IBM Applied Data Science Capstone

Opening a New Restaurant in Minneapolis, Minnesota, US

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Introduction

Restaurants have always played an essential role in the business, social, intellectual and artistic life of a thriving society. The major events of life, personal and professional, are celebrated in restaurants. Right now, restaurants are more important than ever. Restaurants today lie at the heart of 21st-century American life. And for the foreseeable future, millions of Americans will wait tables, cook food, or wash dishes for their livelihoods. Currently, there are many restaurants in the city of Minneapolis and many more are being built. Of course, as with any business decision, opening a new restaurant requires serious consideration and is a lot more complicated than it seems. Particularly, the location of the restaurant is one of the most important decisions that will determine whether the mall will be a success or a failure. For investors, choosing a restaurant location is one of the more permanent choices a restaurant owner makes. Restaurant location influences the success or failure of a restaurant in a host of ways, from attracting enough initial customer interest to being convenient to visit. But the restaurant's location is also interrelated to other factors, some of which are changeable, while others are not. So making a snap decision without doing any research may leave an owner with a location he or she may later regret.

Business Problem

The objective of the project is to analyze and select the best location in the city of Minneapolis to open a new restaurant. Using data science methodology and machine learning techniques, this project aims to provide solutions to answer the business question: In the city of Minneapolis, Minnesota, if a property developer is looking to open a new restaurant, where would you recommend that they open it?

Target Audience of this project

This project is particularly useful for investors looking to open a new restaurant in Minneapolis, Minnesota. This project is timely as the city has more and more restaurants to be built in the following year. Data from the 2018 Minnesota Quarterly Census of Employment and Wages showed that an additional 15 per cent will be added to existing plazas. In addition, the Minnesota Employment and Economic Development agency shows that the current restaurant shows different spatial distribution properties, highly

depending on population demographics, leasing rate and other important factors. So the project here will further identify the spatial clustering characteristics of restaurant and help investors for their decision-making.