Clearly define a problem or an idea of your choice, where you would need to leverage the Foursquare location data to solve or execute. Remember that data science problems always target an audience and are meant to help a group of stakeholders solve a problem, so make sure that you explicitly describe your audience and why they would care about your problem.

I have decided to make a location analysis for the planned opening of an Italian restaurant in the centre of Hamburg, Germany and want to use amongst others the location data of Foursquare for this.

There is a saying that the three most important considerations in business are location, location, location. If you're starting a new business that operates primarily offline like a restaurant, location is critical. You want to be near your customers.

In my scenario a customer of my consultancy company who wants to open an Italian restaurant is my main stakeholder. He is currently looking for a good place to found his restaurant and wants me to assist him in this analysis. He has saved the necessary money during the last 15 years for this founding and wants to be as sure as possible that this restaurant has a good chance to be successful.

Of course he is not only interested to know which potential competitors (and how they are rated by the current visitors) would be in the vicinity of the location, but also whether there are enough people around that could visit his restaurant. So a close look to the demographic statistics could be very helpful too. He wants to know the average age and income of the people around and of course, whether tourists can be expected.

With Foursquare it would be possible to locate not only the venues in the near, but also (as a premium API) the menus of potential competitors. Special venues like sightseeing hotspots that attract tourists would also be interesting to know in such a location analysis and could increase the value of a potential location. It is important for my customer to get insights, whether there are only shops and offices in the vicinity or enough potential customers for evening hours, too.

From the official statistics office for Northern Germany all needed demographic data can be obtained.

The goal of the solution is, that he gets an explorative data analysis of potential locations in the centre of Hamburg so that he can choose which fits best for his restaurant opening.