

Problem Statement

New Sense Company wishes to create bestseller perfumes and market it to the right crowd at the right time. Before launching new perfumes, they would like to identify

- a. The age group to market it to
- b. The gender to market it to
- c. A specific season(s) when it would be most popular

Context

New Sense company is a Cosmetics company planning on entering the Perfume industry. They have been operational in the field of Cosmetics for the past 30 years and have a good distribution channels built up to support their products.

In order to increase their market share and revenues, they have decided to launch signature perfumes by next year. This will help them leverage their existing infrastructure with minimal investment.

Criteria for success

The business will be able to launch 3 new perfumes in the market by the end of the year 2021.

Scope of solution space

Though the solution is specific to the perfumes subdivision, knowledge about popular scents can be used in other cosmetics subdivisions to increase their appeal.

Constraints

1. Data Constraints
 - a. Perfumes always have a cultural element associated with it. A perfume that is well accepted in the West may not fare well in the Eastern market. We do not have data that will help us make this differentiation.
 - b. Users rate perfumes on websites. We use this Rating to drive our analysis. More reviews gives a better overview of the product. Brands that have long reach and/or bigger marketing budgets will be able to make their products widely available at multiple retail stores. While small perfumeries may not have their products easily available to the crowd. This will unconsciously weigh the results in favour of the big brands as more people would have smelled their products which in turn result in more reviews.
2. Domain Constraints
 - a. NewSense is venturing into this field for the first time and lacks domain knowledge pertaining to this.

Stakeholders

Senior Management of New Sense company

Data sources

We are using data obtained from web scraping the website <https://www.fragrantica.com/> where users can login and rate perfumes. Details about perfumes, their accords, along with user ratings are available here.



Figure 1: An example of input data

Deliverables

1. EDA Report
2. Feature Engineering Report
3. Working Model to be used by Perfumers
4. A Slide Deck
5. A Project Report

Notes: A perfume is made up of notes(distinct oils) which in turn make up perfume accords (an oil blend). The fragrance of a perfume is defined by its accords and the weightage of each accord in it. It is quite well known that the **accords of a perfume** are the decisive factors in making a perfume **popular** or **unpopular**. To ensure that their product becomes a bestseller, New Sense needs to know which combination of perfume accords are most popular. They can be factored in when launching a flagship perfume.