



Cannabis Data Science

Cannabis Data Science #58

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When did data science begin?



CAPTAIN JOHN GRAUNT

Known for early work on:

- Descriptive statistics;
- Census methods that lead to modern demography;
- Epidemiology.

John Graunt (1620 – 1674)

An early champion of statistics.

Where did these techniques come from?

- Fit **negative binomial distributions** to the numbers of purchases of a brand of consumer goods.
- Modeled repeated category and brand purchases within a wide variety of markets.
- Studied the percentage of the relevant population that has purchased a given brand (or category) at least once in the time period under study.



Andrew S. C. Ehrenberg
Statistician and
marketing scientist.

Application to the Cannabis Industry



*"Oh Hi's **THC Pomegranate** Seltzer is our number one seller. When deciding on a new product to launch, we look at trending flavors."*

"negotiate pricing structures to sell the customer volume helps greatly."

"Expansion can be complex as it is a capital-intensive investment."

- Matt Vincent

Co-Founder of OH-Hi Beverages

Cannabis-infused beverage label
10mg per serving — 100mg THC per bottle

Author: kiliweb

<https://world.openfoodfacts.org/editor/kiliweb>

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Reference:

<https://cannabisdrinksexpo.com/en/blog/producer-profiles->

<https://consumer-education-is-key-says-matt-vincent-301.htm>

Question of the Day

Brand Analysis: Can we measure marketing performance for a cannabis brand?

Here is a list of potential metrics:

- Market share
- Market penetration rate
- Purchase frequency / time between purchases
- Repeat purchase rate
- Items sold
- Customer lifetime value
- Average product price



Thank you for coming.

We've gone over what it means to be a successful **beverage** producer in Washington State and we've seen how data can contain insights for marketers.

Lessons of the Day

- Certain KPIs correlate with **market share**:
 - ▶ Market penetration
 - ▶ Product proliferation
- Spread the word, **build your brand!**
- **Shelf-space**. Get there while you *can*!

What would you like to talk about next week?