



The Scent of Success

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Let's Look at Some Stats!

- Revenue in the Fragrances market amounts to US\$58.27bn in 2023.
- The market is expected to grow annually by 2.95% (CAGR 2023-2028).
- In global comparison, most revenue is generated in the United States (US\$8,715m in 2023).
- In relation to total population figures, per person revenues of US\$7.58 are generated in 2023.

Source: <https://www.statista.com/outlook/cmo/beauty-personal-care/fragrances/worldwide>

Navigating the Fragrance Labyrinth

? Problem

💡 Solution

📊 Approach



Finding a scent you love is difficult



Trial and error takes time and money



Everyone has unique scent preferences

- **Personalization at the core by helping users find their ideal scents**
- **Generate personalized Recommendations using Data-Driven Approach**

- **Leverage customer review data from Amazon**
- **Analysis on the various attributes of perfume**
- **Recommender System**

Our data-driven perfume matching simplifies finding a scent you'll love by learning your preferences.

A Whiff of Data:

Unveiling Perfume Insights from Customer Feedback

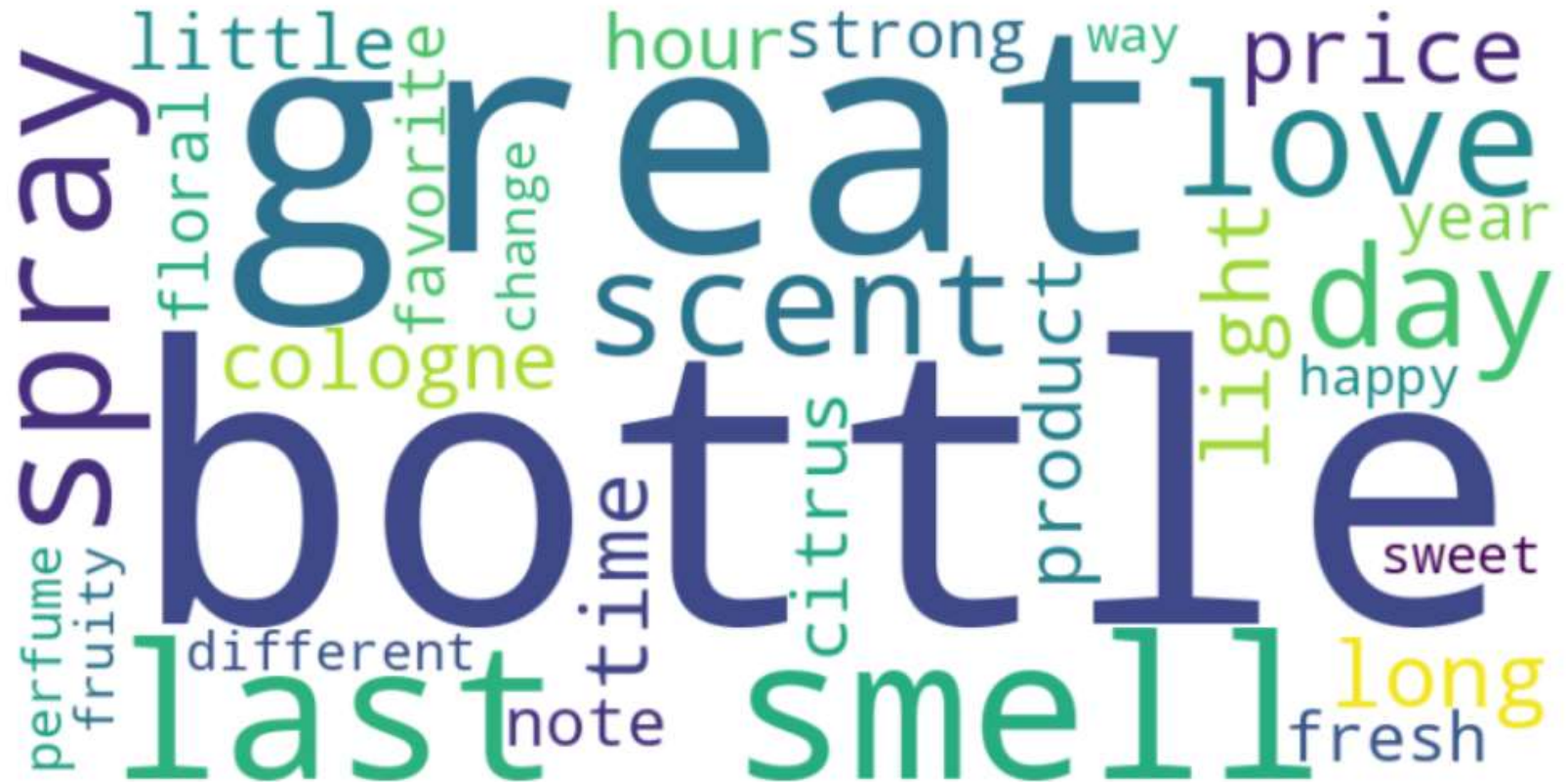
Scraped perfume products and reviews from Amazon.com

- 1700 perfumes
- 7000+ reviews.

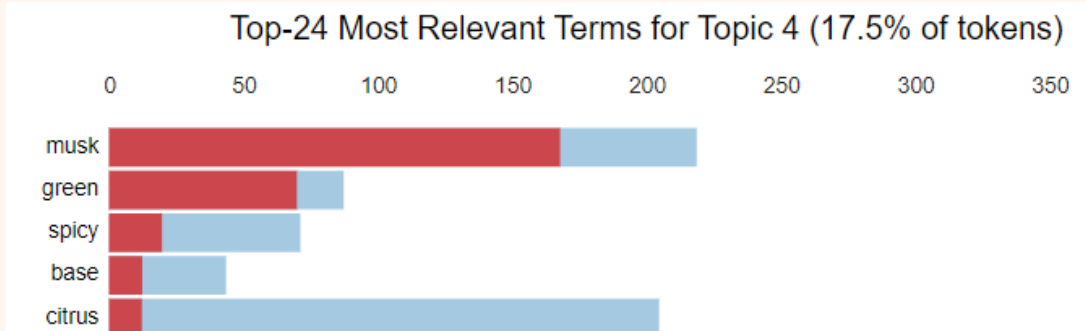
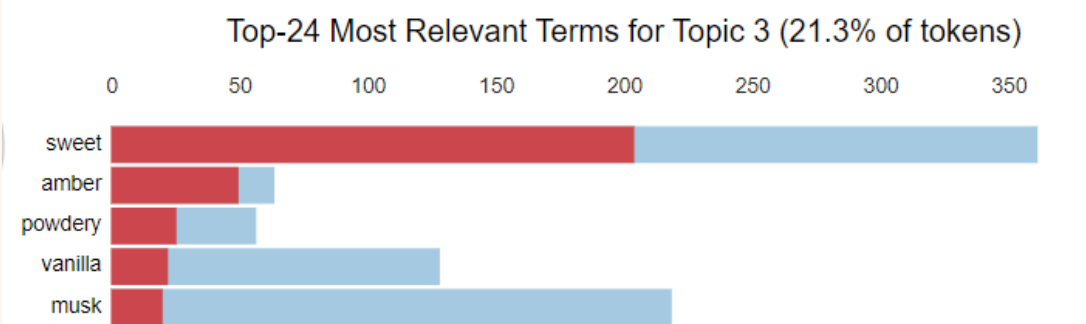
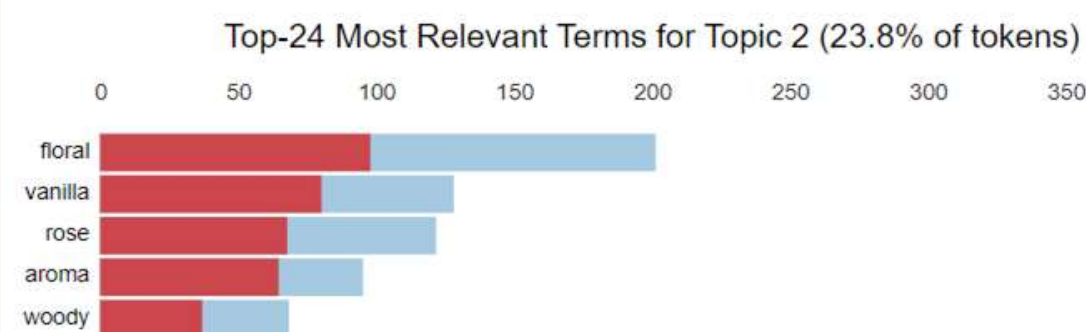
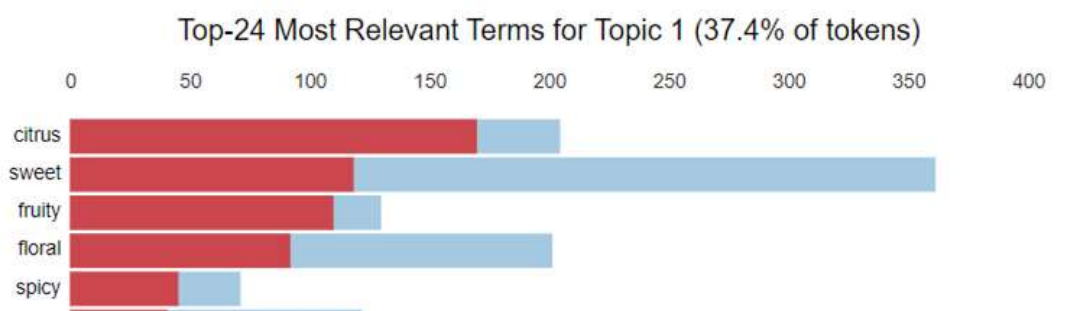
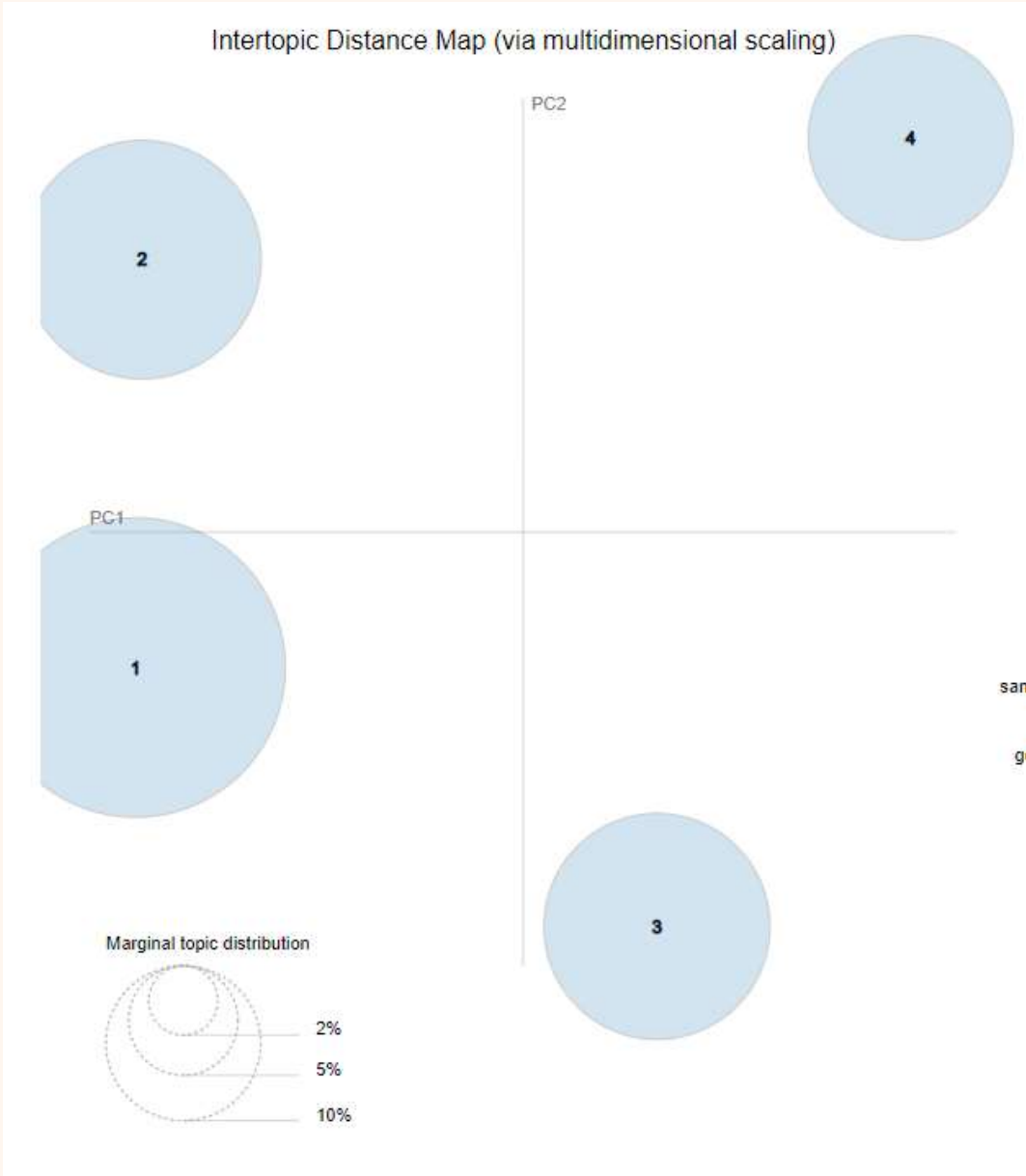


- Removal of :
 - stop words
 - escape sequence characters
 - punctuations
- Word tokenization
- Lemmatization
- Rejoin processed words

Attributes Word Cloud



The Perfume Profiler:



Inhale, Analyze, Excel

Word Vector Similarity

	product_price	product_ratings	attr_1_sim_score	attr_2_sim_score	attr_3_sim_score	avg_sim_score
count	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000
mean	33.017041	4.298068	0.352674	0.466578	0.495583	0.438278
std	18.017899	0.242768	0.116239	0.111197	0.130007	0.109366
min	5.000000	3.400000	-0.060298	-0.098777	-0.106150	-0.048278
25%	21.000000	4.100000	0.278647	0.404092	0.418517	0.372689
50%	31.000000	4.300000	0.360204	0.480019	0.516707	0.454380
75%	35.000000	4.500000	0.428759	0.543317	0.587045	0.520315
max	169.000000	5.000000	1.000000	0.863889	0.857273	0.701996

	product_price	product_ratings	attr_1_sim_score	attr_2_sim_score	attr_3_sim_score	avg_sim_score	senti_score
count	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000
mean	33.017041	4.298068	0.352674	0.466578	0.495583	0.438278	0.636097
std	18.017899	0.242768	0.116239	0.111197	0.130007	0.109366	0.400263
min	5.000000	3.400000	-0.060298	-0.098777	-0.106150	-0.048278	-0.941900
25%	21.000000	4.100000	0.278647	0.404092	0.418517	0.372689	0.458800
50%	31.000000	4.300000	0.360204	0.480019	0.516707	0.454380	0.784500
75%	35.000000	4.500000	0.428759	0.543317	0.587045	0.520315	0.931300
max	169.000000	5.000000	1.000000	0.863889	0.857273	0.701996	0.999000

Word Vector Sentiment

Inhale, Analyze, Excel

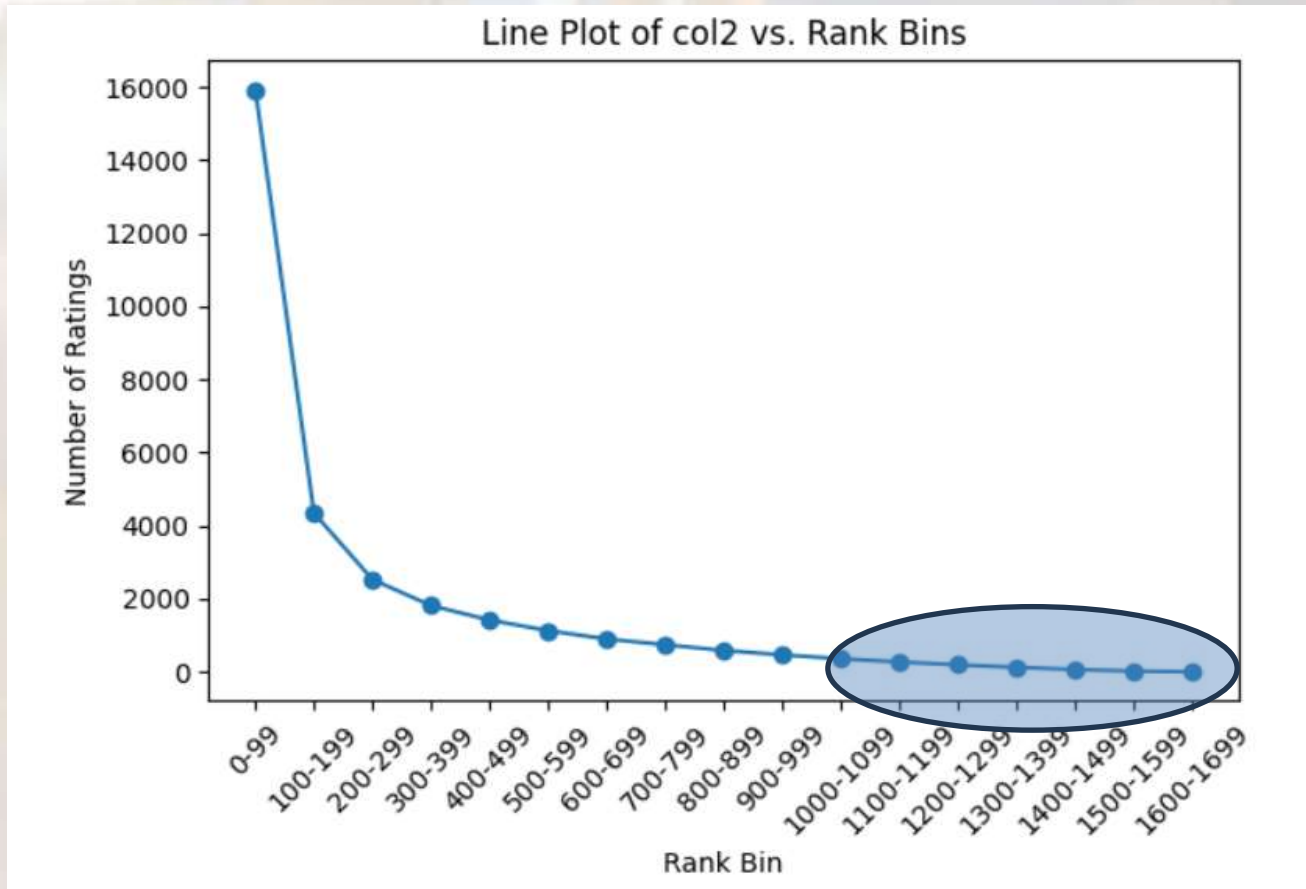
Evaluation Score

	product_price	product_ratings	attr_1_sim_score	attr_2_sim_score	attr_3_sim_score	avg_sim_score	senti_score
count	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000	8333.000000
mean	33.017041	4.298068	0.389442	0.587095	0.624475	0.648442	0.813149
std	18.017899	0.242768	0.109554	0.115436	0.135016	0.145959	0.205836
min	5.000000	3.400000	0.000000	0.000000	0.000000	0.000000	0.000000
25%	21.000000	4.100000	0.320000	0.520000	0.540000	0.560000	0.720000
50%	31.000000	4.300000	0.400000	0.600000	0.650000	0.670000	0.890000
75%	35.000000	4.500000	0.460000	0.670000	0.720000	0.760000	0.970000
max	169.000000	5.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Product ASIN	Review Count	Avg Prod Similarity Score	Avg Prod Senti Score	Avg Prod Eval Score
B0BSRD9WNV	100	0.75	0.90	0.81
B0C8YL925M	48	0.72	0.95	0.81
B0BQF23K6V	1900	0.75	0.90	0.81

Rating by Recommendation

Scents & Sensibility



- 1. Why bother about the long tail?
- 1. Recalculate key attributes
- 1. Compare word-vec similarities
- 1. Take sentiment into account
- 1. Combine results to get hidden gems from the long-tail segment

Scents & Sensibility

What should these
hidden gems do?



1 Look at the data we have

2 How can we evaluate Market Positioning?

3 Do customers value them the way they want to be valued?

Scents & Sensibility

What should these
hidden gems do?



Brand
Description



Customer
Reviews



Scents & Sensibility

We compare the similarity and lift of key attributes mentioned in the Product Description with the Reviews!



Product
Description



Customer
Reviews



The Aromas of Review Analysis

Open for Questions!



“”A fragrance tells a story
about its wearer” ”

PAUL SMITH