Project Title: Using Deep Learning to Predict the Rating of Disneyland Theme Park Reviews

Business Topic: The objective of this project is to use deep learning to predict the rating of Disneyland theme park reviews and improve customer satisfaction and loyalty. By accurately predicting the rating of a review, Disneyland can quickly identify areas of the parks that need improvement and prioritize their efforts accordingly.

Main Issues/Problems: Currently, it can be difficult for Disneyland to quickly and accurately identify areas of the parks that need improvement based on customer feedback. By using deep learning to predict the rating of a review, Disneyland can more efficiently identify areas that need attention and improve customer satisfaction and loyalty.

Background Information: Prior research has shown that sentiment analysis of customer reviews can be used to improve customer satisfaction and loyalty. By predicting the rating of a review using deep learning, this project will provide a more accurate and efficient way to analyze customer feedback and improve the customer experience.

Data: The dataset used for this project is called "Disneyland Reviews", which contains over 4,000 reviews of Disneyland theme park in California, USA. The reviews were scraped from TripAdvisor and cover a period of several years. Each review includes information about the reviewer's rating, title, text, date, and language. The variables measured include the rating (on a scale of 1-5) and the text of the review.

Questions/Concerns: One potential concern with this project is the accuracy of the deep learning model in predicting the rating of a review. Another concern is the ability to generalize the model to other theme parks or tourist attractions. However, by optimizing the model's architecture and hyperparameters and using a large dataset, these concerns can be mitigated.

Unique Part/Business Opportunity: By accurately predicting the rating of a review using deep learning, Disneyland can quickly identify areas that need improvement and prioritize their efforts accordingly. This can lead to increased customer satisfaction and loyalty, ultimately resulting in increased profitability and brand loyalty. Additionally, the insights obtained from this analysis can be used to develop marketing and advertising strategies that are tailored to the needs and preferences of Disneyland customers, further increasing profitability and brand loyalty.

Deliverables: The final deliverables of this project will include a report summarizing the performance of the deep learning model in predicting the rating of Disneyland theme park reviews, a visualization of the model's predictions, and recommendations for improving customer satisfaction and loyalty based on the insights obtained from the analysis.