In response to the casino losing over 1.3 million dollars this past month due to an increased loss percentage, specifically in Blackjack, my prioritized task is to figure out a good estimated percentage of blackjack(21) hits for the dealer compared to the amount of blackjack hits for the player currently. Doing so, we hope to figure out a good amount of full card decks to use each match to get a better hand prediction for the dealer to win the game, primarily based off of hitting more blackjack hands than the player. With the data already obtained, our goal is to achieve a consistent 22% win increase for each dealer in blackjack over the next 6 months. We intend to achieve this goal by increasing the amount of card decks used per game to 10 rather than 8. We also believe that upgrading the headset equipment as well as the software so the support team can communicate with the blackjack dealers mid-game. With this goal being achieved we predict the casino to gain, approximately, a 3.7 million dollar monthly revenue increase. We are likely to hear a majority of the constraints from: 1. The players in blackjack, regarding the increase in losses and 2. The casino owner, due to the 1.2 million dollar cost for the headset equipment and software needed to run the equipment. Our main stakeholders involved are: the blackjack dealers- James Johnson, Jim Adams, Kelly Rice, Stacy Williams, John Kline, and William Sanders; the Casino Owner- Ralph Jones, and the Support team Manager- Debra Jenkins. Our main sources of data in this project are: 1. The dataset for the casinos blackjack results for the following 10 years titled ‘Blackjack Dataset’ from kaggle, 2. The instantaneous feedback and game stats from the blackjack dealers mid-game, 3. The algorithm created with the casino data used to best estimate the best amount of card decks to use and how often to re-shuffle the cards.