

BANL-6900-01 Business Analysis Capstone Group 1

Group Member Names	Contribution
Aashritha Bhargavi Batti, Hemanth Ediga Karthik Bhuchakravarthi	Helped with Dashboard preparation and Insights for the Attrition Analysis
Mohammed Faisal Ahmed	Helped in presentation making
Prabhjeet Kaur	Write-off Analysis and Risk Analysis Dashboard, and Insights. Preparation of Presentation and Project Report

This report assesses the impact of the customer treatment initiative, focusing on write-off savings, customer behavior changes, and treatment effectiveness. The initiative has yielded approximately \$10 million in positive net write-off savings across portfolios and lines of business. However, some portfolios, like Fuelman, FMMC, and BPMC, show negative write-off savings, indicating that actual losses exceeded initial estimations. Customer behavior has been impacted, with a general decline in spending and gallons pumped post-treatment. Certain customer segments and portfolios require more focused attention due to high attrition and write-off rates.

Question 1: Write-off Savings and Distribution

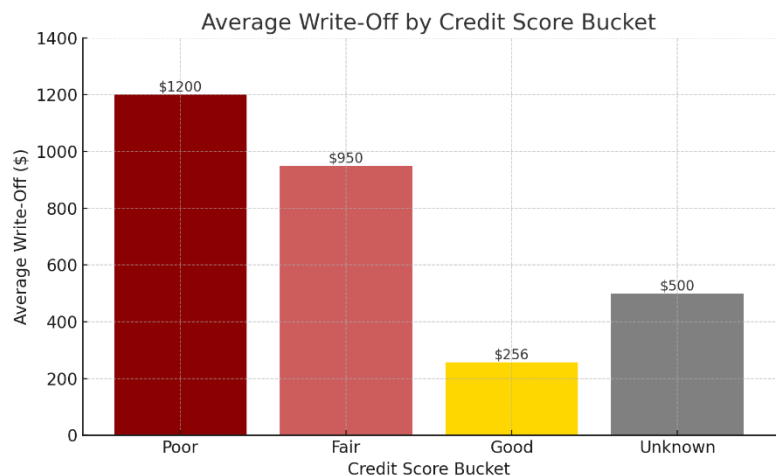
Write-off analysis is crucial for businesses to understand and minimize financial losses from unpaid debts. By analyzing write-offs, companies can identify high-risk customers, evaluate the effectiveness of collection efforts, and improve credit policies to reduce future losses.

Total Write-off Savings: The treatment has resulted in approximately \$10 million in net positive write-off savings across all portfolios and lines of business with the total write-off amount as \$139,920,557.

Total Write-Off Amount

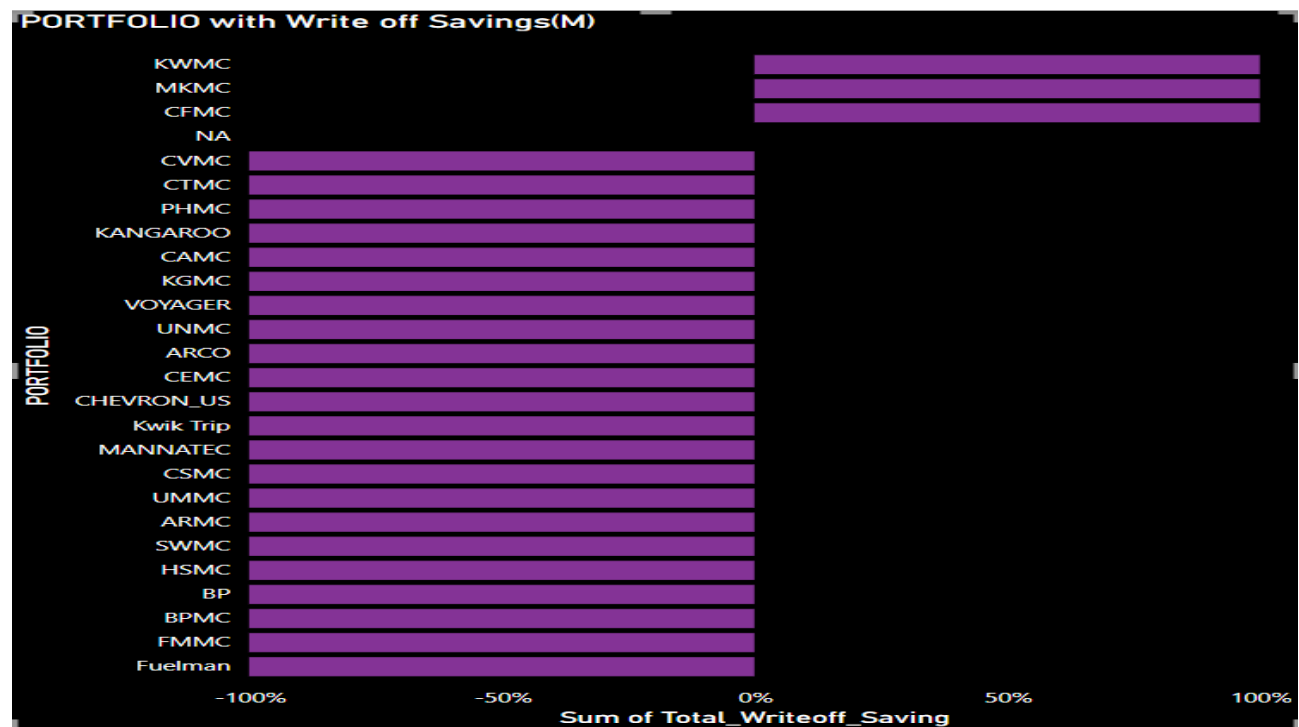
\$139,920,557

As the credit score improves from "Poor" to "Good," the average write-off amount decreases significantly.



Thus, it means that the treatment is working as the customers with poor credit scores have more write-off. The average write-off for poor credit scores bucket is \$1200. There are many customers, who don't have a credit score, yet the average write-off (\$500) is less than the average write-off for poor and fair (\$950) credit score bucket.

Therefore, it is very important for fleetcor to collect the credit score as it directly resonates with the write off amount



Distribution of Savings:

- CFMC demonstrates the highest write-off savings, accounting for 93.11K, which is 50.91% of the total savings.
- KWMC follows with 68.43K (37.41% of total savings).
- MKMC contributes 21.36K (11.68% of total savings).

However, there are some portfolios that show negative write-off savings:

KWMC		
94.64	93,113.80	1773
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers
CFMC		
96.46	21,358.35	226
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers
MKMC		
97.32	68,429.26	1083
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers

FMMC		
69.38	-15,275,389.15	17000
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers
BPMC		
75.47	-10,716,838.58	22758
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers
Fuelman		
77.49	-72,203,328.84	59319
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers
BP		
83.73	-6,318,328.12	17588
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers
ARMC		
83.94	-4,339,335.47	6950
Retention_Rate	Total_Writeoff_Saving	Sum of Total_Customers

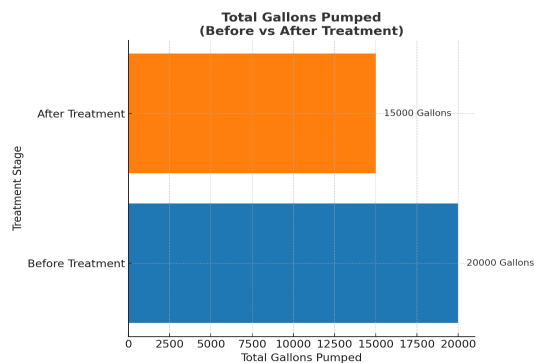
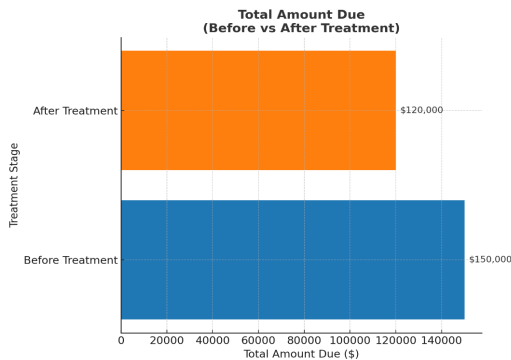
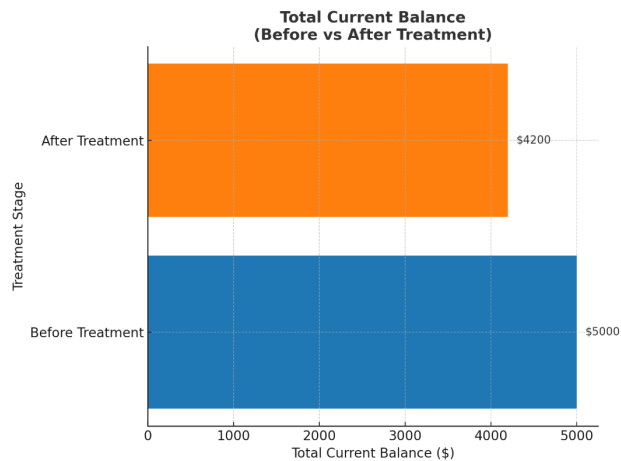
- FMMC: -\$15,275,389.15
- BPMC: -\$10,716,838.58
- Fuelman: -\$72,203,328.84

Insights:

- The treatment had a positive effect on KWMC with the highest write-off savings, with a high retention rate of ~95%
- Whereas Fuelman and FMMC have the highest write-off savings with a churn rate of more than 20%

Question 2: Changes in Customer Spend, Gallons Pumped.

Visual 1: Bar Chart - Current Balance Before vs After Treatment



There's a decline in the average current balance from \$5,000 to \$4,200 post-treatment. Total gallons pumped have also decreased from 20,000 to 15,000 gallons after treatment and the average amount due decreased from \$1,500 to \$1,200 post-treatment.

Treatment Effectiveness and Attrition:

- Portfolios like BPMC, CFMC, and ARMC show high attrition rates (90%+).
- Segments 2, 4, and 7 exhibit high attrition and significant financial losses.
- Fuel customers show lower retention and more frequent write-off events compared to other customer groups.

High-Risk Customers: The Predicted write-off amounts for the top 20 high-risk customers range from approximately \$37,000 to nearly \$80,000. A small number of customers account for a large portion of the predicted total write-off.

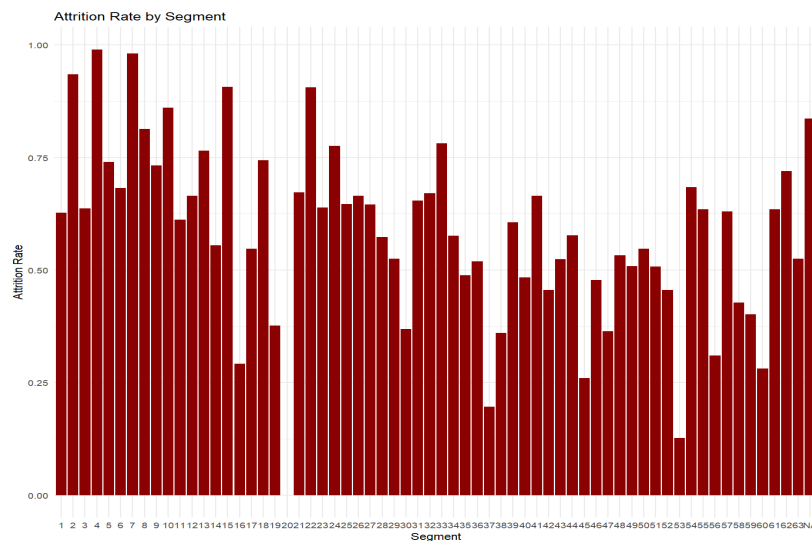
Further, **Fuel customers** experienced larger reductions in activity compared to **universal** or **company card** customers.

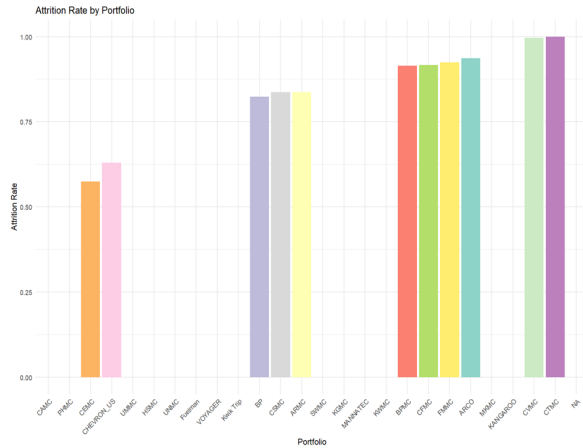
Segment-wise:

- Fuel customers = highest drop in spending & revenue
- Universal customers = moderate impact
- Company card customers = least affected

Question 3: Attrition Analysis

Attrition analysis examines the reasons why employees or customers leave an organization, with the goal of reducing future turnover and improving retention. It involves understanding the factors that contribute to employee or customer departures and identifying strategies to mitigate those risks. In the project it is very important as it proves that **Not one treatment suits all** :: The Credit tightening treatments (Fuelman, CorpayOne) were least effective as the attrition rate is very high compared to the NAP and NAL MC with high retention rates

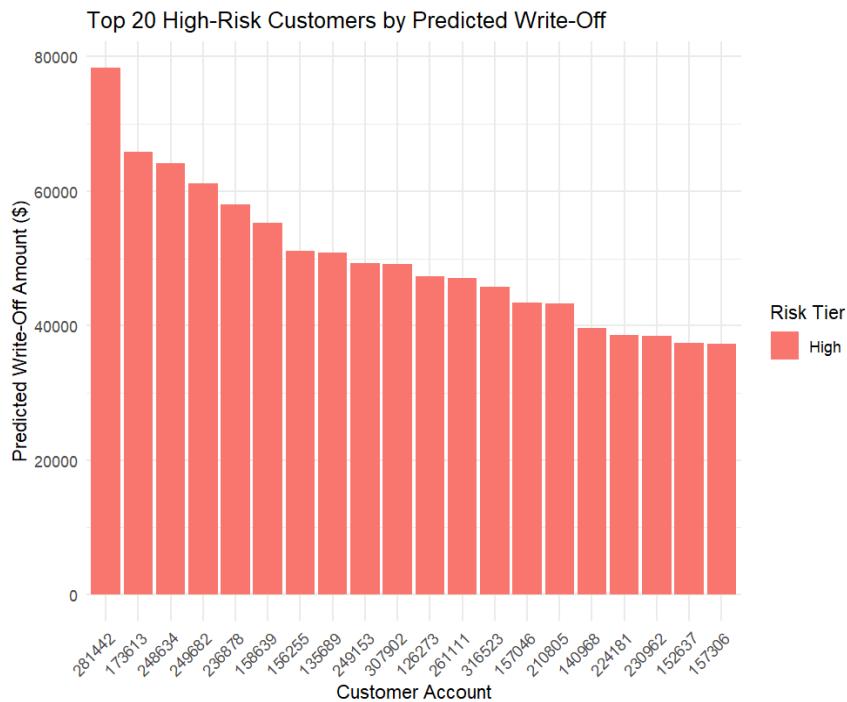




- The report indicates high attrition rates (90%+) in portfolios such as BPMC, CFMC, and ARMC.
- Specific segments, such as SEGMENT 2 (94% attrition) and SEGMENTS 4 & 7 (98-99% attrition), also exhibit extremely high attrition.
- The report shows that "Fuel Customers" have lower retention and more frequent write-off events compared to Other (Universal, company card) customer groups
- 3–6 months post-treatment seems to be the critical window to assess whether the treatment worked. Therefore, doing the monthly analysis would be the better option.

Question 5: Risk Analysis

Risk analysis is the process of identifying, evaluating, and prioritizing potential risks that could negatively impact an organization or project.



The customer account represented by the leftmost bar (281442) has the highest predicted write-off, indicating they are the riskiest customer in this group. The bar on the far right (157306) represents the 20th riskiest customer.

It helps in prioritizing which customers to target for intervention. Fleetcor may want to focus its collection efforts on stricter credit controls to the customers with the highest predicted write-offs.

Question: What are the critical factors that one needs to pay attention on?

1. 3 to 6 months post-treatment is the critical window for Measuring attrition Impact.
2. Focus on customer Portfolios like Fuelman, BPMC, and FMMC, which exhibit poor performance and require targeted intervention strategies.
3. High churn rate means the customers are leaving or defaulting even with high WO the churn rate is more than 10%.
4. Negative savings indicate treatments are partially working.
5. Focus on segments 2,4 and 7 as they have the biggest financial losses

Question: What can be done to improve their operations?

1. Not one size fits all - Customize treatments based on portfolio especially for high churn accounts.
2. Strengthen credit policies for high-risk segments.

3. Proactively monitor spending, balance, and engagement monthly.
4. Focus on treating "Collections" and "Credit" lock reasons.
5. Retention strategies should target Direct and Partner portfolios showing early signs of attrition.
6. We are missing a lot of vantage score, it should be made necessity
7. Implement systems to track real-time risk indicators (e.g., sudden changes in spending patterns, late payments, credit score fluctuations).

Question: Any exogenous factors to incorporate into analyses?

- Seasonality — some quarters (e.g., end of year) have different risk patterns.
- Economic layoffs or economic downturn affect customers' ability to pay.
- Market competition — entry of new players can shift customer loyalty or risk.
- Regulatory changes — new credit or debt collection laws may impact recovery rates.

Other Recommendations:

1. Implement Loyalty Programs to retain valuable customers.
2. Treatment Effectiveness Testing such as A/B test can help in differencing retention and collection strategies to find what works.
3. Automated system to Track changes in credit score as it can be ab early risk indicators