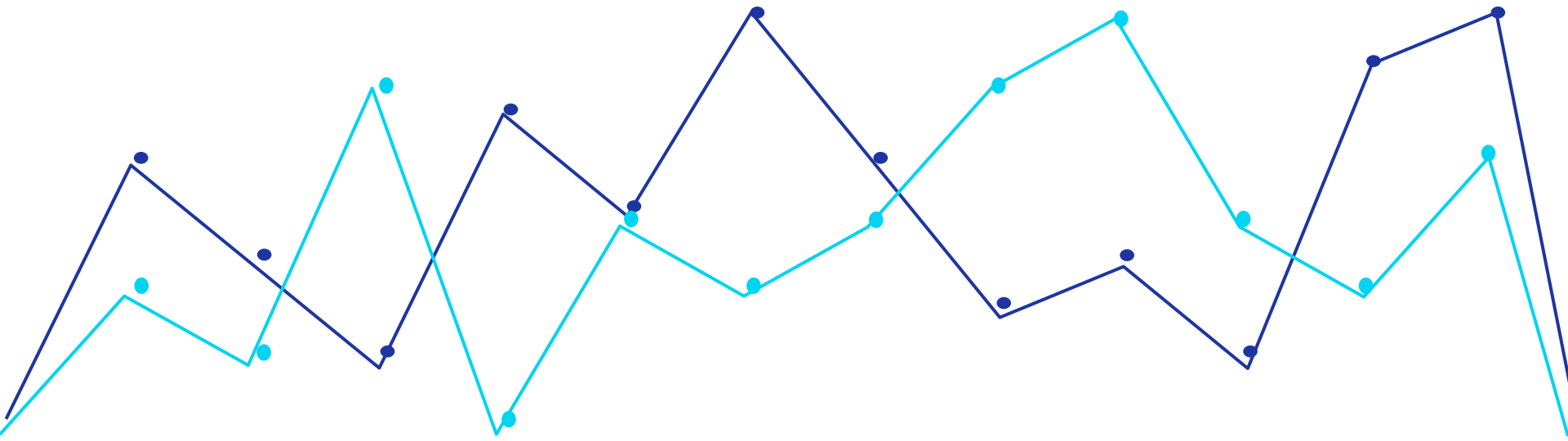


# *Data Analysis Portfolio*

*BY T.M.F.I.*

*APRIL 2024*

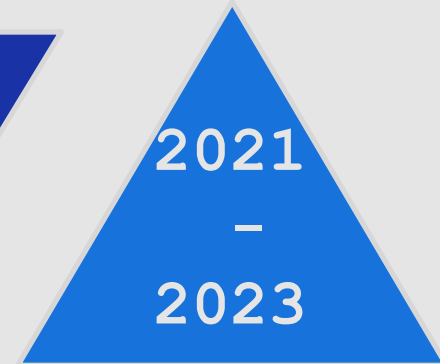


# Professional Background

As a detail-oriented and analytical professional with a strong foundation in finance and data analysis, i have a unique blend of experience in managing operations and driving business growth through data driven insights.

With a strong desire to delve deeper into data analysis, I decided to transition into a data analysis role, leveraging my financial expertise and passion for data story telling to drive business decisions. I am excited to bring my unique blend of operational and financial experience to this project and uncover actionable insights that drive success.

Joined a lodging/resort facility  
as a financial analyst.



Worked as an intern cost controller at  
a global integrated energy company.

# Table of Contents

- ❖ *Professional Background.*
- ❖ *Project Description.*
- ❖ *Key Questions.*
- ❖ *Findings and Insight.*
- ❖ *Summary Of Findings.*
- ❖ *Actions & Recommendations.*
- ❖ *Conclusion.*

# Project Description

## Chocolate Bar Ratings

Chocolate, a universally loved treat, sees an annual consumption exceeding 2.8 billion pounds in the United States alone, highlighting its significant market presence.

Hence this project is based on a comprehensive analysis of an extensive data set containing ratings for over 1,700 individual chocolate bar and other informative data, such as cocoa percentage, bean variety etc.

This helps us to better understand:

- Where the best cocoa bean are grown
- The countries that produce the highest-rated bars
- The relationship between cocoa solids percentage and rating

Deliverable:

- A comprehensive report detailing of the findings.
- A presentation summary of the key insights.

Impact:

This project aims to not only elevate the understanding of factors that contribute to high-quality chocolate bars but also to assist manufacturers and marketers in making informed decisions that could enhance product appeal and increase market share.

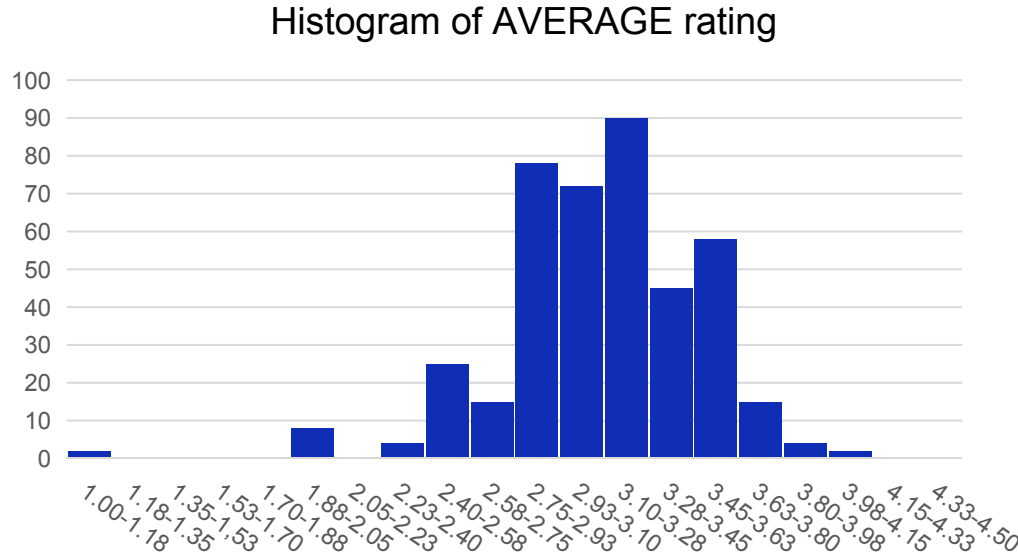
# Key questions

- I. What is the average rating and rating interpretations?
- II. What are the top 10 companies and their locations, with the highest ratings?
  - Bean region
  - Cocoa percentage
  - Cocoa variety(Bean types)
- III. Does cocoa percentage have an effect on ratings?
- IV. Does bean origin have any effect on rating as well?

# Findings & Insights



# 1. What is the average rating and rating interpretation?



## Flavors of Cacao Rating System:

5= Elite (Transcending beyond the ordinary limits)

4= Premium (Superior flavor development, character and style)

3= Satisfactory(3.0) to praiseworthy(3.75) (well made with special qualities)

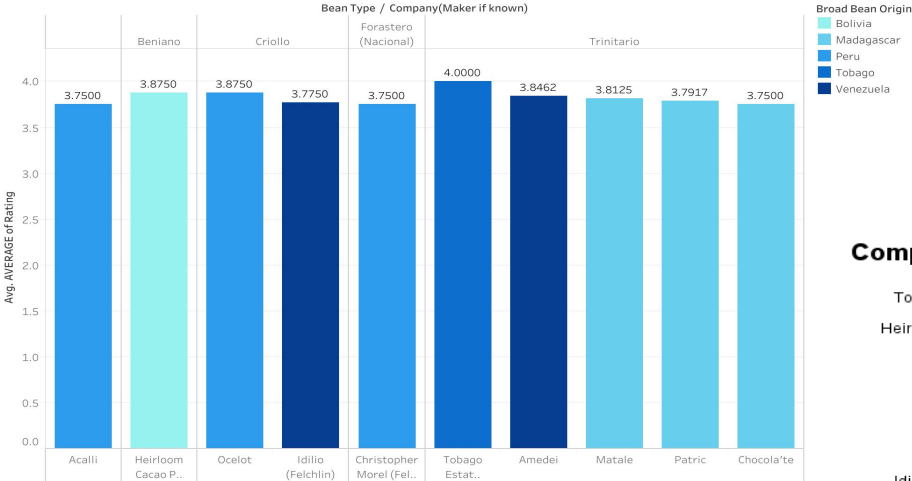
2= Disappointing (Passable but contains at least one significant flaw)

1= Unpleasant (mostly unpalatable)

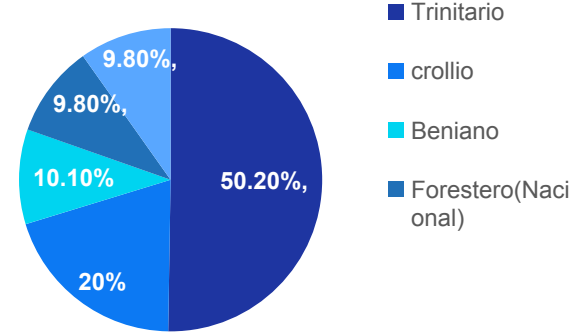
- ❖ The overall rating from customers on an average is a satisfactory (3.1-3.28) .

## 2. Top 10 companies and location with the highest chocolate bar ratings?

Top 10 companies with the highest chocolate bar ratings



Average of AVERAGE of Rating for each Company(Maker if known) broken down by Bean Type. Colour shows details about Broad Bean Origin. Details are shown for AVERAGE of Cocoa Percent.



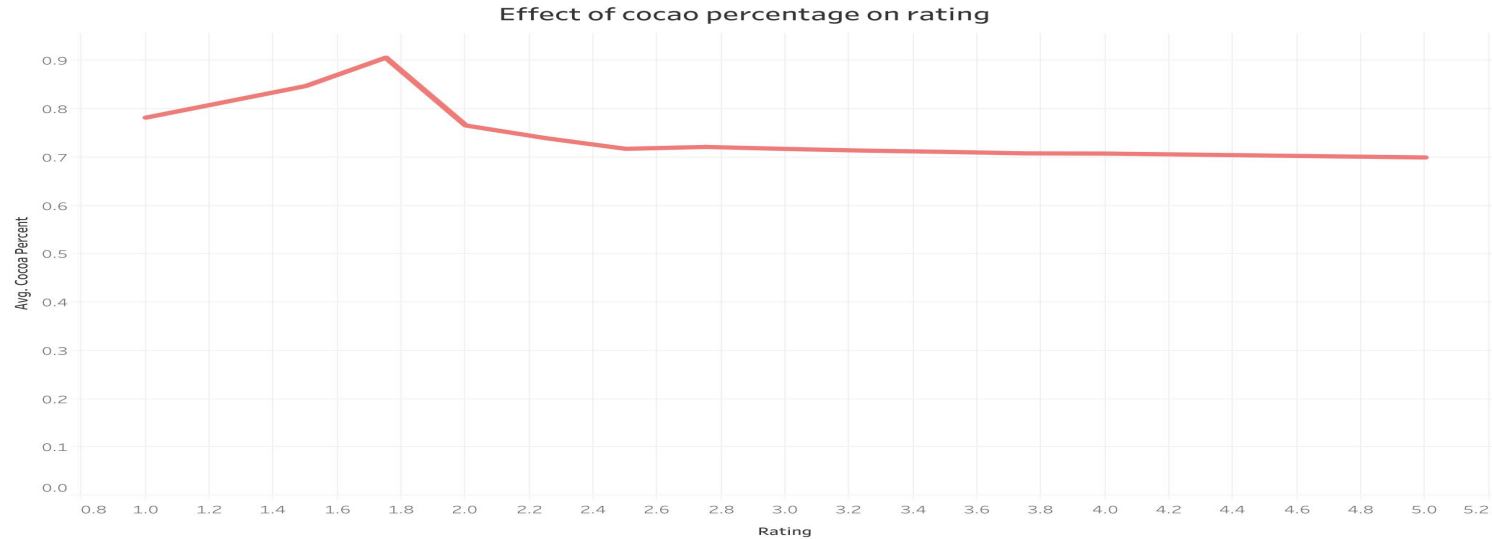
Companies vs Locations



- ❖ Tobago Estate ranks first as the highest-rated chocolate maker with an average rating of 4.00 (**Premium**) out of 5.
- ❖ The trinitario bean type seems to be the most predominant (50.2%) amongst other bean variety used by the top rated chocolate makers with the criollo(20%) following after.



### 3. Does cocoa percentage have an effect on ratings?



The trend of average of Cocoa Percent for Rating.

- ❖ From the data, chocolate bars that contains less amounts of cocoa got a rating of 4.00(Premium) and 5.00(Elite) while those that contain higher percentage of cacao got a rating of 1(Mostly unpalatable) and 2(Disappointing).

#### 4. Does bean origin have an effect on rating as well?

## Bean origin vs rating

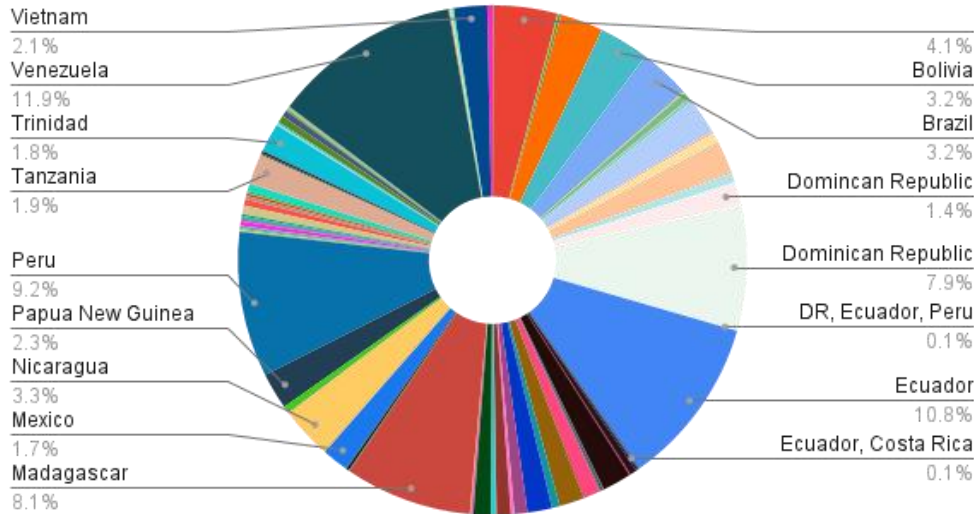


Table 1

World Region	Count of Rating
Asia & Africa	6
Venezuela/ Ghana	3
Venezuela/ Trinidad	1
Venezuela/ Java	1
Venezuela/ Ghana	1
Venezuela/ Dom. Rep.	1
Venezuela/ Caribbean	1
Venez. Africa, Brazil, Peru...	2
Ven. Peru, Nic.	1
Ven. Trinidad, Mad.	1
Ven. Indonesia, Ecuador	1
Ven. Trinidad, Ecuador	1
Ven. Bolivia, G. R.	1
Uganda	2
Trinidad, Tobago	2
Trinidad, Ecuador	1
Trinidad, Tobago	1
Trinidad	3
Togo	2
Tobago	3
Togo	2
St. Lucia	1
St. Lanka	2
South America, Africa	1
South America	1
Seomon Islands	2
Sea Term & Prinsps	1
Samoa	2
Puerto Rico	4
Principe	1
PNG, Vanuatu, Mad	2
Philippines	5
Peru/Martin, Pargosa, PSC...	1
Peru, Mad., Dom. Rep.	1
Peru, Ecuador, Venezuela	1
Peru, Ecuador	1
Peru, Dom. Rep	1
Peru, Bolivia	1
Peru, New Guinea	2
Peru	2
Nigeria	1
Nicaragua	6
Mexico	3
Martinique	1
Madagascar & Ecuador	1
Mad.	1
Mad., Java, PNG	1
Liberia	1
Jamaica	3
Java Coast	1
Indonesia, Ghana	1
Indonesia	1
Honduras	1
Hawaii	2
Haiti	2
Guatemala	2
Guat., D.R., Peru, Mad., P.	1
Grenada	1
Grenada, Barb., Barb.	1
Ghana, Panama, Ecuador	1
Ghana, Guin., Rep	1
Ghana & Madagascar	1
Ghana	3
Gabon	1
Fiji	2
Ecuador	1
Ecuador, Mad., PNG	1
Ecuador, Costa Rica	1
Ecuador	1
DR, Ecuador, Peru	1
Dominican Republic	1
Dominican Rep., Barb	1
Dominican Republic	1
Dom. Rep. - Madagascar	1
Costa Rica	2
Costa Rica, Ven	2
Congo	1
Colombia, Ecuador	1
Colombia	2
Central and S. America	2
Caribbean (CDB/Jam/Tr)	2
Caribbean	2
Caribbean	1
Burma	1
Brazil	5
Bolivia	5
Bolivia	4
Bolivia	1
Africa - Caribbean, C. Am.	1

- ❖ Venezuela(11.9%), Ecuador(10.8%) and Peru(9.2%) are the countries with the highest rating count i.e the number of times people have done a rating.

# Summary and Recommended Actions



# Summary Of Findings

## ❖ **Average Rating:**

- ✓ The overall chocolate ratings is satisfactory which hints at a fair experience and there are existing issues that must be addressed.

## ❖ **Cacao Percentage:**

- ✓ The average amount of cacao present in the chocolate bars for the top 10 companies with the highest rating ranges from 68% - 73%.
- ✓ The higher the cacao percentage the lower the rating. Furthermore, it is shown that 70% is the ideal amount of cacao that should be used for a better appraisal.

## ❖ **Broad Bean Origin:**

- ✓ Four out of five bean types used by the top rated companies had their bean origin in South America.
- ✓ The best cacao beans are grown in South America (Venezuela, Peru and Ecuador; which are in the northern parts of the continent).

## ❖ **Top Producing Countries**

They include;

- ✓ France, U.S.A, Scotland, Italy, Australia, Switzerland and Canada in that order.

# Recommended Actions

## **Marketing recommendations:**

- ❖ There were some unknown bean types which appear to be in the top five highly rated bean types as well as the bean origin which are under-represented. Therefore, marketers should capitalize on highly-rated, lesser-known bean types by exploring their potential further through research and experiments. Additionally, sourcing beans from under-represented origins can differentiate products and appeal to consumers seeking unique flavors.

## **Product Recommendations:**

- ❖ More focus should be on utilizing cacao bean from South America to improve ratings, Also adjusting cacao percentage to 70% as it is the ideal amount that should be employed to enhance flavor and for better appraisal and exploring bean types like the Beniano and Nacional bean type.

# Conclusion

This project analyzes a vast data set of over 1,700 individual chocolate bars to uncover key insights such as optimal cocoa bean locations, top-producing companies, and the relationship between cocoa percentage and bar ratings. The deliverables include a comprehensive report and a presentation summary, aiming to inform manufacturers and marketers on how to enhance product appeal and increase market share in the chocolate industry.

# Thank You



In order to use this template, you must credit Findings and Insights by keeping the Thanks slide.