

# Digital Marketing Analyst Project

As a data Scientist/Analyst member of the marketing team, I will help the company “Radiant Glow” to turn its struggling marketing efforts into a highly successful digital marketing campaign that allows it to grow its brand and reach more customers than ever before.

## Part 1 – Understanding Data:

- 1) **Marketing campaigns** are strategic activities to promote a goal that could be a product, service or brand... to achieve the most effective results, campaigns are carefully planned and that's way we talk about “Impressions”. By definition **Impressions** tell you how many people potentially saw your message, it is the number of times your marketing content for example: ads or social media post. The number of impressions is a good starting point to estimate the reach of the campaign because we can know if the number of impressions increase it means the content is getting out there.
- 2) **Click-Through rate (CTR)** is the percentage of people who actually clicked on your ad or content after seeing it. We can calculate the CTR based on the number of clicks and impressions using this formula: **CTR= (Clicks / Impressions) \* 100**. The CTR provide us if the content (or ad) is relevant and grabs attention to motivate viewers to click and learn more.
- 3) **Reach** is the number of unique individuals who saw the campaign content at least once.  
**Frequency** is the average number of times each person saw the content.  
Reach and Frequency are essential for a content or ad because Reach tells us how wide our content is otherwise, frequency tells us how often we are targeting the same people so these two metrics play in assessing the impact and targeting of a marketing campaign by making a balance between them because a low reach might not get enough eyes on the content while a high frequency can be annoying.
- 4) There are 3 different phases in Marketing: **Awareness, Conversion** and **Consideration**.
  - Awareness phase targets all the people without exceptions.
  - Consideration phase targets people who clicked on this ad or content.
  - Conversion phase targets people who submitted their orders or requested a demand to buy this product (final step). Which means these people are interested in this ad and that's why we calculate the **Conversion rate = (Conversions / Clicks) \*100** in order to see the percentage of people who took a desired action after seeing the campaign. This conversion rate is crucial because it tells us if the campaign is driving the actions that we want from viewers. A high conversion rate indicates a successful campaign.
- 5) **Cost per Acquisition (CPA)** tells us how much it cost to acquire a new customer through our marketing efforts. We can calculate the CPA based on the total campaign cost and the number of conversions using this formula : **CPA = (Total Campaign Cost) / (Number of Conversion)**. It helps evaluate the efficiency and profitability of different marketing channels or campaigns by comparing CPA across different marketing channels, so we can see which one are the most cost-effective.

Here is an example for Radiant Glow to illustrate these media metrics:

1) Impressions:

Scenario: Radiant Glow runs a social media ad campaign for their new anti-aging serum. The ad gets displayed on users' feeds 10,000 times (impressions).

2) Click-Through Rate (CTR):

Building on the above scenario: 200 people clicked on the ad to visit the Radiant Glow website to know more information about the serum.

CTR Calculation:  $CTR = (200 \text{ clicks} / 10,000 \text{ impressions}) * 100 = 2\%$

Interpretation: 2% CTR suggests the ad might not be that captivating so Radiant Glow might need to refine their ad content or target a more relevant audience.

4) Reach vs. Frequency:

Let us consider Radiant Glow's email marketing campaign reaches 5,000 unique subscribers (reach). However, some subscribers receive the email multiple times (frequency).

Analysis: A high reach is good, but if some subscribers see the email too often, they might get annoyed and unsubscribe.

5) Conversion Rate:

Continuing with the email example: Out of the 5,000 subscribers who received the email, 100 people clicked a link to purchase the anti-aging serum (conversions).

Calculation:  $\text{Conversion Rate} = (100 \text{ conversions} / 200 \text{ clicks from email}) * 100 = 50\%$

Interpretation: A 50% conversion rate from email clicks is excellent! It suggests the email content effectively persuaded readers to take action.

6) Cost per Acquisition (CPA):

Let's say: Radiant Glow spent \$1,000 on the social media ad campaign (total campaign cost) that generated 200 clicks (from point 2).

Calculation:  $CPA = (\$1,000 \text{ total cost}) / (200 \text{ clicks}) = \$5 \text{ per click}$

Interpretation: A \$5 CPA for clicks might be acceptable depending on Radiant Glow's industry standards and customer lifetime value. However, they can compare this CPA with other marketing channels (like email marketing) to see which one delivers new customers more cost-effectively.