

## The Battle of Neighborhoods | Business Problem

**Introduction:** Tourism's value is shown all over the world. There is no denying the significance of tourism, from the economic benefits it provides to host communities to the delight it provides to travelers. Tourism's significance may be seen from two perspectives: the tourism business and the visitor. Traditional processing is used by many tourism businesses. A businessperson in this field must be skilled in management, communication, and planning. There are several challenges in managing various facilities for consumers in a typical company model. Every firm nowadays is going digital. In the travel sector, data science may sound strange, but it is the most effective method to build a tourist firm online. To begin, let's define data science. Data science is a field that extracts data and understanding from unstructured and structured data using scientific methods, procedures, algorithms, and systems. Every business collects and creates a large amount of data from a variety of sources.

**Problem Identified:** The problem identified for this project is to provide the customers/users with the most personalized experience of venues around them for them to visit. This project attempts to give solutions to the business challenge using data science approach and machine learning algorithms such as clustering. Therefore, for my capstone project, I wanted to create something that people could use in their daily lives. This prompted me to create a recommendation system model that might propose local restaurants their location based on other people's restaurant ratings, to potentially enhance the recommendation suggestions that you can see on popular food delivery services.

**Objectives:** This capstone project aims to fulfil the following objectives:

- We describe accurate segmentation and targeting using fine-grained segmentation of national tourism based on patterns of movements and visits, which substantially increases the incomplete and fragmented data gathered from population data.
- Recommendations to tourists based on their preferences and ranked accordingly
- Popular restaurants around the area