

Wireframe Document

Customer Personality Analysis

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Document Version Control

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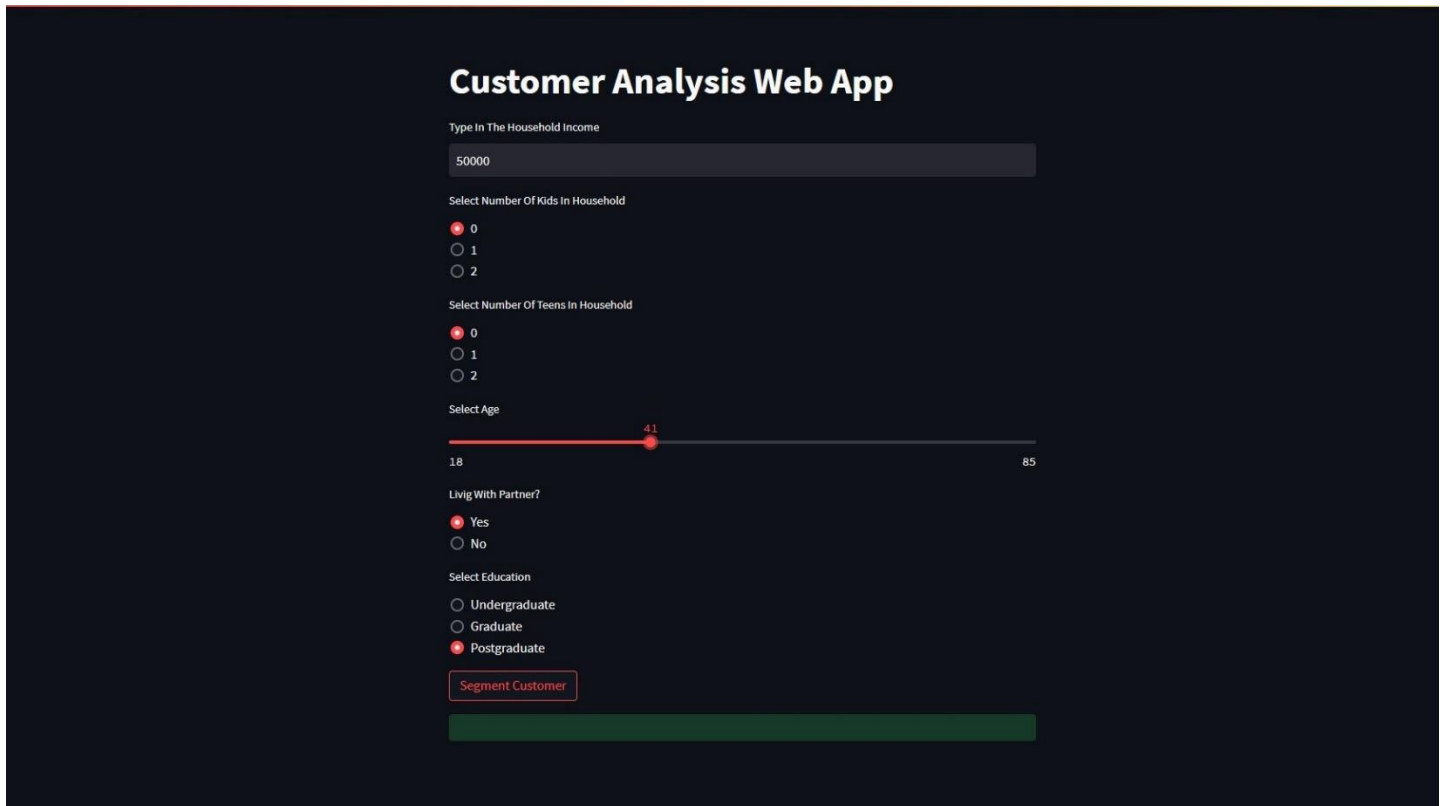
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Abstract

As the legal cannabis industry emerges from its nascent stages, there is increasing motivation for retailers to look for data or strategies that can help them segment or describe their customers in a succinct, but informative manner. While many cannabis operators view the state-mandated traceability as a necessary burden, it provides a goldmine for internal customer analysis. Traditionally, segmentation analysis focuses on demographic or RFM (recency- frequency-monetary) segmentation. Yet, neither of these methods has the capacity to provide insight into a customer's purchasing behavior. With the help of 4Front Ventures, a battle-tested multinational cannabis operator, this report focuses on segmenting customers using cannabis-specific data (such as flower and concentrate consumption) and machine learning methods (K-Means and Agglomerative Hierarchical Clustering) to generate newfound ways to explore a dispensary's consumer base. The findings are that there are roughly five or six clusters of customers with each cluster having unique purchasing traits that define them. Although the results are meaningful, this report could benefit with exploring more clustering algorithms, comparing results across dispensaries within the same state, or investigating segmentations in other state markets

1. Web Interface

1.1 Landing Page



The image shows a dark-themed web application interface titled "Customer Analysis Web App". It features a series of input fields and radio buttons for user selection. The inputs are: "Type In The Household Income" (text input with "50000"), "Select Number Of Kids In Household" (radio buttons for 0, 1, 2), "Select Number Of Teens In Household" (radio buttons for 0, 1, 2), "Select Age" (range slider from 18 to 85 with a marker at 41), "Living With Partner?" (radio buttons for Yes, No), and "Select Education" (radio buttons for Undergraduate, Graduate, Postgraduate). A "Segment Customer" button is located below the education options. A green bar is visible at the bottom of the form area.

Customer Analysis Web App

Type In The Household Income

50000

Select Number Of Kids In Household

☒ 0

☐ 1

☐ 2

Select Number Of Teens In Household

☒ 0

☐ 1

☐ 2

Select Age

18 41 85

Living With Partner?

☒ Yes

☐ No

Select Education

☐ Undergraduate

☐ Graduate

☒ Postgraduate

Segment Customer

2. User Input

Customer Analysis Web App

Type In The Household Income

Select Number Of Kids In Household

☒ 0
☐ 1
☐ 2

Select Number Of Teens In Household

☒ 0
☐ 1
☐ 2

Select Age

18 85

Living With Partner?

☒ Yes
☐ No

Select Education

☐ Undergraduate
☐ Graduate
☒ Postgraduate

Segment Customer

3. Output Page

Customer Analysis Web App

Type In The Household Income

70000

Select Number Of Kids In Household

☒ 0
☐ 1
☐ 2

Select Number Of Teens In Household

☒ 0
☐ 1
☐ 2

Select Age

184485

Live With Partner?

☒ Yes
☐ No

Select Education

☐ Undergraduate
☐ Graduate
☒ Postgraduate

Segment Customer

--cluster 3-- Promotion acceptance is rare and Will be highly interested in completing purchases using discounts