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MS Information

Policy Brief
LIS 707 Data Visualization

Analysing Credit Card Usage and Customer Behavior



Introduction:

The credit card industry thrives on customer loyalty. However, understanding the intricate tapestry of consumer behavior and identifying potential churn factors remain critical challenges. This policy brief delves into a comprehensive credit card dataset, unlocking valuable insights to guide customer retention strategies, credit limit adjustments, impactful promotions, and targeted campaigns.

Executive Summary

The analysis uncovers a captivating perspective of cardholder behavior. Blue cards are the most common, while Platinum cardholders, with lower utilization rates and higher credit limit, represent a lucrative niche. Worryingly, consumer acquisition is declining across all quarters, necessitating rapid response. Another intriguing picture is painted by education level, with college students and graduates dominating in transactions.

according to the set credit limit on each type of card (refer fig.2). On the other side, doctorate and postgraduates might do fewer but costly purchases compared to their high-volume counterparts.

Chart Explanation:

The chart at the right (fig.1) shows an interesting distribution of transaction insights by education level, showcasing distinct spending patterns across different demographics. Graduates reign supreme as the biggest spenders, racking up a above 7k transactions, closely followed by college students at around 5k. In contrast, High School graduates exhibit more modest spending behavior, with close to 4k transactions. Post-graduates, Uneducated and Doctorate individuals show the least transaction activity.

Interestingly, while college students and graduates lead in transaction count. It can be possible that College students and Graduates have more transaction activity as they manage their sundry expenses such as books, stationery, food, etc.

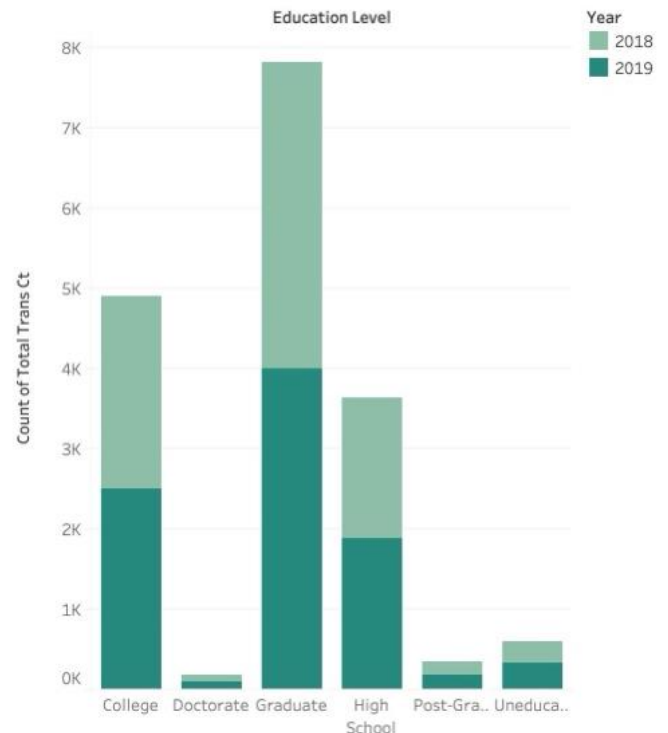


Fig. 1 Transaction Insights: Yearly Total Counts by Education Level

| Card Category | |
|---------------|--------|
| Blue | 2,642 |
| Silver | 8,472 |
| Gold | 21,635 |
| Platinum | 34,150 |

Fig. 2 Card Wise Avg. Credit Limit

It can be said that education level plays a significant role in shaping transaction behavior.

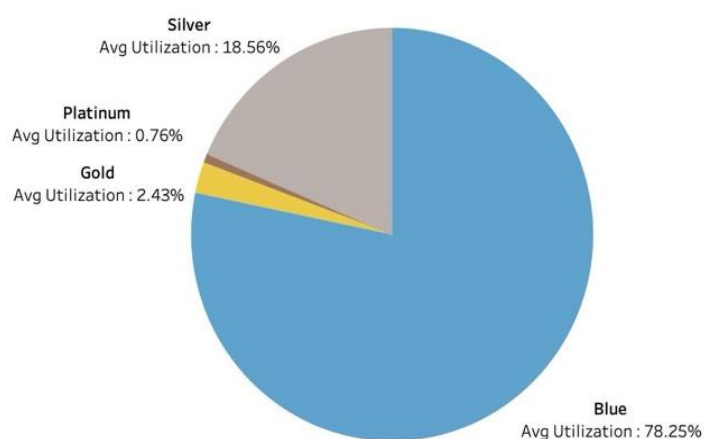


Fig. 3 Utilization Landscape: Average Rates Across Card Types

This chart displays the average utilization rate across card types. It shows that blue cards have the highest average utilization rate at 78.25%, followed by Platinum at 0.76%, Gold at 2.43%, and Silver at 18.56%. This suggests that blue cardholders tend to use a larger portion of their available credit limit compared to other card types.

Interesting, Blue cards, having the highest average utilization rate. This could imply that blue cardholders make smaller but multiple transactions, however blue card has lower credit limits. Overall, the chart highlights the varied spending habits among different card types, with blue cards

indicating a preference for maxing out credit, while Platinum can be used suggests a more strategic use for larger purchases as it has a larger credit limit.

Consistently across both years, Q2(2018) seems to draw the least customer engagement, while Q4(2018) kicks off with enthusiasm but gradually loses momentum in 2019. This suggests a potential opportunity to reassess marketing strategies for Q2 and delve into the reasons behind the initial enthusiasm in Q3 and its subsequent decline in 2019.

| Attrition Flag | |
|-------------------|--------|
| Existing Customer | 17,499 |
| Attrited Customer | 2,572 |

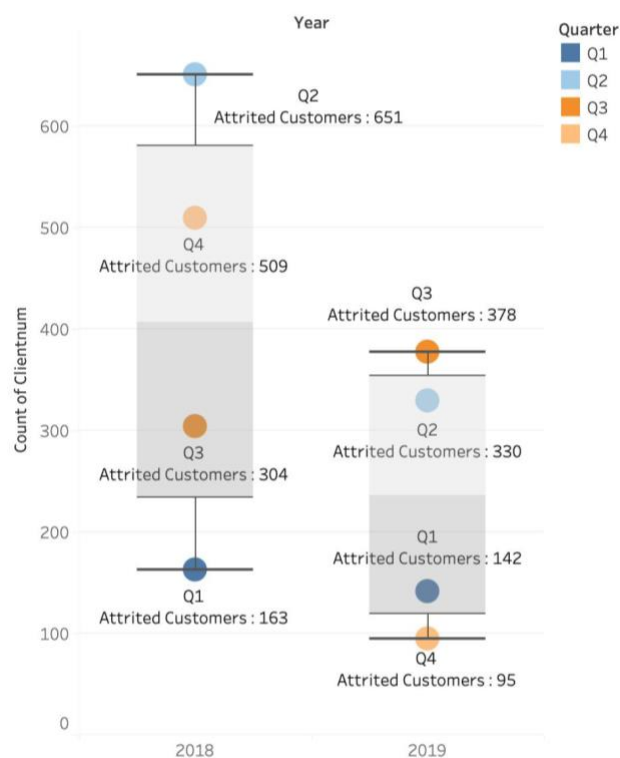


Fig. 4 Attrition Trends: Quarterly & Yearly

Overall, the chart paints a worrying picture of declining customer attraction, urging immediate investigation into the cause and implementation of targeted strategies to reverse this trend.

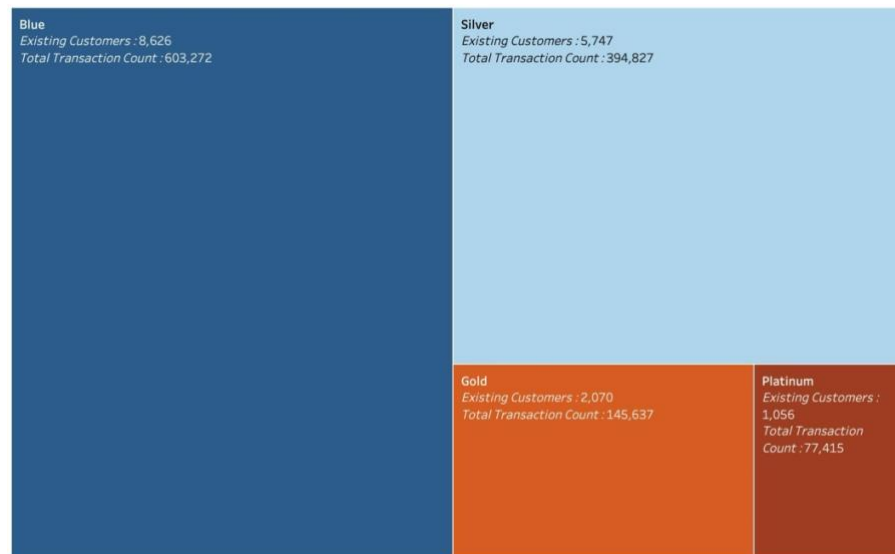


Fig. 5 Card Realm: Distribution of Existing Patrons

This chart (figure 5) reveals a tale of two spending styles: blue cards rule the chart kingdom with a massive existing customer count of more than 8k with the highest transaction count, however, Platinum has the lowest existing customers although it has the highest credit limit as per the dataset. It's clear: Blue caters to the everyday spenders, while Platinum targets the high rollers who make fewer but pricier splashes. Understanding this spending spectrum is key to tailoring strategies that resonate with each segment, from tempting blue cardholders with bigger-ticket incentives to wooing Platinum customers with exclusive high-value experiences.

Suggestions:

Customer Retention Strategies: Use data to target specific product features, better service, or customized rewards to address churn triggers and personalize offers.

Seasonal Promotions: Target vulnerable times and increase consumer engagement by customizing seasonal offers based on quarterly attrition rates. As Blue cards are already established, its time to launch offers and discount for the rest of the card category to increase utilization ratio in general.

Educational Campaigns: To promote financial literacy and brand loyalty, segment clients based on their degree of education and create educational campaigns based on their transaction behavior.

We have substantial development potential that we can realize by putting these data-driven suggestions into practice. By optimizing credit products, launching well-informed marketing strategies, and retaining key consumers, we can move the credit card sector towards sustainable prosperity in the future.

Conclusion:

This policy brief depicts the credit card user landscape in graphic detail, showing both opportunities and concerns. We can foster a loyal client base, optimize credit options, and craft compelling marketing campaigns by adopting data-driven insights and executing the recommended techniques, assuring a flourishing future for the credit card business.