Group 3: Feedback (16/09/24)

Assessment of Group 1's Airbnb Project Report

Substantive Question (5%)

Commendable: *What key factors influence the price of Airbnb listings in New York City?* This question was highly relevant and well justified. The focus on price as a critical factor ties directly to Airbnb's business model.

Needs Further Work: None.

Rational/Arguments for the Business Question (5%)

Commendable: The group gave a solid rationale for focussing on price, highlighting the competitive nature of Airbnb pricing in New York City. The inclusion of neighbourhoods as a factor adds depth to the analysis.

Needs Further Work: While the rationale was strong, more attention could have been given to external factors, such as demand fluctuations due to seasonality or significant events in the city. These could have impacted the findings but were not discussed.

Expected Business Impact (5%)

Commendable: The group linked their findings to business recommendations. For example, they identified price ranges that yielded higher booking rates and suggested that Airbnb optimise pricing based on neighbourhood-specific trends.

Needs Further Work: The recommendations could have been enhanced by discussing the implications for Airbnb's long-term pricing strategy. For example, would lower prices lead to higher occupancy, or is there a threshold where raising prices optimises profitability?

Methodology (40%)

Knowledge and Understanding (10%): The group demonstrated a solid understanding of EDA, using correlation matrices and clustering to uncover relationships between variables. Their approach to cleaning the dataset was sound.

Application of Knowledge and Understanding (10%): The group effectively applied machine learning techniques, particularly clustering, to segment listings by price.

Criticality (20%): The critical analysis of the clustering results needed to be improved. While the clusters were identified, their business implications were not fully explored. For example, the group could have delved deeper into each cluster's characteristics and explained how Airbnb could use these insights to differentiate pricing strategies for high-end versus budget listings.

Needs Further Work: The report would have benefitted from comparing different clustering methods or conducting sensitivity analyses to see how changes in variables like amenities or location affect clustering. Additionally, the methodology did not

clearly explain why certain features were included in the model while others were excluded.

Visualisations of Results (40%)

Commendable: The visualisations, particularly the correlation heatmaps and scatterplots, were well-designed and effectively communicated the relationships between pricing, location, and other variables.

Knowledge and Understanding (10%): The group clearly understood how to use visualisations to show correlations, and their heatmap was particularly effective in highlighting key relationships.

Application of Knowledge and Understanding (10%): The scatterplots showing price distribution by neighbourhood provided a clear view of how prices vary geographically across New York City.

Structure and Presentation (20%): The overall structure was solid, but the report slightly exceeded the word limit.

Needs Further Work: The visualisations could have included more detailed explanations of the findings. For example, the heatmap showed correlations, but the group did not explore why certain variables were more strongly correlated than others, such as the impact of amenities on price. Additionally, some scatterplots lacked proper labelling, making it harder to interpret the results thoroughly.

Overall Presentation Style (5%)

Commendable: The report had a logical flow, with each section building upon the previous one.

Needs Further Work: The word limit was exceeded, affecting the conciseness of some sections. Additionally, more detailed explanations of the visual data would have strengthened the overall clarity of the report.

General Feedback

Your group presented a strong report with well-executed machine learning and EDA techniques. However, the lack of critical analysis of the clustering results weakened the overall impact. The group could have benefitted from a more detailed discussion of the implications of their findings, especially regarding pricing strategies across different neighbourhoods.

Final Thoughts

demonstrated a solid understanding of Airbnb's pricing dynamics in New York City. However, a deeper exploration of the clustering findings and more precise explanations of visual results would strengthen the business recommendations. Ensuring the report adheres to word count limits and providing more critical insights into the results would significantly improve the quality of the analysis.