

Ramón Paynter Portuese

Career Foundry Job course 1.4



Introduction:



- **Problem:** To sum up the main problem what we are trying to solve. What are the main attributes that make a chocolate bar have a high rating? (Taste good)
- **Goal:** Create a thorough but simple data analysis that goes over the key attributes that give a chocolate bar a good rating.
- **Role:** Data Analyst
- **Project Scale:** One month Project
- **Primary Stakeholder:** CareerFoundry
- **Tools Used:** Excel, Python, Tableau, and PowerPoint
- **What were some of the problems that you faced during the project?** Some of the problems that I faced were making sure that the formatting was correct from excel to python. I.E. there was a percentage sign that was in the excel file that caused issues in one column when uploaded into python, I ended up just changing it in excel. Also there was the big issue of time; I was on a time crunch and wanted to finish before Christmas. Another challenge that I faced when creating things in Tableau and Powerpoint was the challenge of balancing white space, visualizations, pictures, and text.

FLAVORS OF CACAO ANALYSIS

- **EXPLORING WHAT ARE THE CHARACTERISTICS AND TRENDS THAT MAKE A GREAT TASTING CHOCOLATE BAR.**



Visualizations

- **Please Note: Visualizations are included, however, for a more in depth look at the visualizations, please click on the following link to view them on Tableau Public:**
https://public.tableau.com/views/CF6_7_17030272150460/Introductionpage?:language=en-US&:display_count=n&:origin=viz_share_link

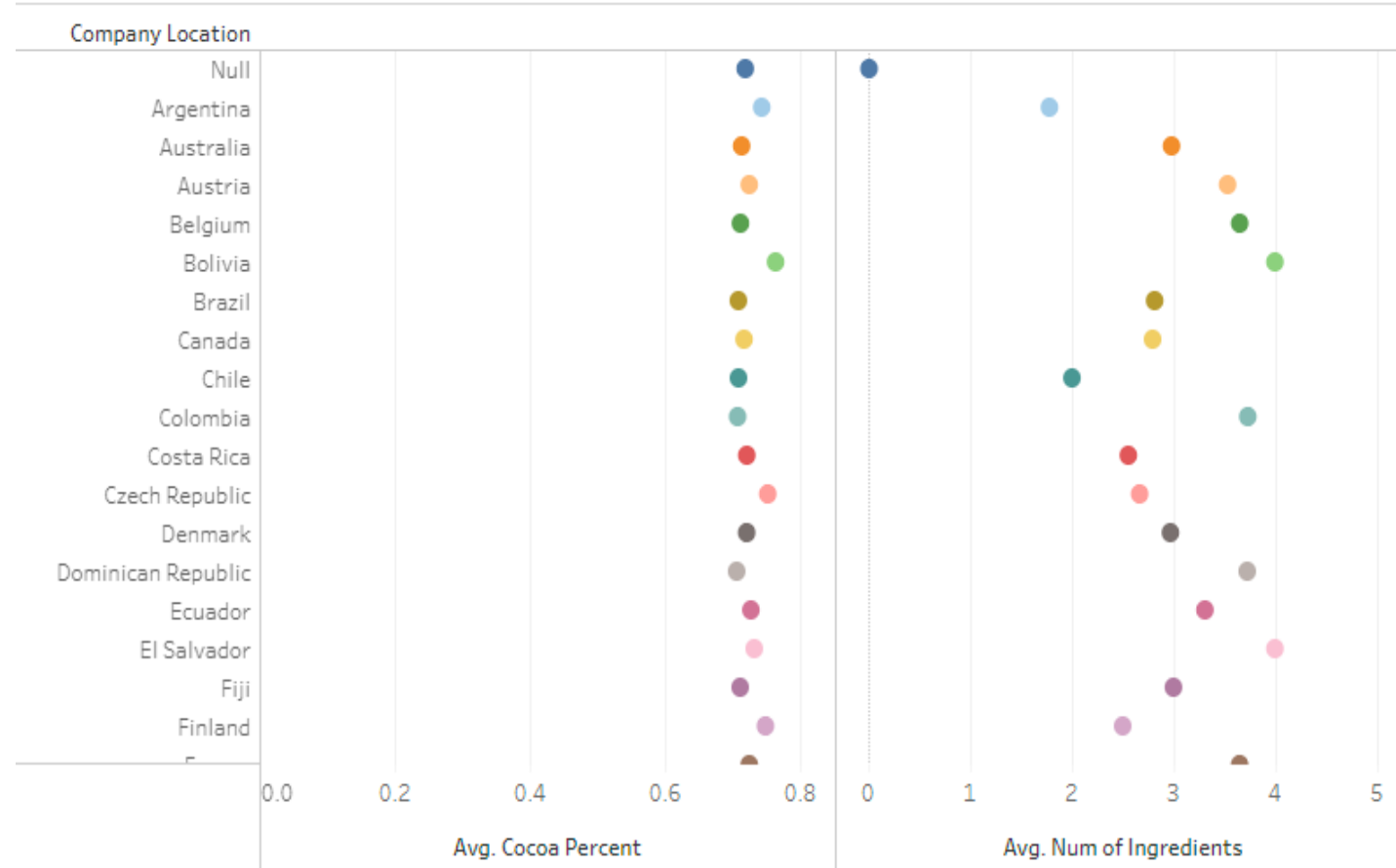


Flavors of Cacao Analysis Key Questions that we Will Explore:

- Does the location where the chocolate bar is made effect the number of ingredients or the cacao percentage of the chocolate bar?
- Does the location where each chocolate bar is made (company location) influence the overall rating of the bar?
- Does the country of origin of cacao beans play a factor into determining the chocolate bar's rating?
- Does the amount of ingredients that are used in the chocolate bar have any influence on the overall chocolate bar rating?
- Does the cacao percentage that's in the chocolate bar have any effect on the chocolate bar's overall rating?

Company Location and Cocoa Percent

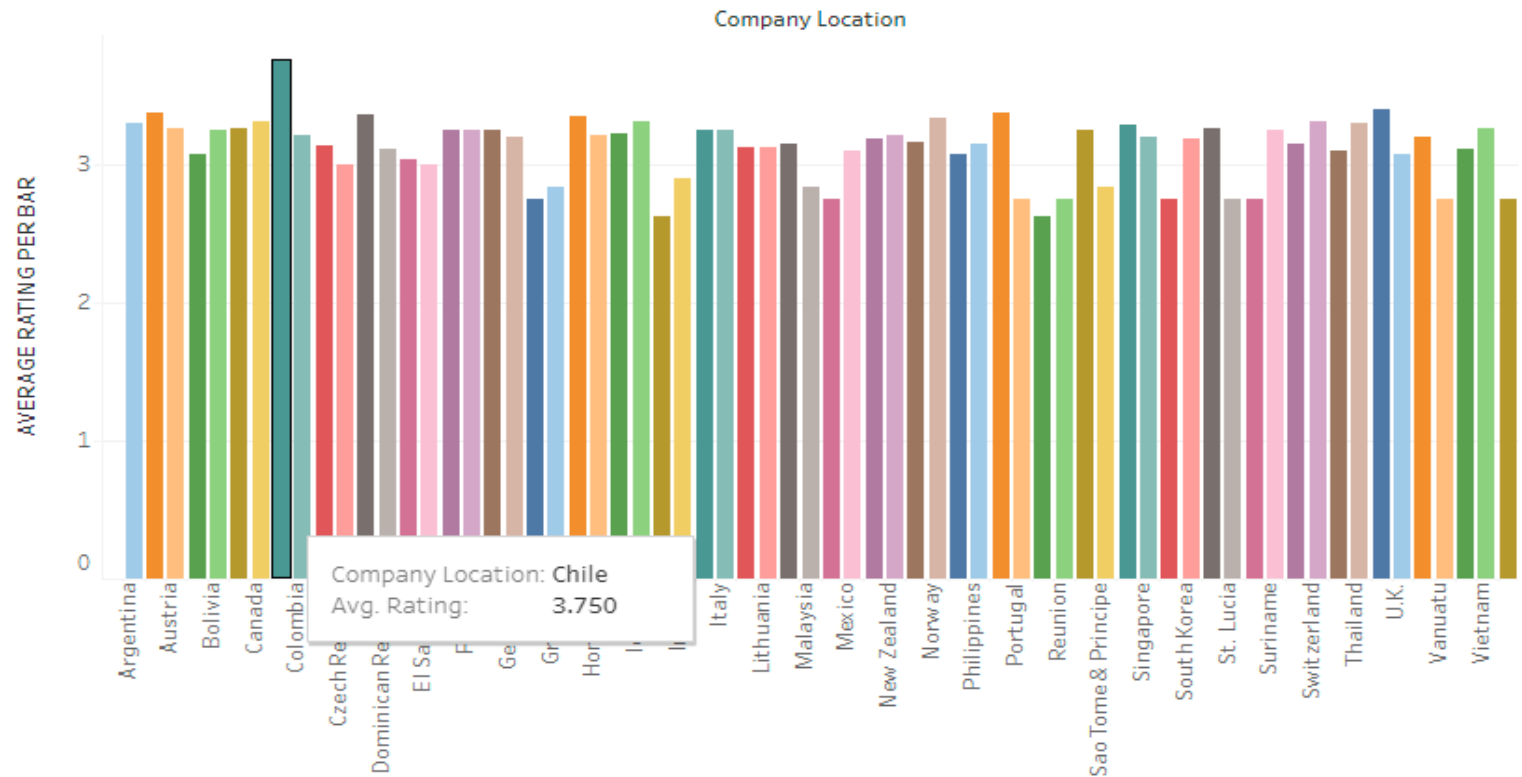
- This is going over how the Company location effects the Average Cocoa Percent and the Average Number of Ingredients in each bar. We can see that the average cacao percent falls between 60-80% worldwide. Also the average number of ingredients seems to fall between 2-5 Ingredients worldwide.



Countries and Average Rating

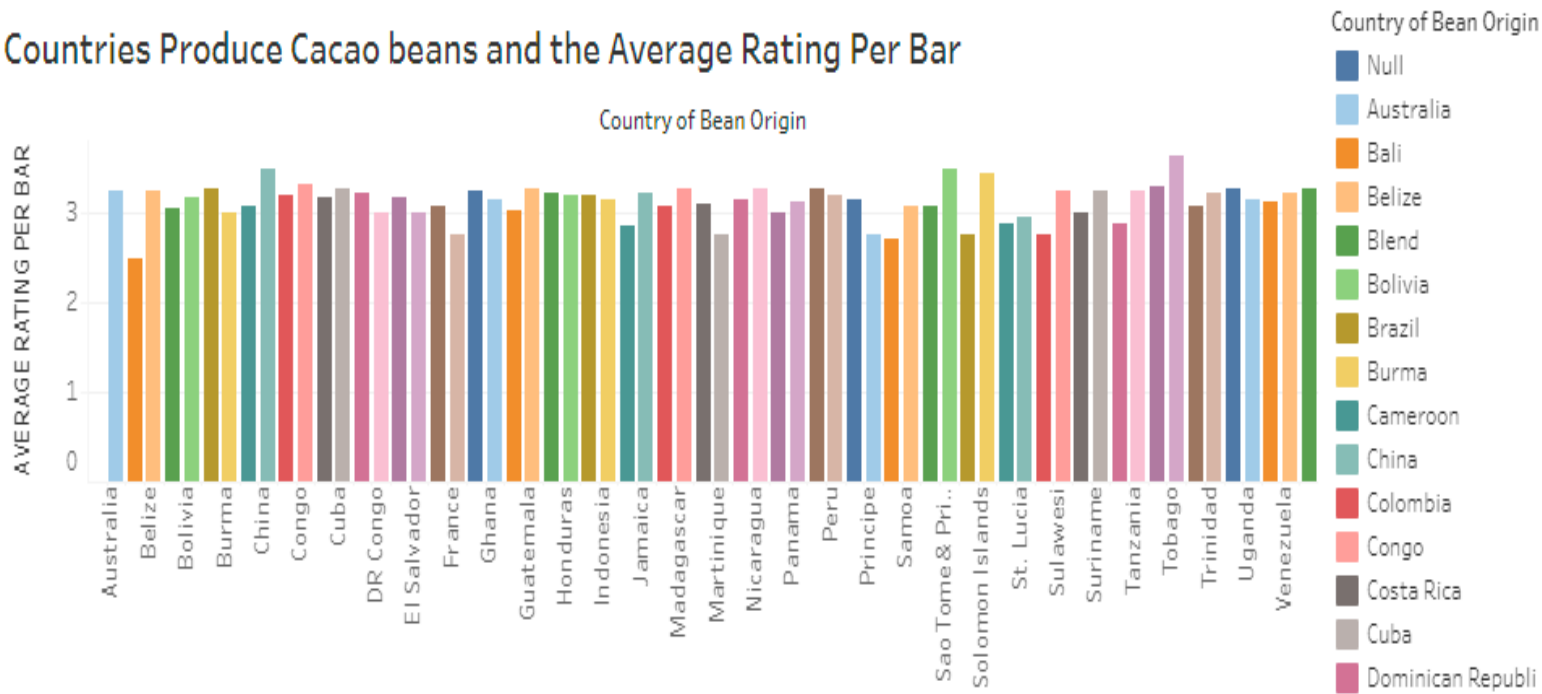
What this graph is doing is letting the viewer know that the companies represented show their average rating per bar. Based off of the data one can see Chile is the country that has the companies that produce the highest rated chocolate bars on average. However there are other countries throughout the world which have high rated chocolate bars on average such as Guatemala 3.350, Norway 3.333, Poland 3.375, Vietnam 3.264, and many others.

Countries with Chocolate companies in them and the average rating per bar



Where Do Highly Rated Chocolate Bar Beans Come From?

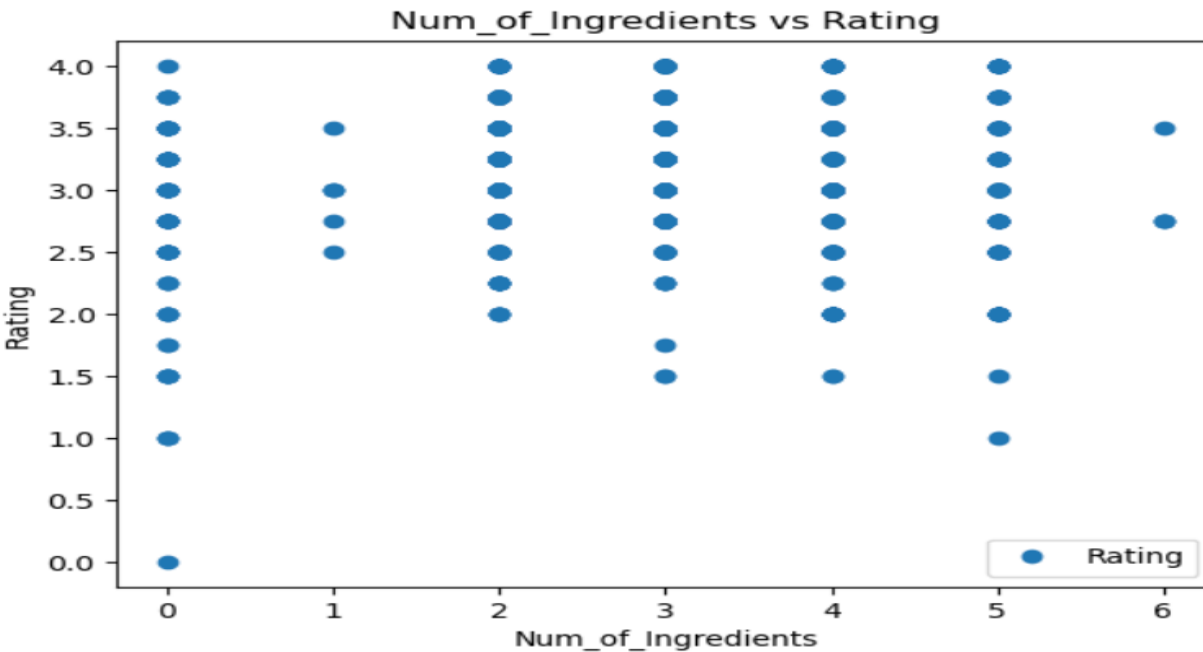
Countries Produce Cacao beans and the Average Rating Per Bar



- This visualization shows that the average rating per bar is affected by the country of the bean origin. We can see that Tobago is the country that produces the highest rated cacao bars on average.

Number of Ingredients in the Chocolate Bar and How they Effect the Rating.

This is going over the number of ingredients and how they effect the rating displayed in a regression analysis



- This goes over the Number of Ingredients (Num_of_Ingredients) in the Cacao Bar and how it effects the overall rating (Rating). The majority of Ingredients fall between 2-5 Ingredients and have a rating between 2-4. So from this we can see that the cacao bar's rating is effected a bit by the number of ingredients.

Limitations

- **There is potential bias in the data because the people who collected the data could have more of an expert opinion on the chocolate bars compared to the average person.**
- **The time that the data was influenced might become outdated eventually.**
- **The limit of geographical data regarding the beans might be an issue.**
- **Another potential issue to consider is the ethical practices of getting Cacao beans. Ideally they are collected in ways that the workers have humane and safe working conditions but there is always a risk for.**

Flavors of Cacao Analysis Questions Answered:

- Does the location where the chocolate bar is made effect the number of ingredients or the cacao percentage of the chocolate bar?
- **Yes! We can see that the average cacao percent falls between 60-80% worldwide. Also the average number of ingredients seems to fall between 2-5 Ingredients worldwide.**
- Does the location where each chocolate bar is made (company location) influence the overall rating of the bar?
- **To a certain extent yes, because we can see that south America has companies that produce the highest rated chocolate bars. We can see Chile is at the highest with 3.75.**
- Does the country of origin of cacao beans play a factor into determining the chocolate bar's rating?
- **Yes, cacao beans in general mainly come from warmer countries. The highest rated bar is created with Cacao beans from the country Tobago.**
- Does the amount of ingredients that are used in the chocolate bar have any influence on the overall chocolate bar rating?
- **Yes the amount of Ingredients typically is between 2-4 ingredients per chocolate bar.**
- Does the cacao percentage that's in the chocolate bar have any effect on the chocolate bar's overall rating?
- **We know by looking at these charts that when the average cacao Percent is 0.71% the average rating of chocolate bars ended up being 3.198 so yes it does effect overall rating.**

Conclusion and Important Summary

- **Link to Tableau Public:**
https://public.tableau.com/views/CF6_7_17030272_150460/Introductionpage?:language=en-US&:display_count=n&:origin=viz_share_link
- **Github :** [Link to GitHub](#)
- **The original data set was provided on Kaggle.com but an updated version was found using the follow link:**
<https://flavorsofcacao.com/flavor.html>
- **Valuable Takeaways:** The most highly rated chocolate bars come out of areas with warm climates. The highly rated chocolate bars use a significant amount of cacao. Tabago is the country that produces the highest rated Cacao beans on average.

Let's Connect:

- Ramón Paynter Portuese's personal info
- LinkedIn: [Ramón's LinkedIn](#)
- Github : [Link to GitHub](#)
- Gmail: ramonportuese@gmail.com