



# Capstone Project

Vinh Nguyen

12/26/2020

# OUTLINE

---



- Introduction
- Data
- Methodology
- Analysis
- Results
- Discussion
- Conclusion

# INTRODUCTION

---



- For this project, we will try and find the best location for a sandwich shop. More importantly, this report will be targeted at important stakeholders in opening a sandwich shop in Toronto, Canada.

Since there are a lot of sandwich shop in the Toronto, Canada area, we will find a location that does not have too many sandwich shop. We are most interested in a location with very little competition. We would like to find a place that is in a popular area and is near the city.

We will use data science and gather information and tables to identify a suitable location. The target audience for this report will be for the partners who is interested in opening a sandwich shop in the Toronto , Canada area.

# METHODOLOGY

---



- **Analytic Approach**
- **Data Requirement**
- **Data Collection**
- **Data Understanding and Preparation**
- **Modeling and Evaluation**

# METHODOLOGY

---



- **1. Analytic Approach** - I would need to identify what type of patterns will be needed to address the question of where is the best location for the sandwich shop. We would use the descriptive approach because we want to show that there is a relationship.
- 2. Data Requirement** - In this step, we need to identify the necessary data content, formats, and places where we can gather data in regards to the best location for the sandwich shop in Toronto, Canada.
- 3. Data Collection** - In this step, we will use descriptive statistics and visualization with the data we have gathered in regards to how close to the city and the population of the area. We need to assess the data, determine the quality, and initial reaction to the data.

# METHODOLOGY

---



- **4. Data Understanding and Preparation** - Here we need to construct the data set. We need to determine if the data we have collected will help us answer the question of credit card fraud and impact on revenues. Descriptive statistics needed to be run against the data columns that would be variables for the model.

- **5. Modeling and Evaluation** - Here we will model the data to help us answer the question of where is the best location for the sandwich shop. We can implement trainset sets so we can help model and evaluations.

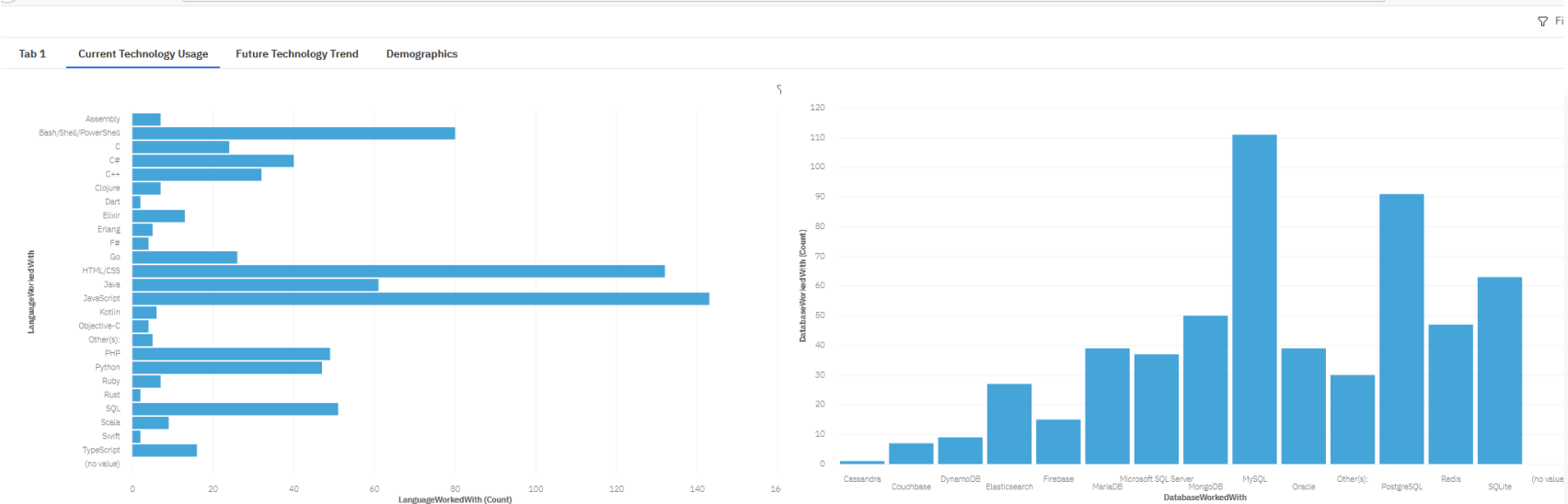
# ANALYSIS

---

- Here we will complete the analysis of where the best and most suitable location for the sandwich shop in the middle of Toronto, Canada. We have to find where the population is the highest and we also have to find the other locations of sandwich shops around Toronto, Canada.

We will make our analysis based of the data we have gathers and bases of the analysis of the data set we have collected.

# DATA1

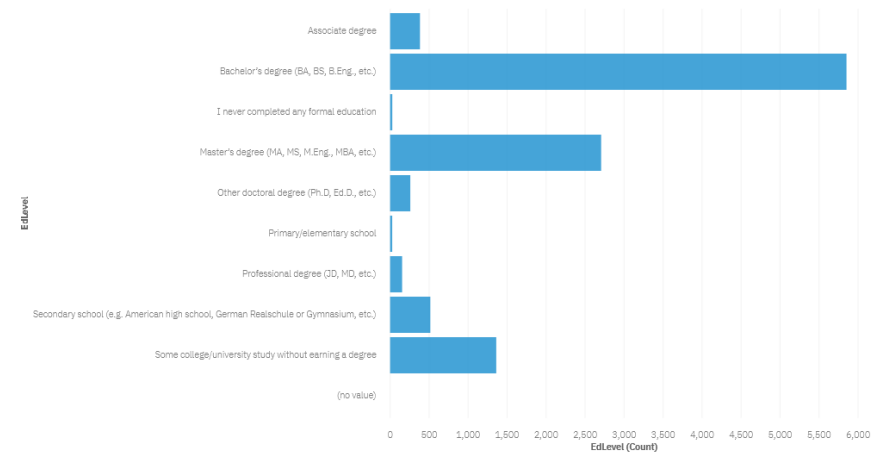
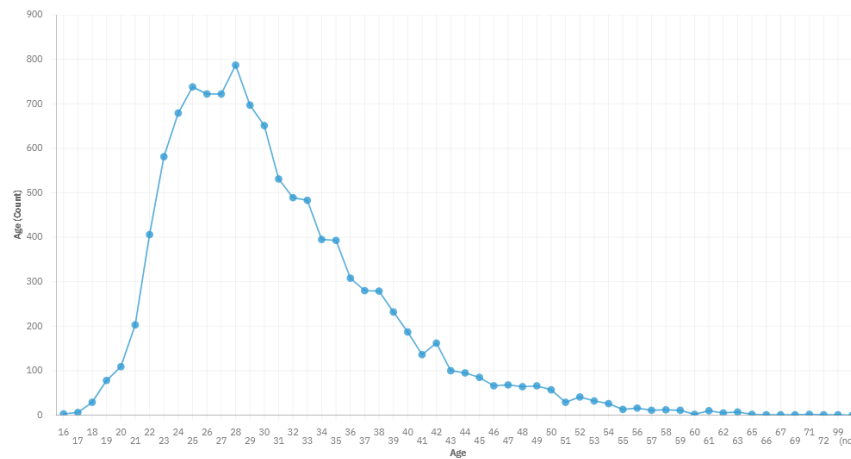
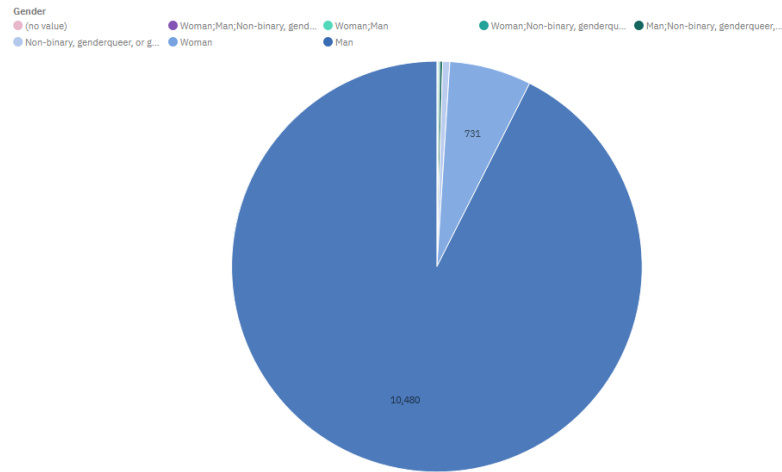




# DATA2



# DATA2



# Results and Discussion

---

- Our analysis shows that even though there are many sandwich shop in the city of Toronto, Canada, there are areas of the city that are still close to the city and have a lot of population. Most sandwich shop are near the outside of the city, so it make sense to open a sandwich shot near the middle of the city where make people are. In the middle of the city, people are able to get to the sandwich shop without the use of a car.

To location that we found, is optimal for a sandwich shop because the density of the population is high. People can get to the location by walking or by bike, so the younger crowds can also enjoy the sandwich shop.

Also since there are not many sandwich shop location near the center of the city, the competition will be low. Lower competition allows for more profits, which is a great thing for the sandwich shop.

## GitHub Link

---



<https://github.com/invest92212/capstone/blob/main/Capstone2.ipynb>

# CONCLUSION

---

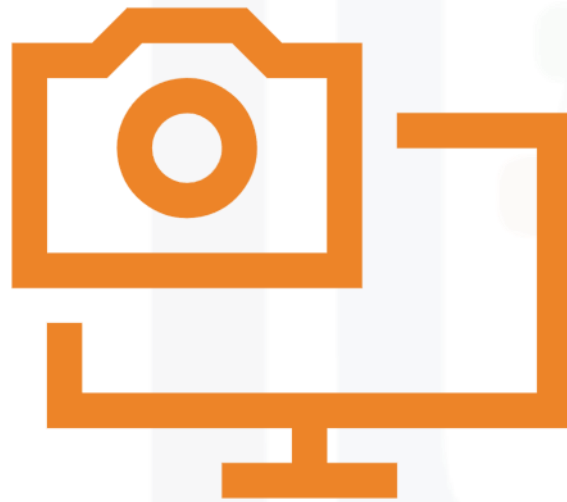


- The purpose of the project was to find the best location in Toronto, Canada for the sandwich shop. The report was made so that the stakeholder can make a more informed decision about the location of the sandwich shop.

Can calculating the population around the city and making the analysis, we found that the best location for the sandwich shop in Toronto, Canada.

Now with the report made available, the stakeholders can make the decision of they should open the sandwich shop all not. They have all the relevant information in regards to where is the best location to open the sandwich shop

# APPENDIX



Tab 1 Current Technology Usage Future Technology Trend Demographics

