

Assignment

Exploratory Data Analysis

Chocolate is one of the most popular candies in the world. Each year, residents of the United States collectively eat more than 2.8 billion pounds. However, not all chocolate bars are created equal! This dataset contains expert ratings of over 1,700 individual chocolate bars, along with information on their regional origin, percentage of cocoa, the variety of chocolate bean used and where the beans were grown.

Flavours of Cacao Rating System:

- 5= Elite (Transcending beyond the ordinary limits)
- 4= Premium (Superior flavour 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)

Each chocolate is evaluated from a combination of both objective qualities and subjective interpretation. A rating here only represents an experience with one bar from one batch. Batch numbers, vintages and review dates are included in the database when known.

The database is narrowly focused on plain dark chocolate with an aim of appreciating the flavours of the cacao when made into chocolate. The ratings do not reflect health benefits, social missions, or organic status.

Flavour is the most important component of the Flavours of Cacao ratings. Diversity, balance, intensity and purity of flavours are all considered. It is possible for a straightforward single note chocolate to rate as high as a complex flavour profile that changes throughout. Genetics, terroir, post-harvest techniques, processing and storage can all be discussed when considering the flavour component.

Texture has a great impact on the overall experience, and it is also possible for texture related issues to impact flavour. It is a good way to evaluate the makers vision, attention to detail and level of proficiency.

After melt is the experience after the chocolate has melted. Higher quality chocolate will linger and be long lasting and enjoyable. Since the after melt is the

last impression you get from the chocolate, it receives equal importance in the overall rating.

Overall Opinion is really where the ratings reflect a subjective opinion. Ideally it is my evaluation of whether or not the components above worked together and an opinion on the flavour development, character and style. It is also here where each chocolate can usually be summarized by the most prominent impressions that you would remember about each chocolate.

Acknowledgements

These ratings were compiled by Brady Belinsky, Founding Member of the Manhattan Chocolate Society. For up-to-date information, as well as additional content (including interviews with craft chocolate makers), please see his website: [Flavours of Cacao](#)

- Where are the best cocoa beans grown?
- Which countries produce the highest-rated bars?
- What's the relationship between cocoa solids percentage and rating?

These are the sample insights you can draw but analyse more if you can of your interest using EXPLORATORY DATA ANALYSIS.

Assignment dataset is posted in LMS with name `Flavors_of_cacao.csv`