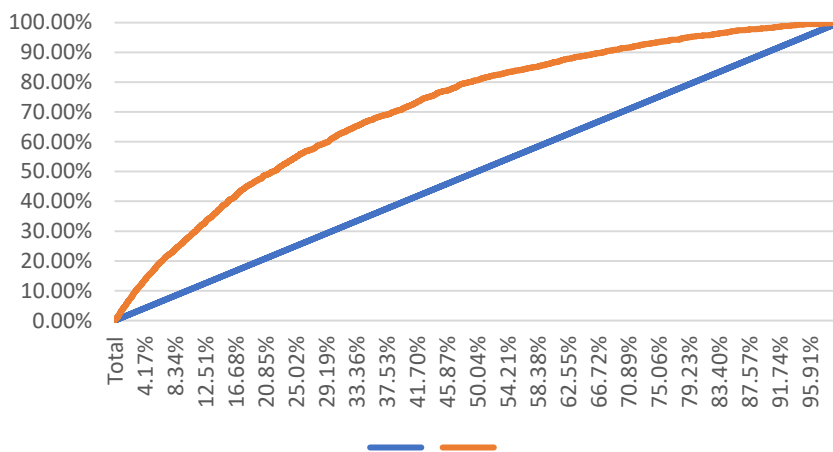


# Banking Departures Modeling Report

|                | coefficient  | p-value                  | Odds-ratio |
|----------------|--------------|--------------------------|------------|
| const          | -3.912575923 | $3.84 \cdot 10^{(-61)}$  |            |
| CreditScore    | -0.000674866 | $1.60 \cdot 10^{(-2)}$   | 0.9993     |
| Age            | 0.072655032  | $3.24 \cdot 10^{(-175)}$ | 1.0754     |
| NumOfProducts  | -0.095019766 | $4.56 \cdot 10^{(-2)}$   | 0.9094     |
| IsActiveMember | -1.075775907 | $1.01 \cdot 10^{(-77)}$  | 0.341      |
| Female         | 0.526721362  | $3.97 \cdot 10^{(-22)}$  | 1.6934     |
| Germany        | 0.747595467  | $1.44 \cdot 10^{(-30)}$  | 2.1119     |
| log_Balance    | 0.069026257  | $7.62 \cdot 10^{(-7)}$   | 1.0715     |
| Tenure         | -0.015879072 | $8.93 \cdot 10^{(-2)}$   | 0.9842     |

- Based on a robust geodemographic segmentation model using a binary logistic regression, the above model was developed and cumulative accuracy profiles verified the results.
- Findings show that member activity should be promoted to reduce departure, where focus on the female and German markets are most vital as those demographics have the largest weight on the probability of account closure.
- Tenure, being the duration a member has had accounts with the bank, should be an indication of '*Brand Loyalty*' but has very negligible effect on the model. This suggests the bank may be able to increase incentives for long-term members to better reflect one's intuition.

Cumulative Accuracy Profile  
Banking Exit Model (10000 Samples)



Test Data Cumulative Accuracy Profile :  
Geodemographic Segmentation Model  
(1000 Samples)

