Lloyds Banking Group

## Customer Churn Analysis Report

This report summarizes the findings of an analysis performed on a customer churn dataset, encompassing customer demographics, transaction history, customer service interactions, and online activity. The analysis aimed to identify trends and patterns related to customer behavior and churn.

\*\*Key Findings:\*\*

1. \*\*Transaction Trends:\*\* Analysis of transaction amounts over time reveals fluctuations in spending. A line graph illustrating transaction amounts against transaction dates is provided, giving a visual representation of these trends. Further investigation into the root causes of these fluctuations could provide actionable insights. Monthly sales data aggregated across the entire dataset also demonstrate variation in spending between months.

2. \*\*Customer Service Interactions:\*\* A stacked bar plot shows the distribution of customer service interactions across various types and their corresponding resolution statuses. This visualization helps understand the common types of customer inquiries and the success rate of resolutions. Further analysis could focus on improving resolution rates for specific interaction types.

3. \*\*Least Active Customers:\*\* The analysis identified customers with the fewest transactions within the past three months. Their Customer IDs have been listed.

4. \*\*Inquiry Resolution Status of Least Active Customers:\*\* The analysis delves deeper into the customer service interactions of the least active customers, analyzing the resolution status of their inquiries. A stacked bar chart presenting the percentages of resolved and unresolved inquiries categorized by inquiry type is included. This information could be crucial for targeted retention strategies, focusing on improving customer satisfaction and potentially preventing churn.

5. \*\*Inquiry Resolution for Specific Customers:\*\* The analysis provides a count of resolved and unresolved inquiries for a specific list of customer IDs, along with their respective percentages. This granular detail is useful to directly assess service quality and performance for individual customers.

\*\*Further Recommendations:\*\*

\* \*\*Root Cause Analysis for Spending Fluctuations:\*\* Investigate the reasons behind the observed fluctuations in customer spending, exploring potential external factors (e.g., seasonality, economic conditions) or internal factors (e.g., marketing campaigns, product changes).

\* \*\*Targeted Customer Service Improvements:\*\* Based on the identified customer service interaction patterns, explore opportunities to improve resolution rates for specific interaction types. This could involve process optimization, employee training, or system upgrades.

\* \*\*Retention Strategies for Least Active Customers:\*\* Develop targeted retention strategies for the identified least active customers. This might involve personalized promotions, proactive communication, or feedback mechanisms to better understand their needs and address potential pain points.

\* \*\*Detailed Customer Segmentation:\*\* Segment customers based on transaction history, online activity, and demographics to identify further trends and create more tailored retention plans.

\* \*\*Correlation Analysis:\*\* Explore the correlation between various factors like customer demographics, online activity, and customer service interactions to identify potential predictors of churn.

\*\*Data Limitations:\*\*

\* The report relies on the provided dataset and its inherent limitations. Missing data or inaccuracies within the dataset could impact the findings and recommendations.

This report serves as a preliminary investigation. More in-depth analysis with a larger dataset and more advanced techniques can provide a more comprehensive understanding of the factors contributing to customer churn.