Elizabeth Evans

MSIS 510, Autumn 2020 Purple

Assignment 4

1-3. Data Processing, Partitioning, Modeling

4. logit = -2.054183 + 0.030643X1 + -0.565803X2

5. Prob(Phone\_sale = Yes) = 0.3723804; with a cutoff of 0.3, this customer is predicted to buy a phone

6.

|  |  |  |
| --- | --- | --- |
|  | No | Yes |
| No | 1728 | 265 |
| Yes | 1 | 0 |

7. In the training data, about 13% bought phones. The confusion matrix indicates a lot of false negatives, indicating that the current model is not useful in targeting customers who will purchase phones.

8. You would need to lower the cutoff to capture customers most likely to purchase a phone as the probability set by the model for a “Yes” is relatively low.