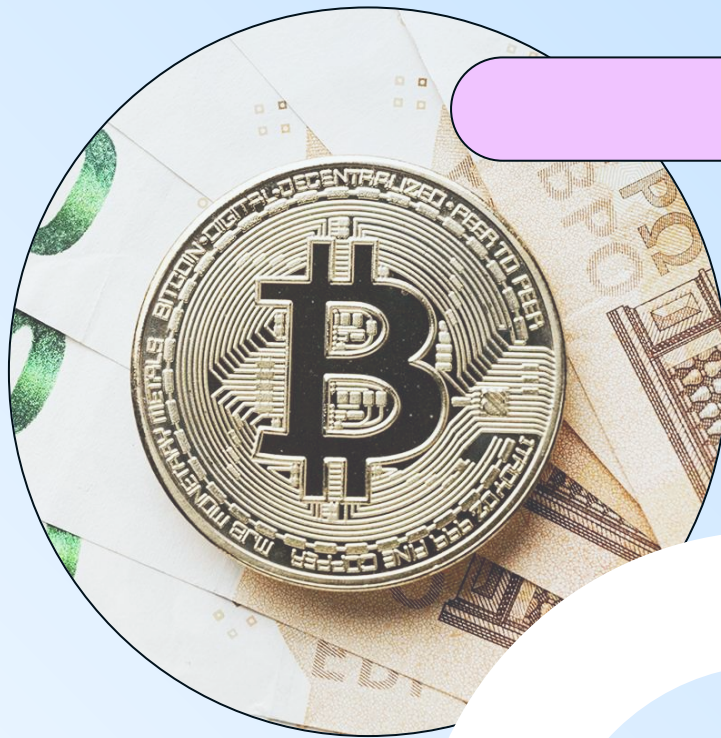


CHURN PREDICTION



CRYPTO

CRYPTO



01

Problem Statement

Conclusions made from EDA

02

Insights

Linear
Regression? Randomforest? X
Gboost?

03

Model Evaluation

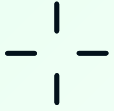
For the Bank

04

Recommendations

Group 2

PROBLEM STATEMENT



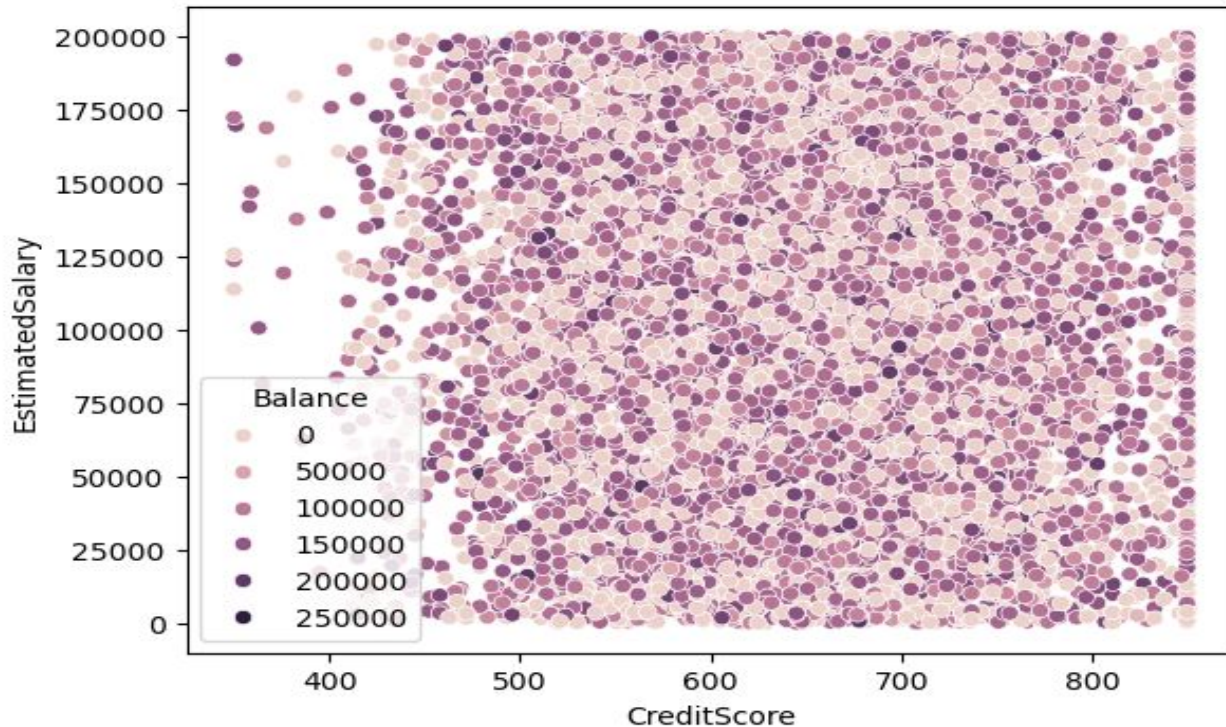
Customers retention is critical for banks. By predicting which customers are likely to exit, the bank can implement targeted retention strategies, improve customer satisfaction and reduce revenue loss.

Objective: Build a predictive model to identify customers at risk of churning

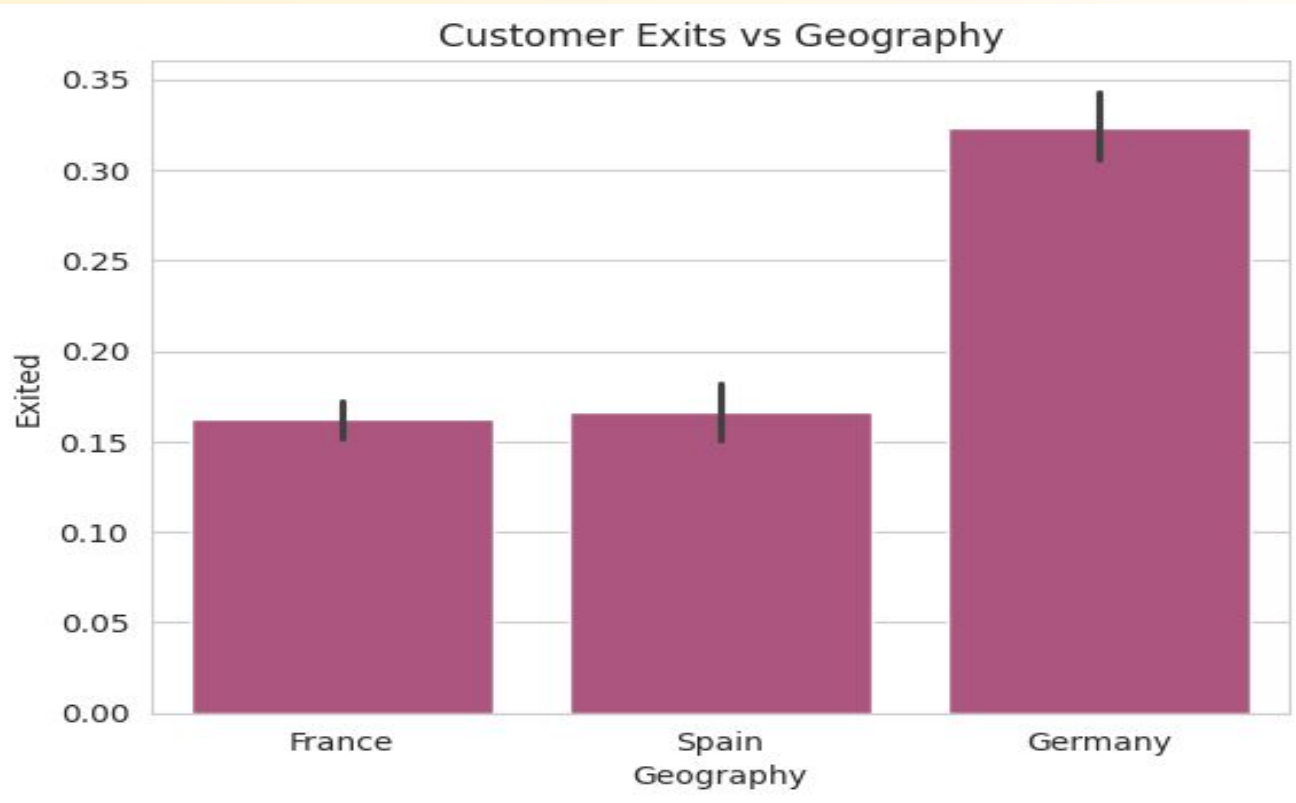
VISUALIZATIONS

Scatter Plot for Credit score and Estimated Salary

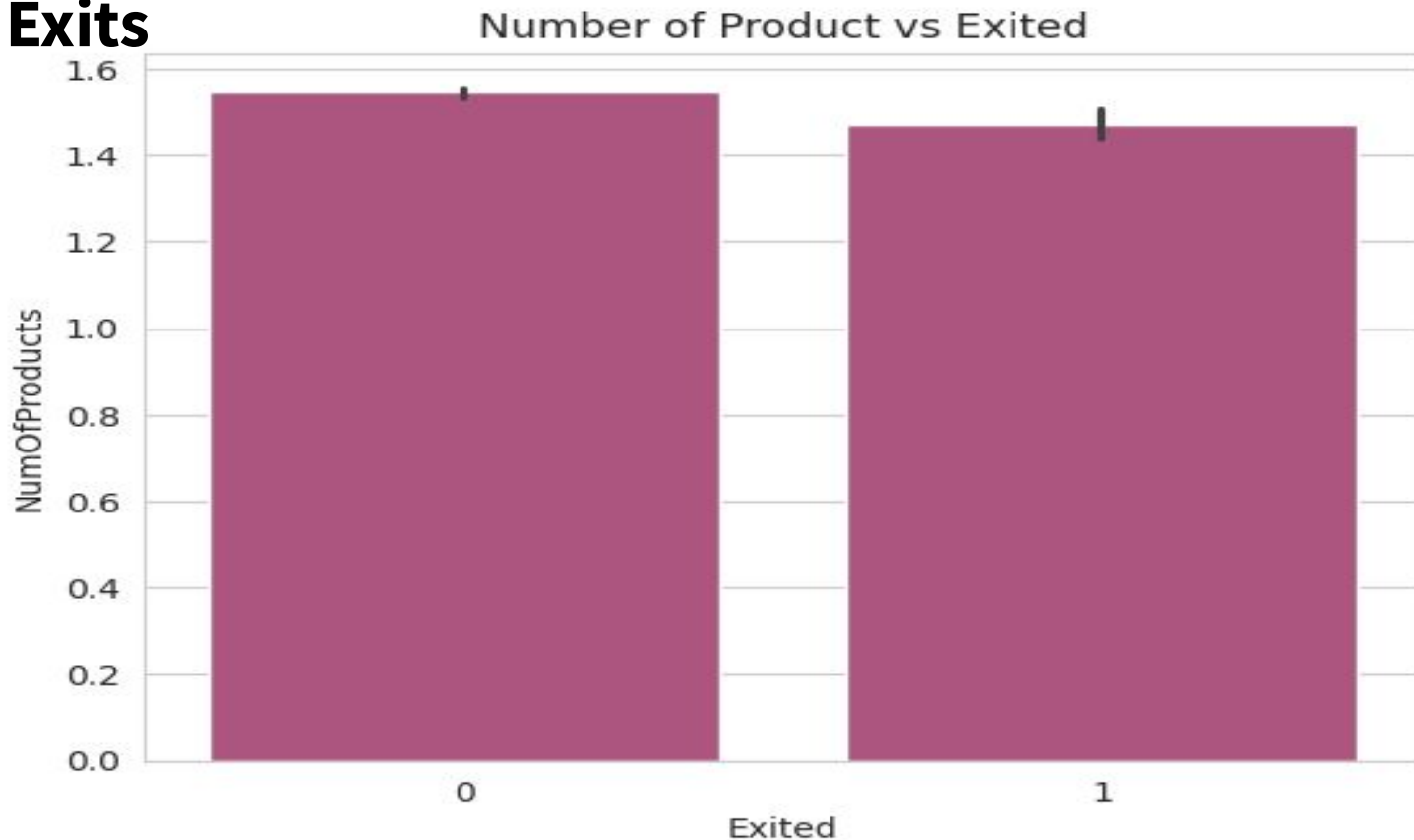
```
[37]: <Axes: xlabel='CreditScore', ylabel='EstimatedSalary'>
```

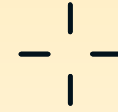


Bar plot for Customer Exits and Geography



Bar plot for Number of Products and Customer Exits





INSIGHTS

1. Customers with a low credit score have low salaries and are likely to churn
2. There's a high rate of customers exiting the bank in Germany
3. Customers who purchase more products are likely to stay

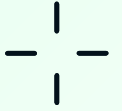


MODEL PERFORMANCE TABLE

| MODEL | USE | ACCURACY |
|------------------------|--------------------------------|----------|
| LogisticRegression | Binary Classification | 0.8149 |
| RandomForestClassifier | Classification and Performance | 0.8528 |
| Xgboost | Performance | 0.8466 |

Best Model: Random Forest Classifier

RECOMMENDATION



1. The bank should allow customers to borrow money despite their salaries at a cost to reduce the risk of churning
2. The bank should introduce more branches in various regions especially Germany so as to minimise the rate of churning
3. Bank should introduce more products to their customers to lower the risk of churning.

GROUP 2

Joy

Iana

Denis

Ahmed

CRYPTO