Battle of the Neighborhoods (Week 4)

Tokyo is the capital of Japan and the political, economic, and cultural center of Japan. The prosperous Tokyo Metropolis includes 23 special wards, among which are very famous, even for foreigners are also familiar with, such like Shinjuku, Shibuya and so on. As one of the world's top economic giants, Tokyo naturally has nearly unlimited business opportunities, but at the same time, expensive prices in local and a trend towards saturated market make it fairly difficult to start new businesses. In addition, the unique society and humanities in Japan make it not easy to prepare to grasp its pulse.

Therefore, this project aims to start with 23 special wards in the Tokyo Metropolis, analyzes the geographical, demographic, and social data of each district to summarize the characteristics of each district. In addition, use Foursquare to get the most popular locations in each district, and summarize the most popular location rankings, in order to provide relevant and valuable information for the target group.

The whole project will be divided into 5 parts.

1. **Project introduction, brief overview of target**

   1.1 Description of Business Problem

   There is countless gastronomy in the bustling areas of Tokyo. Nevertheless, there are still some business opportunities waiting to be discovered. Tokyo is a huge market, if you want to start a new business in Tokyo, such as a restaurant, a Café or a bakery, the first task is to find suitable locations in various areas of Tokyo, such as business districts, tourist attractions, office building gathering places or universities, etc. This project is preferentially used to develop the gastronomic business, but it also has reference value for other types of businesses.

   To say it briefly:
   Find suitable location to start gastronomic business within 23 special wards of Tokyo

   1.2 Target groups

   New in Japan and Tokyo? Interested in searching a cool apartment in the top neighborhoods of Tokyo? Want to start a new business (e.g. shops, gastronomy etc.,...) in the heart of Tokyo? Or just need some tips for exploring and sightseeing in Tokyo?
   So, if you are:
   - A business starter seeking for the business opportunity in Tokyo
   - A backpacker who is excited for your first adventure in Tokyo
   - A newcomer that decided to begin a brand new life in Tokyo
   - A data scientist who wants to learn about the statistics of society in Tokyo

- ▪ Or any other reasons related to Tokyo

Then, here is a statistic based guide map which contains useful information that may help you finding the right direction.

2. Data collection, preprocessing

2.1 The data sets

- ▪ Main data
  The information collected by Foursquare on the most common locations in all 23 special wards of Tokyo, which is used to determine the most popular categories of venues in each district, building the foundation for future business.
- ▪ Supplementary data
  Data on the geographical, demographic, social, and economic conditions of Tokyo 's 23 special wards to understand statistic information such as local income levels, consumption levels, and consumption preferences etc. , which are helping to define and refine the business target population in Tokyo.

2.2 Data pre-processing

- ▪ Retrieve data from below original data source
- ▪ Convert to pandas data frames and clean the data
- ▪ Saving the data for further processing

(This part will be detailed presented in **data section**)

3. Data analysis process (will be detailed presented for Week 5, Part 2)

Next, we will use various data analysis and visualization tools to process the collected data and to find candidate areas in Tokyo's 23 special wards where are suitable for starting new (gastronomic) business. As stated before, the entire database is divided into two parts, main data and supplementary data, which will be analyzed one by one. Then we will present the detailed results of data processing and further analysis.

4. Discussion (will be detailed presented for Week 5, Part 2)

So, what do the results of data analysis process want to tell us? This section will specifically discuss what interesting phenomena we can detect from the above results and mine specific information that is helpful to the target group.

5. Conclusion and summary (will be detailed presented for Week 5, Part 2)

After processing all the data, we will draw certain conclusions. The last part is to systematically summarize the data analysis and processing results of the entire project and also look forward to the future. So far, the project has been completed.