Z-Boxes Case Study

Introduction

In your new role you will be expected to perform tasks of varying complexity. Starting from making quick analyses in Excel through creating interactive dashboards in PowerBI up to developing machine learning models in Databricks. As the next step in our interview process, we would like you to work through the case study below so we can learn how you approach problem solving and structure your outputs.

Task 1.) Create a plan for building new Z-Boxes in Czech Republic

Our Chief Network Officer (CNO) came to your desk and asked you to help him with deciding where to place 3,000 new Z-Boxes. CNO's main task is to run sales teams which find and contract attractive locations for new boxes in order to achieve their maximum utilization. Your task is to recommend how many new boxes they should build in each town/city/municipality considering the population size and already existing box infrastructure. Please segment the municipalities into 4-5 categories based on the population size.

Towards the end of your conversation CNO also asked you to prepare a list of main criteria his team should consider when selecting specific locations for Z-Boxes.

You have been provided with a list of existing Z-Boxes. Any other data you will need to obtain by yourself.

Task 2.) Visually represent your recommendations

After analyzing the current network distribution and creating the plan for building new boxes, visually represent your results and recommendations. CNO is expected to present the box expansion plan to the board of directors in 5 days and he wants to use your visualizations to explain the plan.

You can use any visualization tools you find appropriate (PowerPoint, Power BI, web applications, etc.)

Task 3.) Conduct a quick competition research

Research who are four main competitors of Packeta that provide automated parcel boxes in Czech Republic. Try to download the list of box locations for at least two of them. Describe the tools you have used and the limitations you have encountered.

Output

Please send us a PowerPoint-type presentation that includes your key takeaways and methodology together with all working files you used in the process.

Feel free to let us know should you have any questions. We look forward to reviewing your work.