

Data Insights Challenge -- Part 1

A fictional health & beauty company, named Beautify, is interested in learning insights about their market and customers and would like you to present this information to their CMO. Their core products are labeled under item_type as “Oral Hygiene - Beautify” and “Hair - Beautify.”

[store_visits.csv](#) file is a table containing information on the behavior of consumers surveyed at select chains.

Field Name	Data Type	Description
time_week	date	Time of visit
device_id	bytes/string	Device identifier
category	string	Category of chain
chain	string	Name of chain
visits	integer	Number of times device_id was at chain

[store_purchases.csv](#) file is a table containing information about consumer purchases.

Field Name	Data Type	Description
time_week	date	Time of visit
device_id	bytes/string	Device identifier
item_category	string	Category of item_type
item_type	string	Type of item device_id purchased
item_count	integer	Number of item_type purchased

Using the two tables, come up with 3 insights/recommendations about Beautify’s consumers and how they should target future marketing based on the data. Beware, their CMO loves a good story, but not very technical. If you can wow her, she will sign up to become a major customer on the spot.

Instructions

1. Evaluate store_visits.csv and store_purchases.csv using analytical tool(s) of your choice (i.e. Tableau, SQL, Python, R, Excel, etc.)
2. Create a no more than 1 page executive summary with 3 insights/recommendations for Beautify’s CMO. (You can include additional page(s) explaining your methodologies.)
3. Bonus: Share any additional findings you thought were interesting about the data

Data Insights Challenge -- Part 2

Using the tables below, write queries to get the following:

- Return all device_uuids for individuals who live in Florida
- Return all device_uuids for individuals who live in Miami, Florida
- Return all device_uuids for individuals between 20 and 35 years old on January 1, 2018
- Return all device_uuids who have visited Store 1 and have never visited Store 2
- Return all device_uuids for parents who have visited Store 2 and live in a city that starts with "G"
- Return a table that shows home_city and how many people are in each city, ordered from the city with the most to least people
- Return which stores each of the top ten highest paid people have visited

There are two tables with the following columns and values:

table_1

device_uuid	Identifier unique to each user <i>Example: D129D45</i>
visited_store_1	Boolean that is TRUE if the user has ever visited Store 1 <i>Example: TRUE</i>
visited_store_2	Boolean that is TRUE if the user has ever visited Store 2 <i>Example: TRUE</i>
income	A decimal representation of the person's income <i>Example: 126356.34</i>
parent	Boolean that is TRUE if the user is a parent <i>Example: TRUE</i>

table_2

device_uuid	Identifier unique to each user <i>Example: D129D45</i>
home_state	The state where the user lives <i>Example: CA</i>

home_city	The city where the user lives <i>Example: Los Angeles</i>
birthdate	An datetime representation of when a person is born <i>Example: "1990-01-01"</i>