IBM APPLIED DATA SCIENCE

CAPSTONE PROJECT

OPENING A NEW INDIAN RESTAURANT IN NEW YORK CITY, USA

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BUSINESS PROBLEM

- Commencing up a new restaurant is not a straightforward job.
- The initial and foremost step involved in opening a new restaurant is deciding the best location.
- Thus, it will determine whether a restaurant will be prosperous in the business or it would be a failure.

OBJECTIVE

- The main objective of this Capstone Project is to examine and select the best locations to begin a new Indian restaurant with the help of data science and the data obtained from Foursquare API.
- In this project, Highest population of Indians in USA, Popular Tourist Attraction spots are the two datasets that are taken into consideration for determining the restaurant location.

TARGET AUDIENCE

• The business personnel who wants to invest or open a new Indian Restaurant in USA.

DATA SOURCE

- "https://www.worldatlas.com/articles/top-10-us-metropolitan-areas-with-the-highest-population-of-indians.htm" for obtaining the highest population of Indians in USA.
- "https://www.worldatlas.com/articles/the-world-s-most-popular-tourist-attractions.html" for obtaining information about the popular tourist spot in NYC,USA.
- Foursquare API for getting data about top 30 Indian Restaurants.

METHODOLOGY

- Using web scraping techniques to obtain highest population of Indians in USA, top tourist spots from the respective sites.
- Visualizing the Dataframes in form of Bar chart.
- Get latitude, longitude coordinates using Geocoder.
- Using Foursquare API to obtain the data about top 30 Indian Restaurant around Times Square
- Visualizing the restaurants present using Folium library.
- Determining the number of Indian restaurants present in a particular postal code.
- Obtaining the perfect location to start a new Indian Restaurant around Times Square.

RESULTS



INFERENCE

- A new Indian Restaurant can be opened in the neighborhood of Manhattan having the Postal codes or Zip code as 10017,10016.
- In those particular postal codes the number of Indian Restaurants are less when compared to the Restaurants in other postal codes.
- The perfect location to start a new Indian Restaurant around Times Square is in the Gramercy Park and Murray Hill neighborhood of Manhattan Borough.

DISCUSSION AND RECOMMENDATION

- Two dimensional data such as highest number of Indian in USA, Top tourist attraction spots are considered for determining the location in this project.
- Using data from different databases, to improve
- > Accuracy
- > Precision for determining the perfect location for setting up the Indian Restaurant.

CONCLUSION

• Findings of this project will help the relevant stakeholders to capitalize on the opportunities on high potential locations while avoiding overcrowded areas in their decisions to open a new Indian Restaurant.