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Customer Coupon Analysis

As part of this exercise, I analyzed a dataset to determine a coupon's acceptance rate and ascertain the factors behind why an individual might consider using the discount.

To investigate the dataset, I constructed a new data frame that focused exclusively on bar coupons and found several intriguing pieces of information. I observed an interesting correlation between a person’s age and the status of their passengers, which were important factors behind whether said person was interested in utilizing a bar coupon instead of other coupons. A potential reason for this could be that as people grow older, the number of responsibilities they have prohibits them from visiting a bar more often than when they were younger. As part of this initial investigation, I found that an average of 41% of bar coupons were accepted and that the acceptance rate declined significantly if a person went to a bar more than three times a month as opposed to those who went more often (41% vs. 8.2%) hinting that the coupons were meant to incentivize people to visit the bar for the first time to foster long term habits.

I then conducted an independent investigation into whether the marital status of a respondent influenced the data and found that, on average, the likelihood of an accepted bar coupon for an unmarried person was roughly double that of a married person (14.4 vs. 26.7%), further reinforcing my hypothesis. As part of this investigation, I also found a similar difference in acceptance rate when looking at the number of kids a person had, with those without kids being roughly double the likelihood compared to those with kids.