Data Visualization Early Internship

Week 2

0707 DVT | TEAM 2

Improvements

To better convey the story behind our marketing data, we've enhanced our visualizations. The key improvements focus on adding emphasis to important data points, using annotations for clarity, and labeling charts directly for immediate understanding.

- **Cost Per Click (CPC) by Campaign**

- **Average Click-Through-Rate (CTR) by Audience & Age**

- **Sum of Clicks by Audience & Age**

Adding Emphasis to the chart

In the "Cost Per Click (CPC) by Campaign" chart, we've used color as a pre-attentive attribute to make the most and least effective campaigns stand out. By coloring the highest-cost campaign red and the lowest-cost campaign green, we provide an instant visual cue. This allows stakeholders to bypass the cognitive effort of reading and comparing every data point and immediately grasp which campaigns are performing well and which are draining resources.

Cost Per Click (CPC) by Campaign

We've highlighted the most and least effective campaigns by using color. The campaign with the highest CPC (Campaign 3) is colored red to immediately draw attention to its inefficiency, while the most effective campaign with the lowest CPC (Campaign 8) is colored green. This allows stakeholders to quickly identify which campaigns are draining resources and which are performing well.
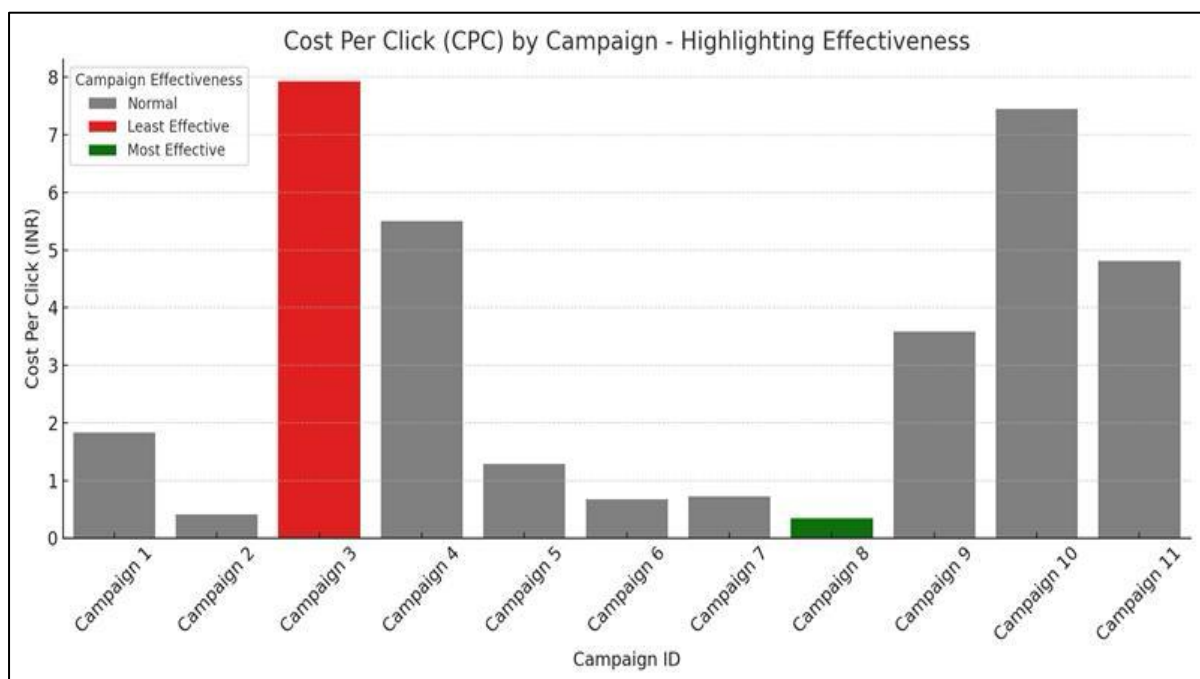
Adding Annotations to the charts

For the "Average Click-Through-Rate (CTR)" and "Sum of Clicks" charts, we've added annotations to explicitly call out the highest and lowest data points. These annotations act as a narrative guide, pointing directly to the most significant findings—such as which age group is most engaged or which audience generates the most clicks. This ensures that the primary takeaways are not missed and helps in focusing the conversation on what truly matters.

Average Click-Through-Rate (CTR) by Audience & Age

To make this chart more insightful, we've added annotations to pinpoint the highest and lowest CTRs. The highest CTR, achieved by the 18-24 age group, and the lowest CTR, from the 25-34 age group, are now explicitly called out. This helps in understanding audience engagement at a glance.
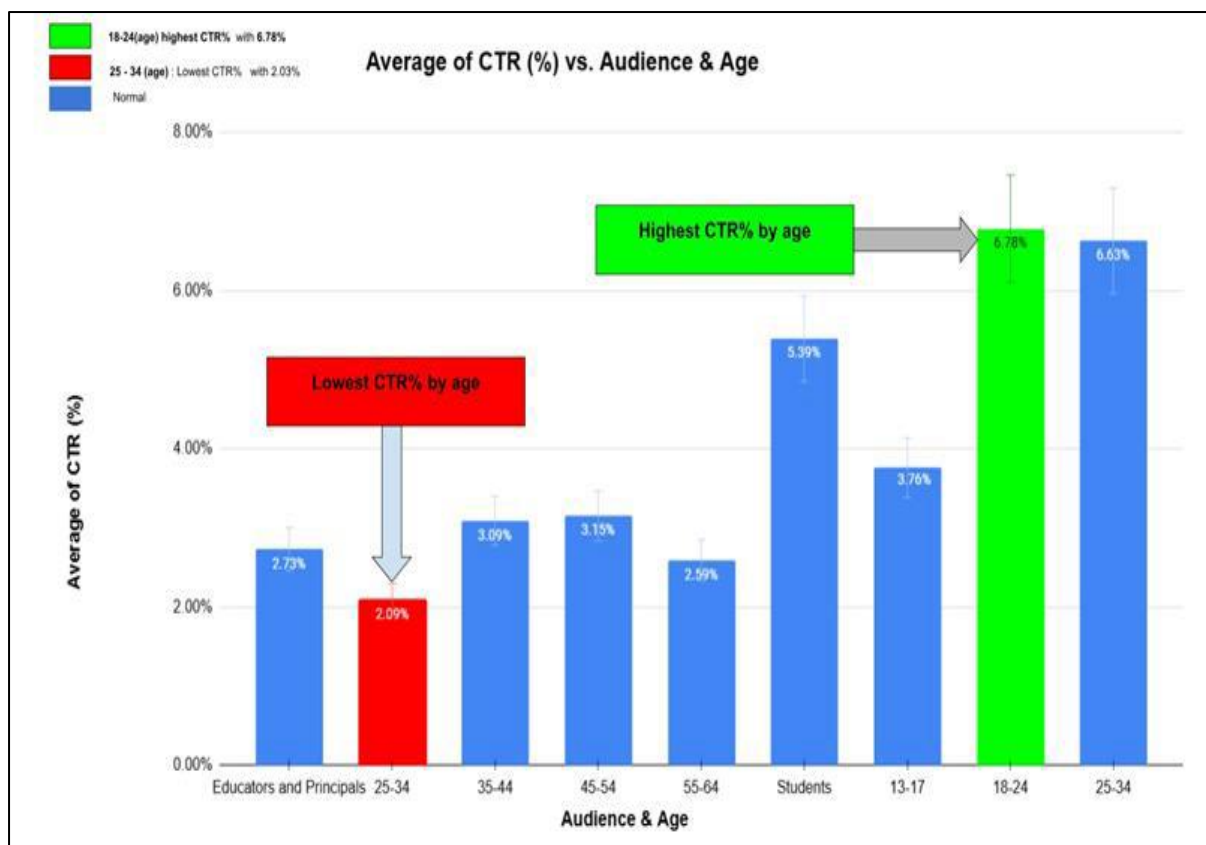
Sum of Clicks by Audience & Age
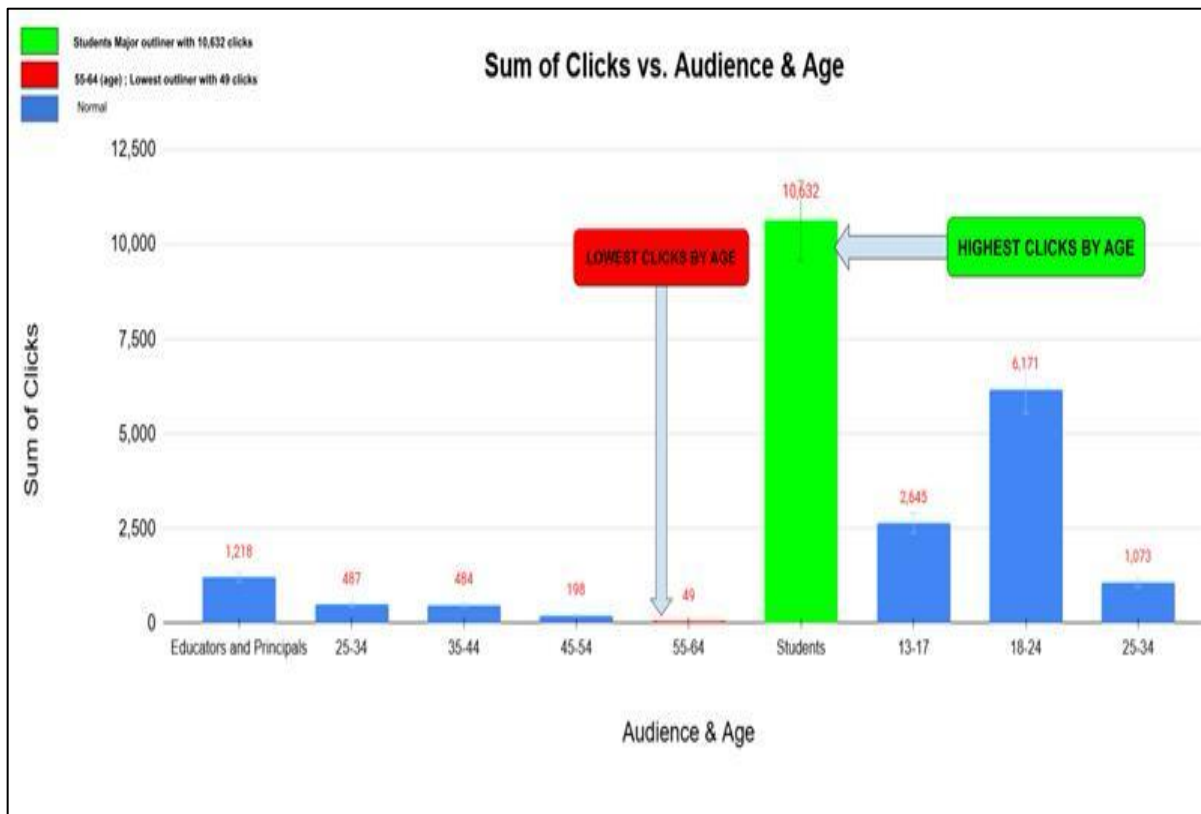
Labelling Charts Directly

We have improved clarity by labeling data series directly on the charts, as seen in our analyses of "Reach vs Impressions" and "CTR by Region." This practice eliminates the need for a separate legend, which requires the viewer to mentally map colors or patterns back and forth between the legend and the data. By placing labels next to the data they describe, we make the charts easier and faster to interpret.

Reach vs Impressions across Campaigns
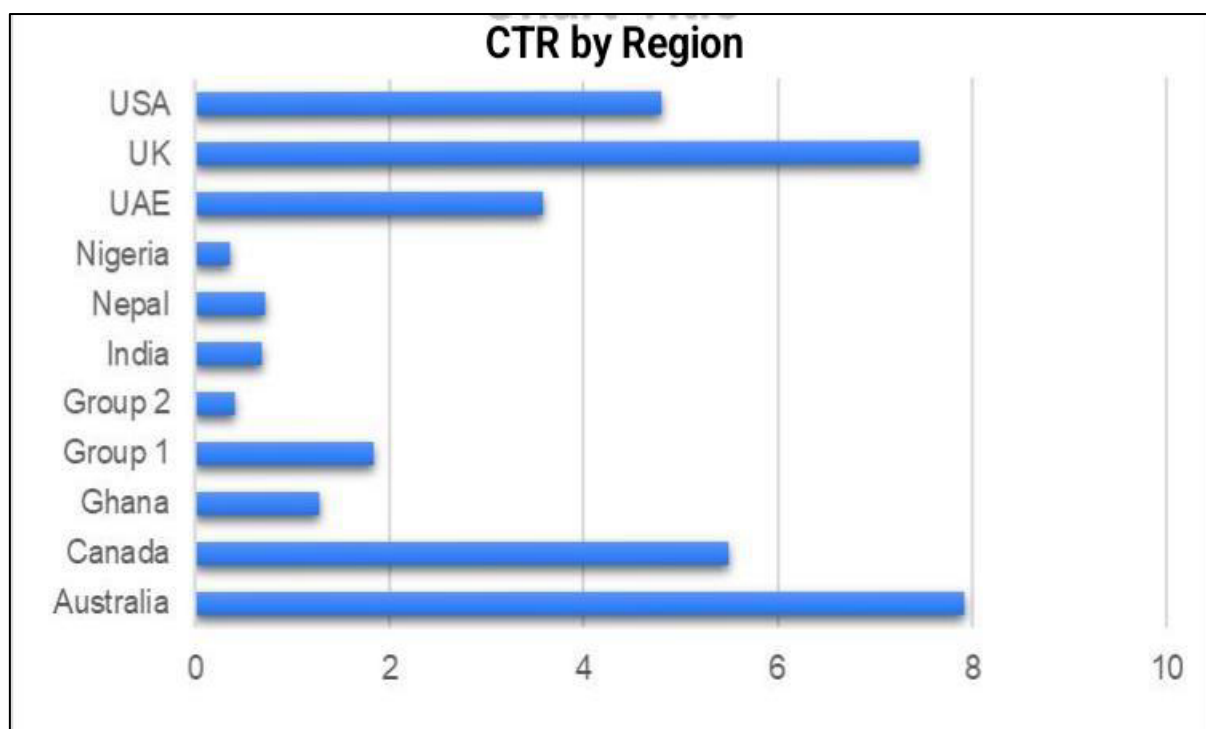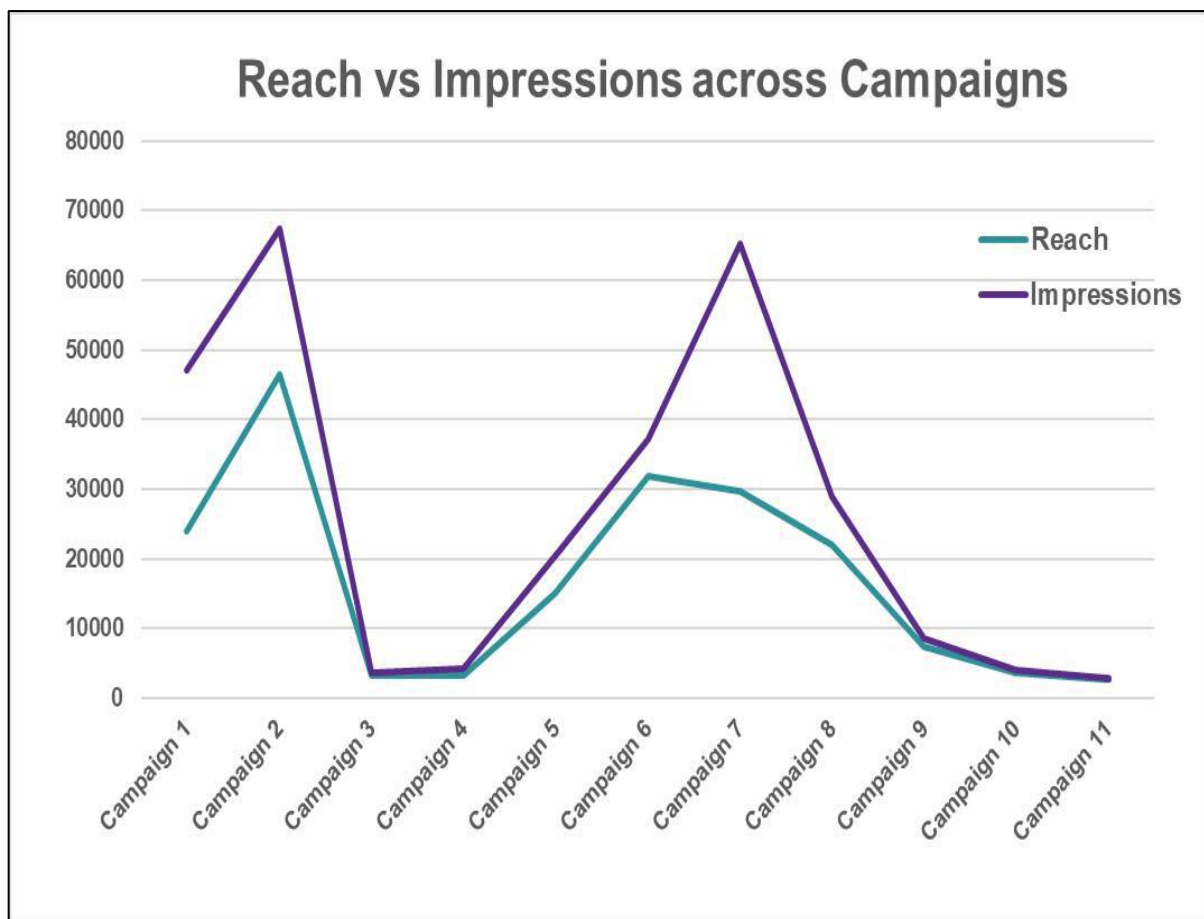
Discontinuation of Campaign 3:

A thorough analysis of the campaign data reveals a clear and urgent need to discontinue **Campaign 3**. The reasons for this recommendation are compelling and point to a significant drain on our marketing resources with minimal return.

The primary issue is its exceptionally high **Cost Per Click (CPC) of ₹7.92**. This figure is not just the highest among all campaigns; it is a significant outlier, representing a severe inefficiency in converting ad spend into user engagement. When compared to our most effective campaign (Campaign 8, with a CPC of ₹0.35), Campaign 3 is over 22 times more expensive for each click.

Furthermore, this high cost is coupled with an extremely low number of clicks—only **119 in total**. This demonstrates that the campaign is failing to resonate with its target audience. The combination of high cost and low engagement results in a critically poor return on investment. Continuing to fund Campaign 3 would be an inefficient use of our marketing budget. By discontinuing it, we can immediately free up these funds and reallocate them to more effective initiatives that have a proven track record of driving results.