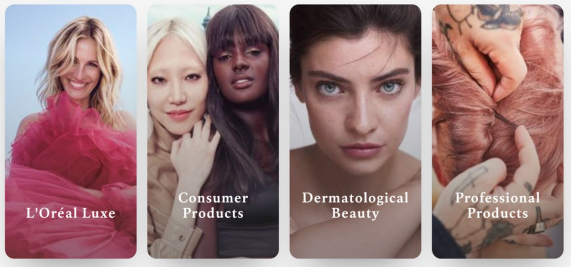
INFLUENCER RECOMMENDATION SYSTEM FOR L'ORÉAL

The Goal

The goal of this influencer recommendation system is to automate the process of finding the most qualified influencers matching L'Oréal's division profiles.



Data can be structured and unstructured. Structured data is directly stored into tables as they are numerical values that can be accessed through public social media API of the user. Unstructured data in the form of text, images, and videos will be scaled into numerical values reflecting each influencers' standing with respect to the certain variable.

Variables are in this summary are partial. Please refer to the report for the full list of variables.

Structured Data Variables	Description	Prompts for Generative AI Tool
Influencer Profile Data	Collect influencer username, name, gender, age range, country, number of followers, number of posts, and whether they have a verified account.	Scrape profile data from this API. Import requests to access the API.
Content Performance	Total number of likes, comments, and shares.	Aggregate number of likes, comments, and shares and group by user.
Engagement Growth Rate	Calculate engagement growth rate in the past year by comparing the number of followers in Year 1 to Year 0.	Use mathematical function to calculate growth rate from YYYY-MM-DD to YYYY-MM-DD.
Audience Analysis	Collect demographic and engagement data of followers.	Collect demographic information on the followers and their average amount of time spent on viewing the influencers' content.

Unstructured Data Variables	Description	Prompts for Generative AI Tool
Content Analysis	Analyze content types, themes, style, and brand affinity.	Search for keywords related to Cosmetics, beauty, L'Oréal's brand names and relevant products. Use vectorized cosine similarity and use score out of 5 for each influencer.
Geographic Reach	Identify geographic location of influencer's audience.	Use binary value 0 (if influencers' audience not in interested geographic location) or 1 (if in interested location).
Languages spoken	Find the languages the influencer speaks based on post language and interaction with followers	Use binary value 0 (if influencer does not speak interested geographic location) or 1 (if speaks interested language).
Competitor Analysis	Analyze influencer collaborations with competitors.	Find in influencers' posts whether other competitors' names or products are mentioned or tagged. Use score out of 5 where the more collaboration gotten, the higher the score

Tangible Outputs

Document with selection requirements for each division — Month 1

Table with variables and respective score grouped by influencer — Month 2-3

Database representing preliminary influencer "Consideration set" — Month 4-5