

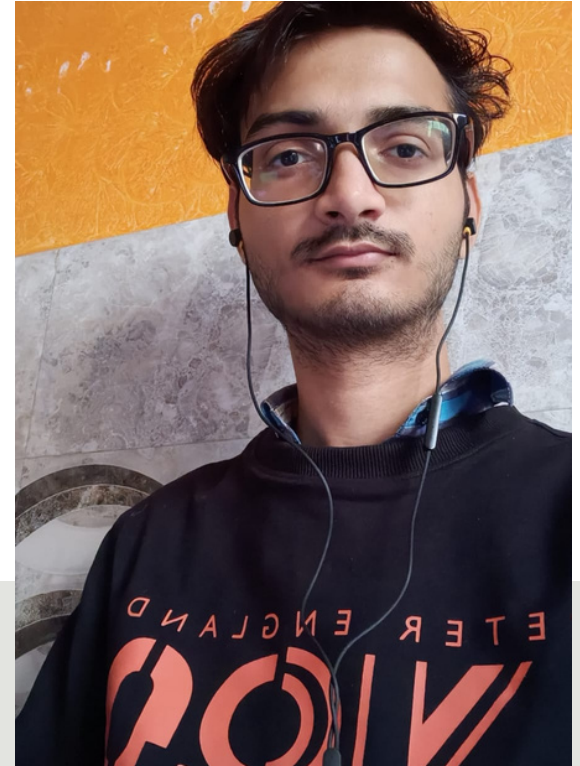
ALCHEMIST



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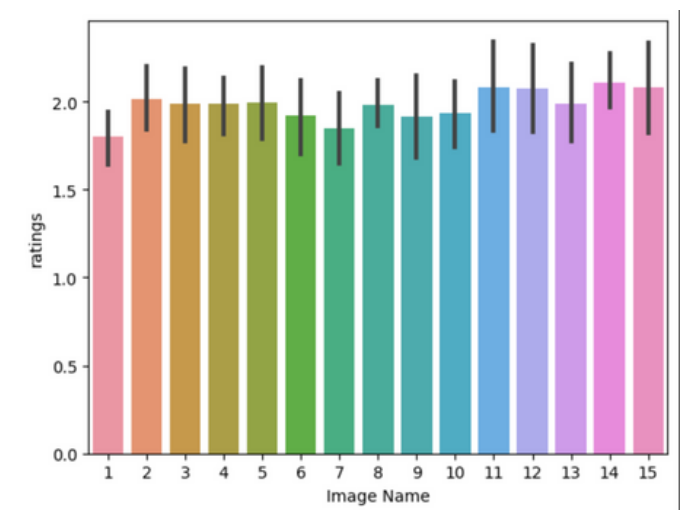
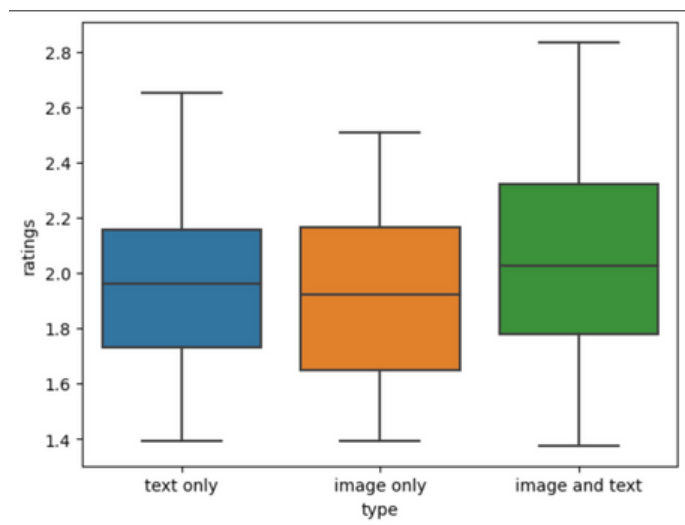
Adobe Experience Cloud Challenge

PROBLEM STATEMENT

Customer engagement is the most important tool to any enterprise or business . They spent ton of assets on customer personalised experience . In this process they failed to understand what attracts customer toward certain post or social media advertisement . The major problem is what content , size or image in the particular category engage the targeted audience .

OBSERVATION ON DATA

- Data taken from Kaggle - ADS-16 Computational Advertising Dataset
- Dataset contains - 1.) Customer response to the post of each category 2.) 300 real advertisements (i.e., Rich Media Ads, Image Ads, Text Ads) rated by 120 unacquainted individuals
- Advertisement belong to 20 product/service categories.
- 300 Ads —> 100 Rich Media Ads, 100 Image Ads and 100 Text Ads.
- answers to Big Five Inventory-10 personality test
- Five recently liked post and disliked post and user reaction to same
- user info such as demography, age, income etc.
- user preference data such as most visited website, most reads books, favourite sports etc.



Pre Processing

- Removed punctuations
- Converted to lowercase
- Concatenated all the columns
- Removed stop-words
- Lemmatization
- Removed URL and HTML tags
- Extracted text from ads image

- Removed rare words
- Removed more frequent words
- Used Python-tesseract , an optical character recognition (OCR) tool
- Extracted keyword from ads text and recently liked posts
- Calculated Big-Five personality scores (**O-C-E-A-N**) of each user

FIRST PHASE



SECOND PHASE

**Cosine
Similarity**



**personalized
ratings**



**Support
vector
machine
(SVM)**



**GPT-3
DALL-E (Dali-
esque)**

Classification on the
user personality

Ranking Matrix

Post Class
Generation

Text - Generation
and
Image - Generation

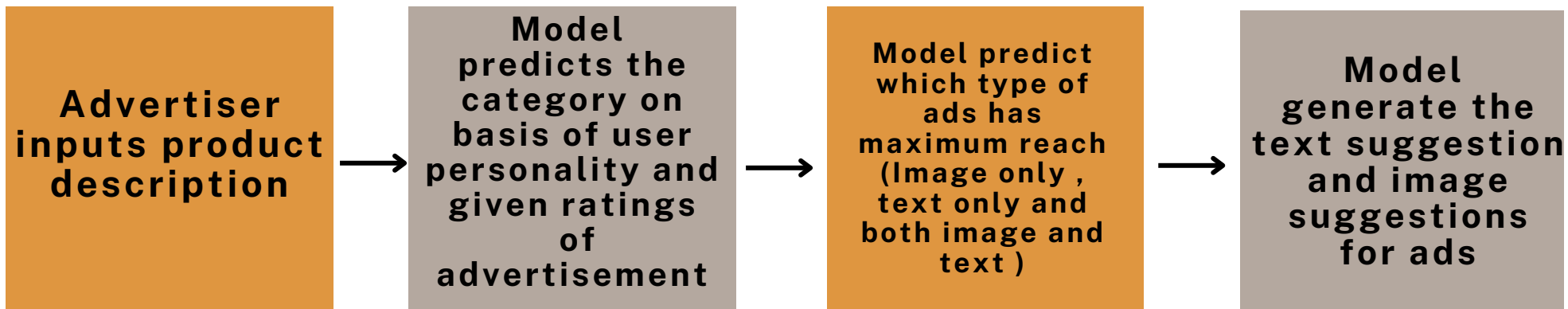
**Support
vector
machine
(SVM)**



Classification
on the rating
given by user

MODEL

MODEL WORKING



FUTURE AREA OF IMPROVEMENT

- We can also use consumer's personalised information so that we can target audience more precisely .
- Increase the size of the training dataset. This can help the model learn more patterns and improve its ability to make accurate predictions.
- We can predict which demographic area have demand of particular category
- We can increase accuracy by using ensemble method
- we can also implement recommendation of images by providing variations of image to the user that suits the user to improve user experience.