IBM DATA SCIENCE CAPSTONE PROJECT

THE BATTLE OF NEIGHBORHOODS –

ANALYZED ON AMSTERDAM

Contoso

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BUSINESS PROBLEM

1. Is the place suitable for opening a restaurant?

2. Is it a good place for a constracter to start his/her own business, i.e. to setup his/her office?

OUR GOAL

To analyze: Is Amsterdam being a well multicultural place to satisfy the above two main business problem?

INTRODUCTION ON AMSTERDAM

- The largest city in the Netherlands

- Have a population of 1.16 million

- This place with approximately 178 different cultural backgrounds

- It hosts many cultural events throughout the year, which emphasizes their worldly view

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DESCRIPTION OF DATASET

- Data scraping from https://en.wikipedia.org/wiki/Category:Neighbourhoods_of_Amsterdam to get **Neighbourhoods of Amsterdam**

- Use geopy library to get the **latitude and longitude values of Amsterdam**

- Use Foursquare API to get data of venue

METHODOLOGY

- Explore and load dataset from website link
- Data transformation by pandas
- Use one-hot encoding to do features extraction
- Get latitude and longitude values of Amsterdam and plot the map
- Apply FourSquare API in all the neighbourhoods on Amsterdam
- Use k-means clustering to visualize the clusters

THANK YOU!

End of week 4's task

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