

Analyse marketing data from multiple platform (Google, Facebook)

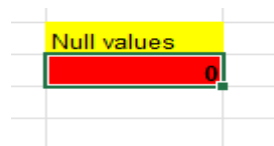
The objective is to analyse marketing data from multiple channels, derive meaningful insights, and provide actionable recommendations. I have worked with sample data from Google Ads and Facebook Ads, focusing on identifying opportunities for scaling, solving issues, and rationalising strategies based on industry benchmarks and business constraints.

1. Data Cleaning & Preparation:

First, I have checked that if null values were present or not.

To check the null values for Google sheet, I have used below formula-

```
=COUNTBLANK(A2:O181)
```

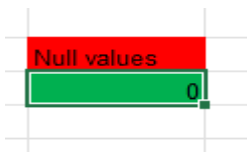


A screenshot of a Google Sheet. The cell A2 contains the text 'Null values' in a yellow background. The cell B2 contains the number '0' in a red background, indicating the result of the COUNTBLANK formula.

In Google sheet, there were no null value.

After I have checked the null values in Facebook sheet

```
=COUNTBLANK(A2:O271)
```



A screenshot of a Facebook sheet. The cell A2 contains the text 'Null values' in a red background. The cell B2 contains the number '0' in a green background, indicating the result of the COUNTBLANK formula.

In Facebook sheet, there were no null value.

Merge

After checking null values, I have merged two sheets Google and Facebook into one sheet and aligning the date ranges across all campaigns and ad sets for better analysis.

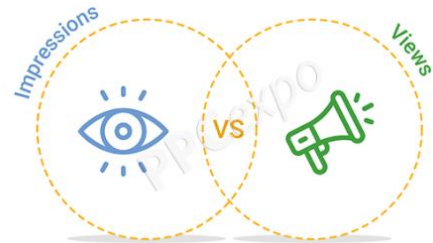
To merge the sheets, I have followed the below steps-

1. Open dataset in power query. (Data tab-> Get Data -> From File -> From Excel Workbook)
2. Then select data set and select Transform data.
3. To manage the same column name for the merged data I have used **table.promoteheaders** function.
4. Then select Close and Load to load the merged dataset.

2. Descriptive Analysis:

Analyse Impressions

An impression (also known as a view-through) is when a user sees an advertisement. In practice, an impression occurs any time a user opens an app or website, and an advertisement is visible.

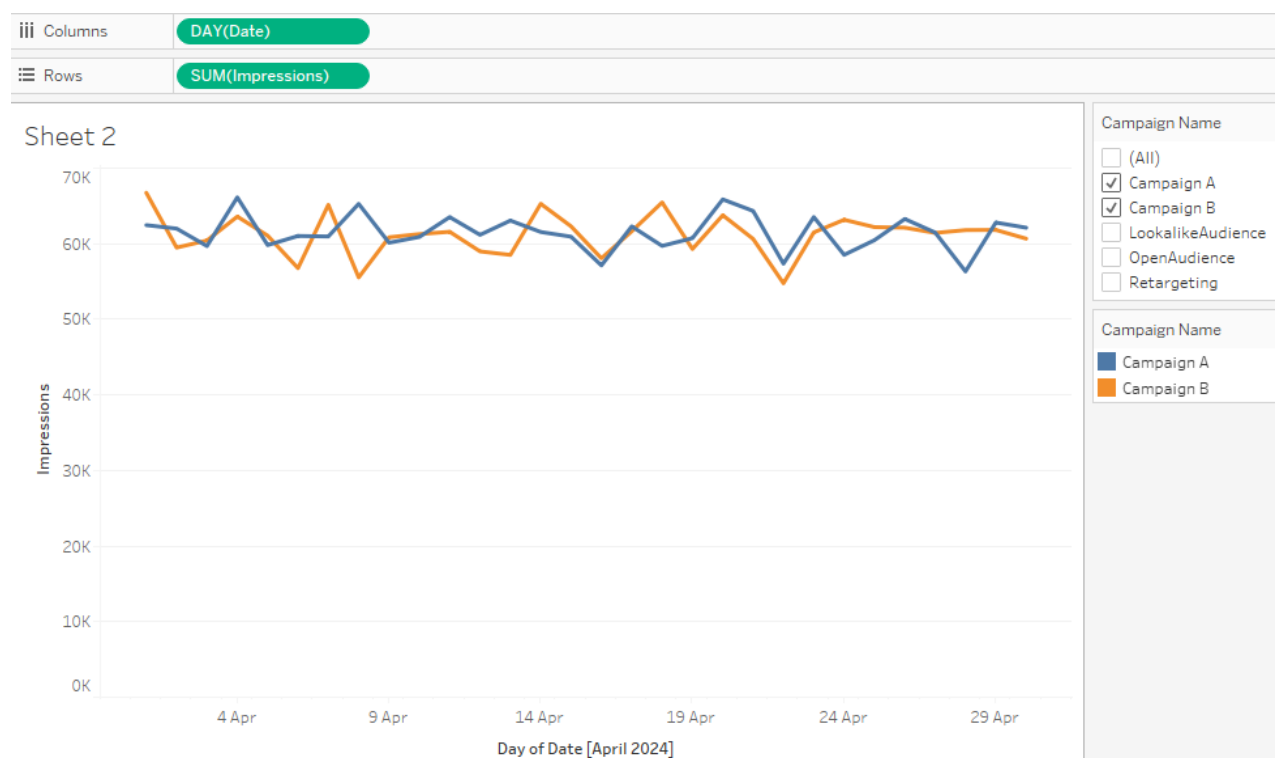


Impressions are important because they provide a simple representation of how many people are seeing ads within a particular channel. Calculating the number of impressions a campaign generates is also one of the simplest ways to ascertain how far an advertising channel really reaches.

Analyse

TOTAL IMPRESSION	
Row Labels	Sum of Impressions
Facebook Raw	4330551
Google Raw	3680665
Grand Total	8011216

Campaign A vs campaign B



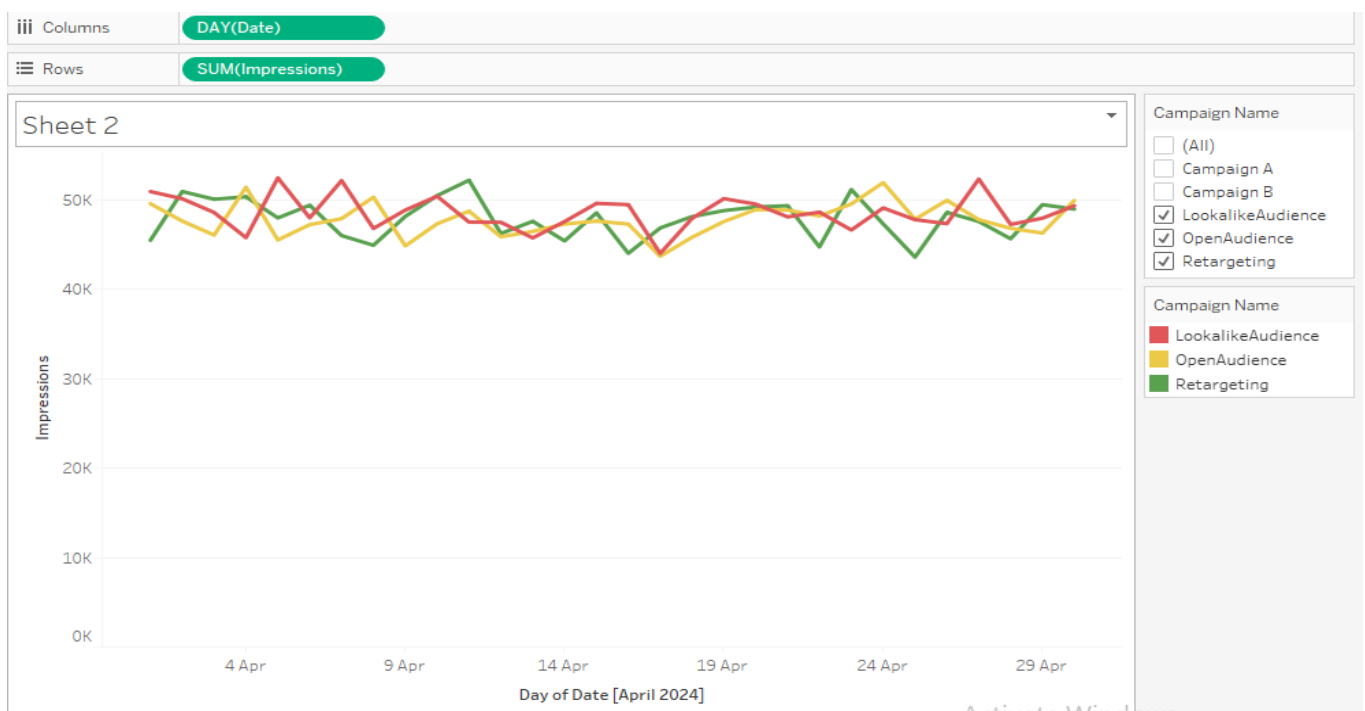
Above line graph indicates the change of impressions with day wise.

- Campaign A (sum of Ad set 1, Ad set 2 , Ad set 3) starts with approximately 70,000 impressions. It experiences fluctuations throughout the month but maintains a relatively consistent level. Notable peaks occur around April 4th and April 19th. Otherwise, overall Campaign A maintains a steady performance in terms of impressions.
- Campaign B (sum of Ad set 1, Ad set 2, Ad set 3) begins with around 60,000 impressions. Like Campaign A, it also shows fluctuations but follows a similar pattern. Peaks are occurred around the same dates (April 4th and April 19th). The overall trend for Campaign B remains steady.

Both campaigns have similar performance trends. It suggests that they are targeting similar audiences or using comparable ad strategies.

The slight difference in impressions could be due to variations in ad content, timing, or audience segments.

Retargeting vs OpenAudience vs LookalikeAudience



- The Retargeting campaign consistently maintains a high number of impressions throughout April 2024.

- It starts around 40K impressions and gradually increases to approximately 50K impressions by the end of the month.
- This campaign appears to be effective in reaching the target audience.
- The OpenAudience campaign shows more variability in impressions.
- It starts around 20K impressions, dips to around 10K, and then recovers to approximately 30K impressions.
- The effectiveness of this campaign seems to fluctuate.
- The LookalikeAudience campaign starts around 30K impressions and remains relatively stable.
- It maintains consistent performance throughout the month, hovering around 30K impressions. This campaign provides a steady audience reach.

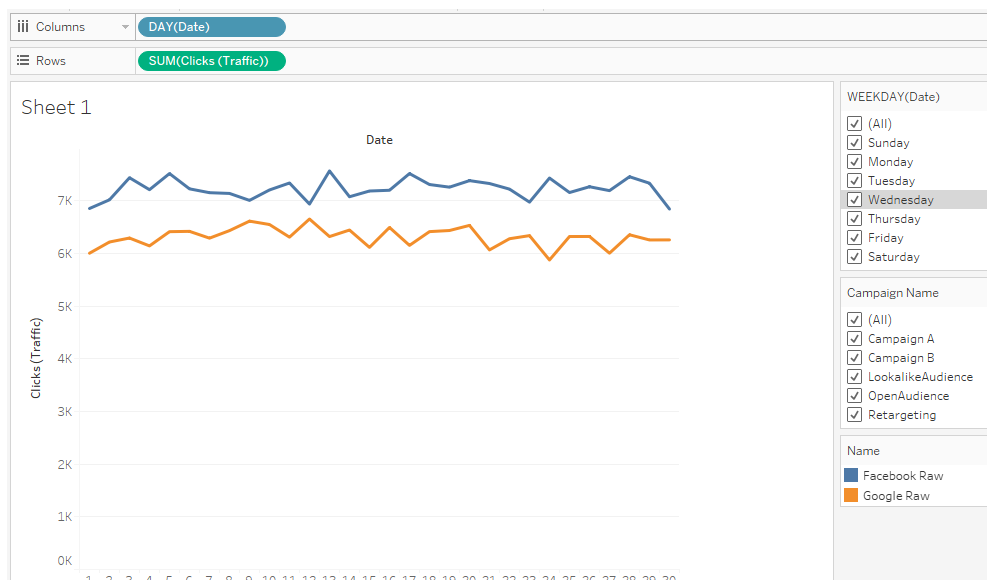
The Retargeting campaign consistently performs well, while OpenAudience and LookalikeAudience campaigns have more variability. Further analysis could explore factors contributing to these differences and inform optimization strategies.

To analyse the impression, Campaign A and B would be the top choices.

Analyse Clicks (Traffic)

Traffic refers to the total number of people who visit a website or online platform, while clicks refer to the number of times those visitors interact with a specific element on the website.

TOTAL CLICKS	
Row Labels	Sum of Clicks (Traffic)
Facebook Raw	216726
Google Raw	189316
Grand Total	406042



The graph shows the number of clicks for Facebook campaigns and Google campaigns over a month. The vertical axis represents the clicks , ranging from approximately 0 to 7K. The horizontal axis represents the date, spanning from 1 to 31 (indicating days of the month).

Campaign Performance:

There are two lines on the graph, one in blue and the other in orange. Blue denotes Facebook campaign and orange denotes Google campaign.

Observations:

- Both lines exhibit fluctuations throughout the month.
- The blue line appears to have higher peaks, suggesting better performance on certain days.
- The orange line shows more consistent performance but with lower overall clicks.

To determine which campaign is performing best, Facebook campaign are performing good.

Analyse CTR

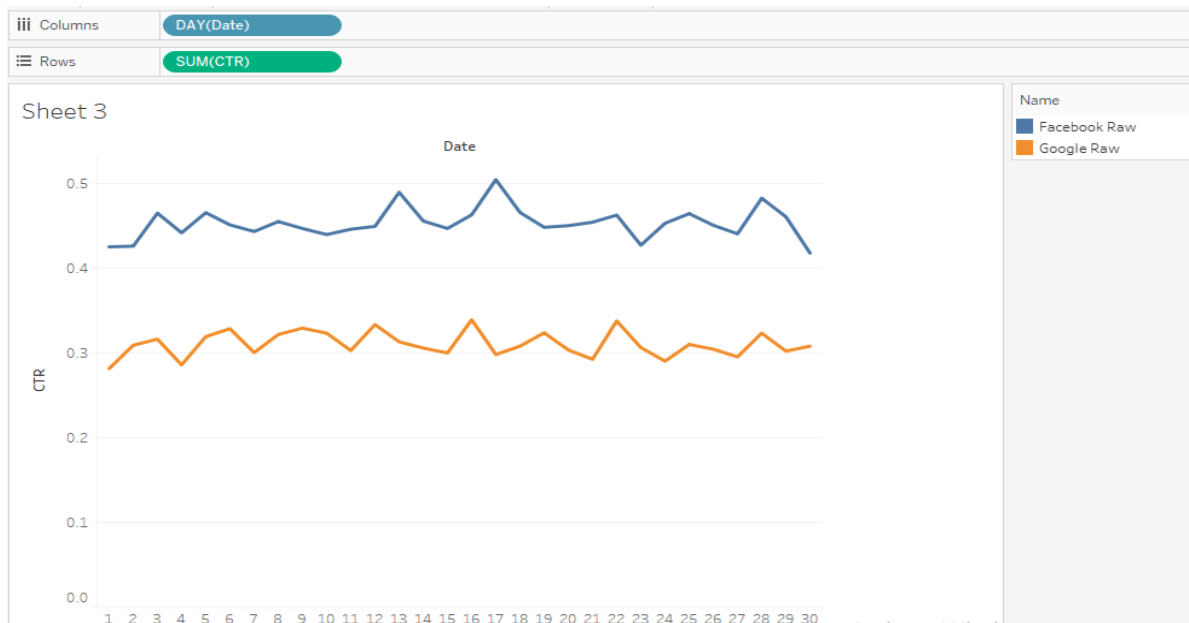
Clickthrough rate (CTR) can be used to gauge how well your keywords and ads, and free listings, are performing. CTR is the number of clicks that your ad receives divided by the number of times ad is shown:

$\text{clicks} \div \text{impressions} = \text{CTR}$.

For example, if you had 5 clicks and 100 impressions, then your CTR would be 5%.

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CTR OF COMPANY	
Row Labels	Sum of CTR
Facebook Raw	13.57728307
Google Raw	9.302740246
Grand Total	22.88002332



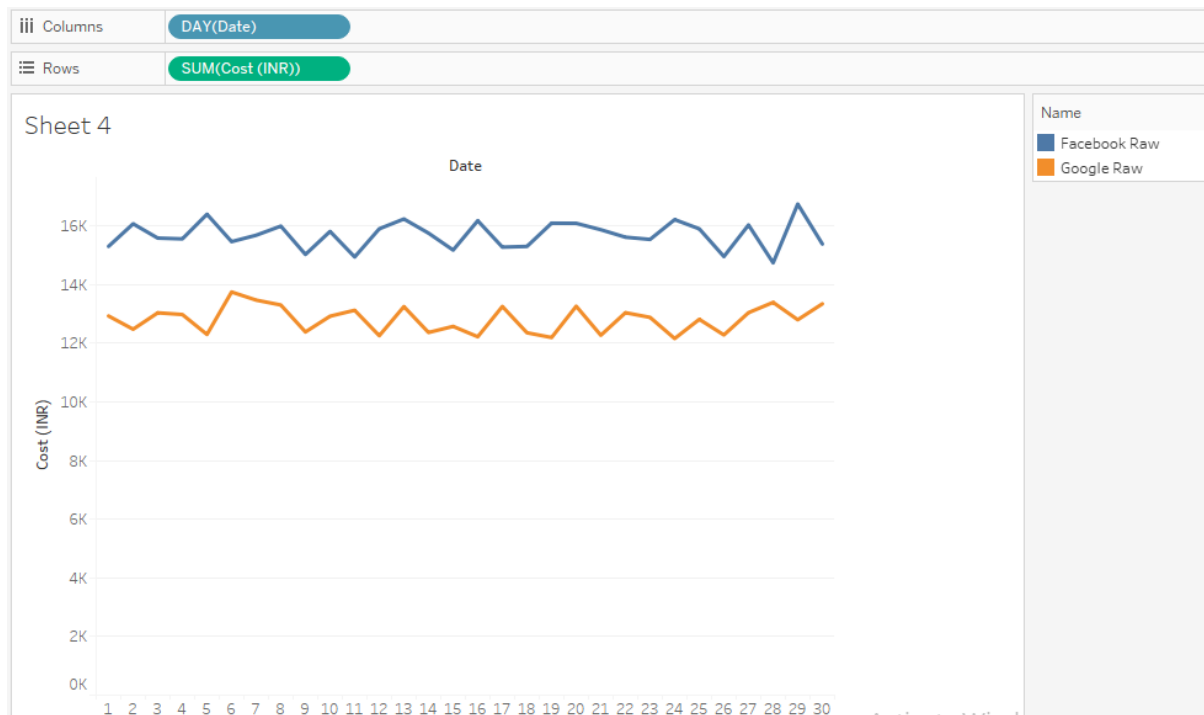
-
- Blue Line indicates Facebook ad and orange line denotes Google data
- The blue line exhibits fluctuations in CTR over time. It has peaked and trough, suggesting variability in CTR performance for Facebook ads. The highest CTR appears to be around 0.5.
- The orange line also shows variability in CTR but with less pronounced fluctuations compared to the blue line. It maintains a relatively consistent performance. The highest CTR for Google ads seems to be around 0.35.

Facebook ads generally have higher CTR peaks but more variability.

Google ads maintain a steadier CTR but with lower overall performance.

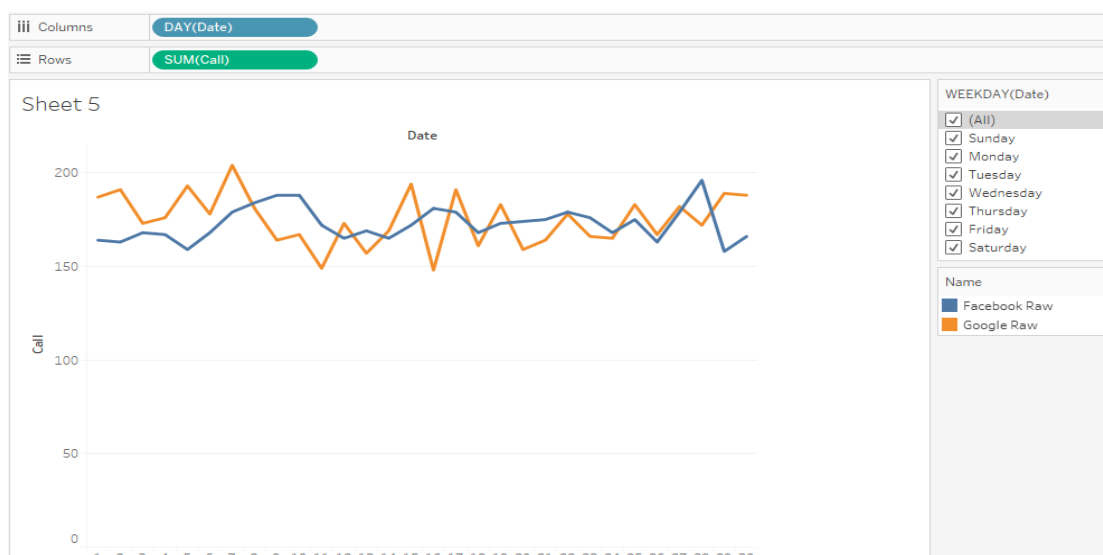
Analyse Cost

TOTAL COST OCCURING	
Row Labels	Sum of Cost (INR)
Facebook Raw	470857.45
Google Raw	384456.35
Grand Total	855313.8



The blue line represents Facebook ads related costs, while the orange line represents Google-related costs. Facebook costs fluctuate more, with higher peaks and valleys compared to Google. Both platforms show some variation throughout the month. Facebook ads cost is higher than Google ads cost but not too much, but Facebook ads have three campaigns where Google ads have two campaigns. Facebook ads are more worthy.

Analyse Calls



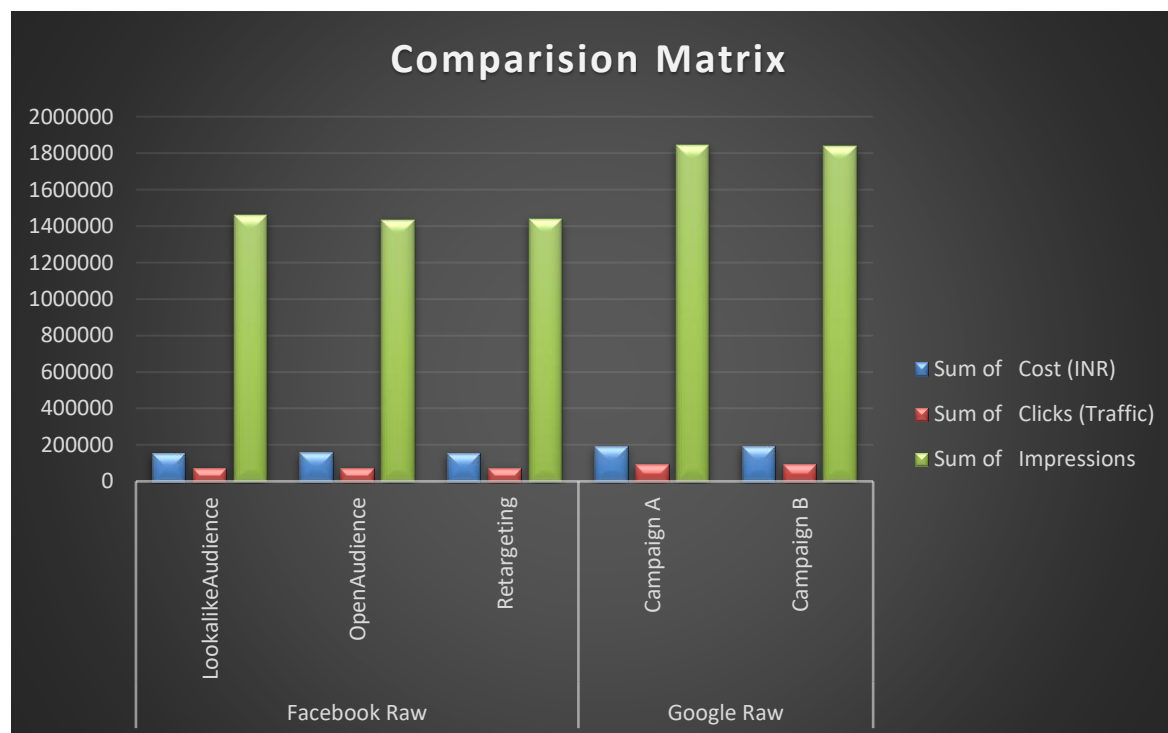
The blue line represents Facebook ads related calls, while the orange line represents Google-related calls. Oth are fluctuated and peak almost same day by day , Google ads calls have more peak.

Total Conversion

TOTAL CONVERSION			
Values		Column Labels	
		Facebook Raw	Google Raw
Sum of	Traffic to Lead	61.98%	38.02%
Sum of	Lead To Call	54.15%	45.85%

Comparison Matrix

Row Labels	Sum of	Cost (INR)	Sum of	Clicks (Traffic)	Sum of	Impressions
Facebook Raw		470857.45		216726		4330551
LookalikeAudience		156272.62		70968		1458074
OpenAudience		158393.2		71885		1434769
Retargeting		156191.63		73873		1437708
Google Raw		384456.35		189316		3680665
Campaign A		191706.45		93654		1844675
Campaign B		192749.9		95662		1835990
Grand Total		855313.8		406042		8011216



3. Benchmark Comparison:

Condition for Google Ads

- CTR: 8-10%
- Traffic to Lead: 7-8%
- Lead to Call: 25-30%

I have compared these conditions with data set help of conditional formatting.

In dataset

1. Yellow colour highlighted cells in CTR column are below 8%.
2. Yellow colour highlighted cells in Traffic to Lead column are below 7% and red highlighted are within benchmark.
3. Red highlighted cells in Lead to call column are above 30 %.

Interpretation

Click-Through Rate (CTR):

CTR falls below the industry benchmark range of 8-10%. This means that ads are not performing well in terms of attracting clicks relative to impressions.

Interpretation: Falls of Benchmark

Traffic to Lead Conversion Rate:

Traffic-to-lead conversion rate is below the benchmark of 7-8%. This suggests that there might be room for improvement in converting website visitors into leads.

Interpretation: Falls Short of Benchmark

Lead to Call Conversion Rate:

Lead-to-call conversion rate is above the benchmark of 25-30%. This indicates that your leads are converting well into phone calls.

Interpretation: Exceeds Benchmark

Campaigns are performing well in terms of lead-to-call conversion. However, there's an opportunity to improve the traffic-to-lead conversion rate and CTR. Consider optimizing the landing pages, ad copy, and targeting to enhance lead generation.

Condition for Facebook Ads:

- CTR: 2-3%
- Traffic to Lead: 12-15%
- Lead to Call: 12-15%

In dataset

1. Yellow colour highlighted cells in CTR column are above 3%.
2. Brown colour highlighted cells in Traffic to Lead column are below 12% and red highlighted are within benchmark.
3. Red highlighted cells in Lead to call column are above 15 %.

Interpretation

Click-Through Rate (CTR):

CTR is above the industry benchmark range of 2-3%. This suggests that ads are attracting as many clicks relative to impressions as expected.

Interpretation: Exceeded Benchmark

Traffic to Lead Conversion Rate:

Traffic-to-lead conversion rate is below the benchmark of 12-15%. This indicates that website visitors are not converting well into leads.

Interpretation: Fall Short of Benchmark

Lead to Call Conversion Rate:

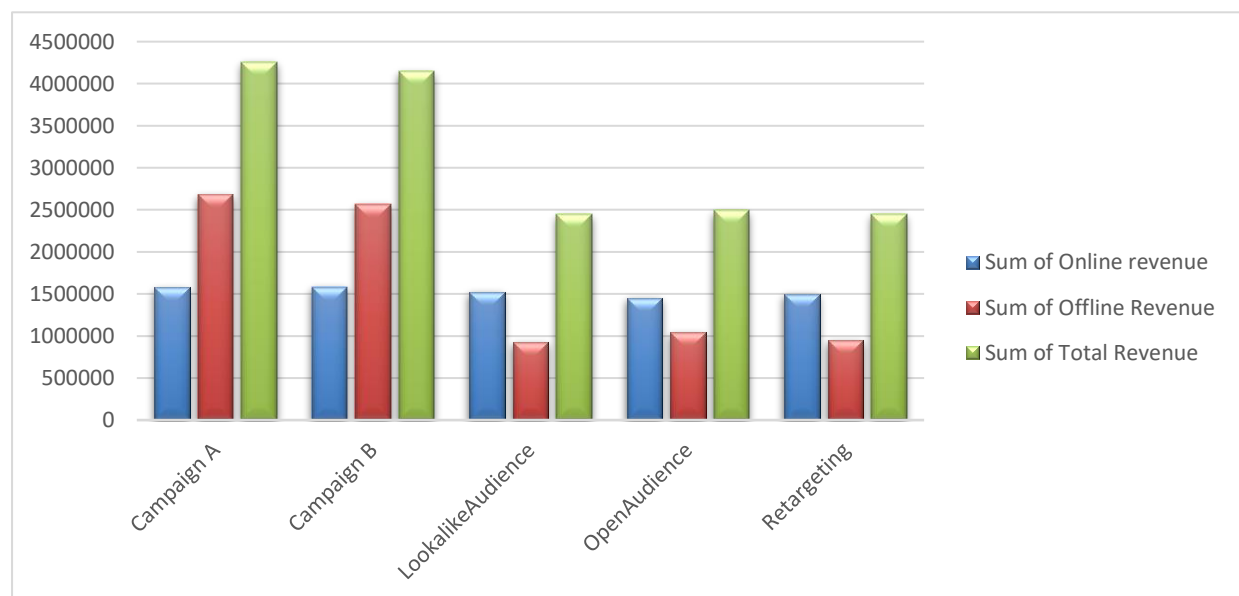
Lead-to-call conversion rate is above benchmark range of 12-15%. This means that leads are converting into phone calls at an expected rate.

Interpretation: Exceeded Benchmark

Lead-to-call conversion rate is on par with the benchmark, CTR is also very good. Consider optimizing your ad copy, targeting, and keywords to increase Traffic to Lead. Additionally, continue leveraging strong traffic-to-lead conversion rate.

Business Context

Row Labels	Sum of Online revenue	Sum of Offline Revenue	Sum of Total Revenue
Campaign A	1575600	2680000	4255600
Campaign B	1580400	2564000	4144400
LookalikeAudience	1518000	926000	2444000
OpenAudience	1453200	1038000	2491200
Retargeting	1500000	946000	2446000
Grand Total	7627200	8154000	15781200



4. Insight Generation:

Which campaigns/ad sets should be scaled up based on their performance?

Ans: After all analysis I can concluded that Campaign B for Google Ad because impression is high, CTR is high, clicks are high, costs are low.

Which campaigns/ad sets are underperforming, and what could be potential reasons?

Ans: Campaign for Facebook are underperforming than Google campaign if I consider individuals performance. Three campaigns are going on for Facebook ads so that more revenue is coming from Facebook but about Google Ads only two campaigns are going on and they are generating revenue almost same to Facebook.

The potential reason behind them

1. Audience Intent
2. Low budget allocation
3. Competition and Bidding
4. Not proper Ad format and engagement
5. Not proper campaign goals

Are there any campaigns/ad sets that should be reduced or discontinued?

Individual performance of Facebook campaigns is not so good but or very worst. It can be improved with proper planning. No campaign should be reduced.

Identify which campaigns and ad sets are performing predictably and can be used for forecasting, and which are performing erratically without a clear pattern.

Ans. Campaign B are performing predictably and campaign for Facebook are performing erratically.

5. Recommendations

Ad Copy and Headlines:

Need test different ad copy variations and headlines. Should be Used compelling language that highlights unique selling points (USPs) and encourages clicks.

Consider using ad extensions to provide additional information and improve visibility.

Keyword Targeting:

Review keyword list and ensure that it's relevant to the product or service. Use negative keywords to filter out irrelevant traffic.

Leverage long-tail keywords for more specific targeting and potentially lower competition.

Landing Pages:

Optimize the landing pages for relevancy and ensure that they align with the ad content and provide a seamless user experience.

Improve load times and mobile responsiveness.

Budget Allocation:

Allocate budget based on campaign performance. Prioritize high-performing campaigns and adjust budgets accordingly.

Consider increasing budgets for top-performing keywords or ad groups.

Quality Score:

Monitor the Quality Score. It affects ad rank and cost-per-click (CPC).

Improve ad relevance, landing page experience, and expected click-through rate (CTR) to boost Quality Score.

Audience Targeting:

Refine the audience segments. Should be used Facebook's detailed targeting options to reach specific demographics, interests, and behaviours.

Consider creating custom audiences based on website visitors, email lists, or engagement with your Facebook page.

Ad Creatives:

Use visually engaging ad creatives (images or videos). Highlight benefits, lifestyle, or emotional appeal.

Test different ad formats (carousel, slideshow, single image, video) to see what resonates best with your audience.

Competitor Analysis:

Analyse competitors' strategies. Identify gaps and opportunities.

Seasonal Trends:

Adjust campaigns based on seasonal trends (e.g., holidays, events).

Plan for peak periods.