

Title: Survey Neighborhoods in Tokyo for Promising Business Opportunities

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Abstract¶

This work analyzed that the shopping streets around Shimokitazawa station at Setagaya-ward in Tokyo is a potential business venue that will be attracting a significant number of visitors during the upcoming Tokyo Olympic 2021. First and foremost, the average airBnB price is affordable while the location is only a few kilometers away from the main venue of Tokyo Olympic. Second, the area has the highest population among all the neighborhoods in Tokyo, which can make the business scalable, and sustain its growth after the Olympic is over.

1. Introduction

For the first time in history that the Olympic, due to take place in Japan in July-August 2020, have been postponed, following the Coronavirus pandemic outbreak. The country's economy will be hugely impacted by both events. It is inevitable that various industries in Japan, from travel to televisions, will experience a difficult time.

Yet, the population of greater Tokyo is as large as 40 Million (To be precise, 38.14 Million as of today), and it creates a huge consumer market. Meanwhile, the new date for the Olympic is set to end of July 2021.

In 2019, domestic travel spending generated around 81 percent of direct travel and tourism GDP compared to 19 percent of foreign visitor spending. Travel and tourism contributed just over ten percent to the Japanese gross domestic product [1]. Therefore, there remains a potential growth in the number of foreign tourists in around the event of upcoming Olympic.

Therefore, any survey based on culinary tourism and investment potentials on restaurant/food/beverage businesses deserves merits for a study, and hence the problem of this project is set for the survey of neighborhoods in Tokyo for promising business opportunities.

2. Methodology and datasets

This work consists of the following problems: (1) Sectioning Airbnb Neighborhoods in Tokyo: Survey the Surroundings around Airbnb hotels, (2) Count and compare the number of restaurants based on cuisine and categories, and (3) Find a potential location for investment on Restaurant Business with specific set of cuisines.

The context and the sources for the datasets, and the methodologies applied are the followings:

(1-a) Problem: The first part of the project focus on sectioning Airbnb datasets on Neighborhoods in Tokyo, and survey the surroundings for potential Business Venues

(1-b) Source: available on Inside AirBnB (<https://insideairbnb.com/get-the-data.html>)

(1-c) Methodology: Statistical analysis and data visualization with bar chart and choropleth maps are applied for: (1) Surveying popular neighborhoods in terms listings and average price of the AirBNB hotels, and (2) Analyzing neighborhoods in terms of the distance from the main venue of Tokyo Olympic 2021.

(2-a) Problem: The second part of the project focus on the Population Dataset from a Wikipedia page in order to merge it to the AirBnB dataset for in-depth analysis.

(2-b) Source: https://en.wikipedia.org/wiki/Special_wards_of_Tokyo.

(2-c) Methodology: Statistical analysis and data visualization with bar chart and choropleth maps are applied for: (1) Survey neighborhoods in terms population. (2) Analyze the neighborhoods in terms of the distance from the main venue of Tokyo Olympic 2021. The prospective neighborhood should have a large population to make the business scalable, and to sustain its growth after the Olympic is over.

(3-a) Problem: The third and final part focus on FourSquare dataset to carry on key analyses on the specific promising business.

(3-b) Source:

[{}](https://api.foursquare.com/v2/venues/explore?client_id={}&client_secret={}&ll={},{&v={}&radius={}&limit={}'.format(CLIENT_ID, CLIENT_SECRET, latitude, longitude, VERSION, radius, LIMIT))

(3-c) Methodology: Statistical analysis and data visualization with bar chart and choropleth maps are applied to: Count and compare the number of restaurants based on culinary categories. This will lead finding a potential location for investment on Restaurant Business with specific set of cuisines.

3. Results and Discussion

Figure 1 shows the Most Popular Neighborhoods in Tokyo in terms of number of listings in Airbnb datasets. In Tokyo metropolitan city, there are 23 wards assigned as neighborhoods in this work. Among all, Shinjuku-ward is leading the listings in BnB datasets. It is also

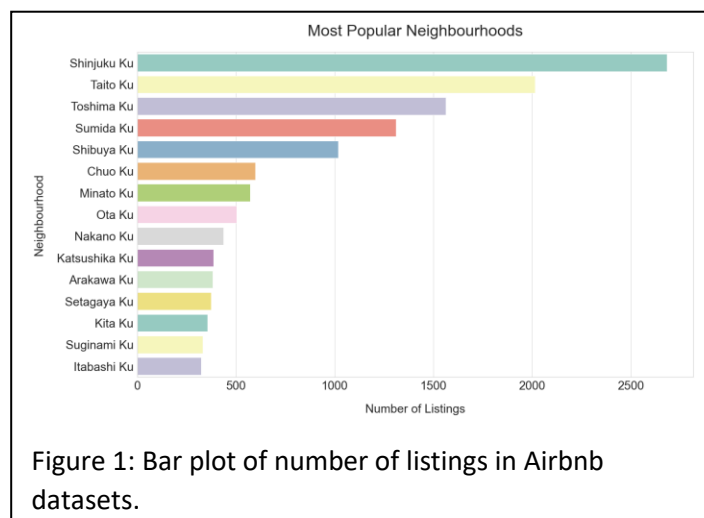
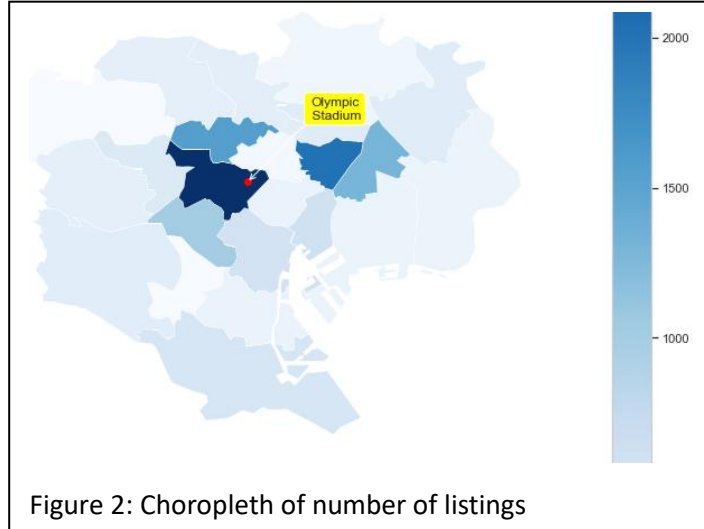


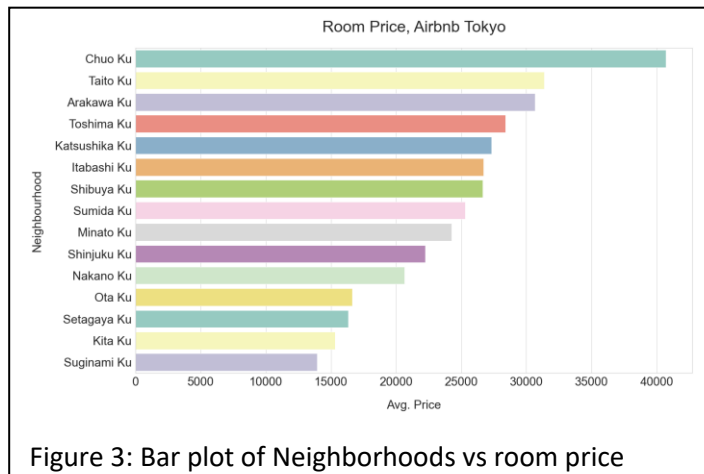
Figure 1: Bar plot of number of listings in Airbnb datasets.

interesting to note that the main venue for the Tokyo Olympic 2021 is National Stadium which is also constructed in Shinjuku ward. This scenario is redrawn in the choropleth map Figure 2 where the most popular neighborhoods are shown along with the location of Tokyo Olympic Stadium. The deeper the color in the blue color bar, the more number of listings of Airbnb hotels, and hence, reflects the popularity of the neighborhood. It is clearly visible that the Shinjuku ward is the most popular.

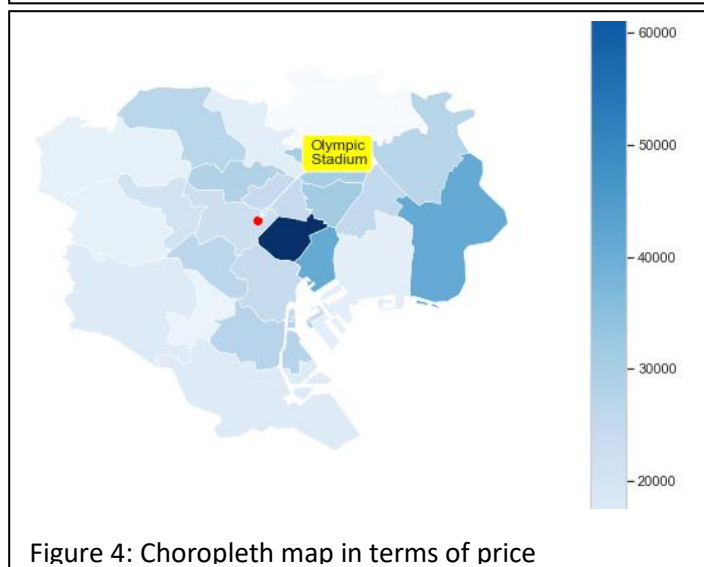


The above scenario raise the problem of seeking affordability on the stay in the hotels. To address this problem, an analysis of the neighborhoods in terms of average booking prices was carried out.

Figure 3 shows the Bar plot of Popular Neighborhoods in Tokyo in terms of number of room price in Airbnb datasets. In this chart, Shinjuku ward ranks at 10th position with an average room price around 24,000 Yen per night. This value is nearly one-thirds compared to the highest price of around 70,000 Yen in Chiyoda-ward.



Again, the above scenario is redrawn in the choropleth map in Figure 4 along with the location of Tokyo Olympic Stadium. In the figure, the deeper the color in the blue color bar, the higher the room prices in the Airbnb hotels. Now we see a contrasting situation between two neighboring wards Shinjuku and



Chioyda. Shinjuku with much lesser price (in which is the Tokyo Olympic stadium), and Chiyoda-ku with very high price. Now let you remind that the data analyzed here is based on the datasets until August 2020, which is the latest dataset available.

If you notice that neighboring prices around Shinjuku-ward, the prices are even higher. The above analysis suggests that Shinjuku ward is a promising place for businesses in culinary tourism ground point.

However, the above analysis equally suggests that the average room price at Shinjuku will go higher as the Olympic approaches closer, and foreign tourists will find affordable places in the neighborhoods. Therefore, the problem is set forth in analyzing who is the next neighborhood for new the Airbnb hotels, and to what extent the hotels will grow. Solution of this problem can give answer to potential venue for business in culinary tourism with affordable investment.

For this purpose, I have carried out statistical analysis of the population of each wards in Tokyo. Figure 5 and 6 are the representations of data visualization in both bar chart and choropleth maps. Figure 5 shows that Setagaya-ward is the mostly populated and hence, most promising place for new BnB hotels, and business on culinary tourism. As listed in the official webpage of Setagaya-ward, there are 130 prominent Shopping arcades in

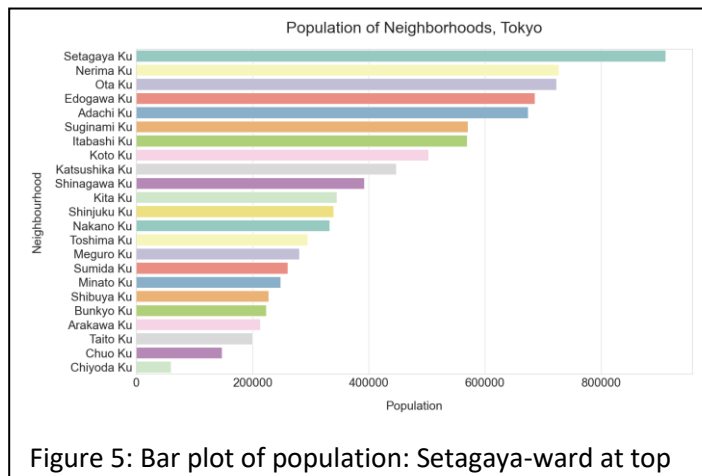


Figure 5: Bar plot of population: Setagaya-ward at top

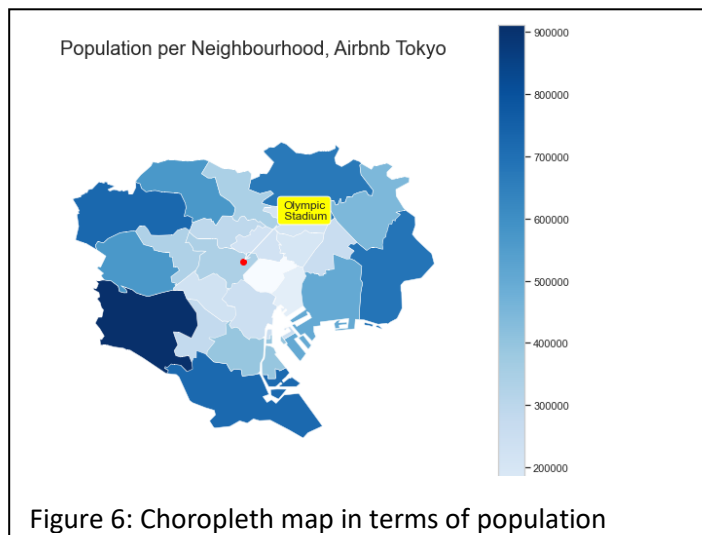


Figure 6: Choropleth map in terms of population

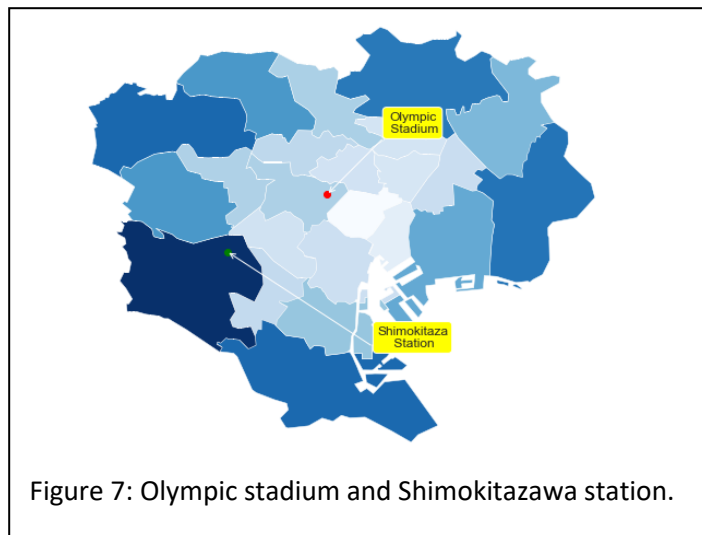
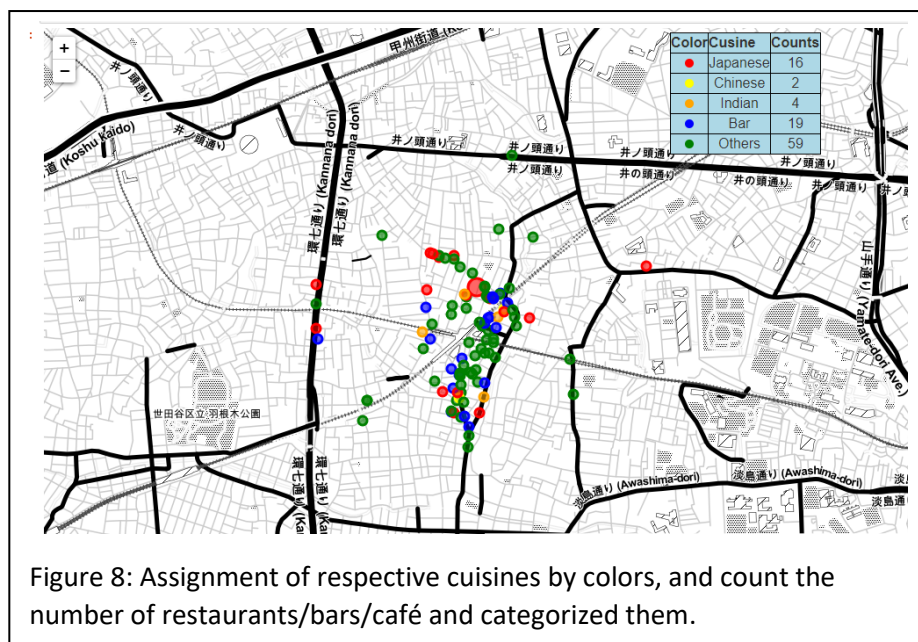


Figure 7: Olympic stadium and Shimokitazawa station.

Setagaya ward [3]. It was found that the shopping arcades and streets around Shimokitazawa train station is the most promising spot for new Airbnb hotels and culinary tourism. Because the list was in Japanese, and I was having trouble in dealing and converting Japanese text to English, this part of analysis is not included in this report. Nevertheless, the locations of both the Olympic stadium and Shimokitazawa-station in the population plot in Figure 7, and the distance between this two venues are few kilometers. As will be shown in Figure 8, both of these venues are easily accessible by trains running by multiple subway companies. Therefore, the shopping arcades and streets around Shimokitazawa train-station are most promising for more Airbnb hotels and future culinary businesses.

In the third and final part of the current work, I focus on FourSquare dataset to carry on key analyses on the specific promising business. For this purpose, I pursued statistical analysis and data visualization with bar chart and choropleth maps: Count and compare the number of restaurants based on culinary categories. Figure 8 assigns names for respective cuisines by different colors, and count the number of restaurants/bars/café and categorized them.



These series of analyses suggested the locality around Shimokitazawa station in Setagaya-ward in Tokyo for potential business opportunities. It appeared that Business in Food industry is promising here, and found that Indian cuisine are most popular next to local Japanese cuisine. To avoid competitive price adjustment and return of investment, any investment in Indian Restaurant Business seems Promising.

4. Conclusion

This work analyzed that the shopping arcades and streets around Shimokitazawa station at Setagaya-ward in Tokyo is a potential business venue that will be attracting a significant number of visitors during the upcoming Tokyo Olympic 2021. First and foremost, the average Airbnb price is affordable while the location is only a few kilometers away from the main venue of Tokyo Olympic. Second, the area has the highest population among all the neighborhoods in Tokyo, which can make the business scalable, and sustain its growth after the Olympic is over.

5. Recommendation

The last part of this work successfully included python outputs in HTML - which was the output of the legend table in the last map. The codes were very large, and I hope the community can develop a suitable tool for "Python in HTML" in the same manner in "CGI".

6. References

- [1] Statista Research Department: "Domestic and foreign tourism contribution to Japanese GDP 2019", published online (<https://www.statista.com>)
- [2] List of shopping arcades in Setagaya-ward: List online (<https://www.city.setagaya.lg.jp/theme/kanko/006/001/d00007656.html>)