

COMP9321-Assignment 3 Report

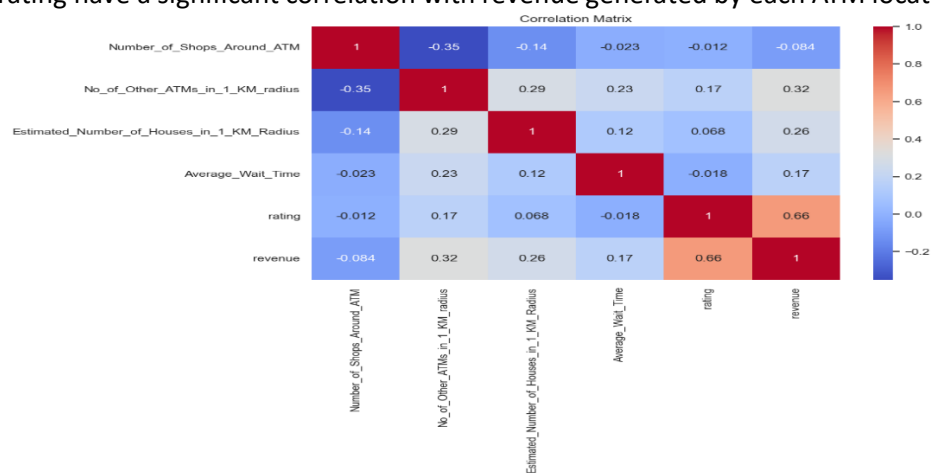
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Introduction

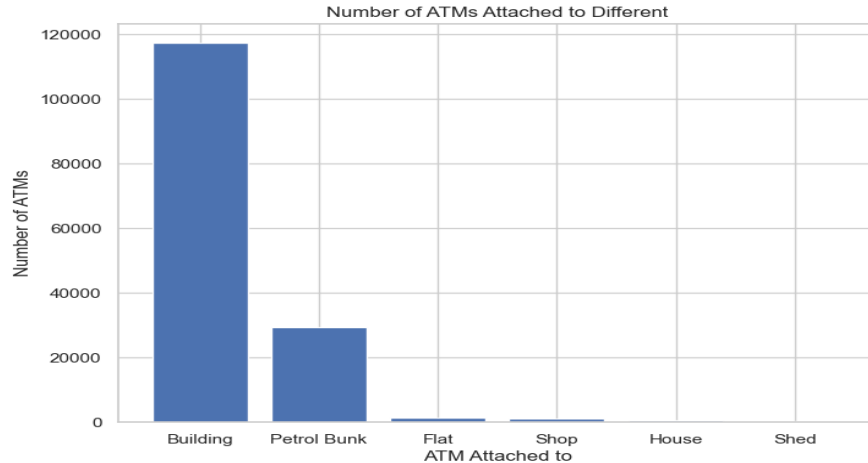
This report analyzes a dataset provided, which contains information about ATMs locations and revenues generated by them. The purpose of this report is to help the company decide about the location of new ATMs to maximize their revenue. The dataset contains information about the location of ATMs, their types, placement, looks, and revenues generated by them. The dataset also contains information about the rating of each ATM location. In this report, we will perform various analyses of the dataset and provide recommendations to the company based on the findings.

Data Analysis

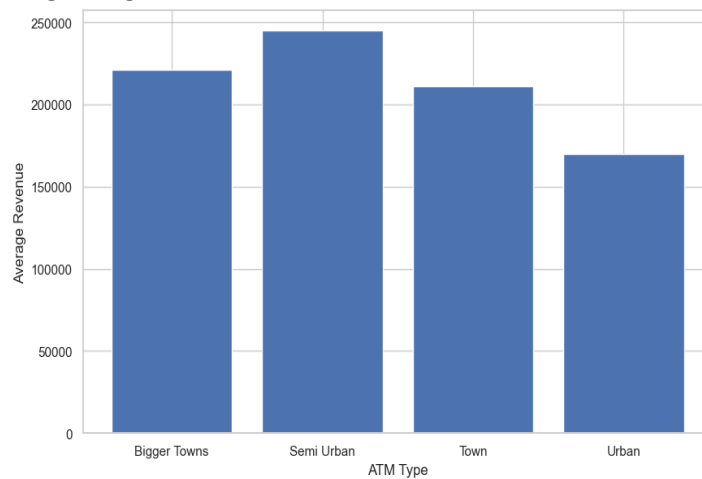
We analyse by exploring the correlation between different features of the dataset and revenue generated by each ATM location. We plotted bellow a heatmap to visualize the correlation matrix of the dataset. The heatmap revealed that the average wait time, number of houses around, number of ATM around, and rating have a significant correlation with revenue generated by each ATM location.



Next, the bellow chart shows the distribution of revenues by ATM placement. From the chart, we can see that ATMs placed inside a building tend to have higher revenues compared to those placed outside. ATMs placed in shopping malls also tend to perform well.



From the chart bellow, we can see that ATMs with type Semi Urban generate more revenue compared to other types. This could be because Semi Urban ATMs have more features or are placed in a better location compared with right target audiences.



Conclusion and Recommendation

Based on the findings of our analysis, we recommend the company should focus on the type of ATM, placement, average wait time, number of houses around and number of ATM around while deciding the location of new ATM machines. The company should prefer installing ATMs of type Semi Urban, bigger towns, and town as they generate higher revenue. The company should also focus on placing ATMs in building as they generate higher revenue compared to other attached places. The company should also consider average wait time as it impacts the revenue.

The company should also consider the rating of each ATM location while deciding the location of new ATMs. The company should aim to install new ATMs in locations with a higher rating, as higher-rated ATM locations are more likely to generate higher revenue.

To conclude, our analysis provides compelling evidence for the company to follow our recommendations while deciding the location of new ATM machines.