SEME: Clarins problem use-case

Name

Product recommendation engine

Keywords

Recommendation engine, collaborative filtering, cosmetic personalization.

Introduction

Clarins is a French luxury skin care and cosmetics company which manufactures and sells products in more than 150 countries. Its products are designed to enhance the beauty and well-being of all women thanks to the power of active agents in plants. Clarins is the number one high-end beauty company in Europe and although 90% of its products are exported, Clarins continues to formulate and manufacture them at Clarins Laboratories in France.

The company counts with a product catalogue of more than 1000 references for skincare (anti-aging serums, face and body care, sun protection, etc.) and make-up (foundations, concealers, eyeliners, lipsticks, etc).

Clarins looks forward Today to personalize the customers experience on direct to consumer distribution channels (brand website, retail stores, marketing campaigns) by leveraging the available customer data.

The objective of this exercise as a Data Scientist is to prototype a product recommendation engine that can achieve better performances than simple hard-coded business rules (e.g., "if customer buys A then recommend B").

Problem to be solved

Design a recommendation algorithm that given a Customer ID it predicts the top-5 recommended products to be purchased next time and the inter-purchase delay since the last purchase.

Use case: Push the right product at the right moment for a customer.

Datasets and performance

The available data is the online and offline transactions for a given country for the last two years.

The performance metric will be open to debate based on classical metrics such as precision, recall, MSE, etc.

Contact

Gabriel Delgado (Head of Data Science) – gabriel.delgado@clarins.com