

1. Introduction

1.1. Background

Hamburg is the second-largest city in Germany with more than 1.8 million inhabitants and one of the major science, research, and education metropolises in Europe [1,2]. The city has nineteen universities, both public and private, with more than 100 000 students in total [2,3]. Notably, the number of Hamburg's students rises every year [3-6] and will continue to grow, since projects like the "excellence strategy" [8,9] and the "Science City Bahrenfeld" [10-12] will draw even more young people from all over the world to Hamburg [1]. However, the city's university buildings and campuses offer only very limited space and are often overcrowded, old, and decrepit [7]. Hence, they are not a very attractive place for students to pass the time, learn, or socialize inbetween and after courses. With more students to come in the following years, there is clearly a need for more student venues like cafés and bars nearby these universities. For example, a new venue type called "study café" might be of particular interest for most students, i.e. a special coffee shop that offers free WLAN/electricity, low prices for drinks & foods, long opening hours, and enough space/tables for students to work alone or in groups. However, such off-campus study cafés are yet entirely lacking in Hamburg. Private or public investors should seize this opportunity and initiate the opening of such new types of student venues.

1.2. Business problem

Before opening a new study café in Hamburg, investors are faced with the question where to best open such a place. To approach this problem, several aspects should be considered:

- **Where are the universities located?** (since the new venue should be located nearby one or more universities)
- **What are the characteristics of different districts?** (since the new venue should be located in a lively district with other food & drink venues, but not too many cafés already)
- **How high are the rental prices for different districts?** (since the new venue should be located in a district with low to moderate rental prices in order to be able to offer low-priced food & drinks to students)

The present project addresses this problem by using different data about Hamburg (e.g. rental prices, locations data of universities, venues, and districts) to aid investors in finding the optimal location for opening a new study café.

1.3. Interested parties

This report will be of particular interest to any investors, private or public, who might want to open a new student venue in Hamburg and are yet undecided about the best location for such a place. Such investors could even include the universities themselves, which might decide to rent nearby places off-campus to offer more space for their students. Especially non-local investors not familiar with the city of Hamburg might profit from this report, as it will give them a nice visual overview of Hamburg's districts and their relevant characteristics.