

Excel Portfolio Project Report

# A Comprehensive Analysis of the Ramadan Digital Marketing Campaign

SUBMITTED BY:

Ahsan Farooq

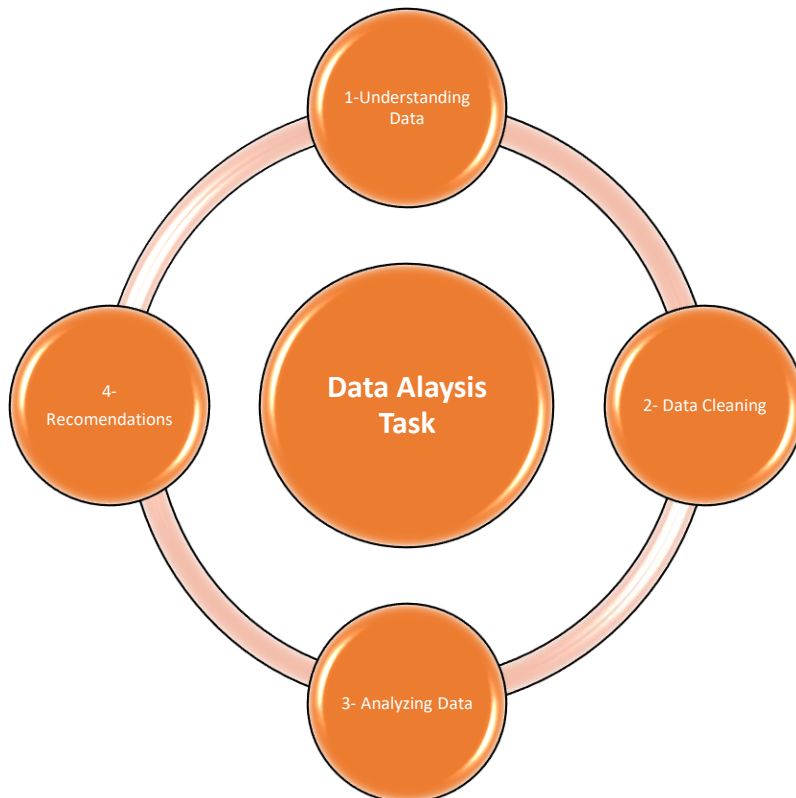
To Team AtomCamp

# Introduction

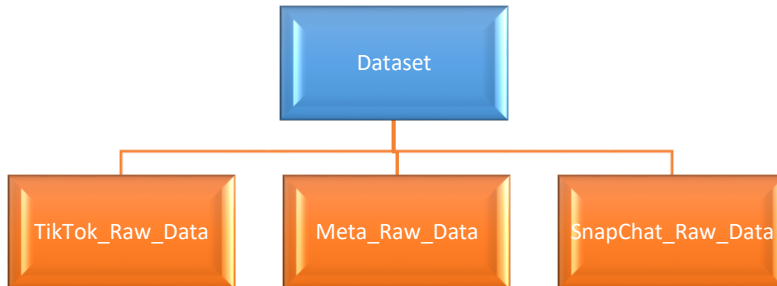
This report presents a comprehensive analysis of a digital marketing campaign conducted during Ramadan across TikTok, Meta (Facebook & Instagram), and Snapchat. The primary objective of the analysis is to evaluate the campaign's performance in terms of brand awareness, engagement, and conversions.

By leveraging Excel's data cleaning, analysis, and visualization capabilities, this report aims to uncover valuable insights into the campaign's effectiveness and identify areas for improvement. The analysis will involve tasks such as data cleaning, applying formulas to categorize performance, creating Pivot Tables, and automating processes with Macros.

Through a detailed examination of key performance indicators (KPIs) like impressions, clicks, click-through rate (CTR), cost per click (CPC), and engagement metrics, this report will provide actionable recommendations for future campaigns.



# Step 1: Understanding Data



Dataset has some common Attributes to understand Data. Here are details of some of them.

- 1) **Market:** Geographic market where the ad was displayed
- 2) **Campaign Name:** Name of the campaign
- 3) **Audience:** Target audience for the ad (e.g., demographics, interests)
- 4) **Ad Name:** Name of the individual ad
- 5) **Language:** Language of the ad (i.e., Arabic, English) content
- 6) **Format:** Ad format (e.g., video, image)
- 7) **Creative Variation:** Specific variation of the creative (e.g., different visuals, text)
- 8) **Amount Spent:** Total amount spent on the ad
- 9) **Clicks:** Number of times the ad was clicked on
- 10) **Paid Reach:** Number of people who saw the ad and were charged for it
- 11) **Cost Per Click:** Average cost per click
- 12) **Paid Reach:** Number of people who saw the ad and were charged for it
- 13) **Total Impressions:** Total number of times the ad was seen
- 14) **CTR:** Click-through rate (clicks divided by impressions)
- 15) **CPM:** Cost per mille (cost per 1,000 impressions)
- 16) **2 Second Video Views:** Number of times the video was viewed for at least 2 seconds
- 17) **Video Completions:** Number of times the video was viewed to completion
- 18) **VTR (2 Sec):** View-through rate for 2 seconds (2 second video views divided by impressions)
- 19) **VTR (Complete):** View-through rate for completion (video completions divided by impressions)
- 20) **Total Engagement:** Total number of interactions with the ad (e.g., likes, comments, shares)
- 21) **Engagement Rate:** Engagement divided by impressions

## Step 2: Data Cleaning

### Data Cleaning for TikTok\_Raw\_Data

#### 1. Removing Duplicates:

- The first step involved identifying and removing any duplicate rows within the dataset. This ensures data accuracy and prevents redundant information from skewing analysis.

#### 2. Cleaning the Campaign Name Column:

Campaign Name
CN~MCDRamadan_CH~FBIG_MK~RIY_TG~Awareness_PP~Brand_LG~ENAR_KT~Exact_CA~Interests_FM~Mixed_AT~Mixed_DT~All~FF~ SABO0000015094

- The **Campaign Name** column was split into separate columns using the "\_" delimiter. This created new columns for **CN** (Campaign Name), **MK** (Market), **CH** (Channel), and **TG** (Target) and Then apply =Concat() function to merge these four. Now Campaign name is easy to understand for all. Finally apply **PASTE SPECIAL** command to change my formula into values.

Campaign Name
CN~MCDRamadanCH~FBIGMK~RIYTG~Awareness

- This step standardizes the data format and makes it easier to analyze campaign performance across different markets and channels.

#### 3. Cleaning the Ad Name Column:

- Extra words or phrases were removed from some cells within the Ad Name column. This ensures consistency and clarity in the ad naming convention.

E
Ad Name
CT~DarkPost~AR~RIY~Video~9x16~61~_CV-PKsCG-
CT~DarkPost~AR~RIY~Video~9x16~30~_CV-mhUEb-
CT~DarkPost~AR~RIY~Video~9x16~45~_CV-QBlq7-
CT~DarkPost~AR~RIY~Video~9x16~30~_CV
CT~DarkPost~AR~RIY~Video~9x16~61~_CV
CT~DarkPost~AR~RIY~Video~9x16~45~_CV
CT~DarkPost~AR~RIY~Video~9x16~30~_CV-ZEv9c-
CT~DarkPost~AR~RIY~Video~9x16~61~_CV-X7sKd-
CT~DarkPost~AR~RIY~Video~9x16~45~_CV-MpCqN-
CT~DarkPost~AR~RIY~Video~9x16~30~_CV
CT~DarkPost~AR~RIY~Video~9x16~61~_CV
CT~DarkPost~AR~RIY~Video~9x16~45~_CV
CT~DarkPost~AR~QAT~Video~9x16~30~_CV

#### 4. Data Validation:

- Numeric values were checked for alignment. Left-aligned values, indicating a string format, were converted to numeric format.
- Data validation techniques were applied to ensure data integrity and consistency. This may have included checks for valid date formats,

appropriate ranges for numerical values, and adherence to specific data types.

**Overall, the data cleaning process for the TikTok Raw Data focused on:**

- Removing inconsistencies and errors
- Standardizing data formats
- Ensuring data accuracy and integrity
- Preparing the data for further analysis

The same data cleaning procedures used for the **TikTok\_Raw\_Data** were also applied to the **Snapchat\_Raw\_Data** and **Meta\_Raw\_Data** datasets. This ensured consistency and accuracy across all three sources, making it easier to compare and analyze campaign performance across different platforms.

## Step 3: Preparing for Analysis: Performance Evaluation

To facilitate a comprehensive analysis of campaign performance, new columns were added to dataset using IF statements and NOT functions. These columns categorize campaigns based on predefined criteria.

**Q3:**

**Using the Meta data, apply an IF statement to evaluate the CTR of each campaign. What percentage of campaigns had a "Good" CTR (e.g., above 2%)?**

**1. Calculate CTR:**

- I Created a new column named **CTR** in the Meta Raw Data dataset.
- Use the following formula to calculate the CTR for each campaign:
- $$= (\text{Clicks} / \text{Impressions}) * 100$$

$\text{fx}$	=(K2/I2)*100			
	I	K	O	P
	Impressions	Link clicks	CTR	Good or Bad CTR
)	6014321	26667.00	44.34%	Good
)	4944626	18676.00	37.77%	Good
)	3698744	15163.00	40.99%	Good
)	2835346	9696.00	34.20%	Good
)	2890910	12938.00	44.75%	Good
)	2296226	10599.00	46.16%	Good
)	1118842	9408.00	84.09%	Good

- This calculated the click-through rate for each campaign as a percentage
- 2. **Categorize CTR:**
  - I Created another new column named **GOOD or Bad CTR**.
  - I Used an IF statement to categorize each campaign's CTR as "Good" if it's above 2%, and "Not Good" otherwise:
  - = **IF(CTR > 2%, "Good", "Bad")**
- 3. **Calculate Percentage of "Good" CTR Campaigns:**
  - I used a COUNTIF function to count the number of campaigns with a "Good" CTR.
  - Divide the count of "Good" campaigns by the total number of campaigns and multiply by 100 to get the percentage.
  - = **(COUNTIF(Good or Bad CTR, "Good") / COUNTA(CTR\_Category)) \* 100**

**Count of Good CTR**

**361.0**

**Percentage of Good CTR**

**85%**

**Q4: Implement the NOT function to identify campaigns on Snapchat that had low engagement (e.g., less than 1000 clicks). How many campaigns were flagged for low engagement, and what might this indicate about the campaign strategy?**

To identify campaigns with low engagement on Snapchat, a new column named "Low Engagement" was created. This column used the NOT function to flag campaigns with less than 1000 clicks.

= **IF(NOT(Clicks >= 1000), "Low Engagement", "Good Engagement")**

= IF(NOT(K2 >= 1000), "Low Engagement", "Good Engagement")				
	J	K	M	N
tion	Amount Spent	Swipe Ups	Low Engagement	Swipe Up Rate
	197.51	363	Low Engagement	0.0033
	206.13	385	Low Engagement	0.0036
	67.92	84	Low Engagement	0.0028
	51.99	64	Low Engagement	0.0029
	140.98	174	Low Engagement	0.0027
	229.49	454	Low Engagement	0.0036
	216.23	420	Low Engagement	0.0034
	352.46	384	Low Engagement	0.0022
	422.52	1160	Good Engagement	0.0057
	110.89	332	Low Engagement	0.0063

And Finally count for Low Engagement is calculated by using

= COUNTIF(Range, "Low Engagement")

fx =COUNTIF(M2:M54, "Low Engagement")			
	K	M	N
		Total Low Engagement	
		38	

### Analyzing Low-Engagement Snapchat Campaigns

The analysis of Snapchat campaigns revealed a significant number of low-engagement campaigns. Out of **53** campaigns analyzed, **38** were **flagged** as having low engagement This represents approximately **72%** of the total campaigns analyzed indicating a **need for significant improvements** in the campaign strategy.

**Possible reasons** for low engagement include irrelevant targeting, ineffective ad creative, landing page issues, and high competition. To address these issues, it is **recommended** to:

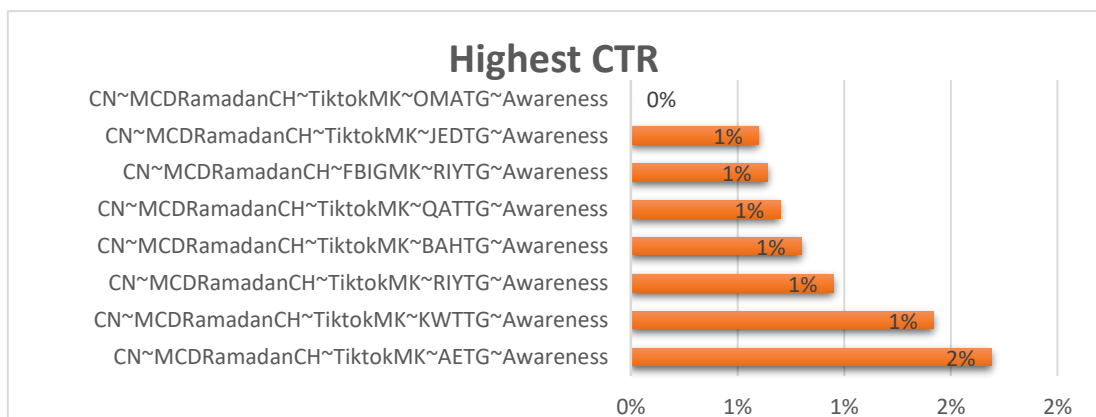
- Re-evaluate targeting criteria.
- Experiment with different ad formats and messaging.
- Optimize landing pages for better user experience.
- Monitor competitor activities and differentiate campaigns.

**Q5: Create a Pivot Table from the TikTok data to sum impressions and clicks by campaign name. Which campaign had the highest CTR, and what might be the reason for its success?**

Row Labels	Sum of Clicks	Sum of Total Impressions
CN~MCDRamadanCH~FBIGMK~RIYTG~Awareness	31766	16873762
CN~MCDRamadanCH~TiktokMK~AETG~Awareness	12769	11363327
CN~MCDRamadanCH~TiktokMK~BAHTG~Awareness	3613	2098862
CN~MCDRamadanCH~TiktokMK~JEDTG~Awareness	17744	15307011
CN~MCDRamadanCH~TiktokMK~KWTG~Awareness	6936	5882789
CN~MCDRamadanCH~TiktokMK~OMATG~Awareness	0	2567839
CN~MCDRamadanCH~TiktokMK~QATTG~Awareness	6429	4128788
CN~MCDRamadanCH~TiktokMK~RIYTG~Awareness	131	56264
Grand Total	79388	58278642

A pivot table was created to analyze campaign performance based on impressions and clicks. The table provided a comprehensive overview of campaign metrics, allowing for a deeper understanding of campaign effectiveness.

- **Top-Performing Campaigns:**
  - **CN~MCDRamadanCH~TiktokMK~AETG~Awareness** emerged as the top-performing campaign with the highest click-through rate (CTR). This ad is running on Tiktok Platform and **UAE** is its market.
  - The success of these campaigns can be attributed to factors such as relevant targeting, engaging creative, strong calls to action, and effective ad placement.

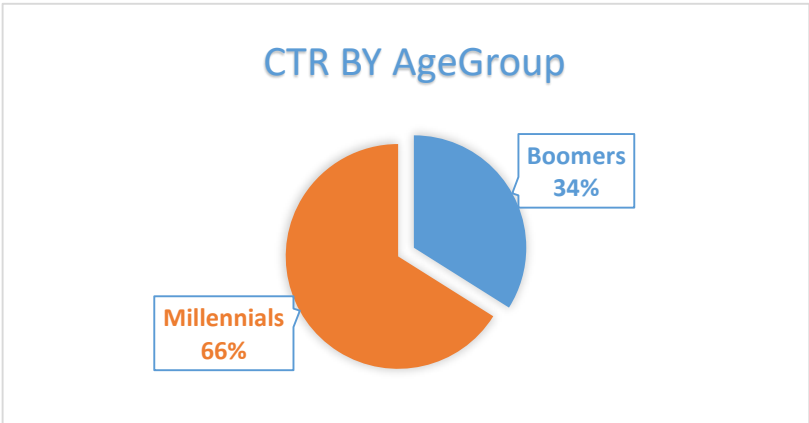




**Q6: From the Meta data, create a Pivot Table to analyze the performance of ads targeted at different age groups. Which age group had the highest conversion rate, and how could this insight affect future campaigns?**

To analyze the performance of ads targeted at different age groups, I used the **data storytelling technique** to manually categorize the audience into two key segments: "**Millennials**" and "**Boomers**." Since the original Campaign Dataset in Meta Data did not include age group information, this segmentation allowed for clearer analysis.

Row Labels	Sum of CTR (all)
Boomers	52.82
Millennials	102.79
Grand Total	155.61



A Pivot Table was created to compare conversion rates between these groups. The analysis revealed that **Millennials** demonstrated the **highest conversion rate**, indicating a **stronger engagement** with ads compared to Boomers. This insight suggests that future campaigns should prioritize strategies that resonate with Millennials, such as digital platforms and tailored content. However, there is potential for improving Boomer engagement by optimizing ad placement and messaging for this demographic.

**Q7: How could you use Excel's Conditional Formatting to highlight campaigns with exceptional performance in your summary sheet? Provide an example of how you would set this up.**

In response to the analysis of campaign performance based on the Swipe Up Rate in Snapchat's raw data, I utilized **Excel's Conditional Formatting** to highlight the **top 5 campaigns** with exceptional performance. By applying this feature, I was able to automatically identify and emphasize the highest-performing campaigns based on their Swipe Up Rates, which reflect user engagement.

- ❖ The analysis revealed that the top 5 campaigns had Swipe Up Rates ranging from 0.0057, 0.0063, 0.0059, 0.0058 and 0.0060, with the **highest rate recorded at 0.0063**. These campaigns clearly outperformed others in terms of user interaction, indicating that the content, targeting, or ad placement resonated well with the audience.
- ❖ In **Meta\_Raw\_Data** top 5 Campaigns had CTR 232.75% , 202.50%, 252.85%, 276.44% and 197.53% with the highest Click Through Rate is 276.44%.
- ❖ In **TikTok\_Raw\_Data** top 5 campaigns had CTR 0.36%, 0.37%, 0.33%, 0.28% and 0.35% with the highest CTR 0.37%

Swipe Up Rate
0.0033
0.0036
0.0028
0.0029
0.0027
0.0036
0.0034
0.0022
0.0057
0.0063
0.0048
0.0039
0.0040
0.0059
0.0027
0.0029
0.0043
0.0037
0.0028
0.0058
0.0038
0.0035

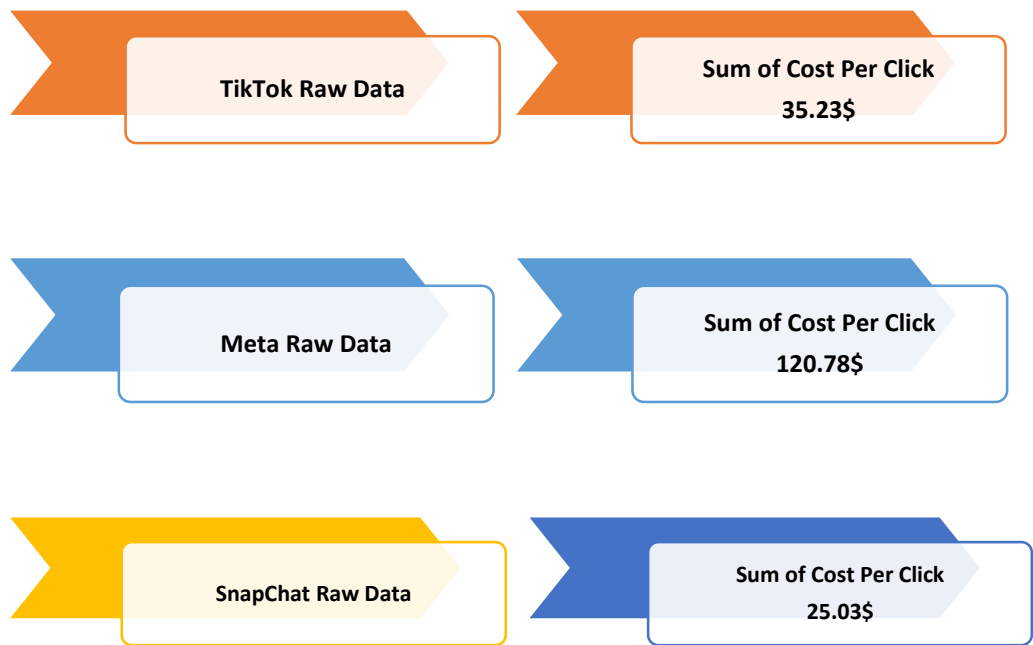
This insight allows for a focused evaluation of what made these campaigns successful, providing a foundation for optimizing future campaigns. By leveraging high-performing strategies, we can enhance engagement across other campaigns and drive better overall performance.

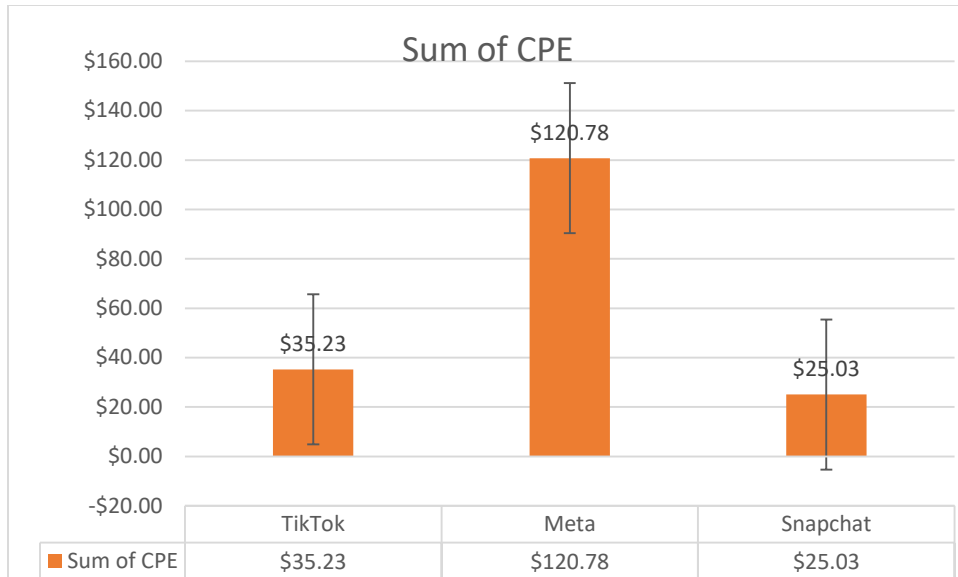
**Q8: Create a chart that visualizes the cost per click (CPC) across different platforms. Based on this chart, which platform provided the best value for money in terms of CPC, and why?**

To evaluate the performance of ads across different platforms, I first calculated the **Cost Per Click (CPC)** by dividing the total cost by the total number of clicks for each platform. This provided a clear metric to compare how cost-effective each platform was in driving user engagement.

=IFERROR(J2/K2, "NA")			
	J	K	L
n	Amount Spent	Swipe Ups	Cost Per Click
	197.51	363	0.54
	206.13	385	0.54
	67.92	84	0.81
	51.99	64	0.81
	140.98	174	0.81
	229.49	454	0.51
	216.23	420	0.51

While calculating the CPC values, I encountered a **division by zero error** in some cases. To resolve this, I applied the **IFERROR** formula, ensuring the CPC column displays clean and accurate data without interruption from calculation errors.





Based on the chart, **Snapchat** provided the best value for money in terms of Cost Per Engagement (CPE), as it has the lowest CPE at **\$25.03**, compared to **\$35.23** for TikTok and **\$120.78** for Meta.

Lower CPE indicates that Snapchat's platform required less spending to achieve engagement, making it the most cost-effective platform for driving user interactions. This suggests that allocating more budget to Snapchat could optimize campaign efficiency and increase ROI.

### Conclusions:

#### 1. Campaign Performance across Platforms:

Based on the data analysis, it is clear that campaign performance varied significantly across platforms. **Snapchat** demonstrated the most cost-effective results with the lowest **Cost Per Engagement (CPE)** at **\$25.03**, making it the best value for money. **TikTok** also performed reasonably well, with a CPE of **\$35.23**, while **Meta (Facebook & Instagram)** had the highest CPE at **\$120.78**, indicating that it required more budget to achieve similar levels of engagement.

#### 2. High Variation in Click-Through Rate (CTR):

Campaign performance also varied in terms of **Click-Through Rate (CTR)** across different platforms and demographic groups. From the **Meta data**, campaigns targeting **Millennials** performed significantly better in terms of CTR compared to **Boomers**. This suggests that

Millennials were more responsive to digital advertising, especially on platforms like TikTok, where CTR was higher overall.

### 3. **Significant Number of Low Engagement Campaigns:**

The analysis of **Snapchat campaigns** revealed that **72%** of the campaigns had **low engagement**, with less than 1000 clicks. This indicates a need for better targeting, creative optimization, and possibly improvements in ad placement. The high number of low-performing campaigns suggests that Snapchat's platform is still underutilized or may require strategic improvements to enhance performance.

### 4. **Top-Performing Campaigns:**

Specific campaigns, such as **CNMCDDRamadanCHTiktokMKAETCAwareness**, stood out with high CTR, especially in the **TikTok** platform targeting the UAE market. This indicates that relevant targeting, engaging content, and clear calls to action contributed to the success of these campaigns. This campaign's performance demonstrates the effectiveness of the combination of creative variations and market alignment.

## Recommendations:

### 1. **Allocate More Budget to Snapchat:**

Given that **Snapchat** had the lowest **Cost Per Engagement (CPE)**, it is recommended to increase the budget allocation for this platform in future campaigns. With more focused efforts on Snapchat, it is possible to achieve greater engagement and maximize ROI, particularly by improving targeting strategies to reduce the number of low-performing campaigns.

### 2. **Focus on Millennials for Higher Conversion Rates:**

The analysis revealed that **Millennials** had the highest **conversion rates** across platforms, especially on Meta and TikTok. Future campaigns should prioritize this demographic by tailoring content, messaging, and ad formats that resonate with younger audiences. Additionally, TikTok's favorable performance among this group suggests a need for further investment in this platform when targeting Millennials.

### 3. **Re-evaluate Low-Engagement Campaigns:**

To address the issue of low engagement, particularly on **Snapchat**, it is essential to **re-evaluate targeting strategies**. Consider experimenting with different audience segments, refining ad messaging, and improving landing page experiences. By addressing these key factors, engagement levels can be improved, leading to better overall campaign outcomes.

### 4. **Creative Optimization for Meta Ads:**

Despite having the highest CPE, **Meta (Facebook & Instagram)** remains a key platform due to its broad reach and targeting capabilities. It is recommended to focus on **creative optimization** for Meta ads, ensuring the content is highly engaging and relevant to the audience. This can include testing different ad formats (video vs. image), messaging, and creative elements to lower the cost per engagement and improve CTR.

### 5. **Analyze Competitor Activities:**

It may also be beneficial to monitor **competitor activities** closely and ensure differentiation in future campaigns. This can help in positioning the brand effectively and potentially improving engagement and conversion rates, especially in competitive markets like Meta.

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**Thanks**