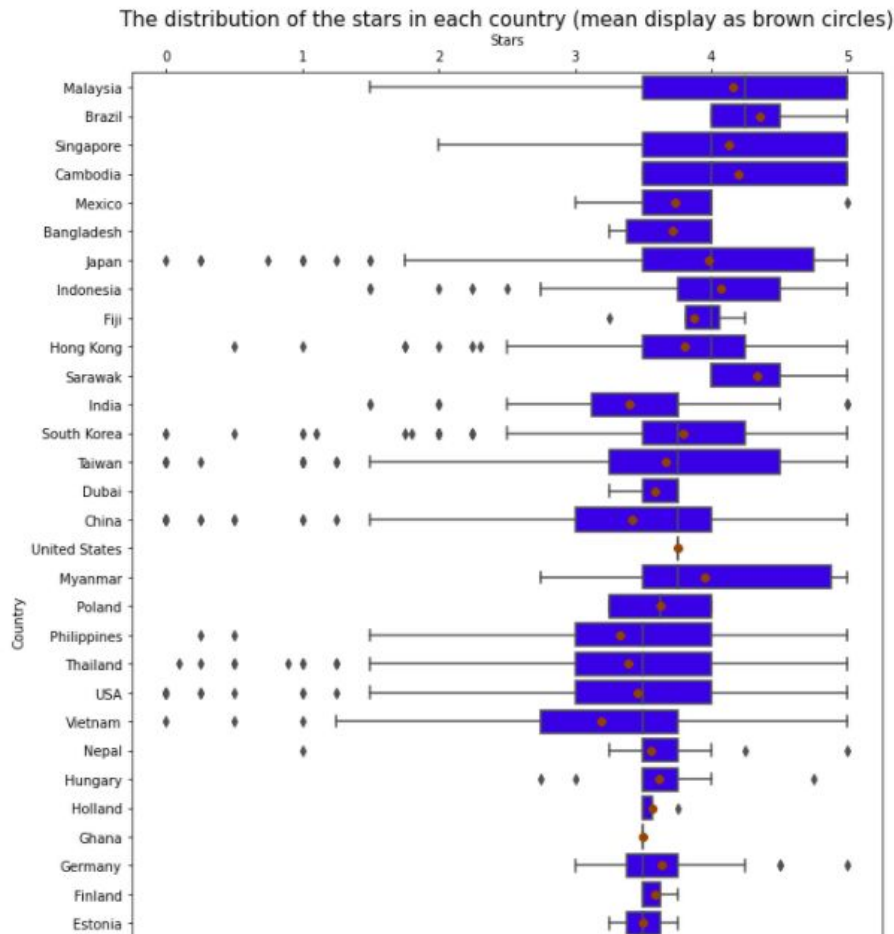
Heat Maps showing the average rating grouped by each country



Remark: This heat map provides the average rating grouped by each country. As we can see in the graph, people in Brazil tends to give the highest average rating to the Ramen!



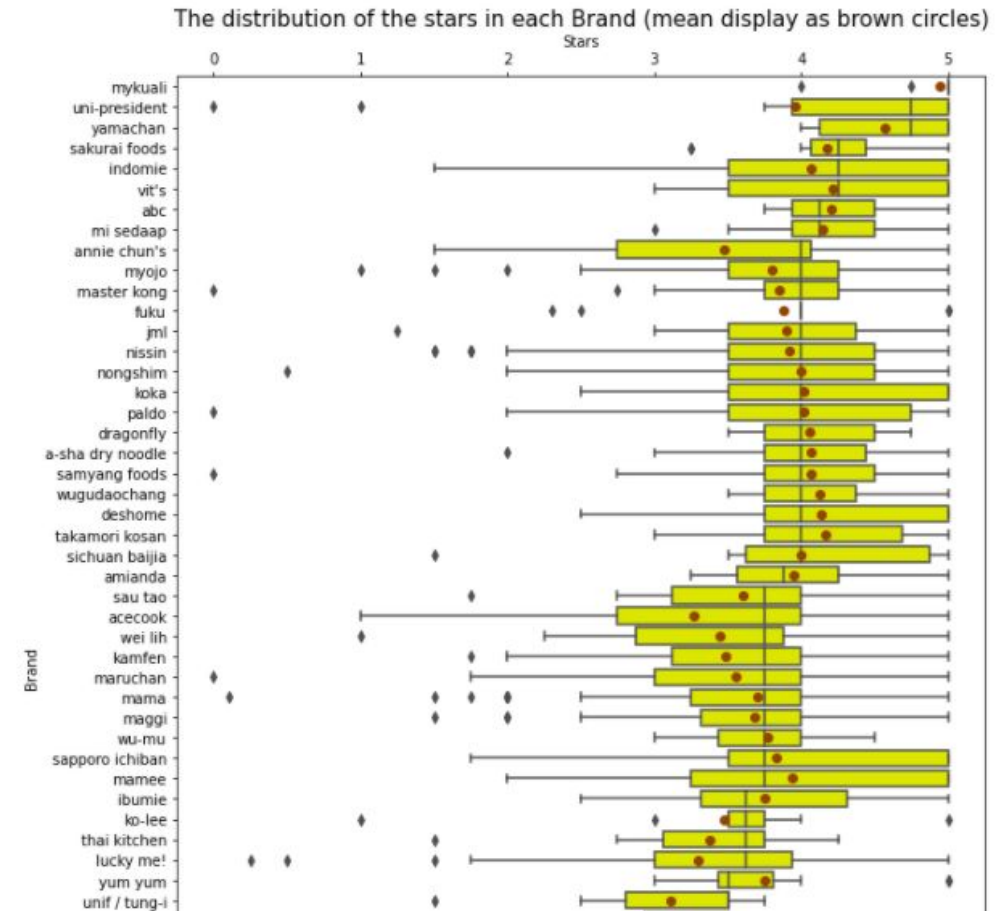
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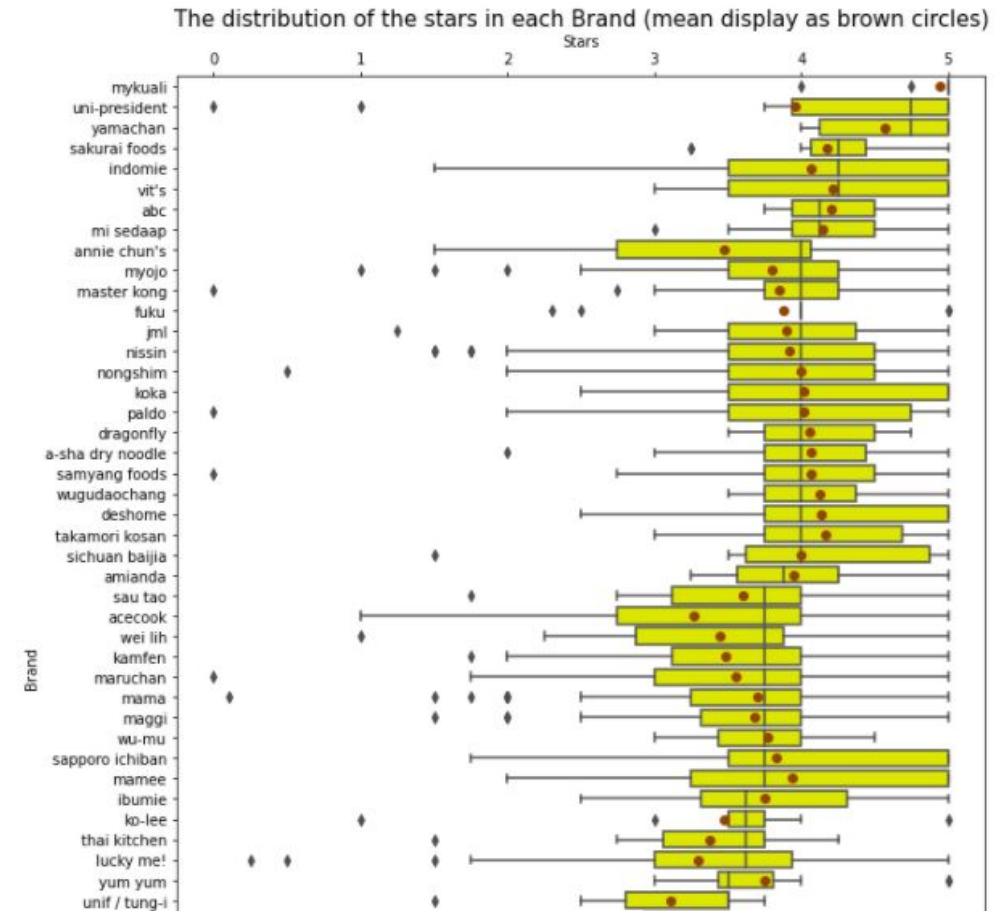
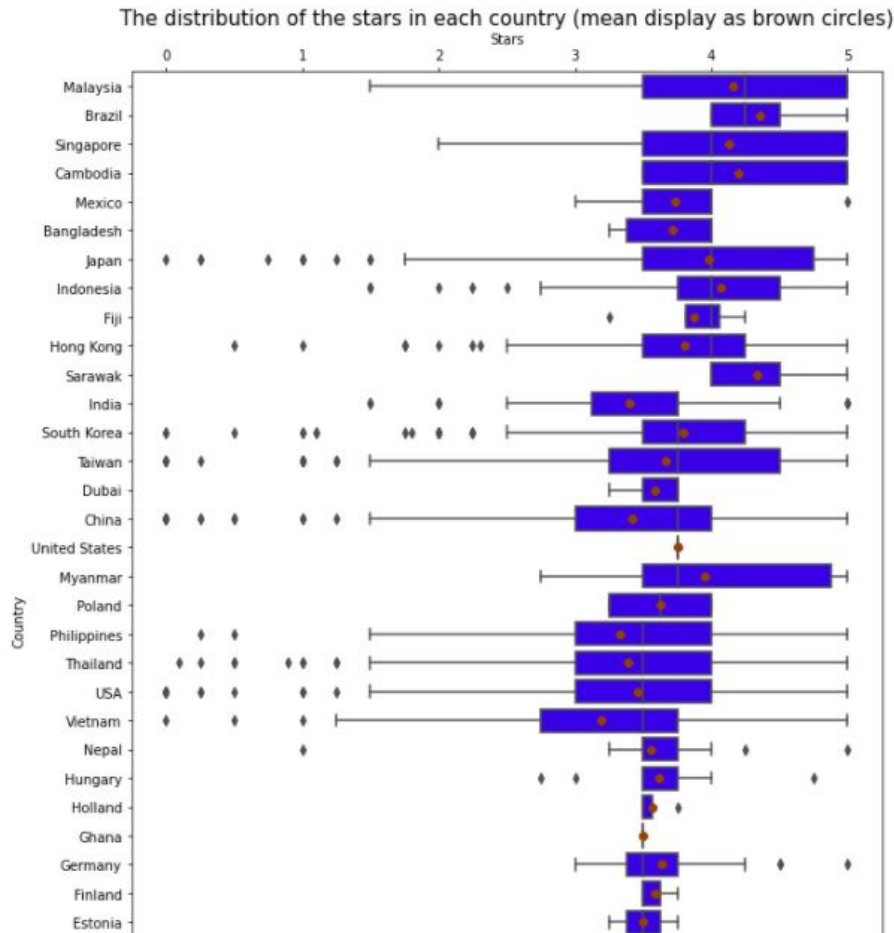
Instead of plotting the heat map, we decided to plot the box plot which represents the information more scientifically. The number in the box plot is more explicit.

# Q1: Which factor affects more about the rating, Brand or Country?

box plot about distribution  
grouped by brand

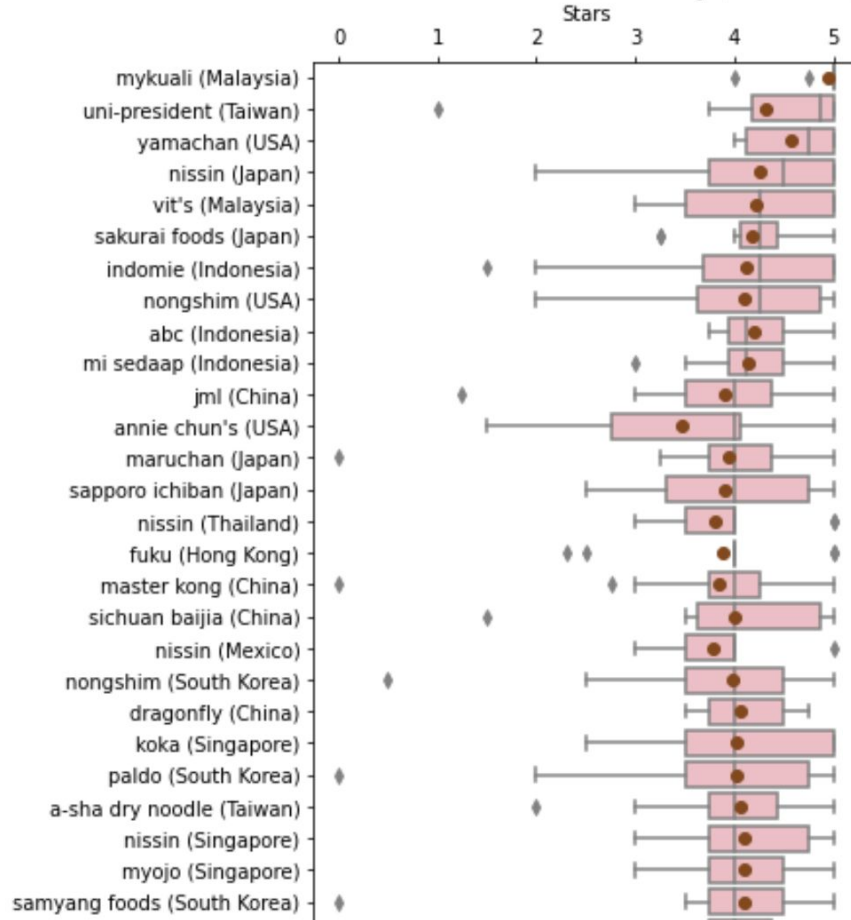


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The distribution of the stars in each brand/country (mean display as brown circles)



Remark:

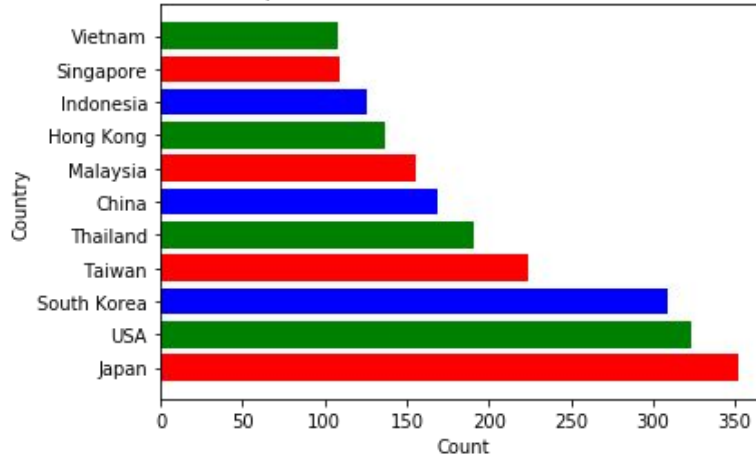
If you remember correctly, Malaysia and MyKuali has the best rating distribution, and if we combine them together, it also gives us the best average ramen stars regarding brand and country.

The ranking of this box plot follows the pattern of box plot grouped by brand. Mykuali, uni-present, yamachan .. ect

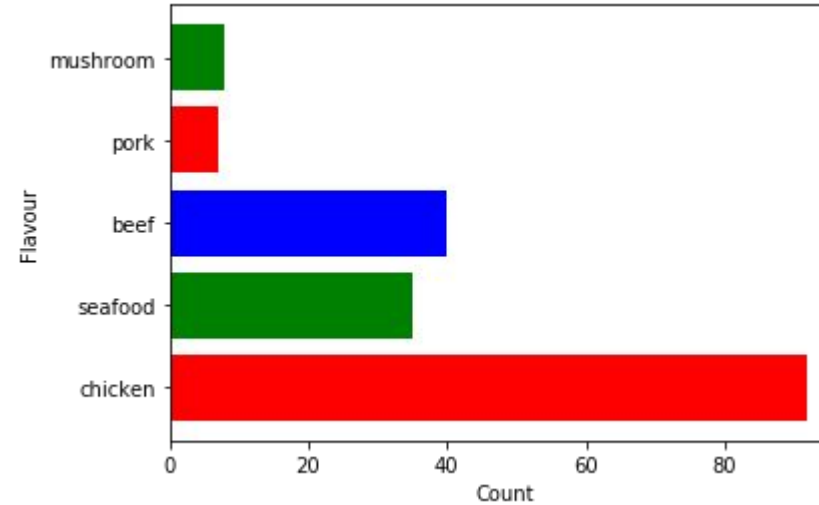
# Q2: Does the global preference on flavour stays consistent with each country?

UC San Diego

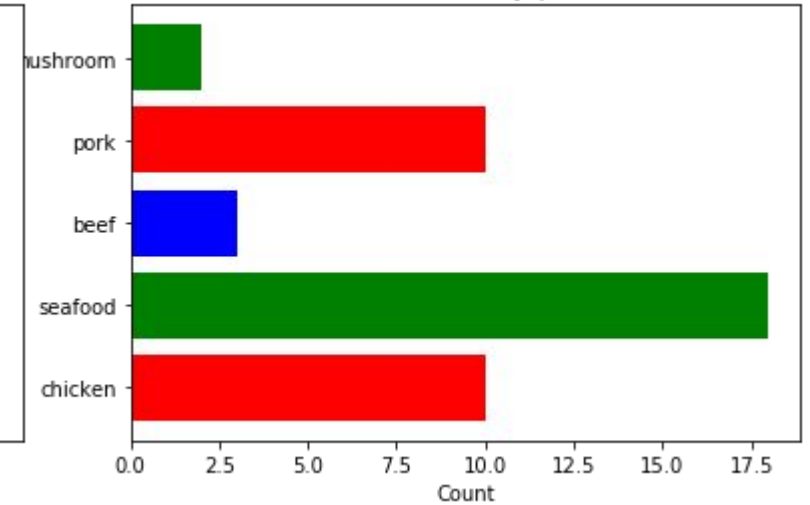
Top 11 Countries with The Most Varieties



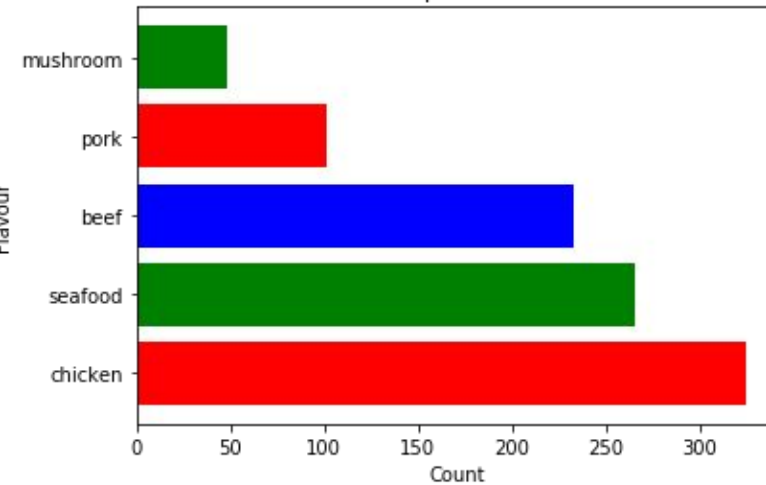
Preference of USA



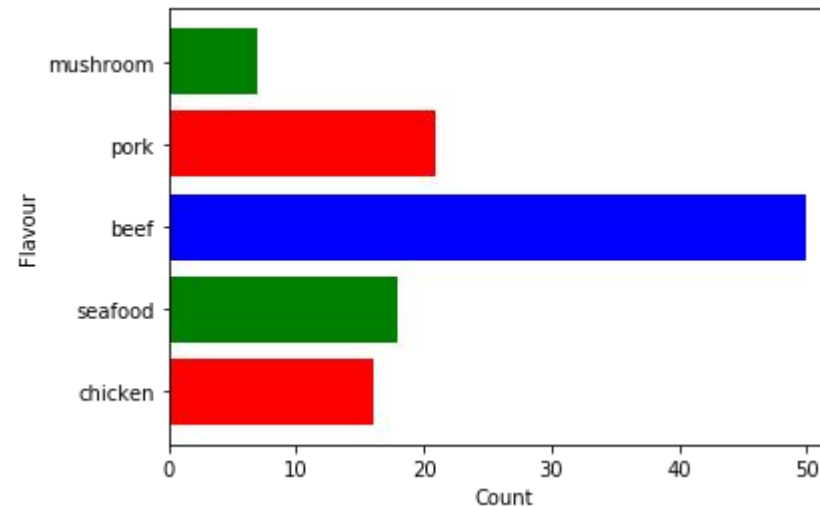
Preference of Japan



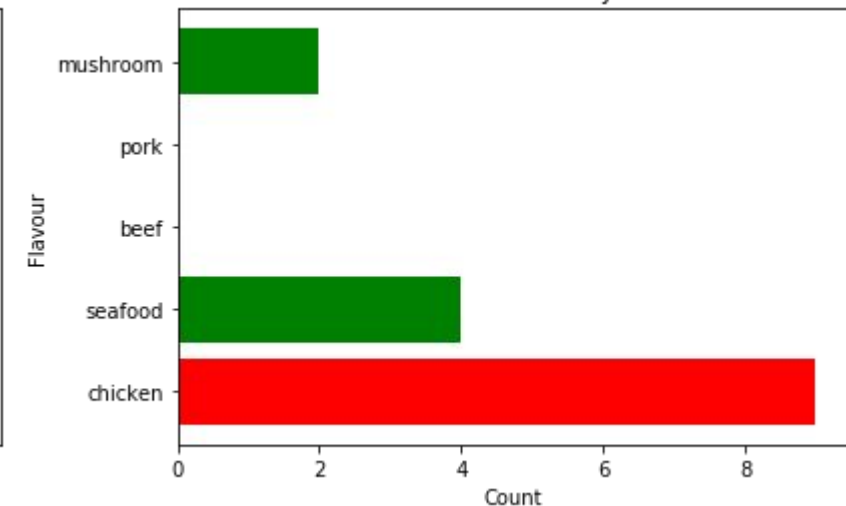
Global Top Five Flavours



Preference of China

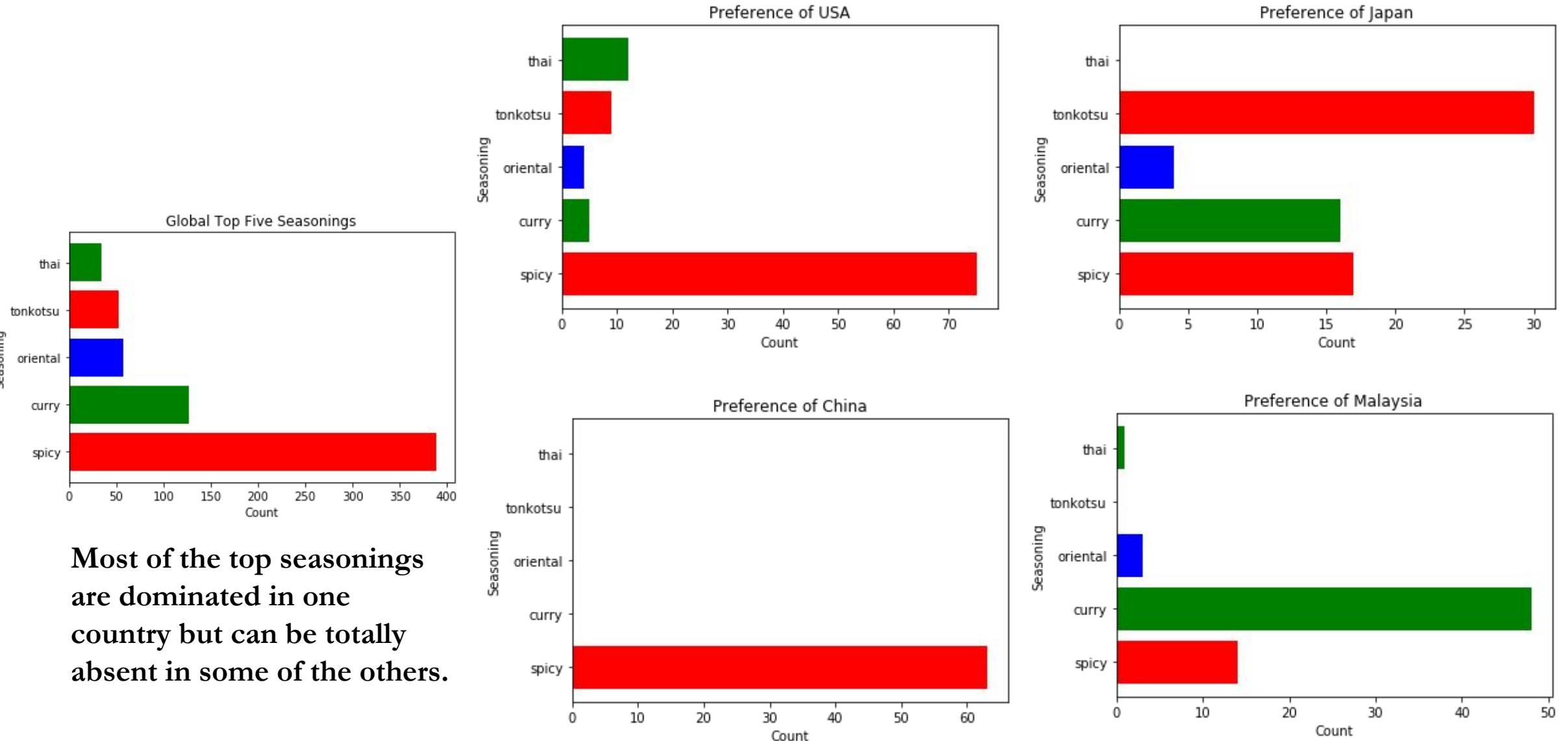


Preference of Malaysia



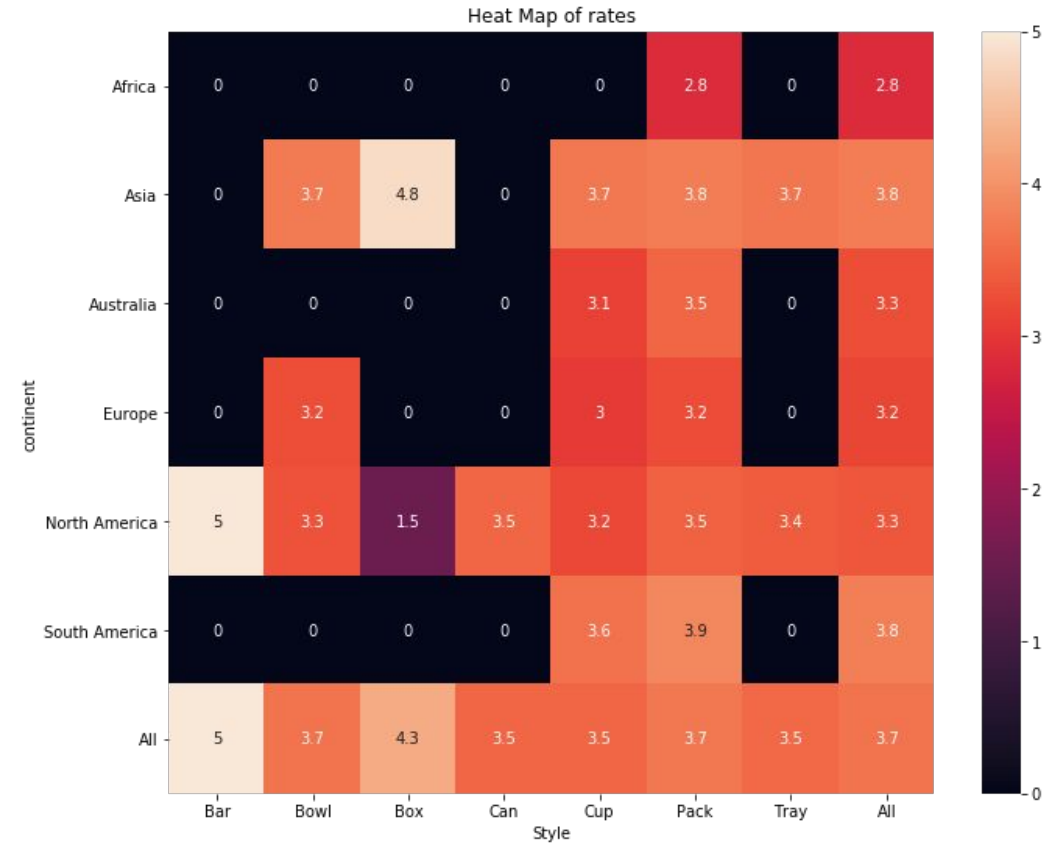
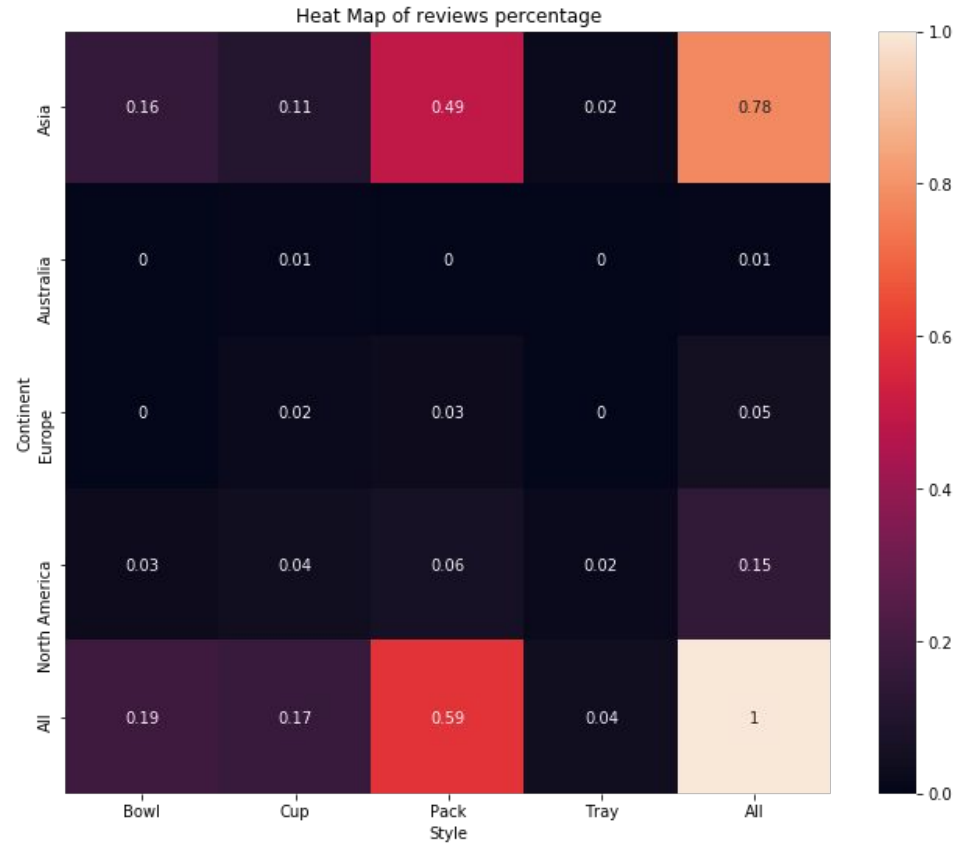
The connection between global and countries' preference on flavour is weak.

# Q3: Does the global preference on seasoning stays consistent with each country?



Most of the top seasonings are dominated in one country but can be totally absent in some of the others.

# Q4: Which size do people like best?



*Pack is more popular!*



UC San Diego