



## THE KEBAB CHALLENGE – SPATIAL OPTIMIZATION OF SALES NETWORKS

### PROJECT GOAL

The right location to set up a business, the analysis of the market environment and the respective target group are decisive for the economic success of a company.

The main objective of our use case, which is not meant to be entirely serious, was to demonstrate our expertise in spatial optimization through the prediction of especially favorable business locations.

On the basis of a fictional example, locations were to be found for an entrepreneur who would like to establish himself in the kebab business. Ideally, it would attract a particularly large number of hungry nightclub visitors. The city of Berlin was chosen not only as the headquarters of Supper & Supper GmbH, but also as the official kebab capital.

The aim was to identify vacant shops in the immediate vicinity of nightclubs that could be acquired by the entrepreneur, to make sure after entering the market with his new kebab business he could achieve at least 30% market share of the Berlin kebab market.

### PROVIDED DATA

Three datasets were used in total. One that contained the coordinates of vacant property in Berlin, one contained the locations of other kebab shops and finally one with Berlin nightclub locations.



## APPLIED METHODS

This use case was a spatial optimization task. As part of the solution process, the geographic information system ArcGIS was used.

It was required to optimize the location of the future kebab shop in order to achieve the desired market share of 30%. This was done taking into consideration the following parameters: pre-defined budget for the property acquisition, property location and distance to nightclubs and competing kebab shops as well as market share of the competition. Subsequently, all possible locations for new kebab shops that represent the optimum of these parameters could be identified.

## PROJECT OUTCOME

By applying this model, two locations were identified as potential kebab shops in Berlin, namely in the city districts Friedrichshain and Moabit. Through the identification of vacant properties that match the fictional entrepreneur's specifications, he can create a kebab sales network with a market share of 30% on the spot with only two purchases.

