

NEW YORK STOCK EXCHANGE

Lead Conversion Business Plan



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Market Trends



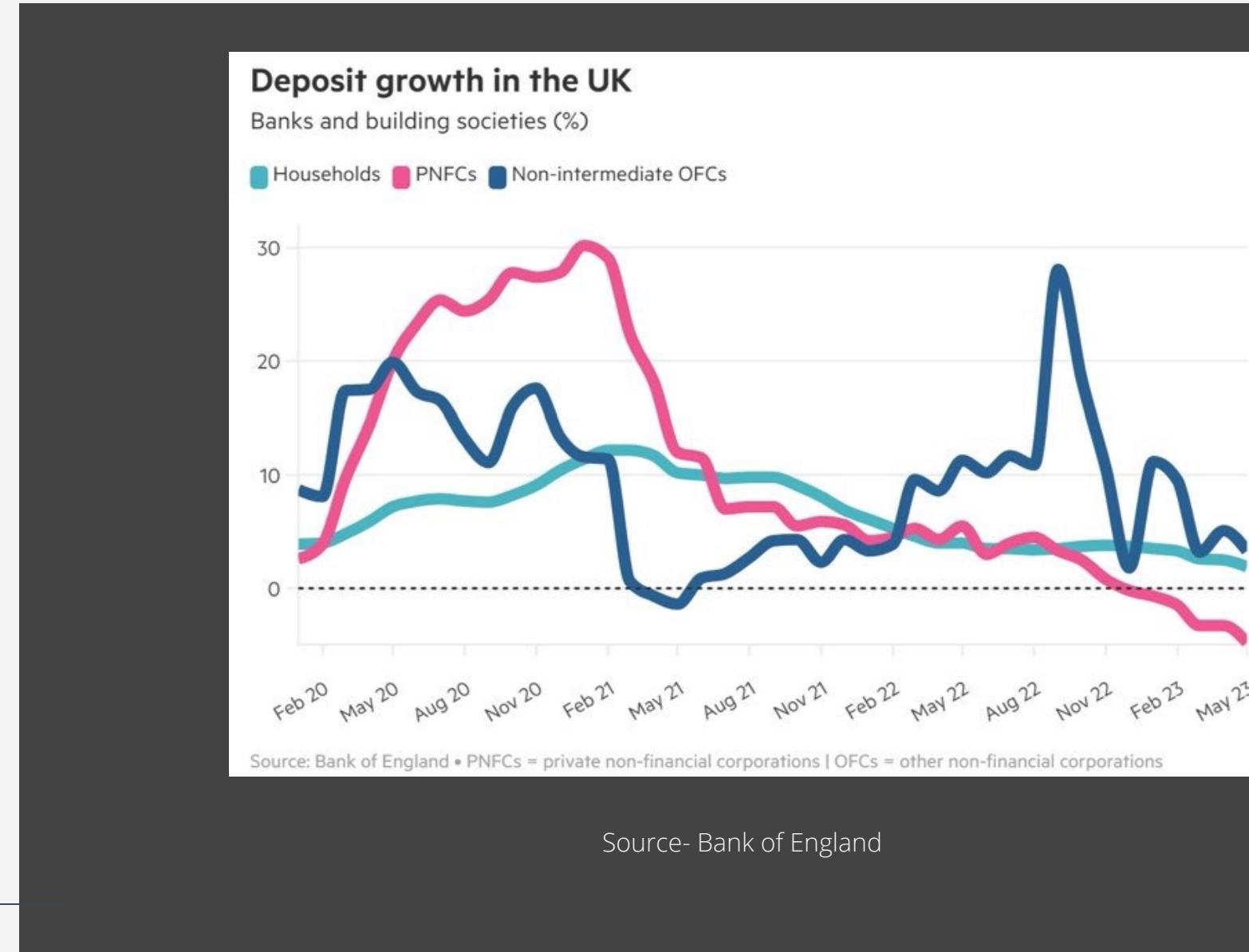
The inflation has skyrocketed since the Russia-Ukraine conflict.



Households are struggling with cost-of-living crisis resulting in a weaker willingness to buy new deposit product.



This has resulted in increasing competitiveness for the banks to sell their new term deposit product.



Current Market Scenario

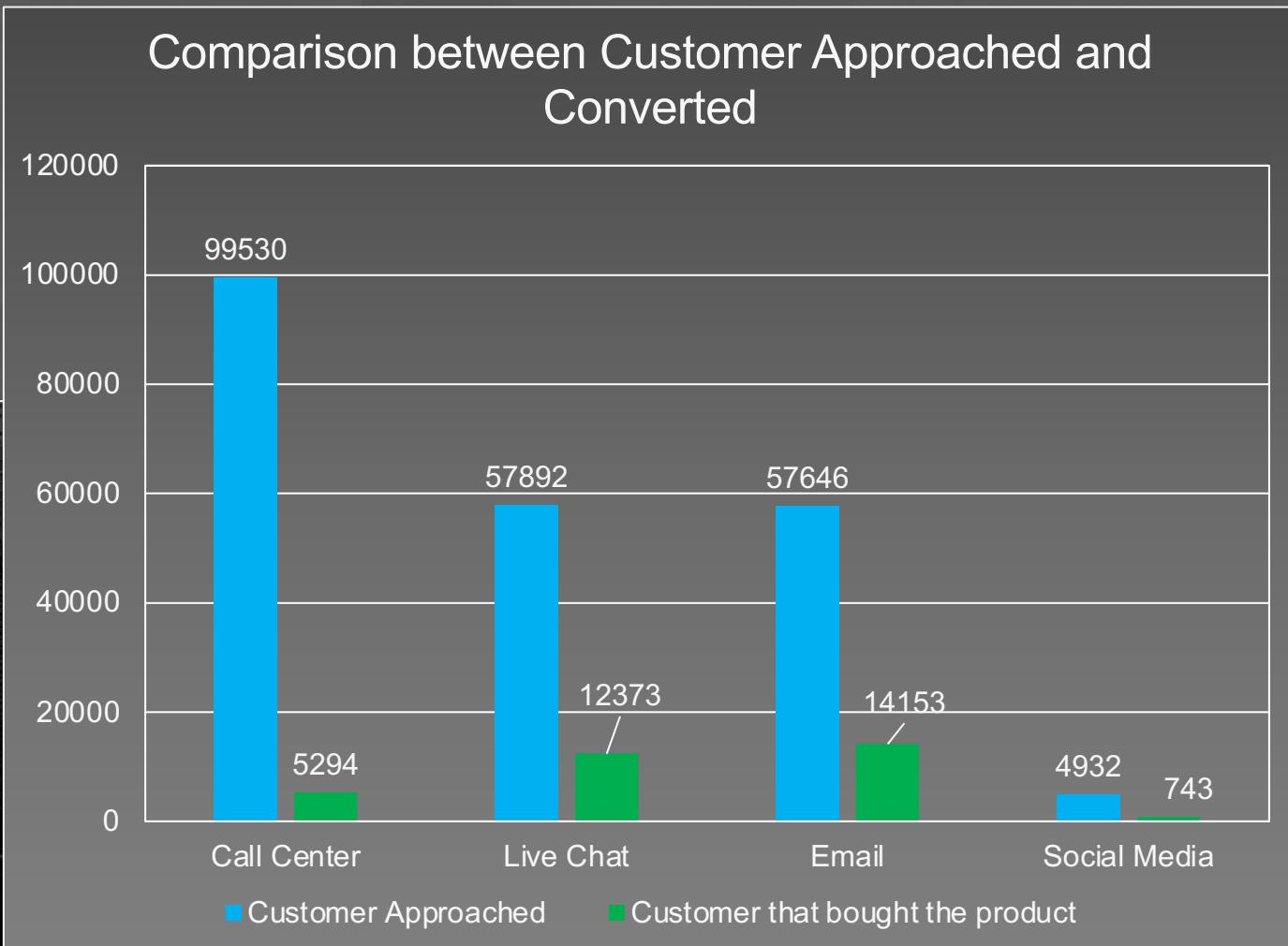


Banks are Facing Issues in identifying Target Customers



Unproductive Investments

Need for a Proper System to Identify Potential Customers Accurately



Source – World Plus Bank Customer Dataset

Problem

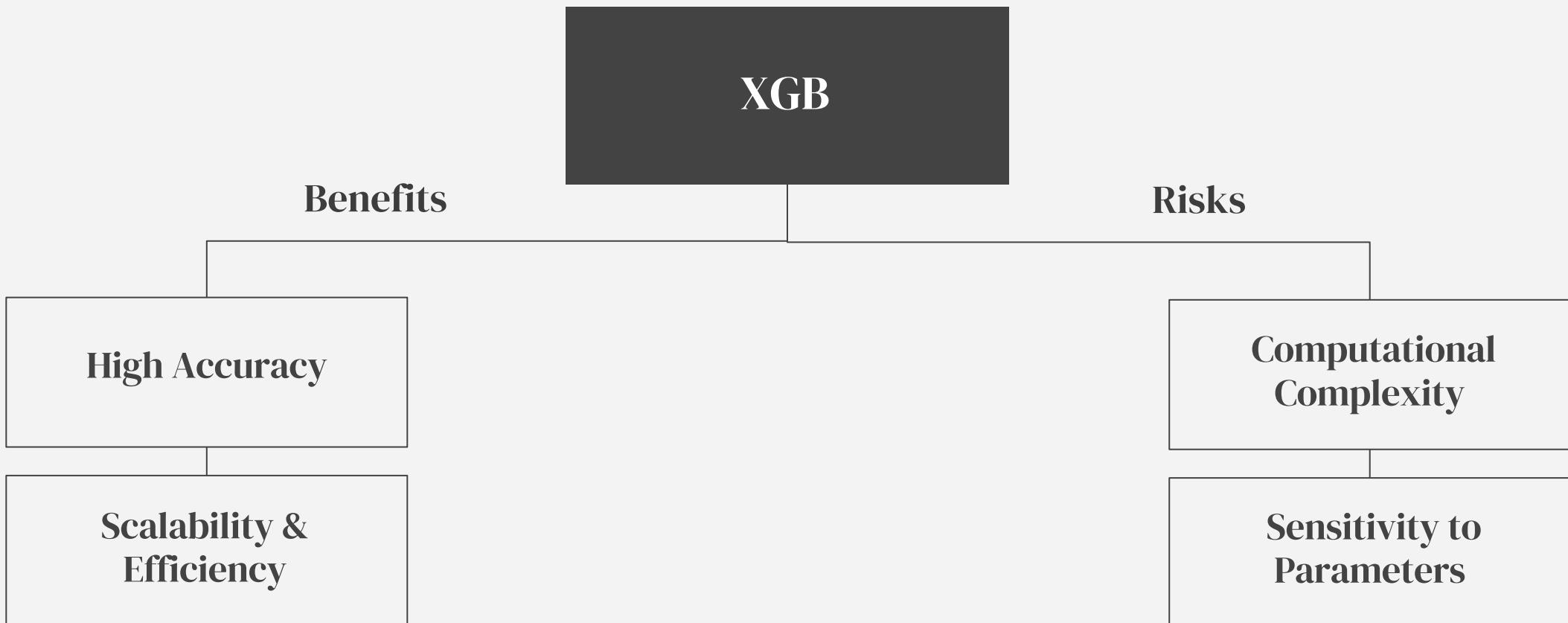
World Plus Bank struggles to accurately identify leads for their new term deposit product.

Current approach results in inefficient resource allocation in sales and marketing.

Solution

Need for a Strategic, Data-Driven Solution:
A Lead Prediction System

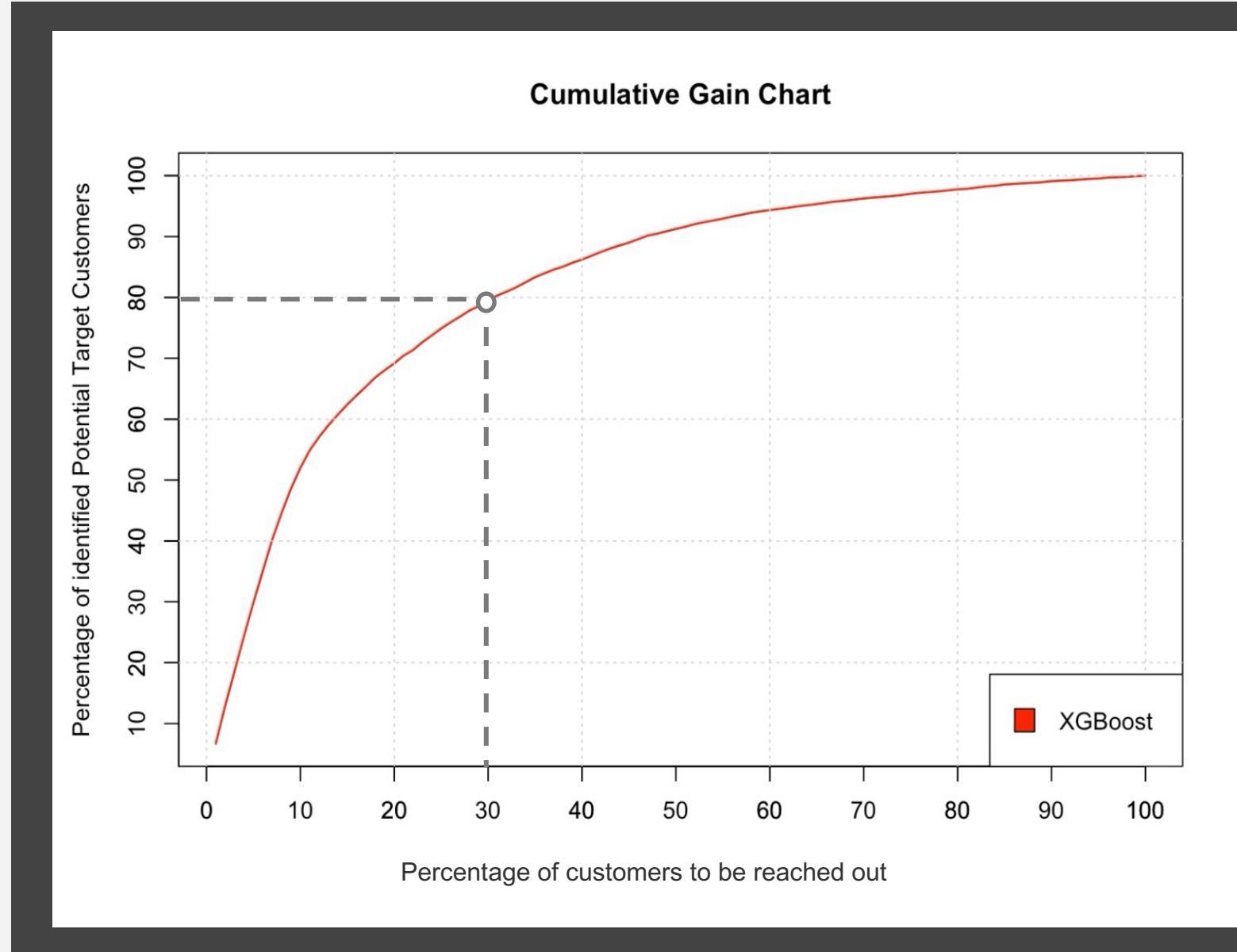
Our Model : Extreme Gradient Boost (XGB)



XGB's Cummulative Gain Chart

Highly efficient in capturing large number of actual potential customers by just reaching out to a small percentage of customers through efficient communication channels.

→ Optimise Cost & Boosts Revenue



Important Insights



Feature Importance

Gives information about what data parameter information will help in effective prediction



Range Prediction for the Important Data Parameters

Registration: Yes

Age: 40-60

Average Account Balance: 615k to approximately 3 Million Pounds

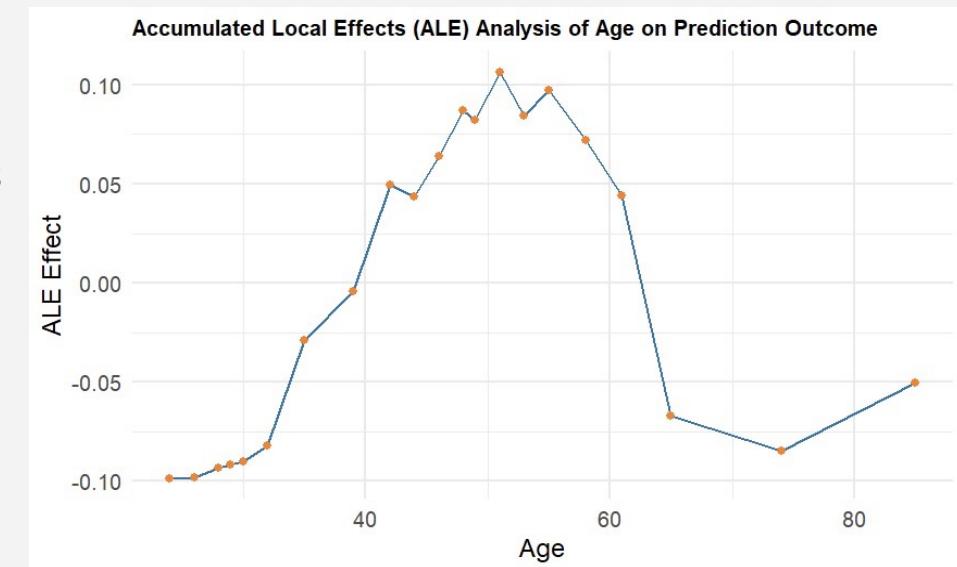
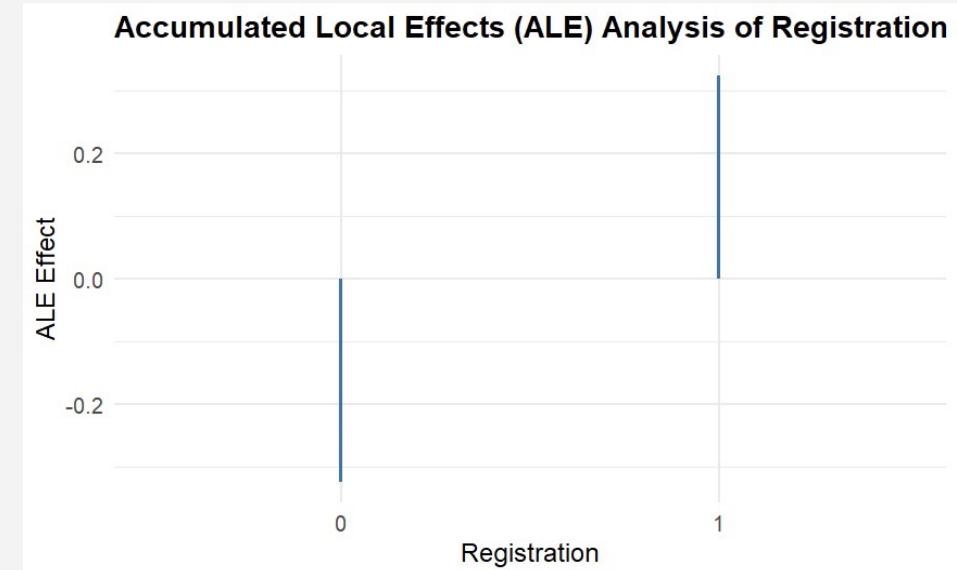
Vintage: 88 to 100 months (7-8 years)



Individual Customer Prediction Capability



Reduced Cost with Better Potential Customer Identification

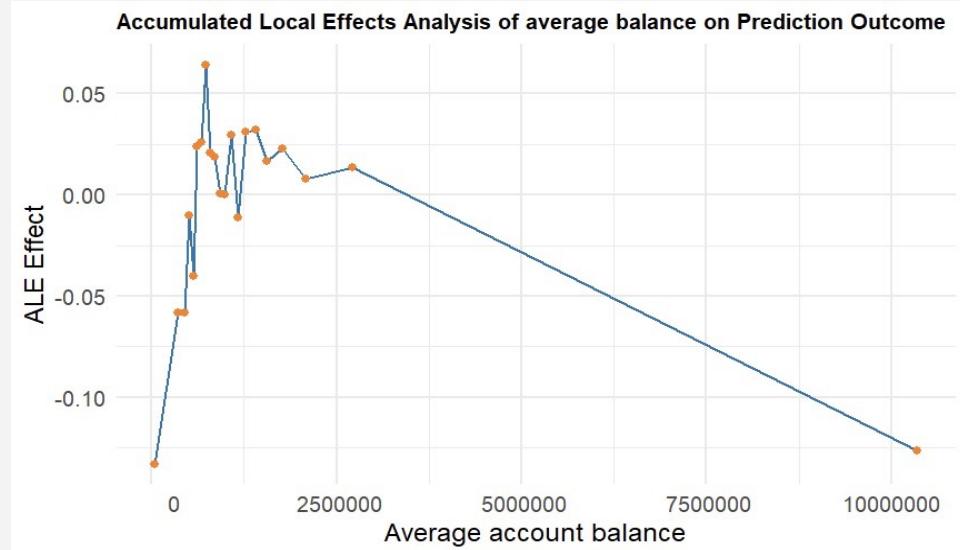


Important Insights



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Gives information about what data parameter information will help in effective prediction



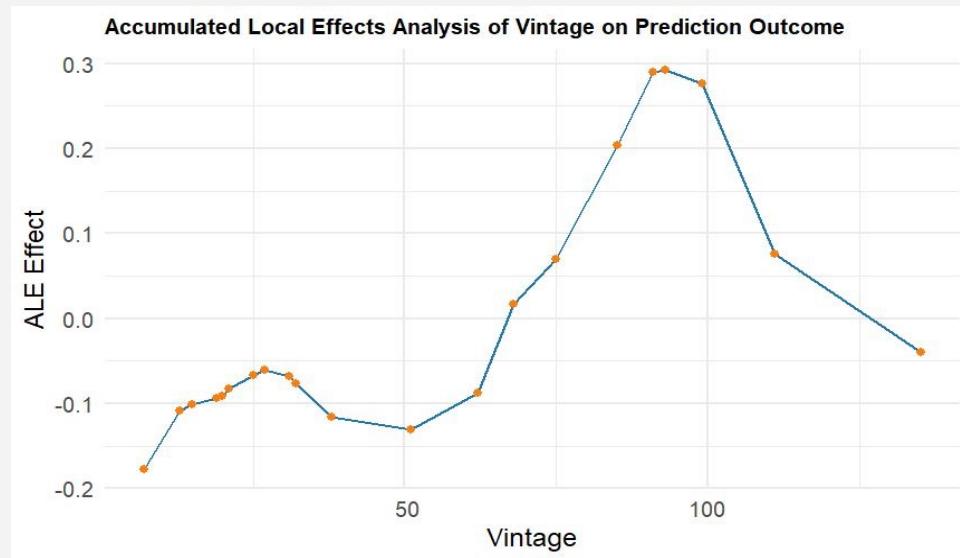
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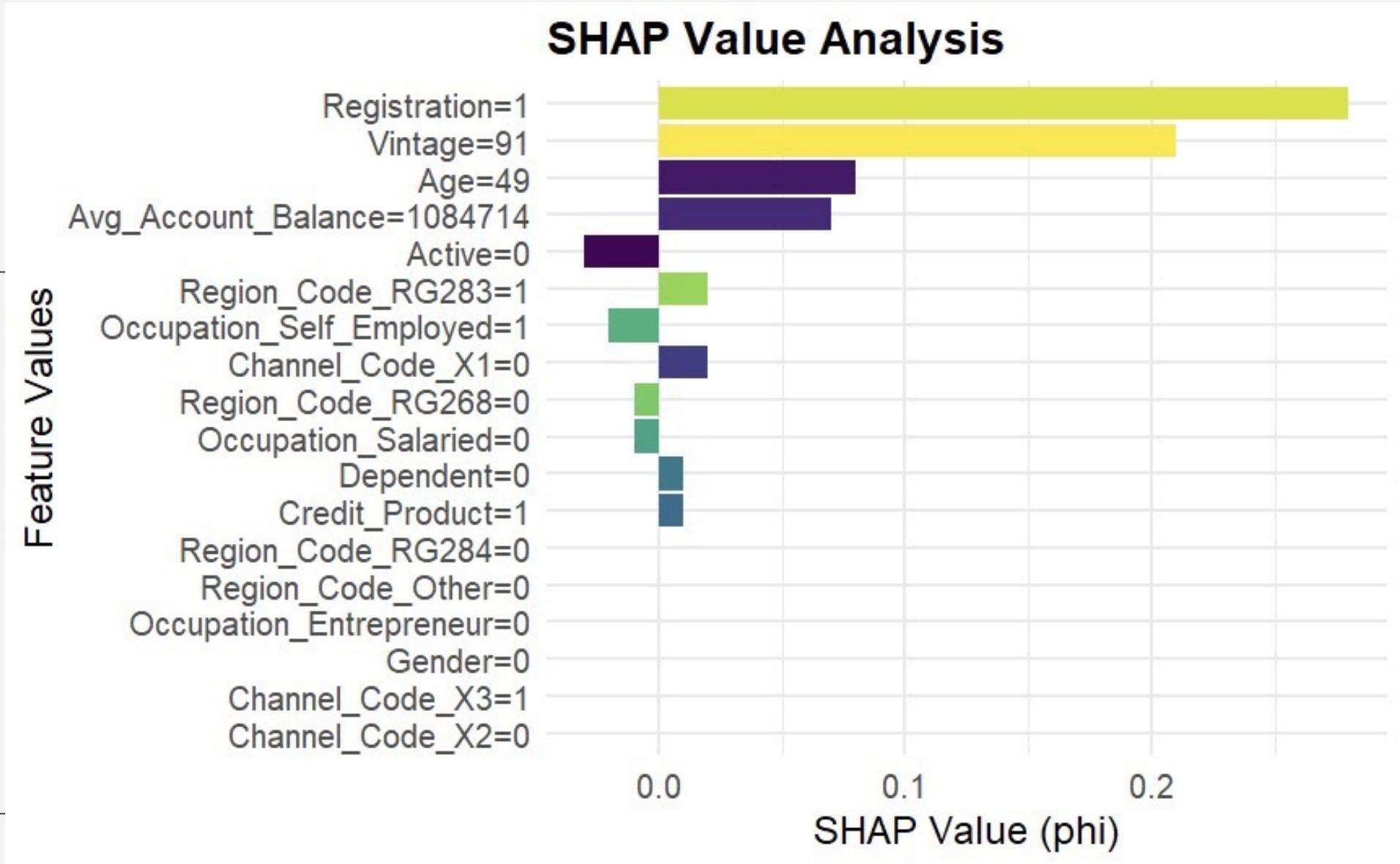


Individual Customer Prediction Capability

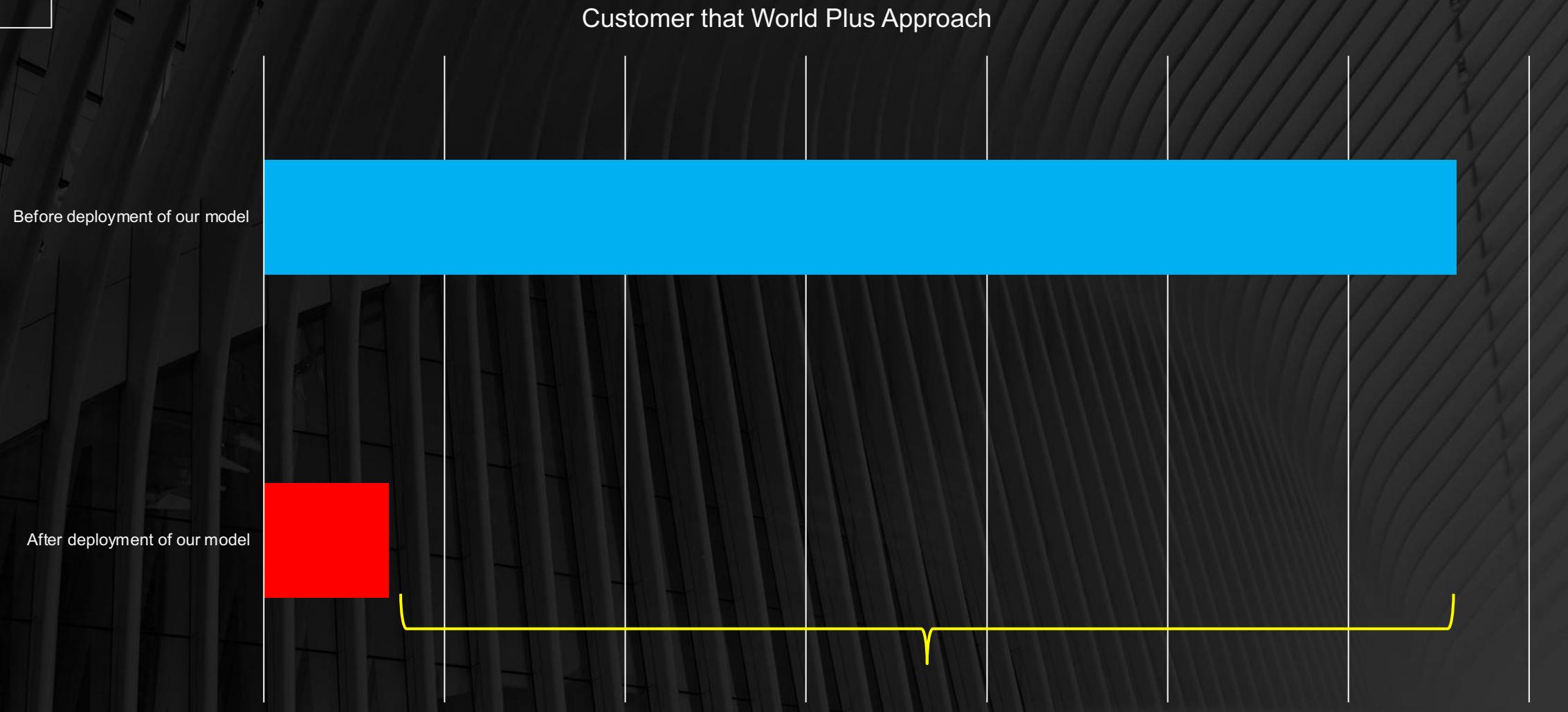
Reduced Cost with Better Potential Customer Identification



Individual Customer Conversion Prediction



Predicted Cost Minimization In the Long Run



Cost Saved calculation shown in Appendix





Them

Range of Cost Saved

Prediction based on Information for a Group
of Customers

Us

Accurate Prediction for Individual Customers

Improve Revenue and Profitability in the Long Run

Clear Explanation Path for Each Prediction & Comprehensive
Understanding of Influential Factors

Deployment

Training and Testing



Performance Optimization



Feedback



Scalability and Maintenance



Sun Mon Tue Wed Thu Fri Sat

January

		1	2	3	4	05
06				10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Sun Mon Tue Wed Thu Fri Sat

February

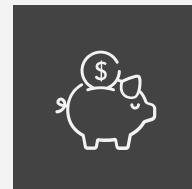
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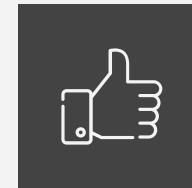
Conclusions



Precise Prediction of
Potential
Customers



Cost Effective



Increase in Customer
Conversion in Comparison
to Targeted Customers





Thank You !!

Do you have any questions?

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Appendix

Please Refer To This for Any Detailed Information

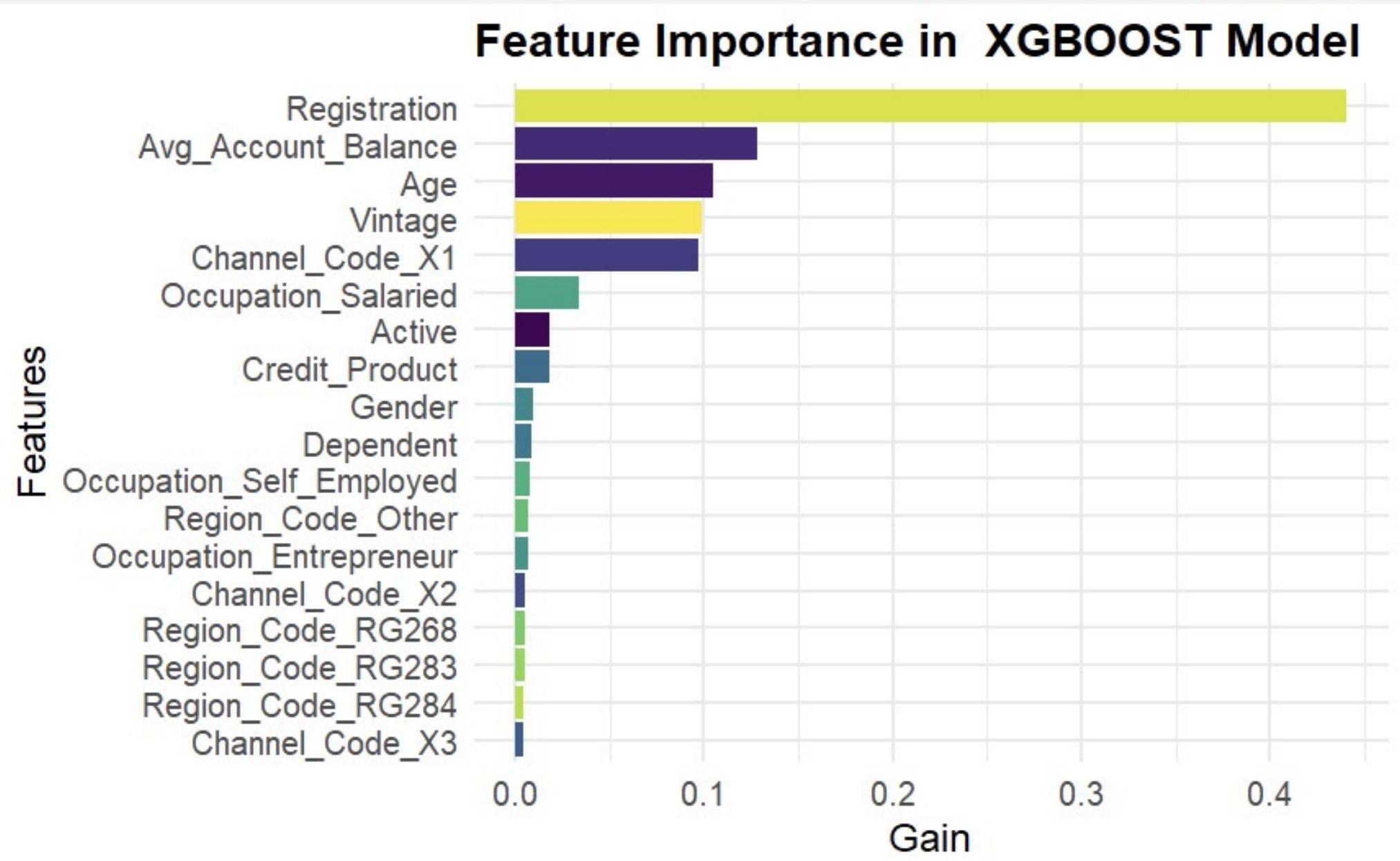


Calculation of Cost

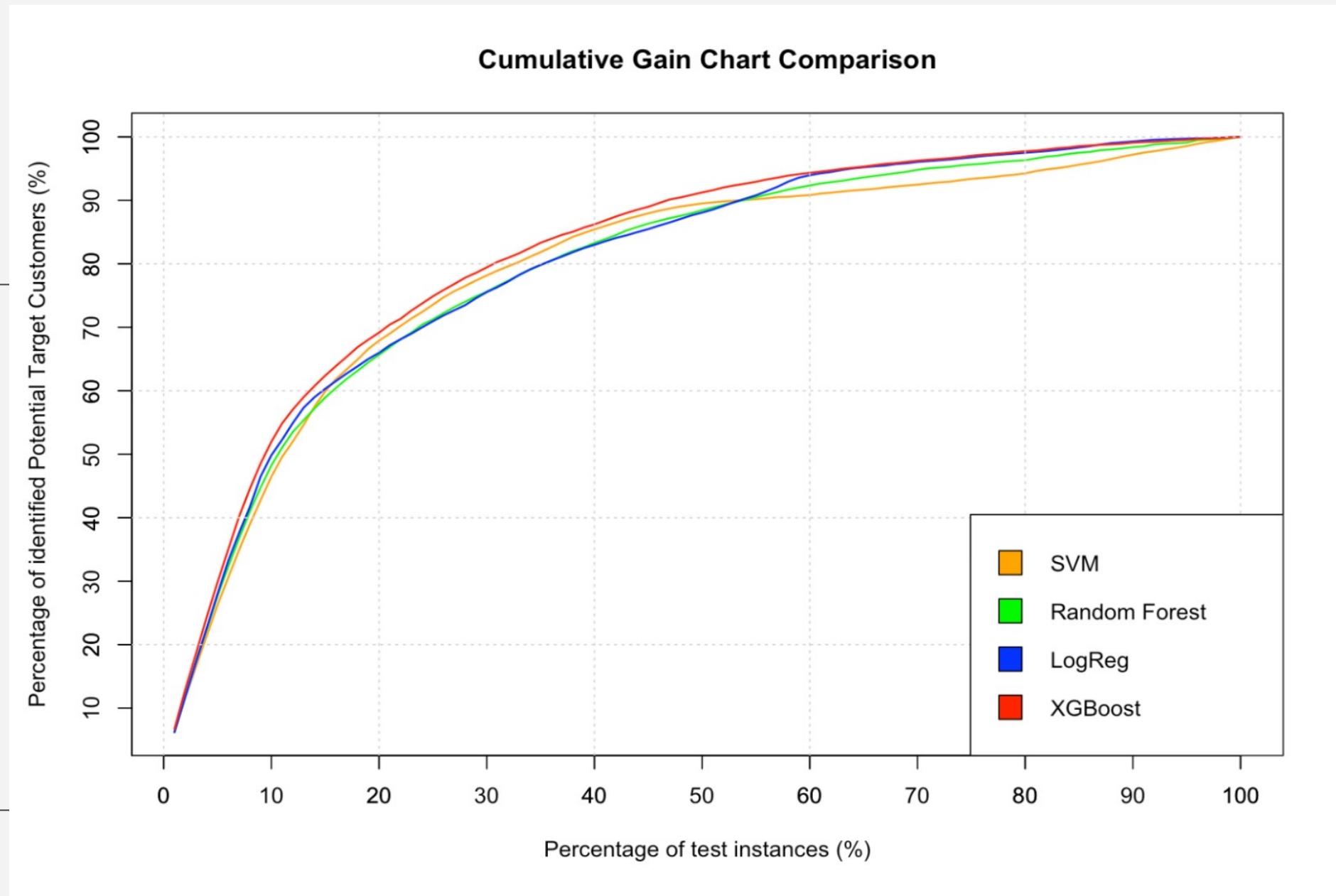
- We make assumption for the cost of marketing based on the co-operative bank's (mid-size bank) operating expenses, and financial sector in UK spend 13% of their budget on marketing each year, and we also assume that world plus bank has 625k customer which is sensible for a mid-size bank based on a report from FCA regulation.
- The operating expenses from co-op financial report is £288.6m, thus to find marketing budget we take $\text{£288.6m} * 0.13 = \text{£37518000}$; then to find marketing cost per customer we use $\text{£37518000} / 625000 = \text{£60.03}$. Thus, the savings based on the test data is $\text{£60.03} * 59052$ (difference in customer approach before and after model deployment), we will get £3.545m savings



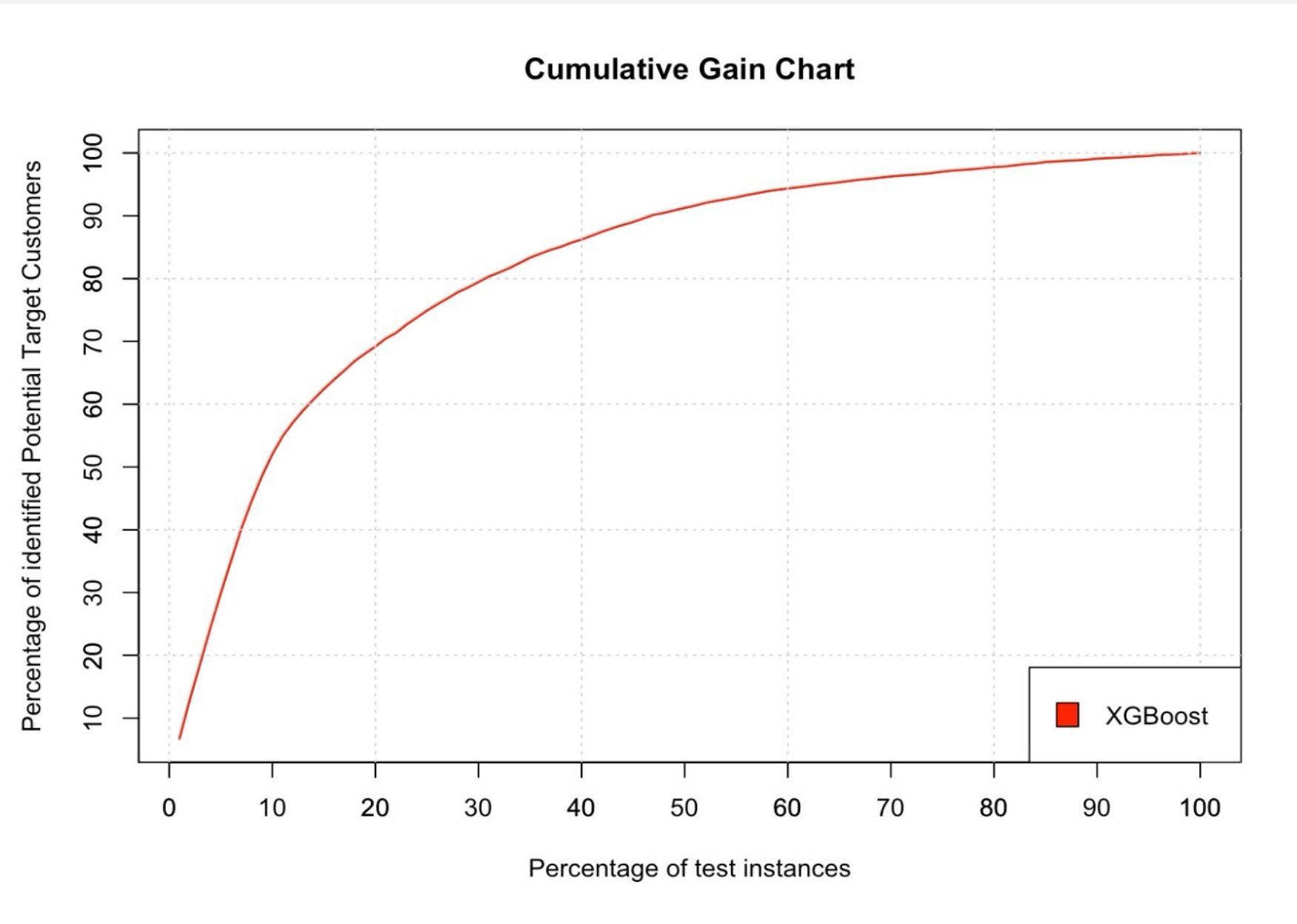
Data Feature Importance Prediction



Cumulative Gain Chart Comparison for all Modelling Methods Used



Cumulative Gain Chart for Extreme Gradient Boost Model (XGBoost)



Reference

Strategic Review of Retail Banking Business Models: Final Report 2022 (fca.org.uk).

How Much Do Banks Spend On Marketing? | ActiveWin Blog