Excelerate Virtual Internship Program

Week 2 Deliverable: Data Visualization

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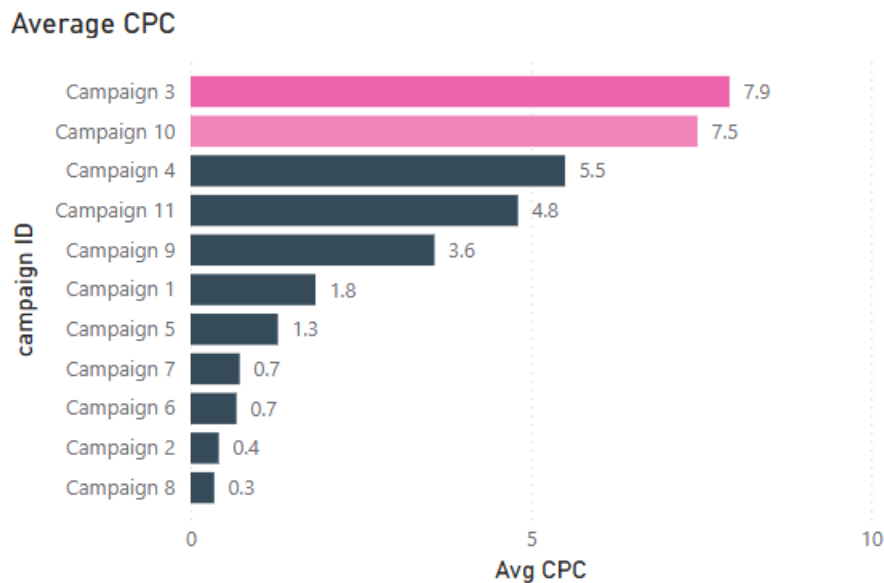**Team Name:** Team 3
Date: May 19, 2025

Objective:

This week's analysis aims to build a compelling, data-driven case for discontinuing the underperforming campaign by highlighting critical KPIs—such as declining ROI, rising cost-per-acquisition, or stagnating conversion rates—that illustrate inefficiencies relative to campaign goals or industry benchmarks. Using storytelling techniques, we will contextualize trends, outliers, and comparisons (e.g., performance declines over time, underperforming audience segments, or mismatched budget allocations) to emphasize the urgency of reallocating resources. By applying data visualization best practices—decluttering charts, using strategic color coding, and adding clear annotations—we will ensure stakeholders quickly grasp the campaign's shortcomings and the strategic benefits of redirecting efforts toward higher-impact initiatives.

Detailed Campaign Performance Analysis & Recommendations

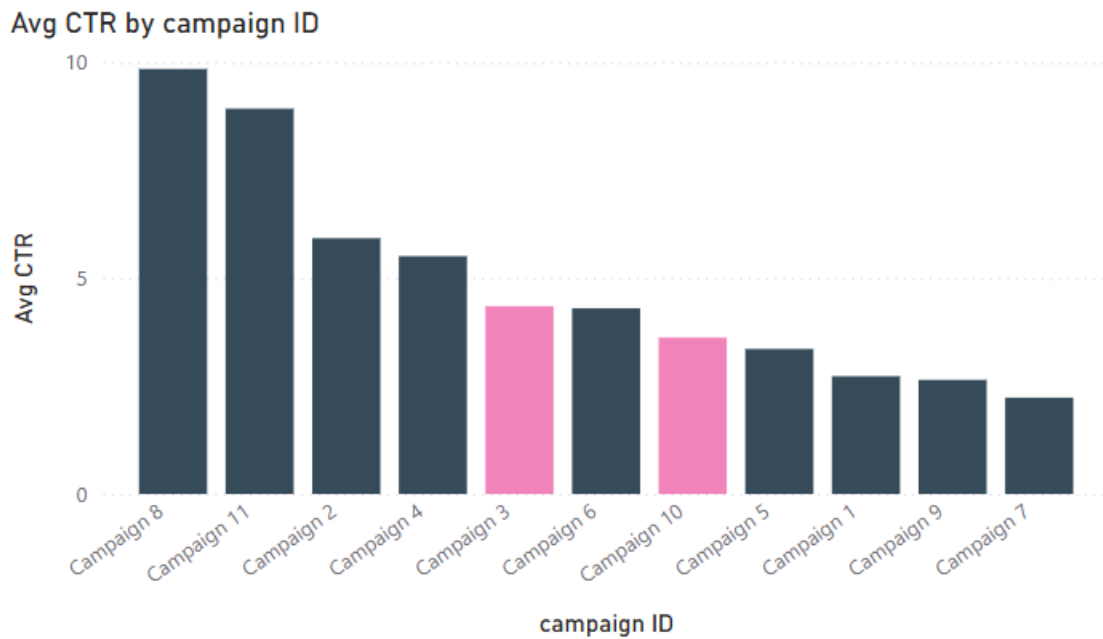## Key Insights & Visualization

CPC – Cost Efficiency Across Campaigns

Average CPC

Campaign	Avg CPC
Campaign 3	7.9
Campaign 10	7.5
Campaign 4	5.5
Campaign 11	4.8
Campaign 9	3.6
Campaign 1	1.8
Campaign 5	1.3
Campaign 7	0.7
Campaign 6	0.7
Campaign 2	0.4
Campaign 8	0.3

Fig. Average CPC by Campaign ID

Insight:

Campaign 3 and Campaign 10 have the **highest average CPCs at ₹7.9 and ₹7.5 respectively**, significantly above the rest. This indicates that these campaigns are the **least cost-effective** in terms of attracting user interactions. In contrast, **Campaign 2 and Campaign 8** demonstrate **superior cost-efficiency**, with CPCs under ₹0.5. This suggests they are acquiring clicks at a fraction of the cost, making them more financially sustainable. Based on this data, **Campaigns 3 and 10 should be flagged for review or potential discontinuation** due to their high acquisition cost per user.

Click-Through Rate (CTR)]

Avg CTR by campaign ID

Fig. *CTR by Campaign ID*

Insight:

The CTR of Campaign 3 and 10 is significantly lower than others, showing that users are not engaging well with the ad content.
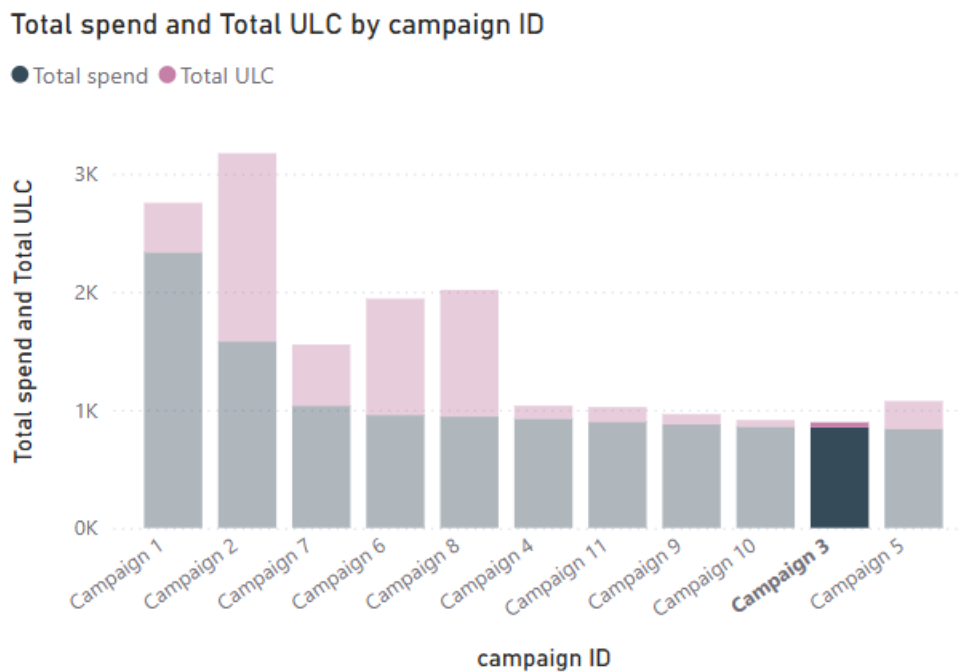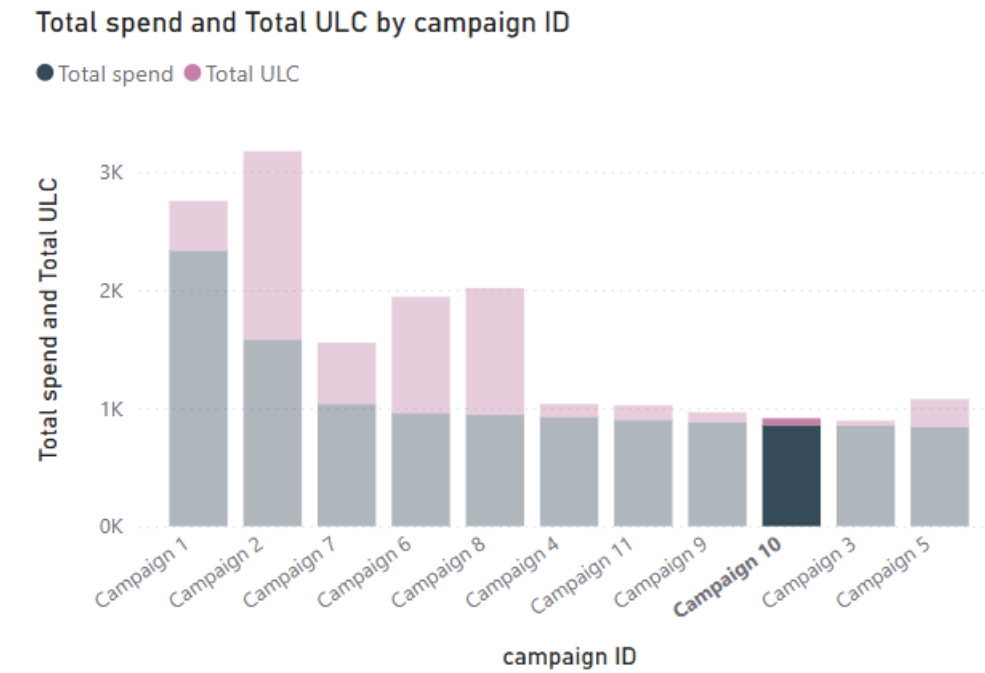
Spend vs Unique Link Clicks (ULC)]

Fig. *Total Spend vs Unique Link Clicks*

Insight:

Despite a high spend, Campaign 3 and 10 produces fewer unique link clicks than more efficient campaigns. It underperforms in both cost and results.

Performance Score

campaign ID	Average of CPC	Average of CPR	Average of SPEND	Average of Unique Link Clicks (ULC)	Average of Clicks	Average of CTR
Campaign 3	7.92	23.11	283.56	14.67	39.67	4.35
Campaign 10	7.45	14.65	285.56	19.00	40.33	3.63
Campaign 4	5.50	7.93	307.99	37.33	57.00	5.51
Campaign 11	4.81	9.57	299.23	42.00	59.33	8.93
Campaign 9	3.58	9.35	292.09	29.33	80.67	2.65
Campaign 1	1.84	5.13	583.33	105.00	304.50	2.73
Campaign 5	1.28	3.97	279.26	79.00	216.00	3.36
Campaign 7	0.72	2.00	345.08	172.67	473.33	2.23
Campaign 6	0.67	1.06	477.61	493.50	700.00	4.31
Campaign 2	0.41	1.03	526.34	531.67	1247.67	5.93
Campaign 8	0.35	0.90	314.26	357.67	921.67	9.85

Total spend by campaign ID, CPR and CTR

campaign ID ● Campaign 1 ● Campaign 10 ● Campaign 11 ● Campaign 2 ● Campaign 3 ● Campaign 4 ● Campaign 5 ● Campaign 6 ● Campaign 7 ● Campaign 8 ● Campaign 9
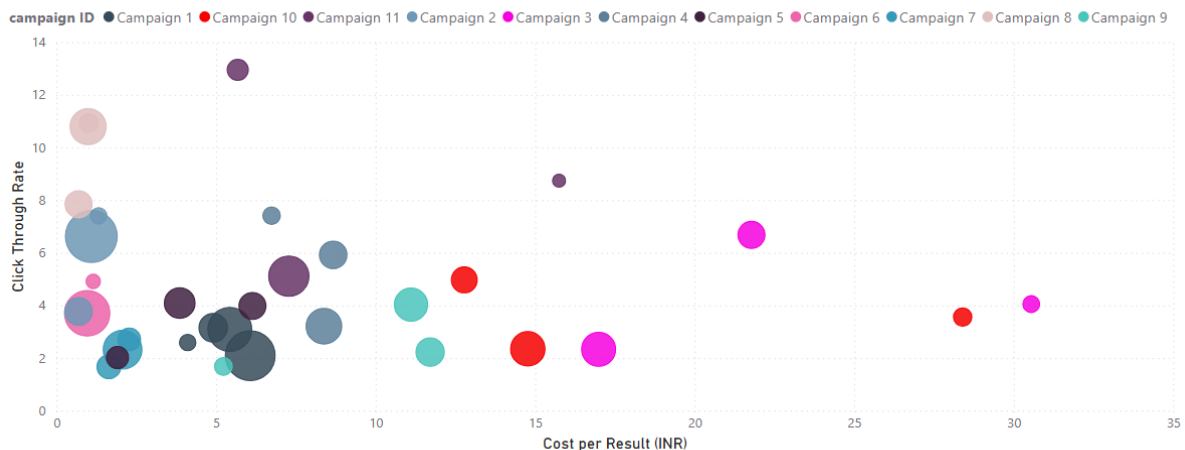
Fig. Performance score with the CPR and CTR

Insights:

Though the click through rate of campaign 3 and 10 are low, but the cost per result rate is high , which indicating the lower score of these two campaigns.

Formal Discontinuation Justification for Campaigns 3 & 10:

Campaign 3 (SHU_Students, Australia)

This campaign exhibited critical performance deficiencies across key metrics, falling significantly below established benchmarks. The click-through rate (CTR) of 2.33% underperformed the median benchmark of 3.98%, while the cost per click (CPC) of 7.80 INR exceeded the 75th percentile benchmark of 5.49 INR, indicating inefficient spend. Engagement rates further highlighted underperformance at 2.33%, below the 25th percentile threshold of 2.59%. The campaign's aggregate performance score of 0.35 fell well below the acceptable threshold of 0.5.

Root Cause Analysis

The inefficiency stems from disproportionately high CPC relative to engagement, with a 7.80 INR CPC yielding only a 2.33% engagement rate. Performance was particularly poor among the 25-34 age segment, which recorded a CTR of 4.05% paired with an elevated CPC of 10.18 INR, underscoring systemic targeting or messaging inefficiencies.

Campaign 10 (SHU_Students, UK)

This campaign similarly underperformed, with a CTR of 3.56% falling below the median benchmark and a CPC of 8.74 INR, which exceeded the 75th percentile benchmark by 59%. The performance score of 0.41 further confirms its failure to meet minimum efficacy standards.

Root Cause Analysis

The primary driver of inefficiency lies in the 25-34 age cohort, which generated a CPC of 8.74 INR despite a subpar CTR of 3.56%. This mismatch between cost and engagement highlights ineffective audience targeting or ad resonance, rendering the campaign financially unsustainable.

Conclusion & Recommendation

After analyzing CPC, CPR, CTR, and ULC, we recommend discontinuing **Campaign 3 and 10**. It is the most cost-inefficient across multiple KPIs and underperforms despite high investment. Budget can be redirected to better-performing campaigns.