

Personal Practicing Project on

***Data Analysis of
Social Media Campaign
Using PowerBI***

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Abstract

This project Data Analysis of Social Media Campaign Using PowerBI is done on an individual basis by Nachiket Asare for personal practicing purposes. The data was collected from kaggle.com of title Marketing Campaign Performance Dataset, <https://www.kaggle.com/datasets/manishabhatt22/marketing-campaign-performance-dataset>. The whole project is completed on PowerBI, single handedly without guidance of any external support. Therefore, the credit or rights of this project do not belong to others.

The columns available in the data are as follows:

Company: The company responsible for the campaign, representing a mix of fictional brands.

Campaign_Type: The type of campaign employed, including email, social media, influencer, display, or search.

Target_Audience: The specific audience segment targeted by the campaign, such as women aged 25-34, men aged 18-24, or all age groups.

Duration: The duration of the campaign, expressed in days.

Channels_Used: The channels utilized to promote the campaign, which may include email, social media platforms, YouTube, websites, or Google Ads.

Conversion_Rate: The percentage of leads or impressions that converted into desired actions, indicating campaign effectiveness.

Acquisition_Cost: The cost incurred by the company to acquire customers, presented in monetary format.

ROI: Return on Investment, representing the profitability and success of the campaign.

Location: The geographical location where the campaign was conducted, encompassing major cities like New York, Los Angeles, Chicago, Houston, or Miami.

Language: The language used in the campaign communication, including English, Spanish, French, German, or Mandarin.

Clicks: The number of clicks generated by the campaign, indicating user engagement.

Impressions: The total number of times the campaign was displayed or viewed by the target audience.

Engagement_Score: A score ranging from 1 to 10 that measures the level of engagement generated by the campaign.

Customer_Segment: The specific customer segment or audience category that the campaign was tailored for, such as tech enthusiasts, fashionistas, health and wellness enthusiasts, foodies, or outdoor adventurers.

Date: The date on which the campaign occurred, providing a chronological perspective to analyze trends and patterns.

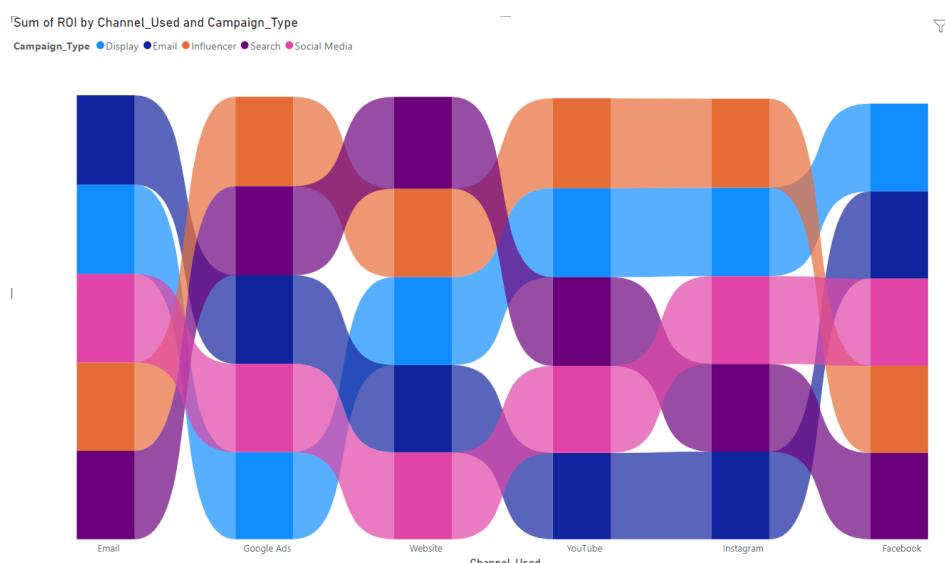
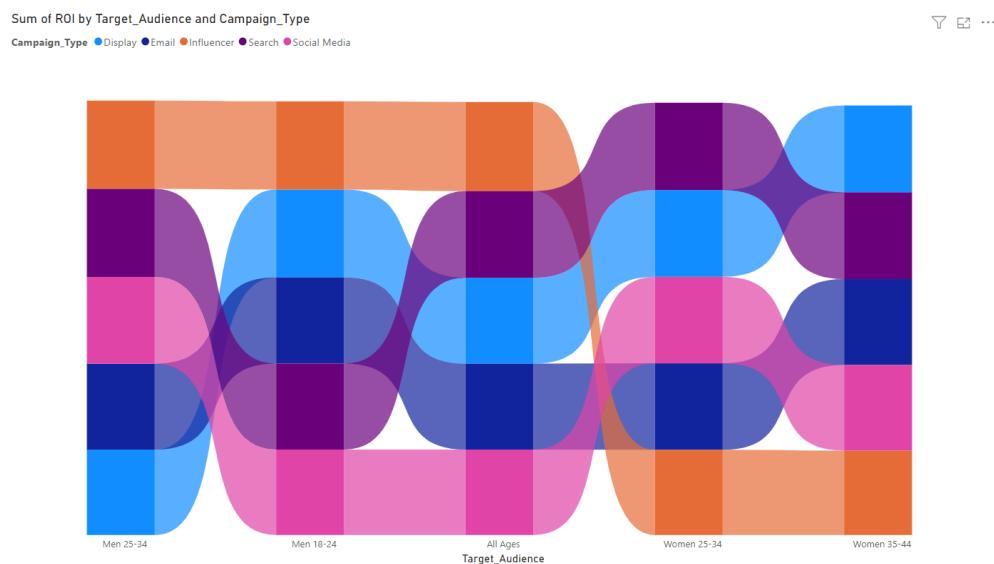
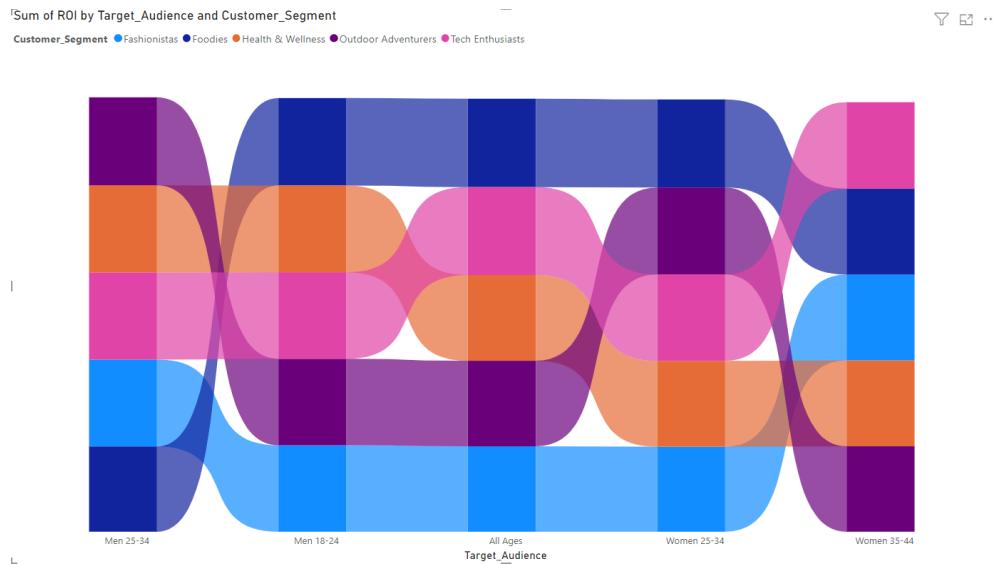
Scope:

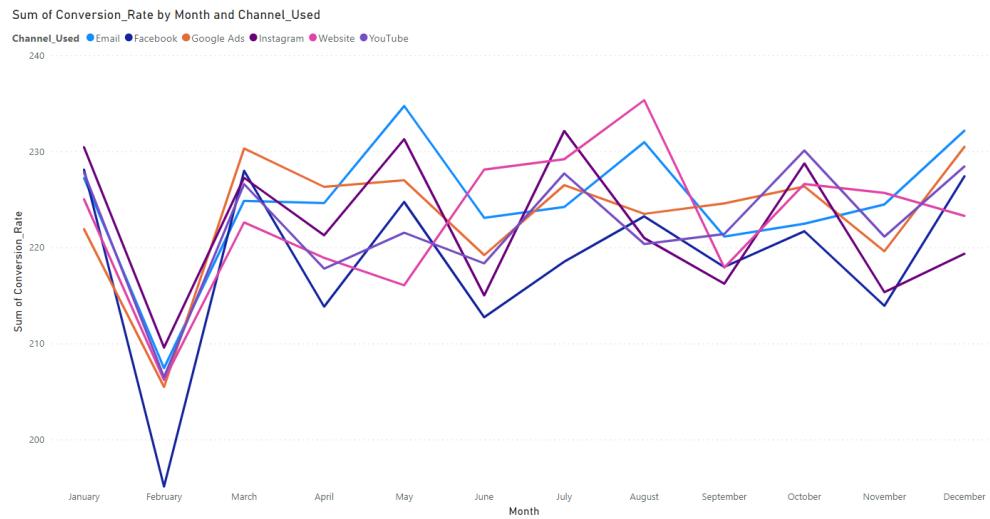
By leveraging this dataset, marketers and data analysts can uncover valuable insights regarding campaign performance, audience preferences, channel effectiveness, and ROI. This dataset serves as a valuable resource for market research, campaign optimization, and data-driven decision-making, enabling businesses to refine their marketing strategies and drive targeted growth.

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**Note:** This is a fictional dataset.

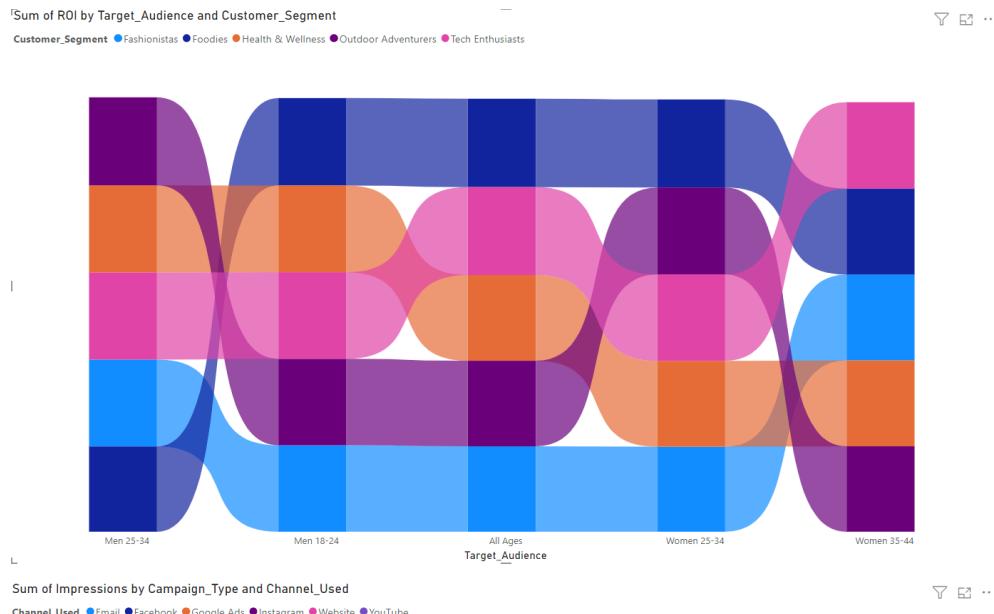
## 1. What were the most successful aspects of the social media campaign?





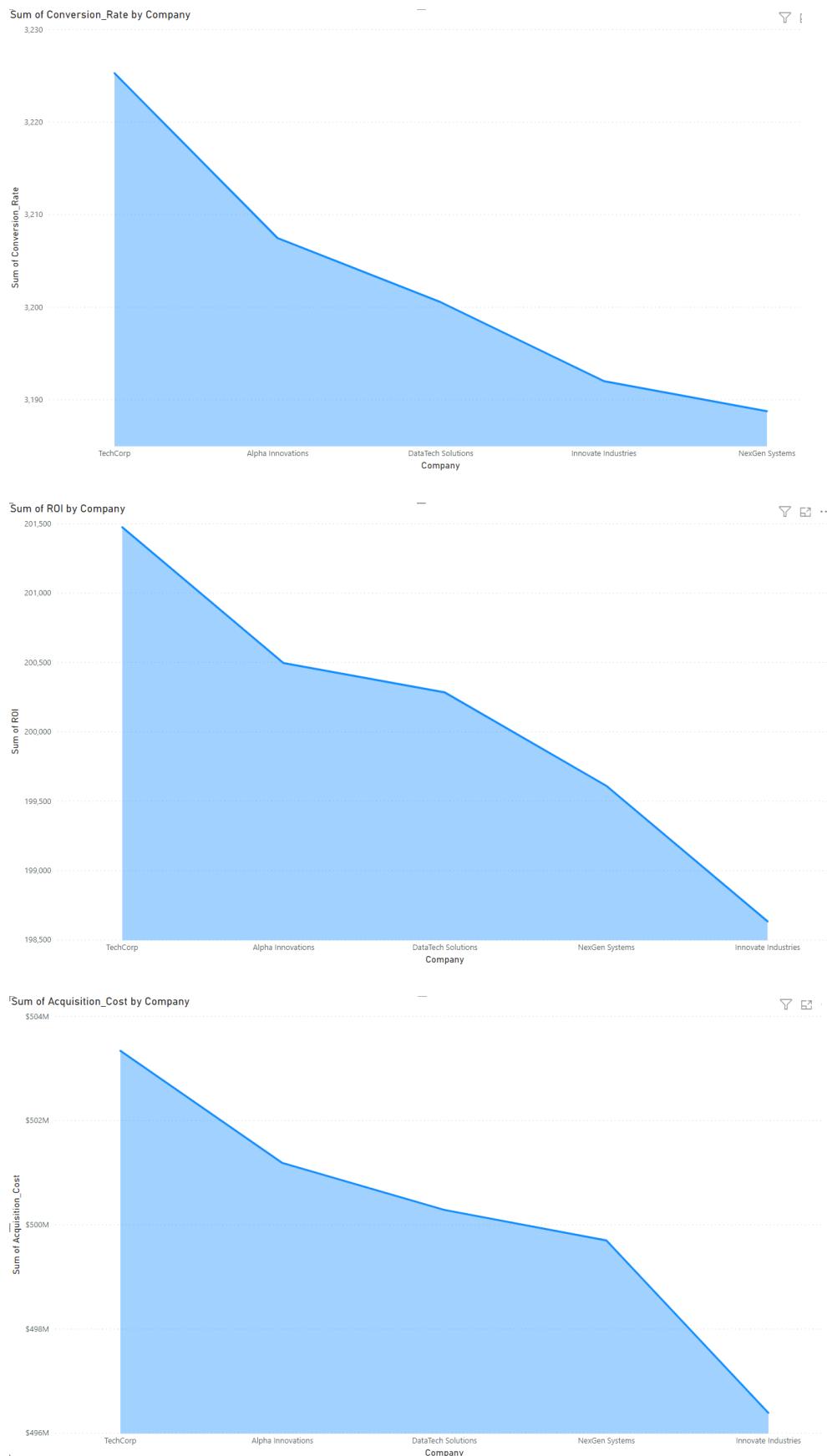
**1.** From, 1) ROI from the Target\_Audience with respect to Campaign\_Type and 2) ROI from the Target\_Audience with respect to Customer\_Segment we get to know about the most successful aspects of the social media campaign. The influencer marketing worked successfully with to score of ROI for men of all ages and Google Ad, YouTube and Influencer for channel used, whereas the young population was more interested in the Food category of campaign.

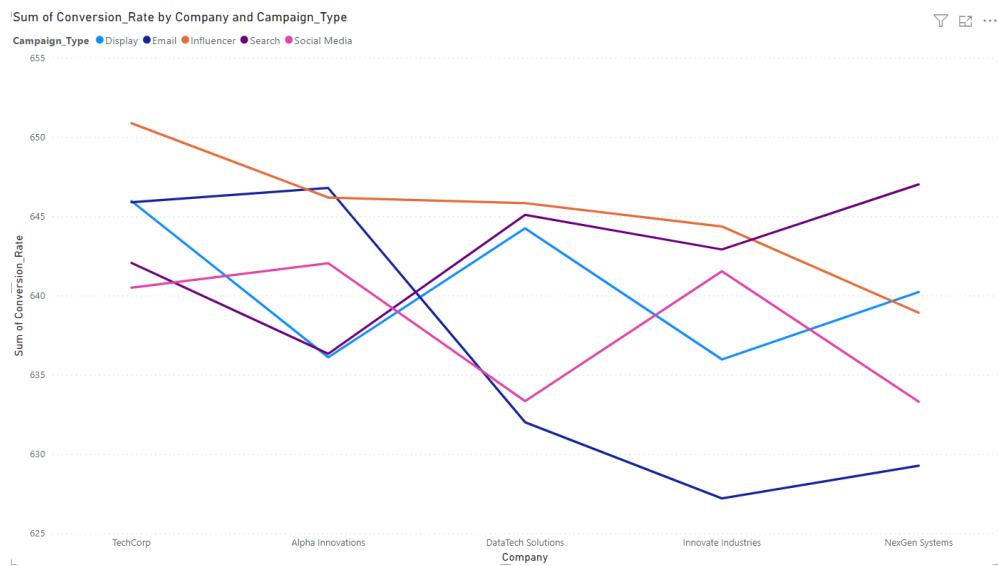
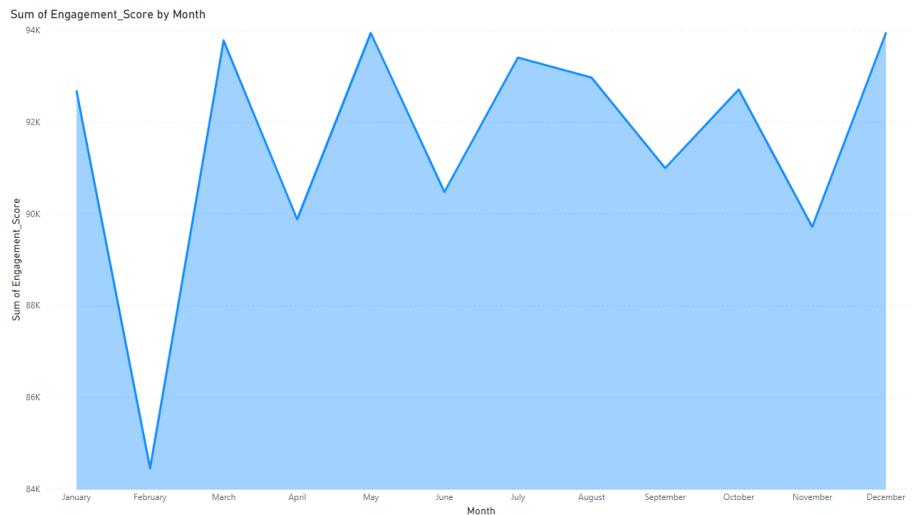
## 2. What were the least successful aspects of the social media campaign?



**2.** The Customer\_Segment of Fashion scored minimum in most of the younger section of men and women. The Channel\_Used of Facebook scored minimum in Campaign\_Type of Search, Influencer and Email.

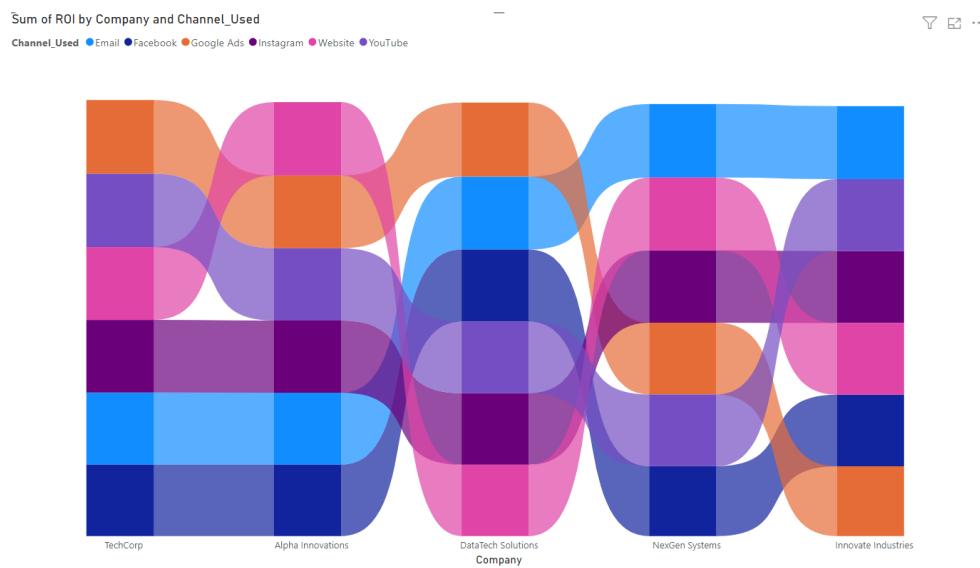
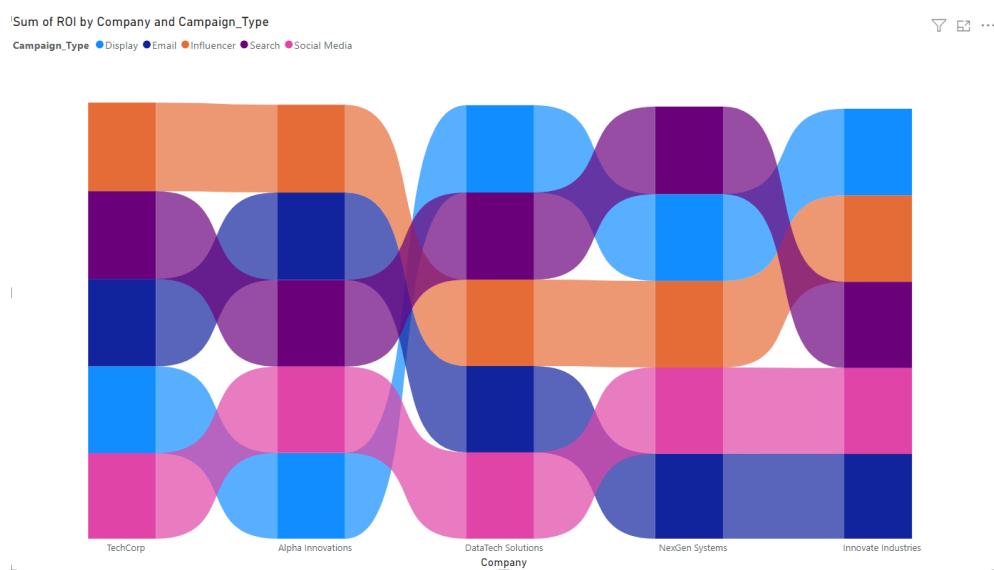
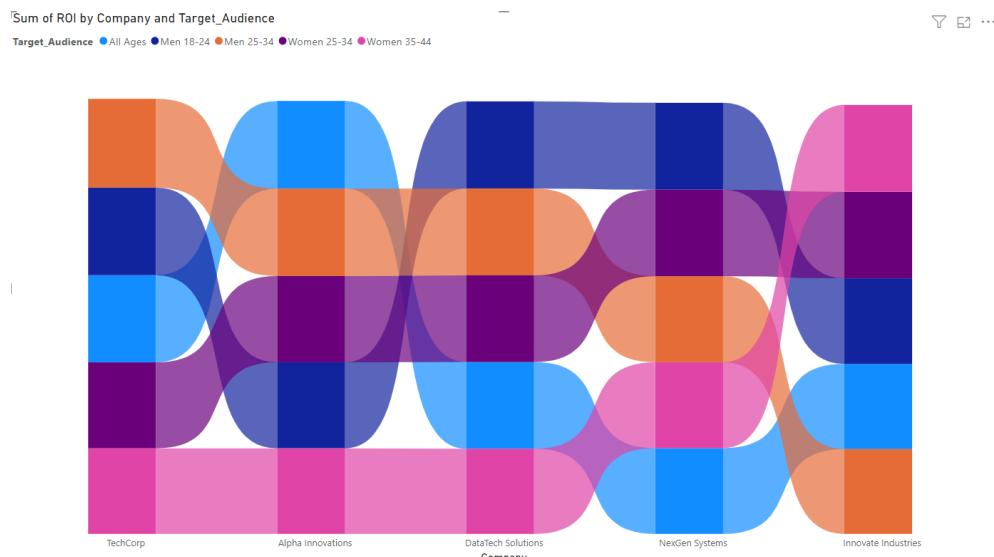
### 3. How will we measure the success of the campaign? What metrics will we track?



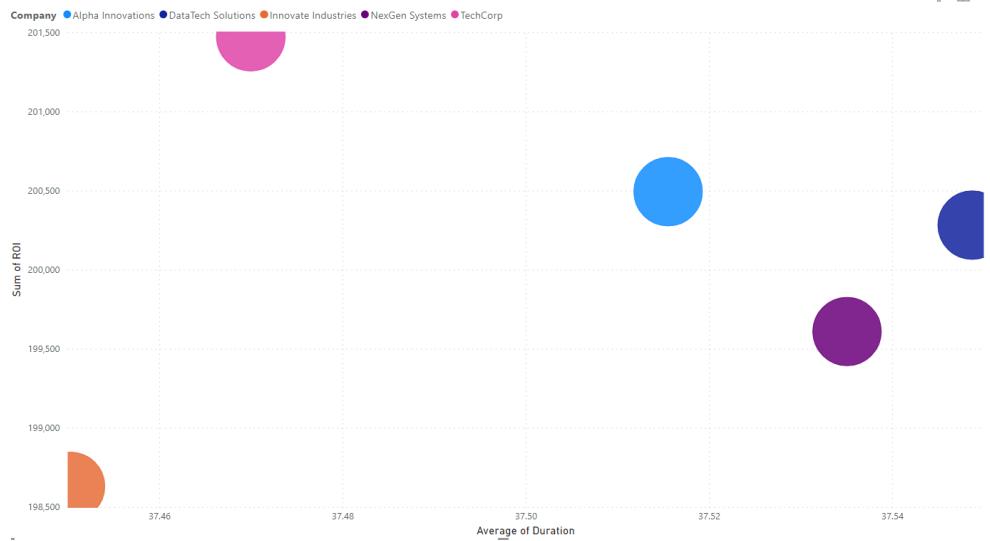


3. We have used the scores of Conversion\_Rate, ROI, and Acquisition\_Cost of the involved Brands where TechCorp performed best and the engagement for whole year, where March, May and December were having higher Engagement\_Score. Here NextGen System is having lesser Conversion\_Rate but still having more ROI.

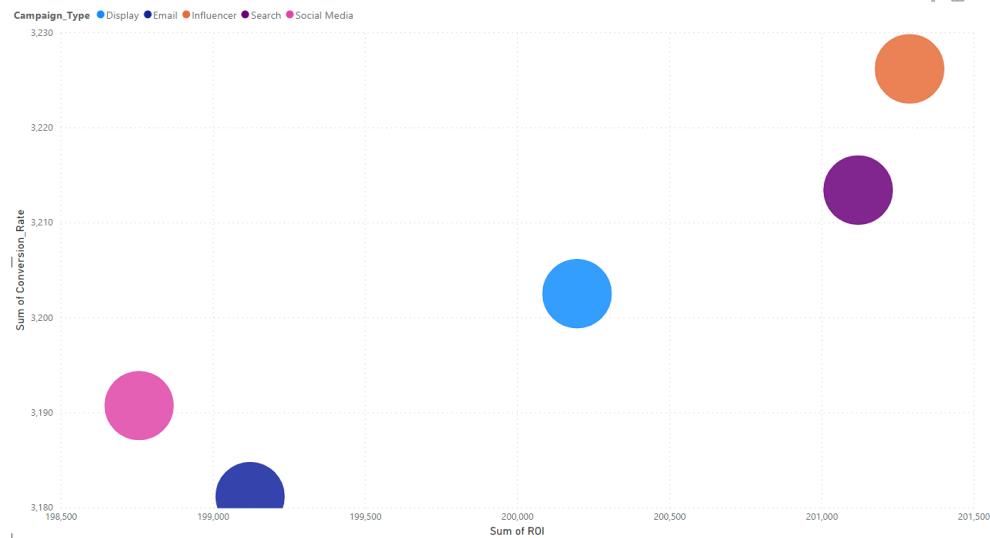
#### 4. How will we measure the return on investment (ROI) of the campaign?



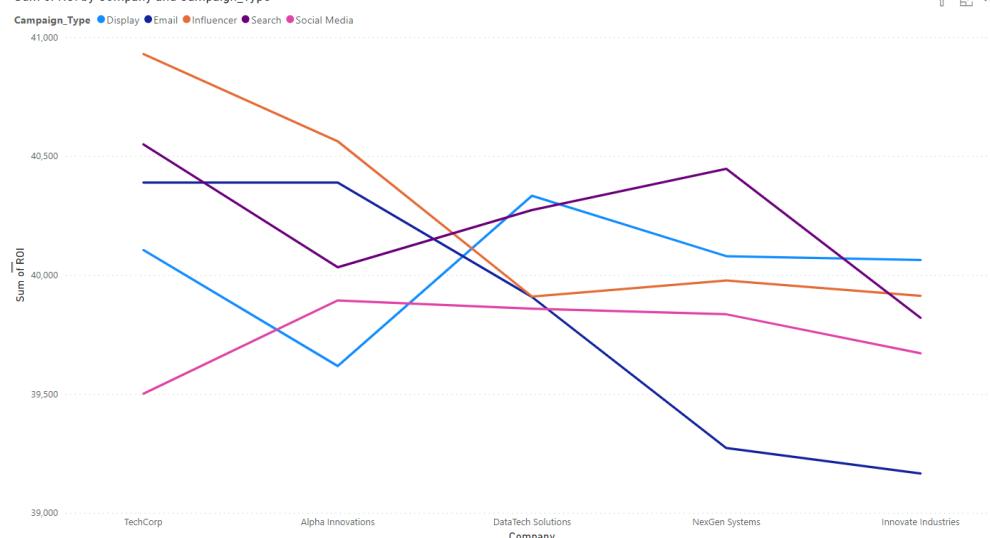
Average of Duration, Sum of ROI and Sum of ROI by Company

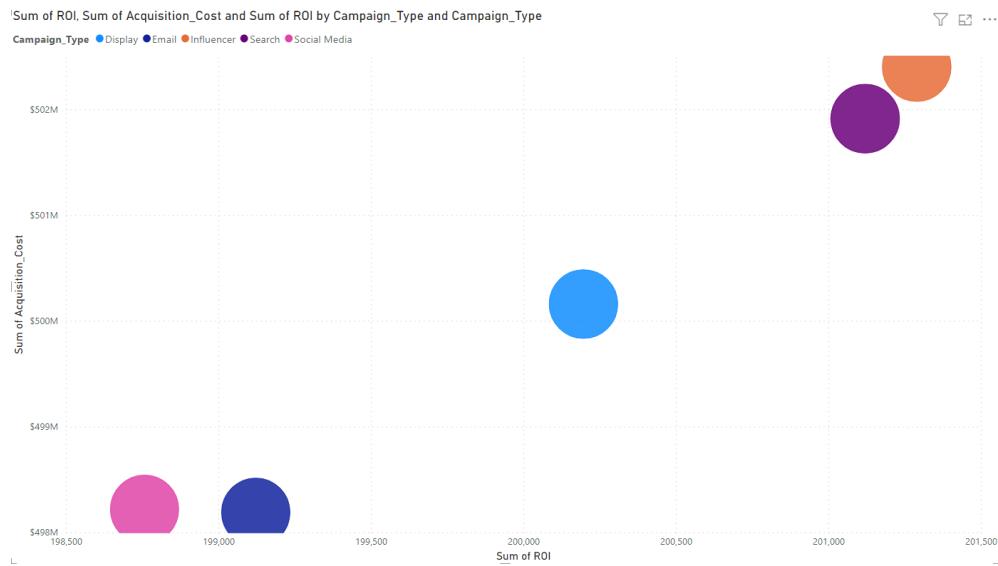
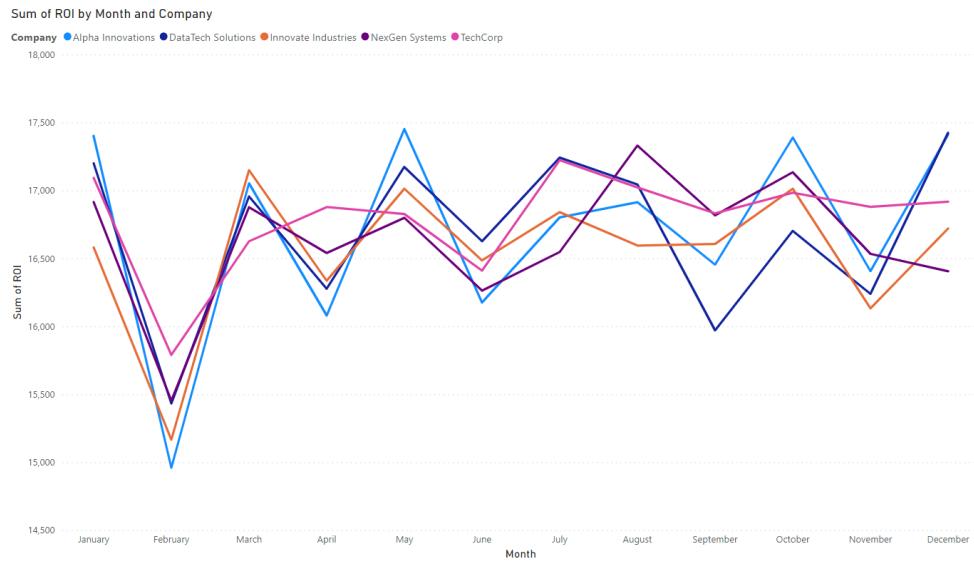


'Sum of ROI, Sum of Conversion\_Rate and Sum of ROI by Campaign\_Type and Campaign\_Type'



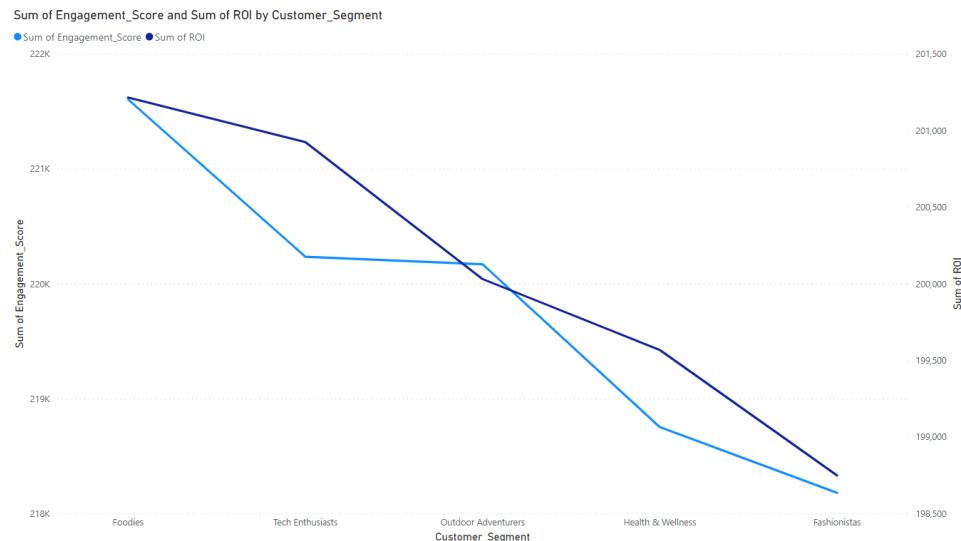
'Sum of ROI by Company and Campaign\_Type'





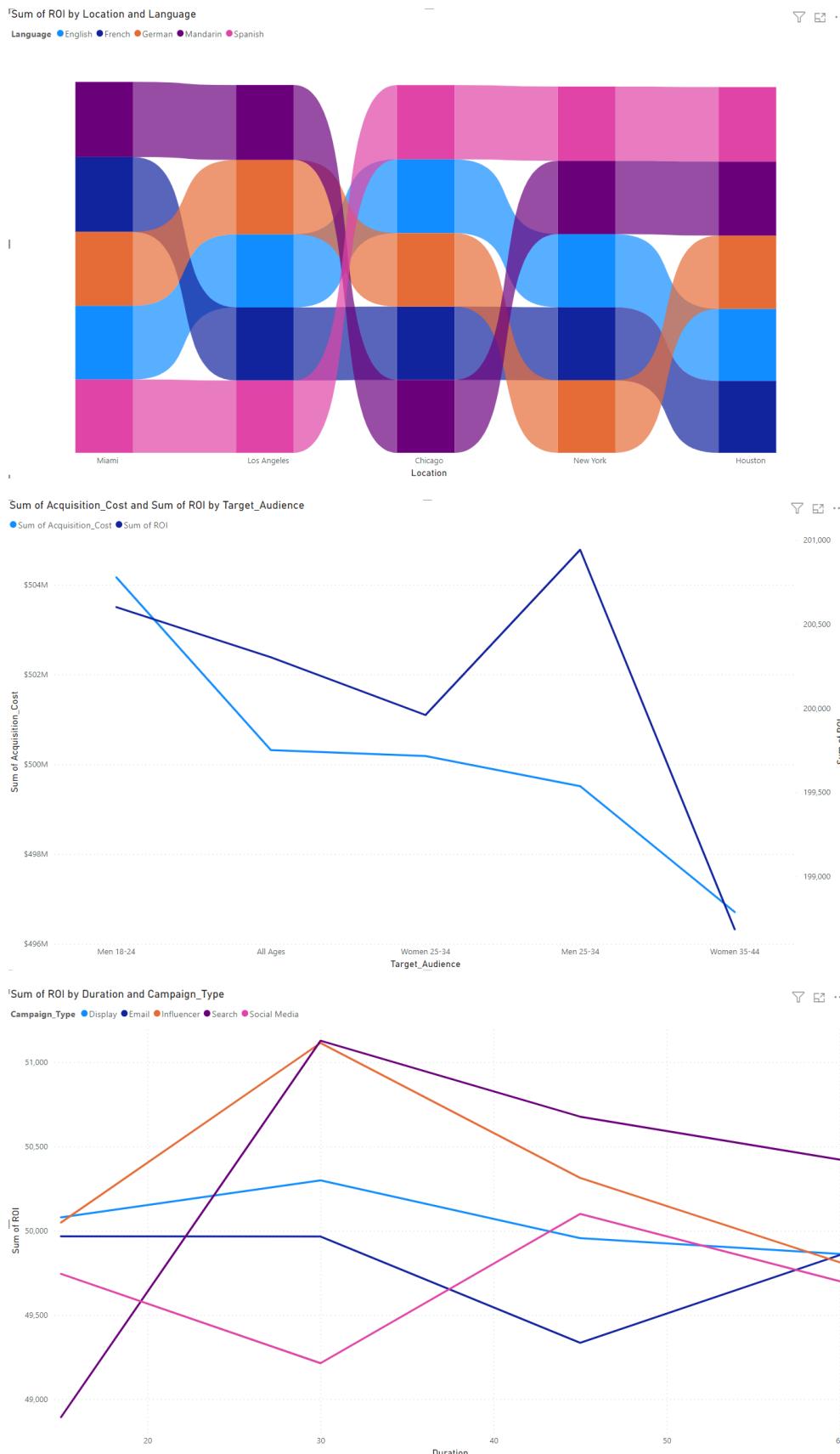
4. We can refer these visuals for making the decisions where the ROI is more and respectively make the decisions in the same direction where the execution is parallel to it. We have used these vs. ROI because all these aspects are those important aspects which correlate with ROI such that it will help to know how the performance of each aspect in overall campaign was. Because ROI is the ultimate profit we made.

## 5. How will we ensure that our social media campaign is aligned with our overall brand identity, values, and messaging?



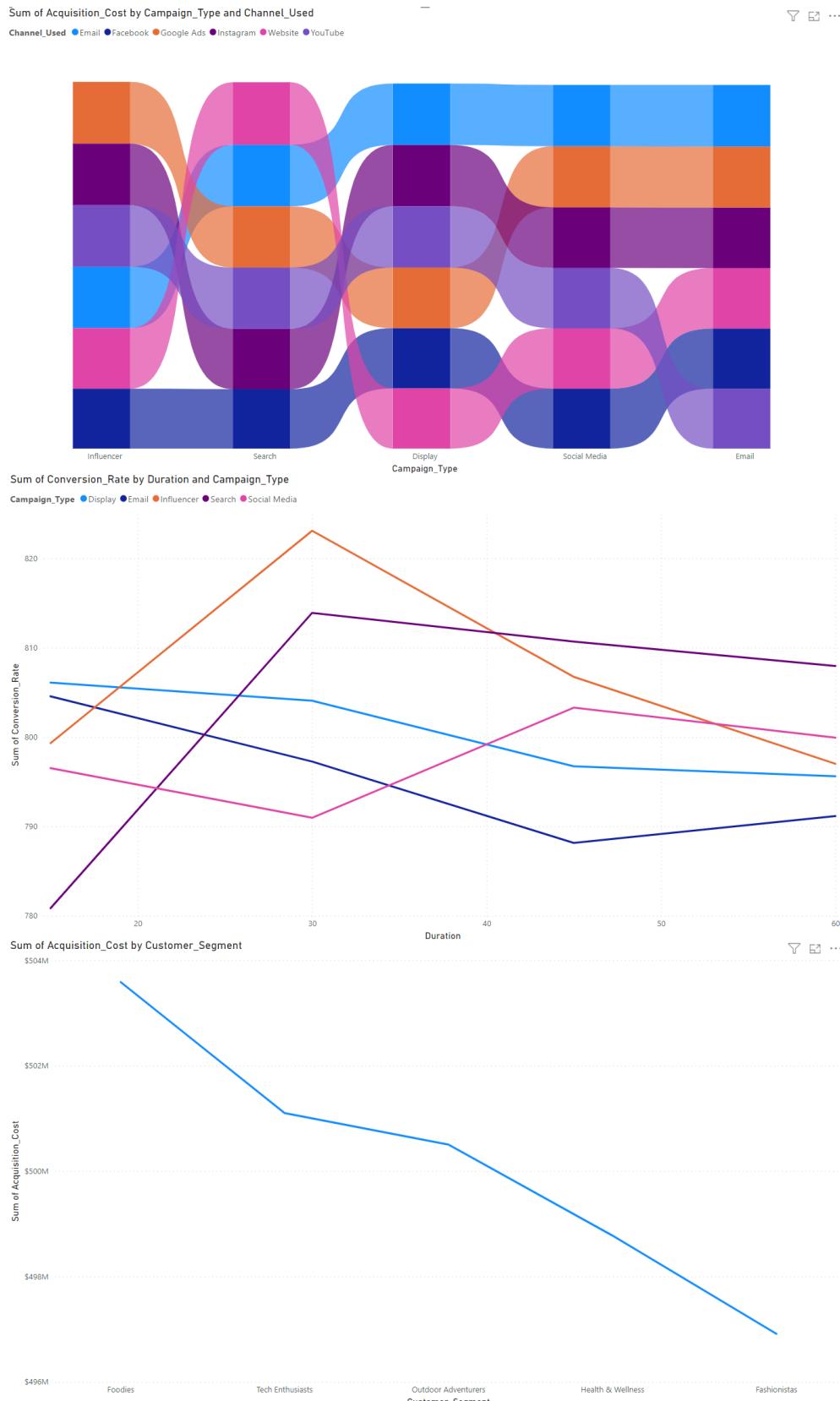
5. By ensuring the engagement and ROI, to be parallel to each other mostly. Because if the Target Audience can correlate themselves with the brand and the product then we will see the less difference in Engagement Vs. ROI. And when the difference will be more then we can understand that the people either did not engage or when engaged we got good ROI comparatively.

## 6. How can we leverage social media analytics to identify the most effective content formats (e.g., images, videos, infographics) for our campaign?



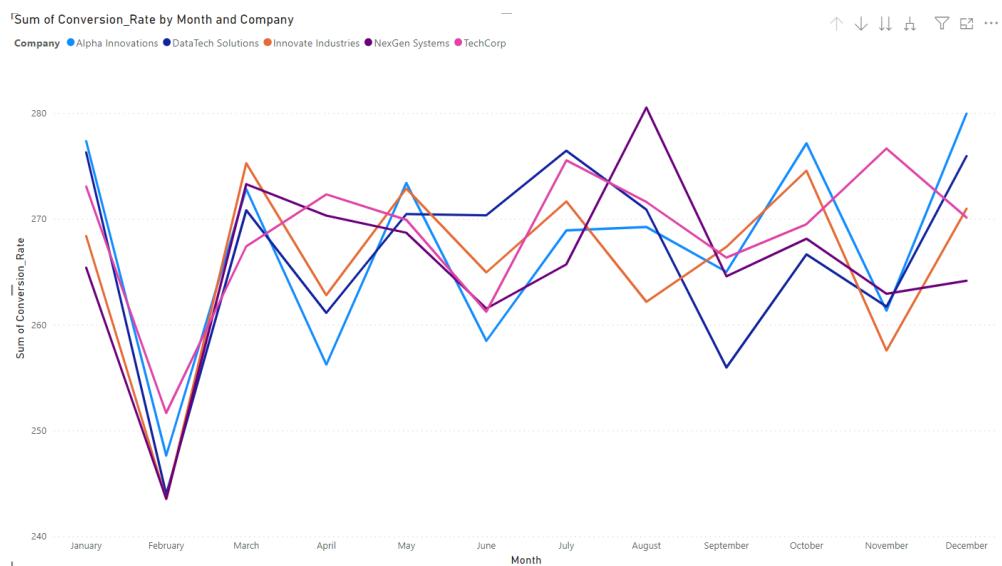
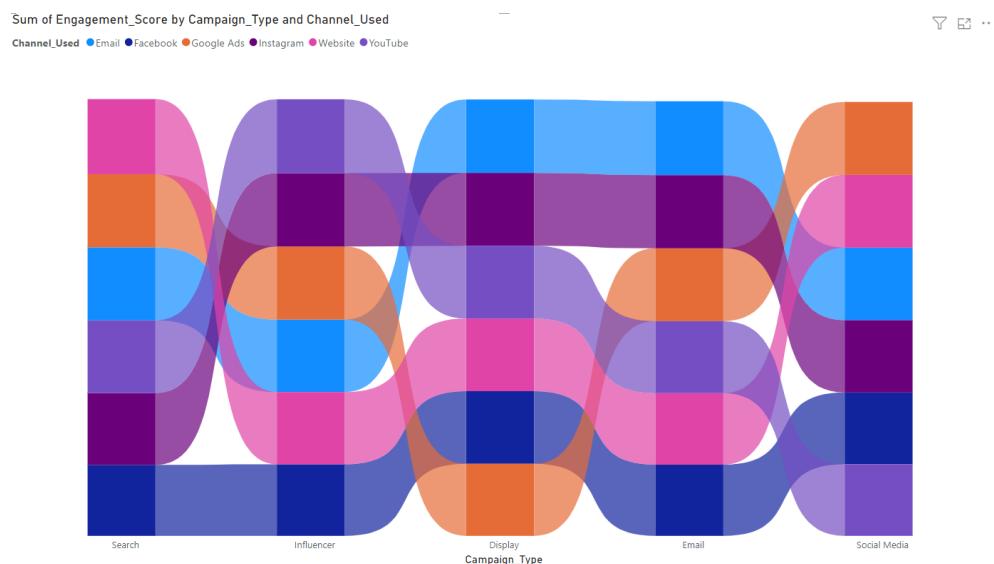
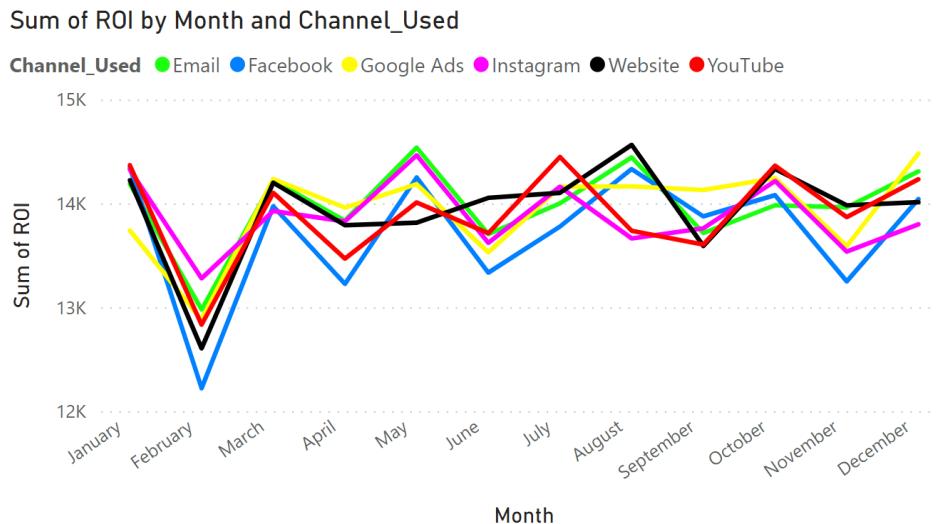
6. We have used all those aspects which involves content formats like images, videos, or infographics. And to measure the effectiveness of those content formats we have used ROI Vs. them.

## 7. How will we allocate funds across different activities, such as content creation, paid advertising, or influencer partnerships?

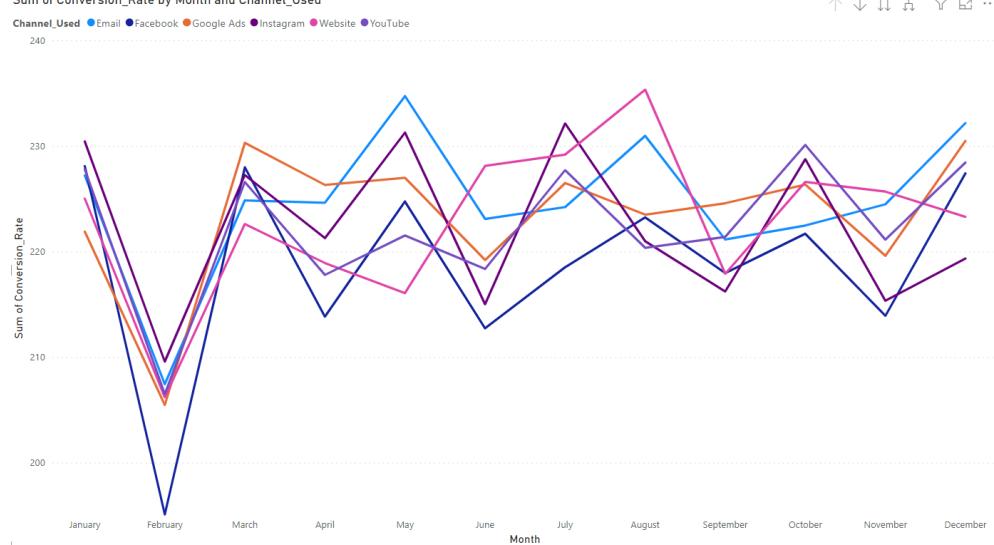


7. Here we have taken into consideration the Campaign\_Type versus the Acquisition Cost and the Duration. The Duration will let us know about the time we require for gaining the desired customer number and therefore we can manipulate the budget according to it.

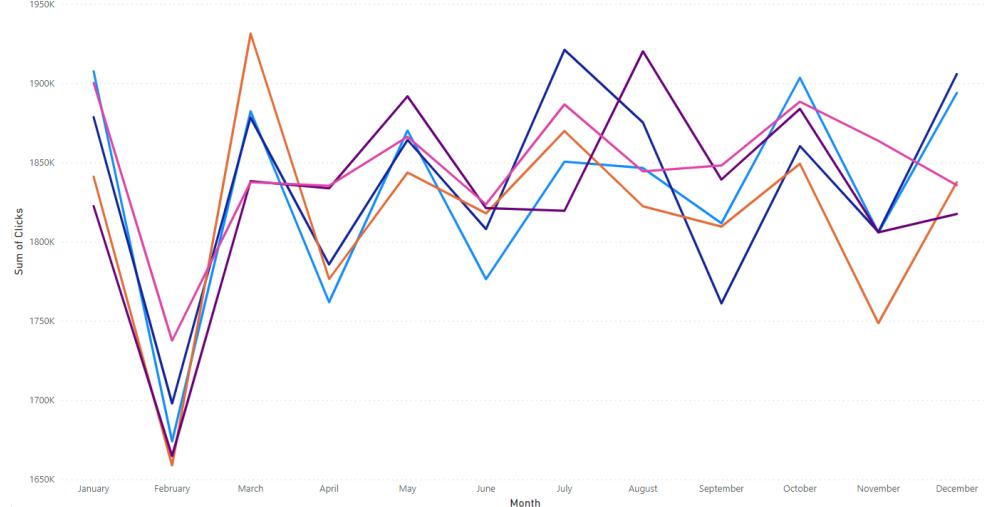
## 8. How frequently should we post content? What is the ideal posting schedule for maximum reach and engagement?



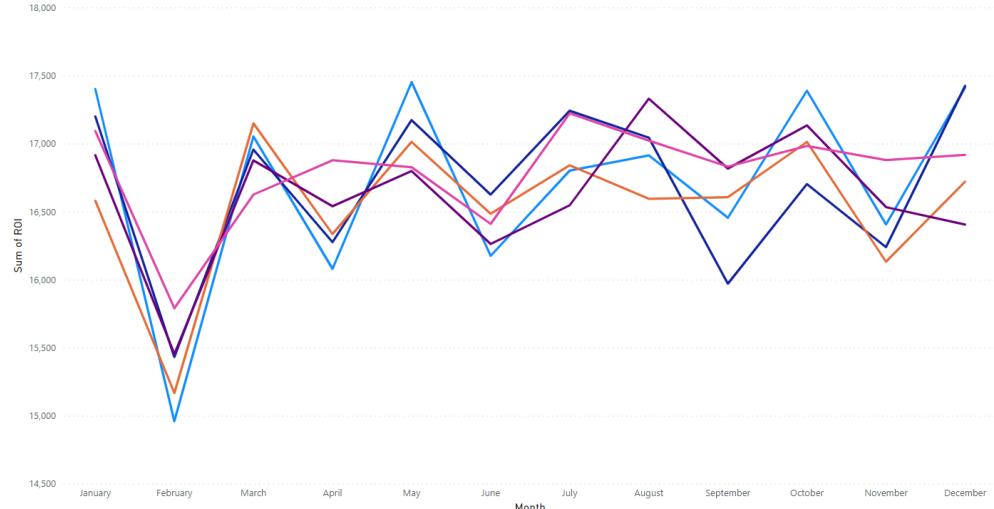
Sum of Conversion\_Rate by Month and Channel\_Used  
 Channel\_Used Email Facebook Google Ads Instagram Website YouTube

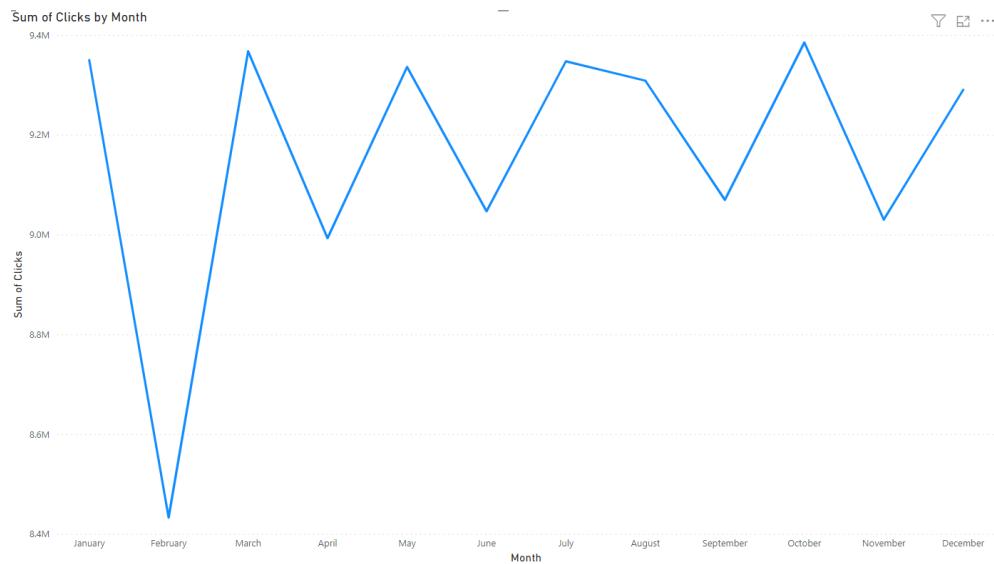


Sum of Clicks by Month and Company  
 Company Alpha Innovations DataTech Solutions Innovate Industries NexGen Systems TechCorp



Sum of ROI by Month and Company  
 Company Alpha Innovations DataTech Solutions Innovate Industries NexGen Systems TechCorp





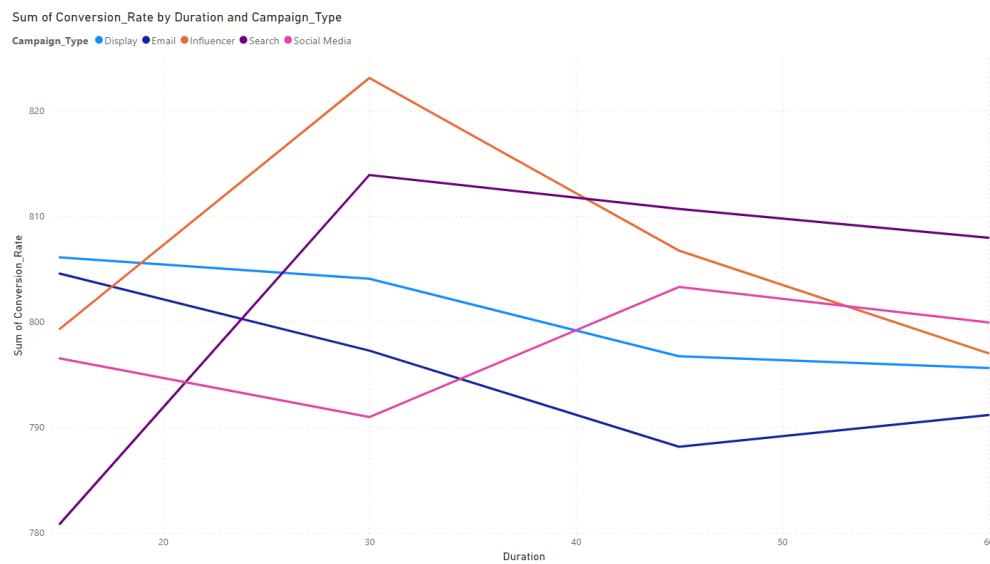
**8.** Here we have taken into consideration the Months versus the Clicks, ROI, Conversion Rate of the Channel\_Used and Campaign\_Type. So, from the previous data we get to know when there is appropriate time to vary the content as per the way public is interested last time. So, we can also grab the opportunity to find the gaps to fulfill them or create any opportunity to increase ROI.

## 9. What is our strategy for leveraging paid advertising on social media platforms to amplify the reach and impact of our campaign?



9. If we observe the Duration of the Campaign\_Type according to the Conversion\_Rate we do understand when the public is willing to engage and when not. So as per the product type we can understand the calamities affecting the Conversion\_Rate. Therefore, we should make the policies to according to the duration of campaign to increase conversion rate earlier and after that keep the conversion rate constant. We should also take into consideration the months to understand when the peak period is and when is the downfall, to prevent the conversion rate from falling with respect to the Channle\_Used by public. Because we can see that the Conversion\_Rate is varying for different months for each Channel\_Used.

## 10. How will we optimize our content for search engine visibility and discoverability on social media platforms?

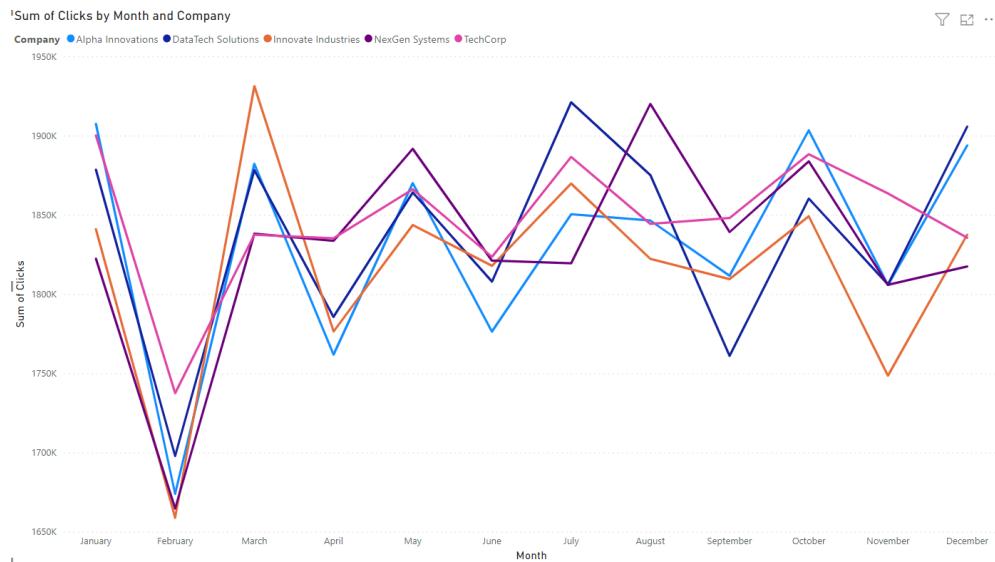


**10.** If we observe we get to see that the results take approximately 30 days to give best Conversion\_Rate. But the but it decreases after that.

Therefore we also need to add the graph of Conversion\_Rate with the months and Campaign\_Type and channel used.

From that we get to see the best Conversion\_Rate and by identifying the reasons which made the campaign perform best in those time we need mimic or reflect same aspects in the upcoming campaign which will help us to diagnose the best possible reason for having maximum conversion rate.

## 11. What are the opportunities for cross-promotion or collaboration with other brands or organizations to extend the reach and impact of the campaign?



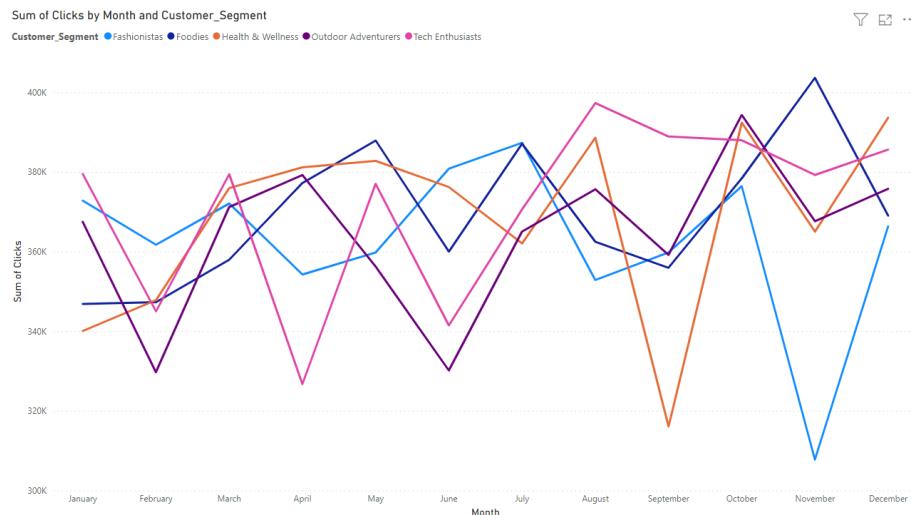
**11.** If we observe the Company versus Months graph, we get to know how the brands have performed. We get to know when the ups and downs in which month was. Hence, we can make the strategy to collaborate with other brands when there is a downing period of certain brand but rising of other. By doing such kind of collaborations we can make exchange of ideas and get maximum output from the market.

## 12. How can we leverage social media influencers or brand advocates to amplify the reach and impact of our campaign?



12. The graph show us the score of clicks in each month of every brand/company. We need to point out the reasons for which the social media influencers were successful during specific period. We need to connect the dots which made the social media influencers to perform well. And identify those factors which affected the result in both ways. And to amplify the reach and impact of our campaign need to plan according to it. The influencer-based data of clicks of different brands in the 3<sup>rd</sup> graph, shows which brand's influencer have more scope for improvement, with respect to the month by how they have performed and if change in strategy have helped them, then the same should be followed for other influencers.

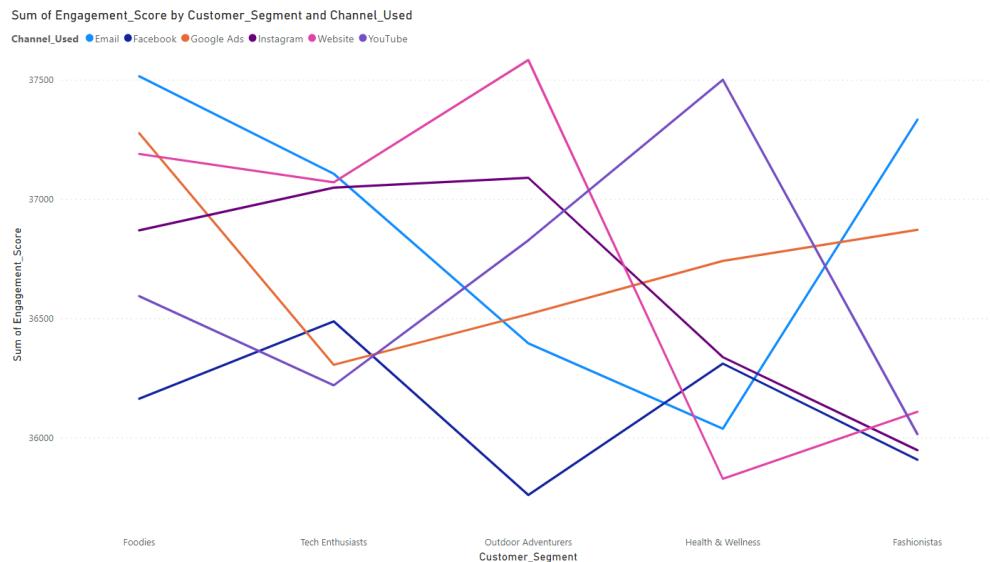
### 13. What tactics can we use to leverage social media influencers to create engaging and authentic content that aligns with our campaign goals?



13. The graph shows the clicks of different Customer\_Segment of influencers month wise. From this we understand that the performance of the influencers in different sections of Customer\_Segment. And clicks tells where the public found its interest in Influencer. Therefore, there is need of creating such a strategy which will take this interest to next level and where the performance was lagging there is need to understand it's reasons and improve accordingly.

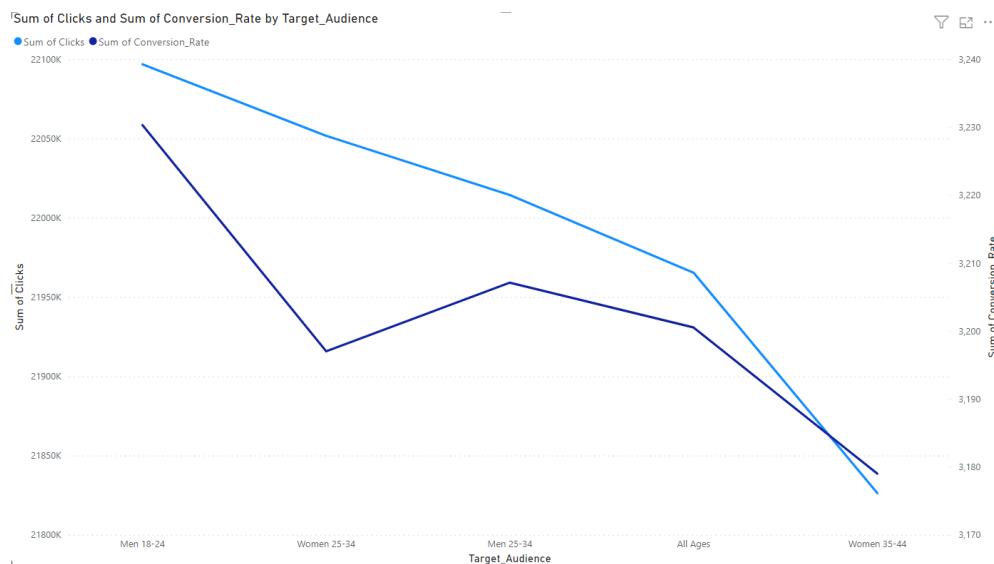
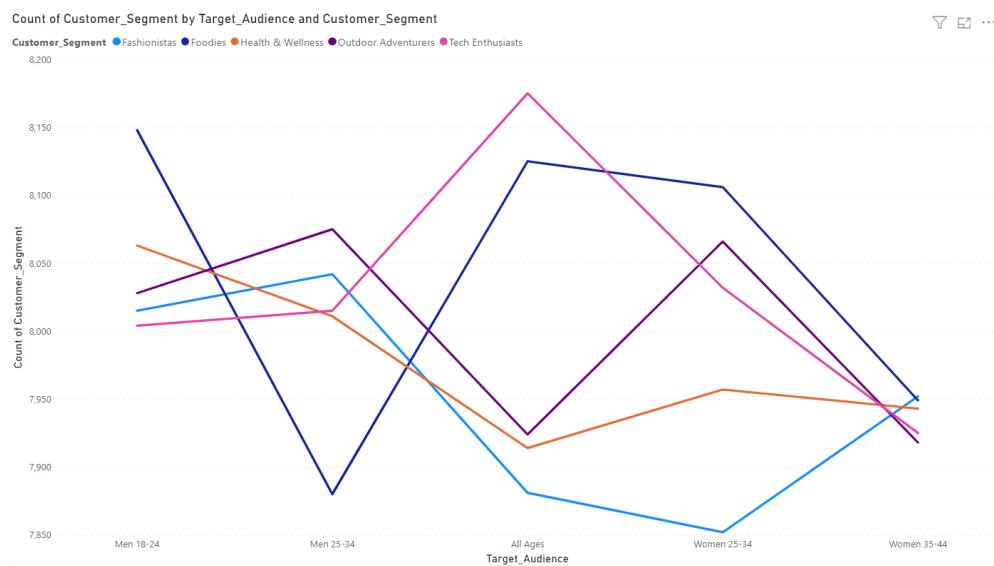
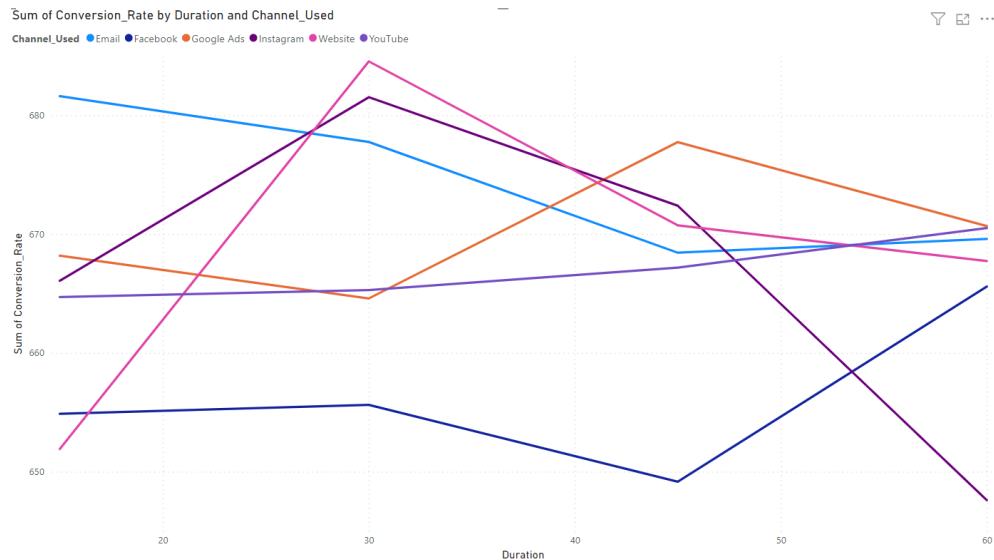
## 14. How will we measure and track the engagement levels of our social media?





**14.** We are having engagement data and the clicks data with the Customer\_Segment data, Campaign\_Type and Channel used. We can create these combinations to get the knowledge to measure and track the engagement levels of our social media content.

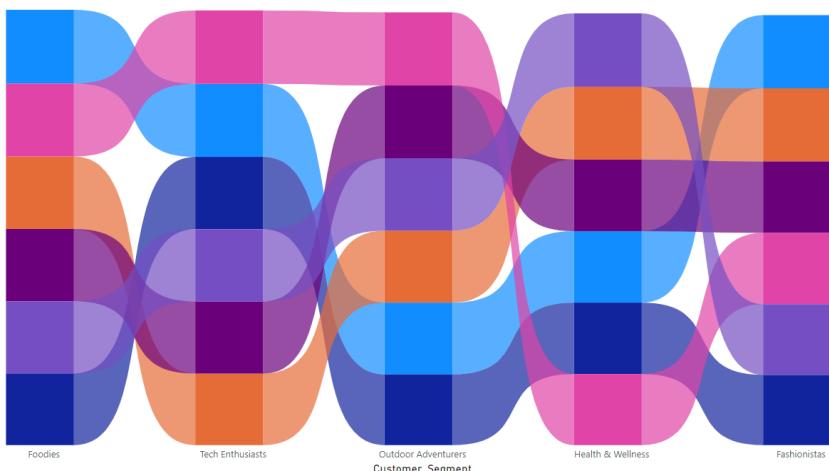
## 15. How can we leverage social media analytics and insights to continuously optimize our campaign performance?



Sum of ROI by Customer\_Segment and Channel\_Used

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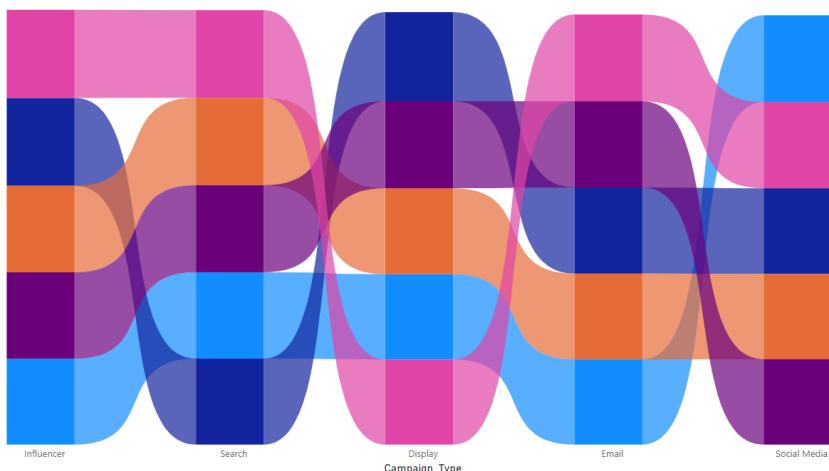
Channel\_Used Email Facebook Google Ads Instagram Website YouTube



Sum of ROI by Campaign\_Type and Customer\_Segment

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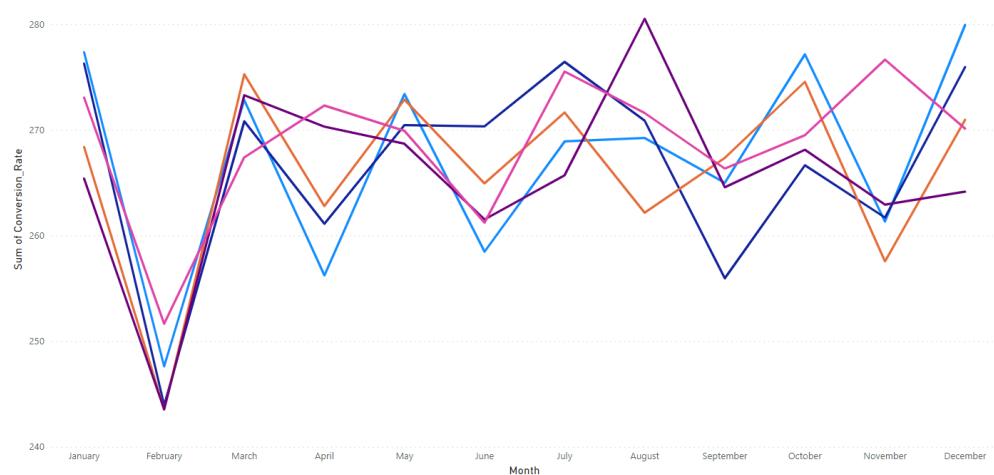
Customer\_Segment Fashionistas Foodies Health & Wellness Outdoor Adventurers Tech Enthusiasts



Sum of Conversion\_Rate by Month and Company

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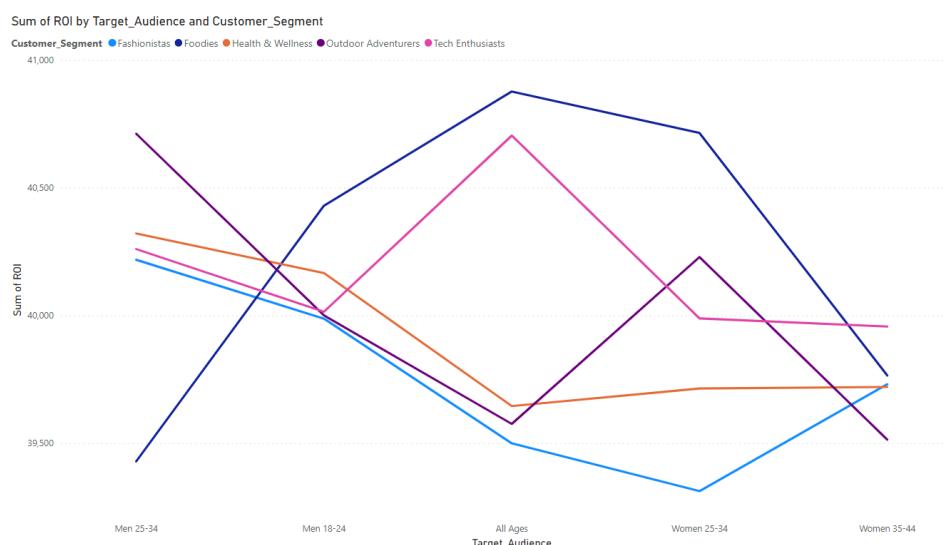
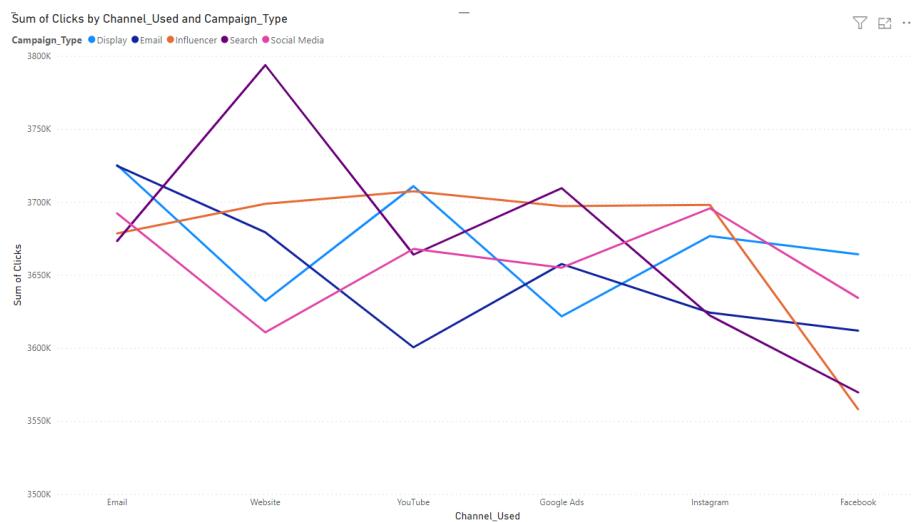
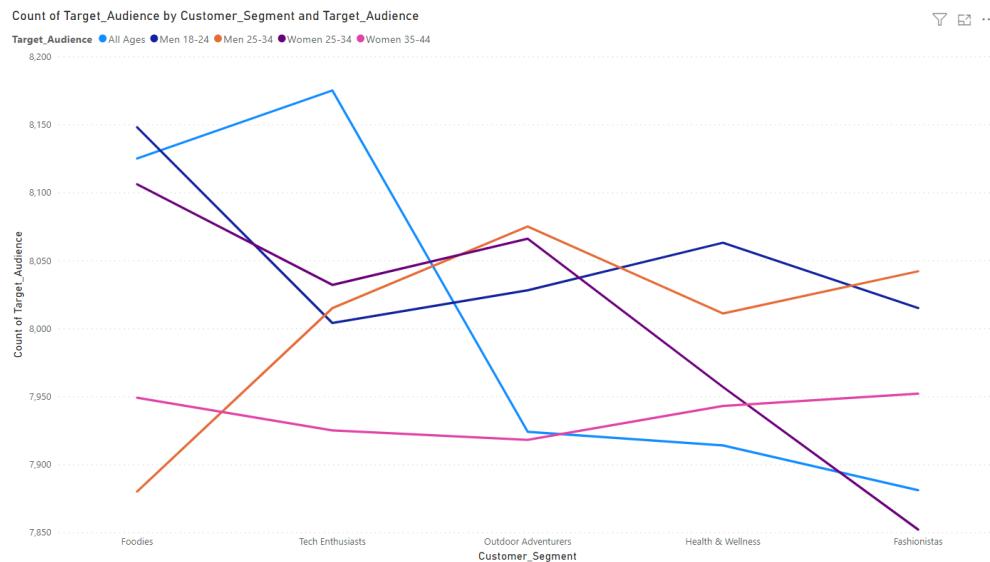
Company Alpha Innovations DataTech Solutions Innovate Industries NexGen Systems TechCorp



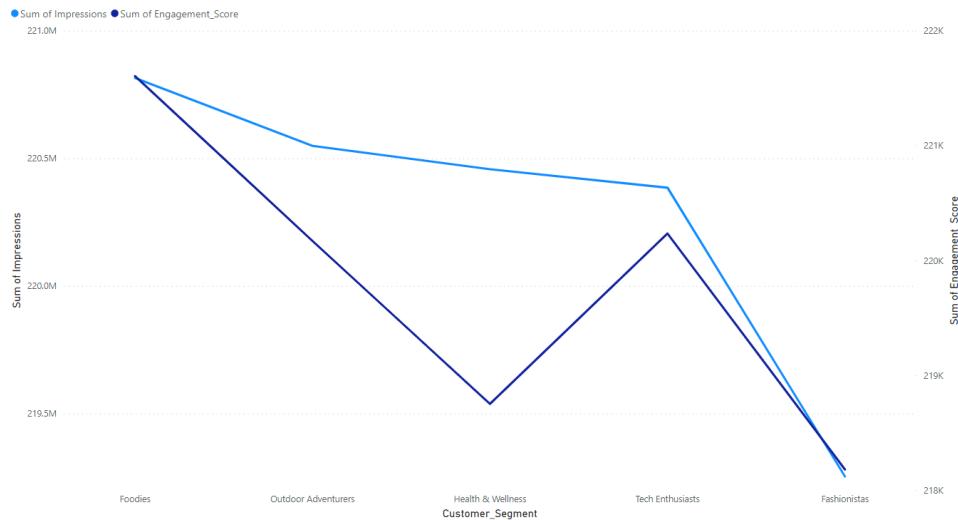


**15.** These visuals of clicks, ROI, Conversion\_Rate, Campaign\_Type, Language, Month, Customer\_Segment and Target\_Audience can help to continuously optimize our campaign performance.

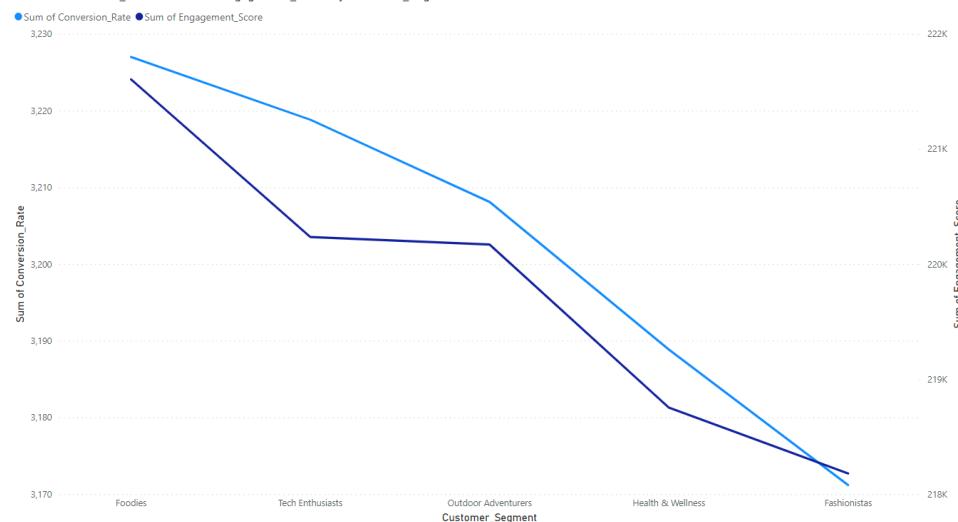
## 16. How will we leverage social media analytics to identify key trends, preferences, or behaviors of our target audience and adjust our campaign accordingly?



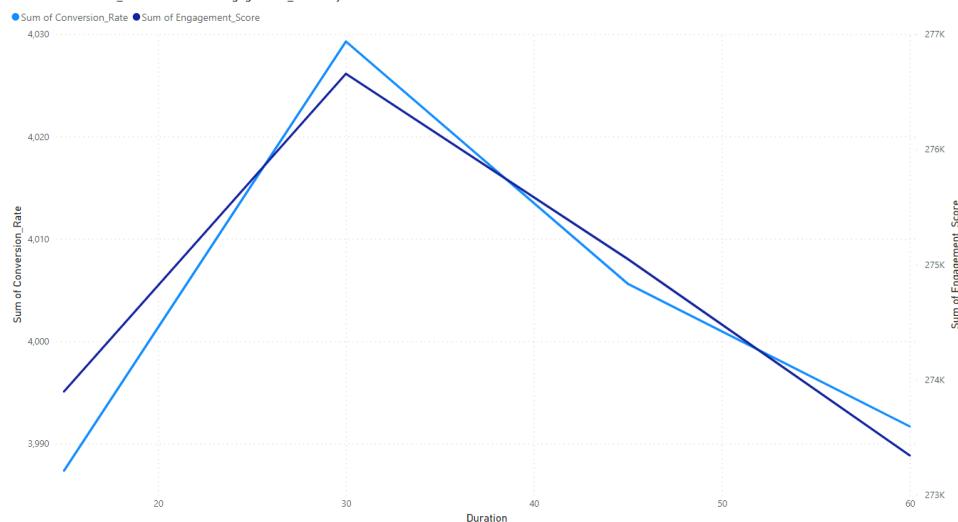
#### Sum of Impressions and Sum of Engagement\_Score by Customer\_Segment

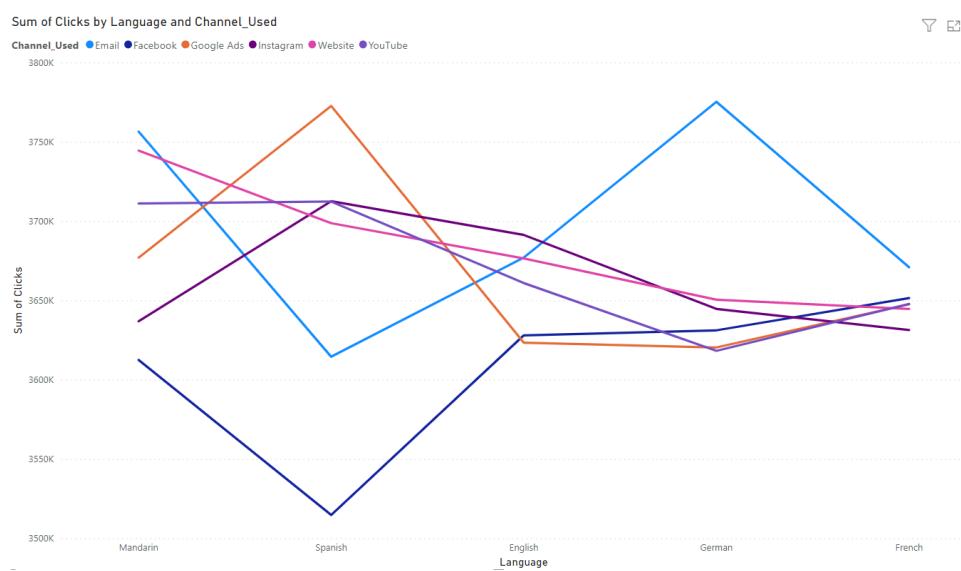
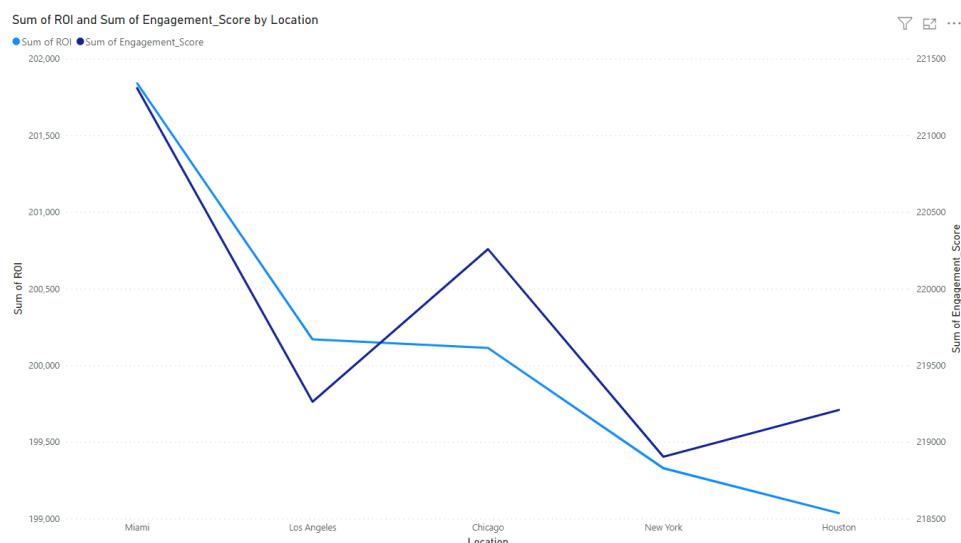
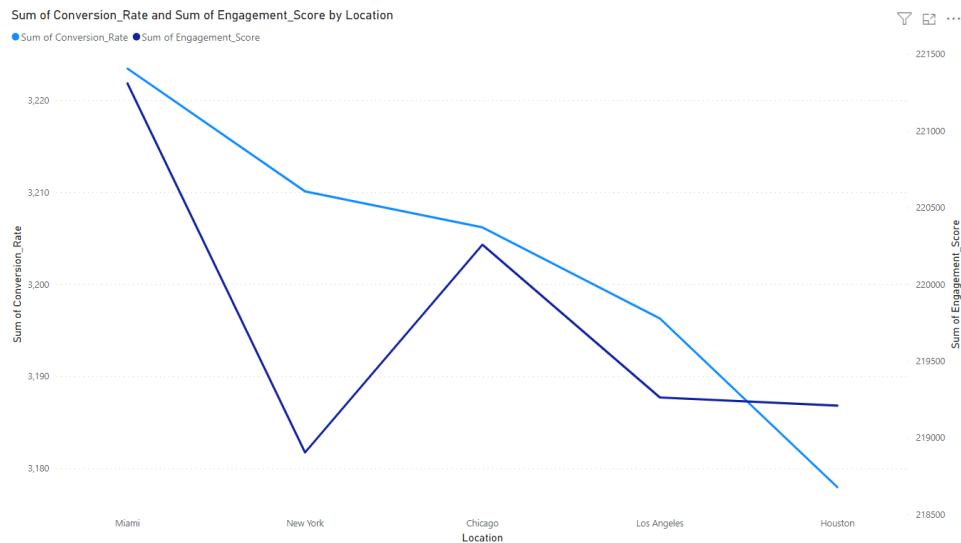


#### Sum of Conversion\_Rate and Sum of Engagement\_Score by Customer\_Segment



#### Sum of Conversion\_Rate and Sum of Engagement\_Score by Duration

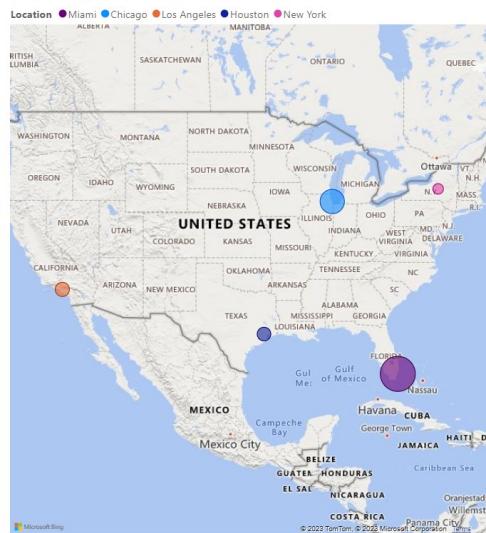




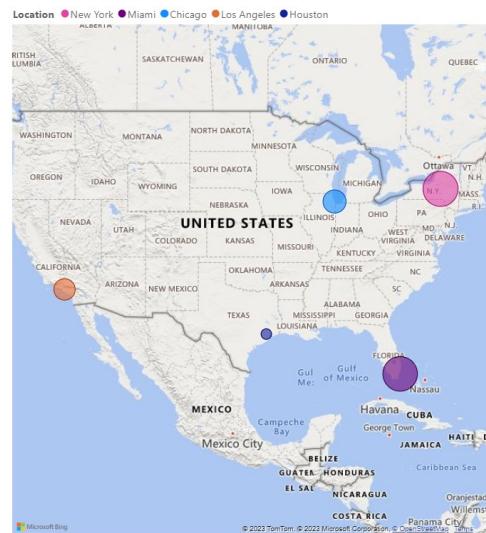
**16.** To understand the customer behavior, we need to know how the customer is engaging with the brands, campaign\_types, channels etc. That shows how the customer is interested.

## 17. What strategies can we employ to localize our campaign content and messaging for different regions or language preferences?

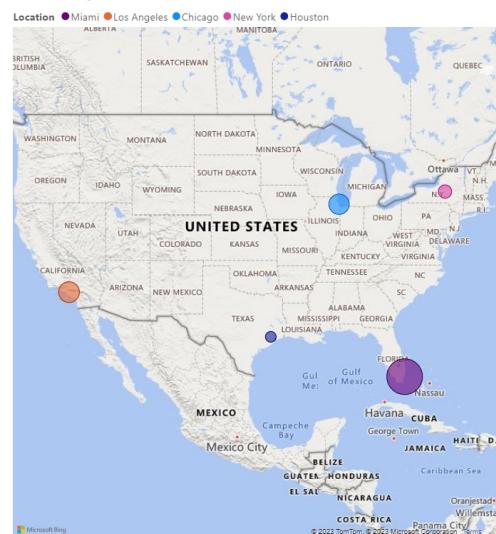
Sum of Engagement\_Score by Location and Location



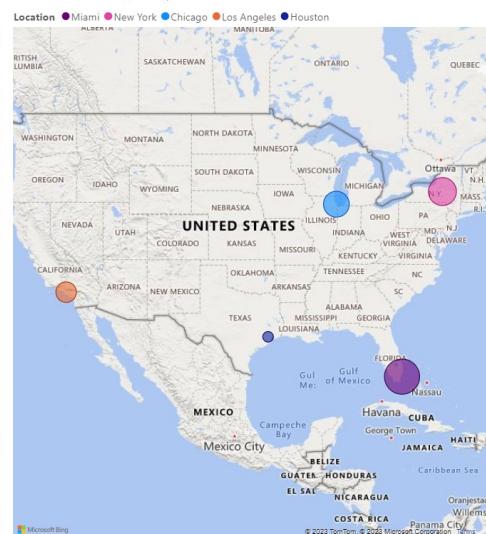
Sum of Clicks and First Company by Location and Location



Sum of ROI by Location and Location

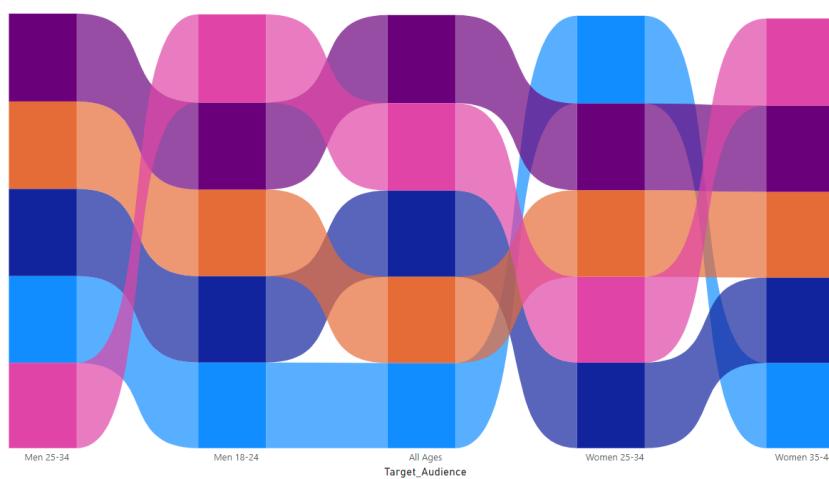


Sum of Conversion\_Rate by Location and Location



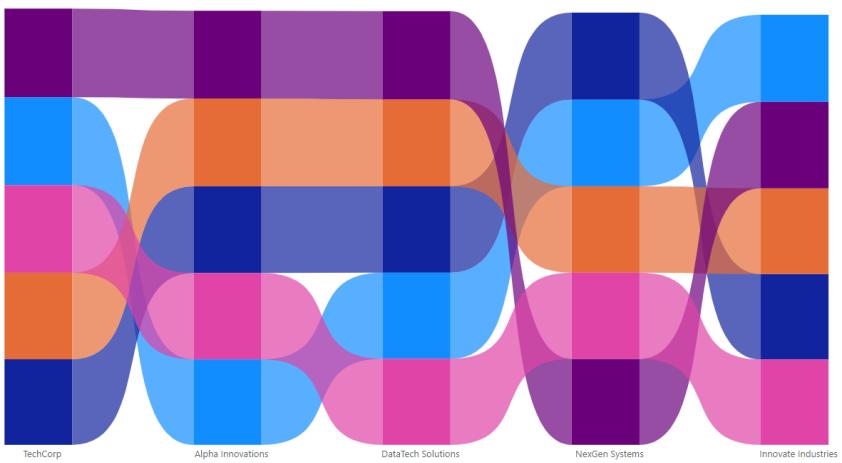
Sum of ROI by Target\_Audience and Language

Language: English (blue), French (dark blue), German (orange), Mandarin (purple), Spanish (pink)



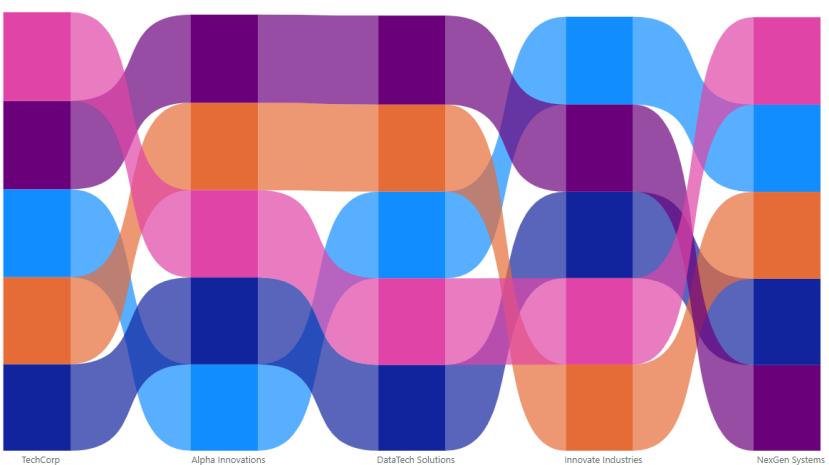
Sum of ROI by Company and Location  
Location ● Chicago ● Houston ● Los Angeles ● Miami ● New York

⋮ ⋯



Sum of Conversion\_Rate by Company and Location  
Location ● Chicago ● Houston ● Los Angeles ● Miami ● New York

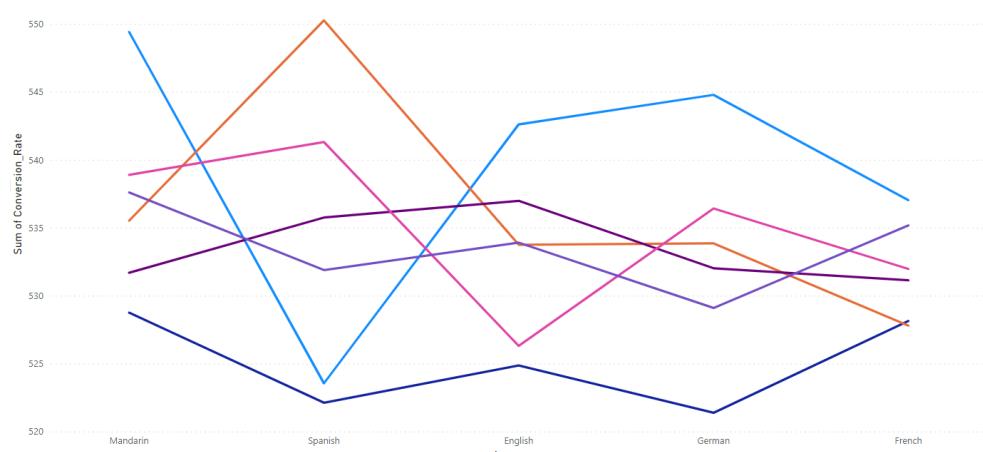
⋮ ⋯



Sum of Conversion\_Rate by Language and Channel\_Used  
Channel\_Used ● Email ● Facebook ● Google Ads ● Instagram ● Website ● YouTube

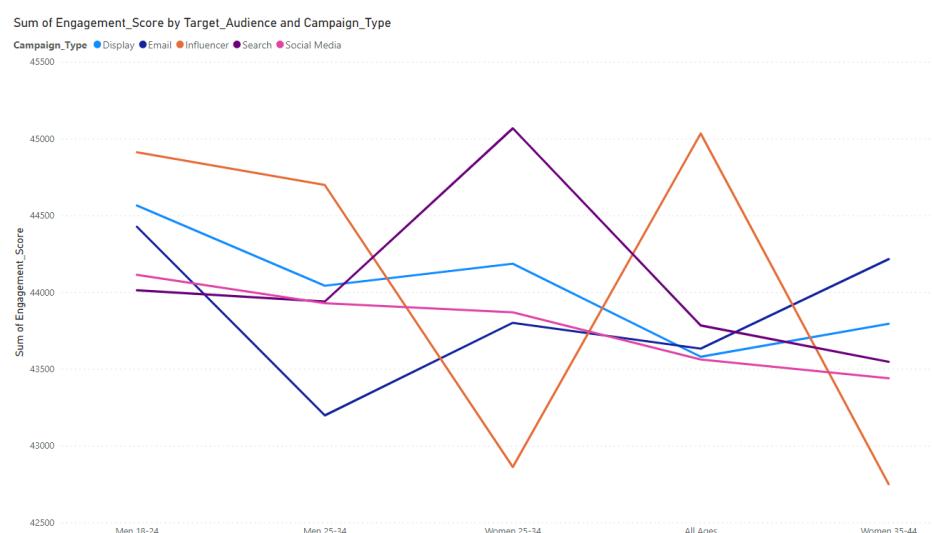
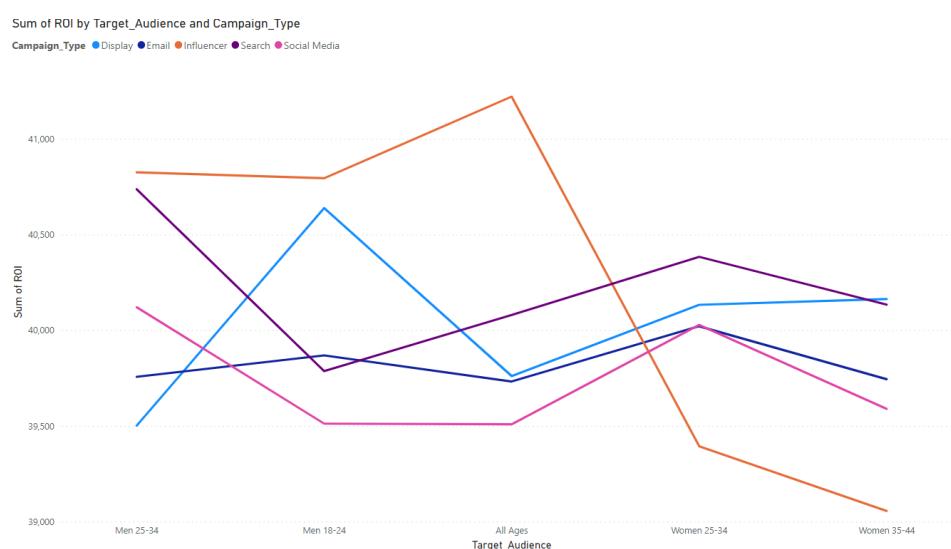
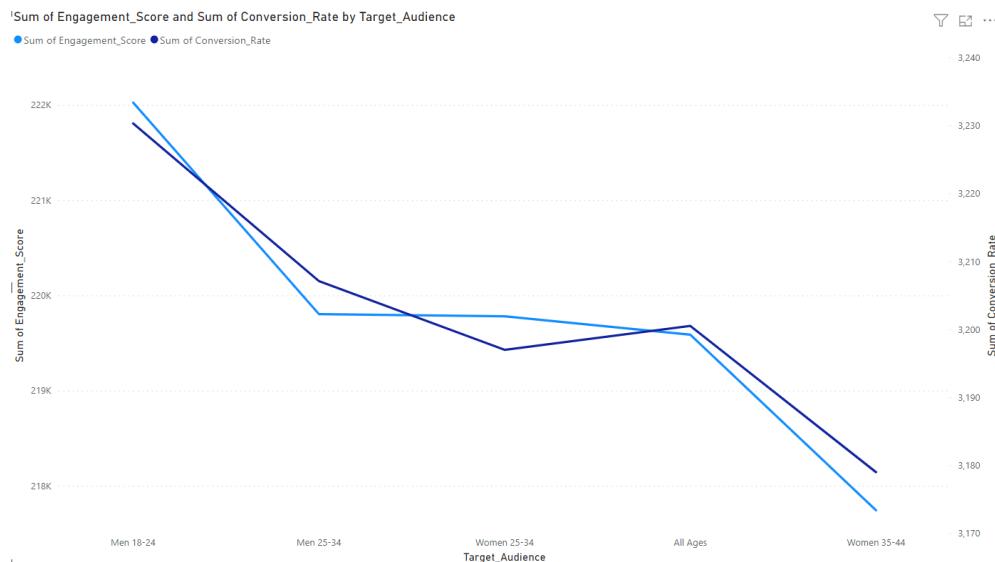
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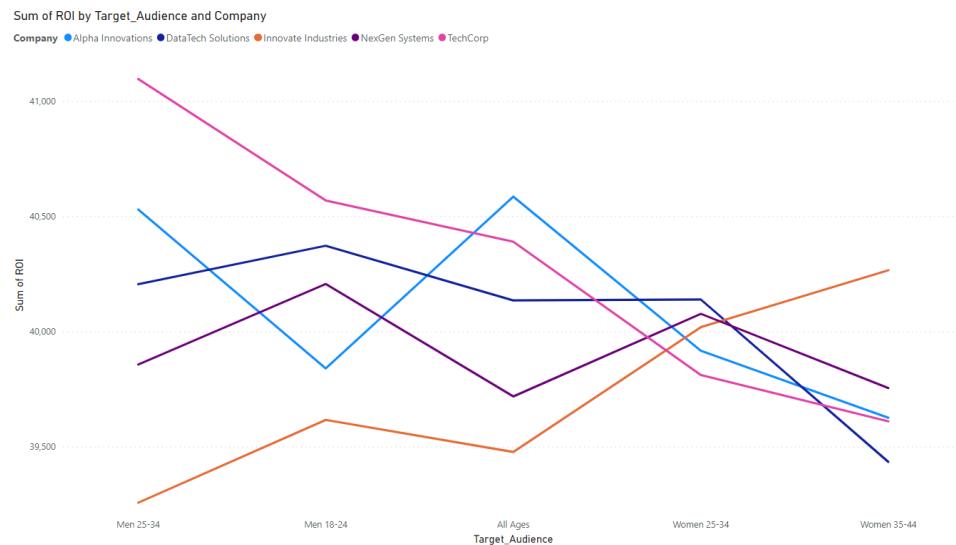
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**17.** By looking at these graphics it is possible to know the brand awareness in that region. We can observe the Engagement and Conversion rate in that regions and with respect to the languages need to create new campaigns covering the other aspects of the same region. Because we keep our focus on same region, we get advantage of advertisement impact on the target audience and more audience try to engage with the product, rather than spending on the new areas. Once the campaign saturates in certain region we can try to survey or join the dots of campaign with surrounding region with similar corresponding reasons, which will make the brand appeal more relatable to new region and we can optimize further accordingly with minimum possible requirement.

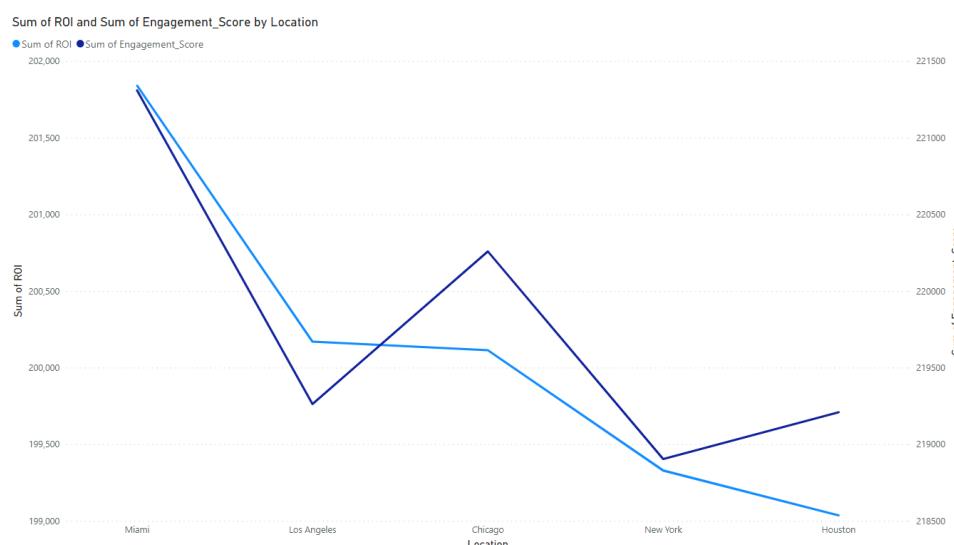
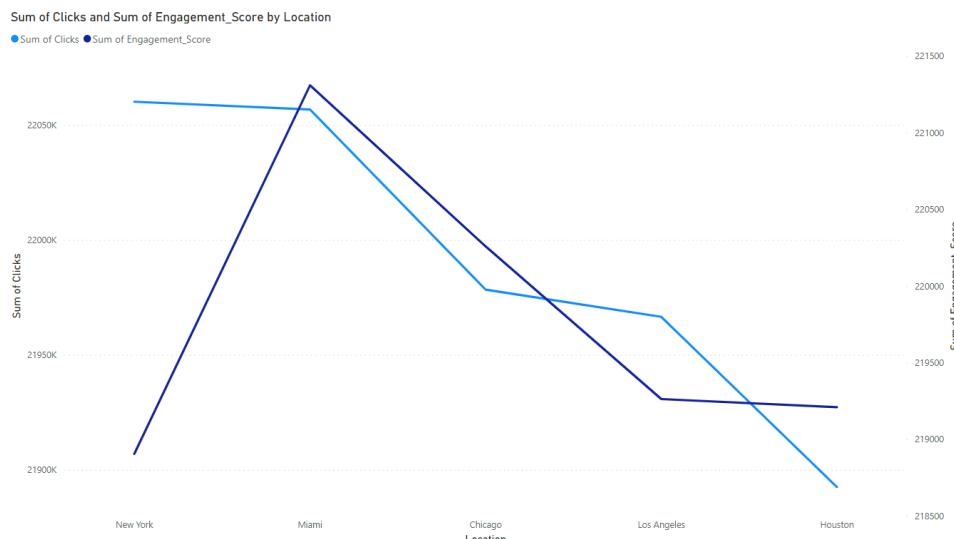
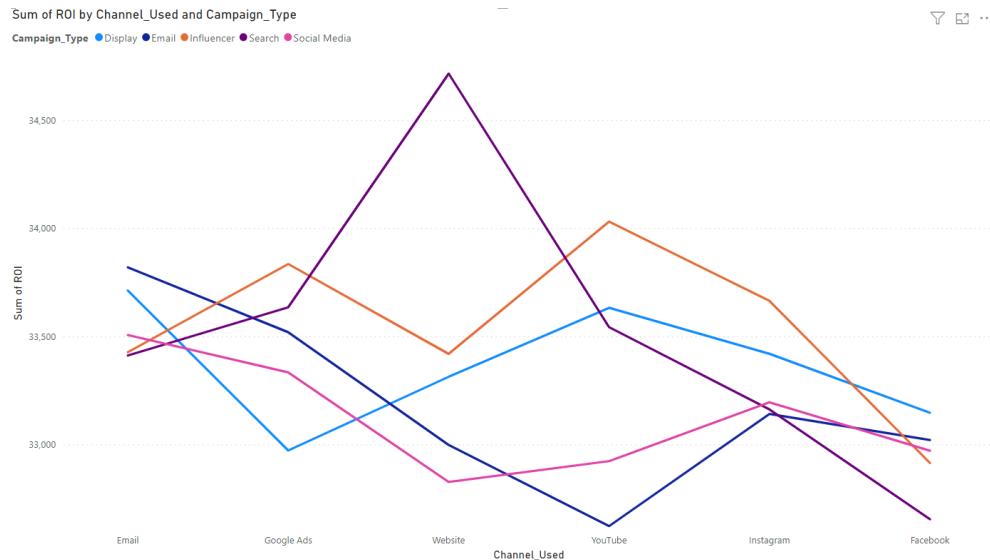
## 18. What strategies can we implement to encourage social media users to actively engage with our campaign through likes, comments, and shares?



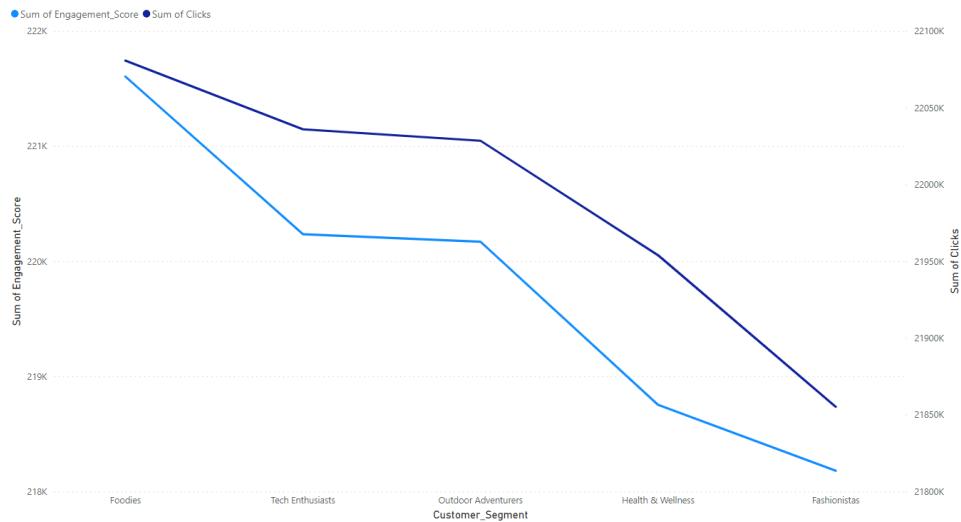


**18.** As we can see the age group in of the target audience the way they have shown the engagement and the conversion rate, from that we get the idea how the target audience is involved in the campaign. By the graph of the Target audience and campaign type we get to know the interest of the age groups, so with both we get the validation which target audience is interested in what kind of campaign type and from ROI we understand the brand impacted them. Therefore, the strategies should always be around the target audience interest.

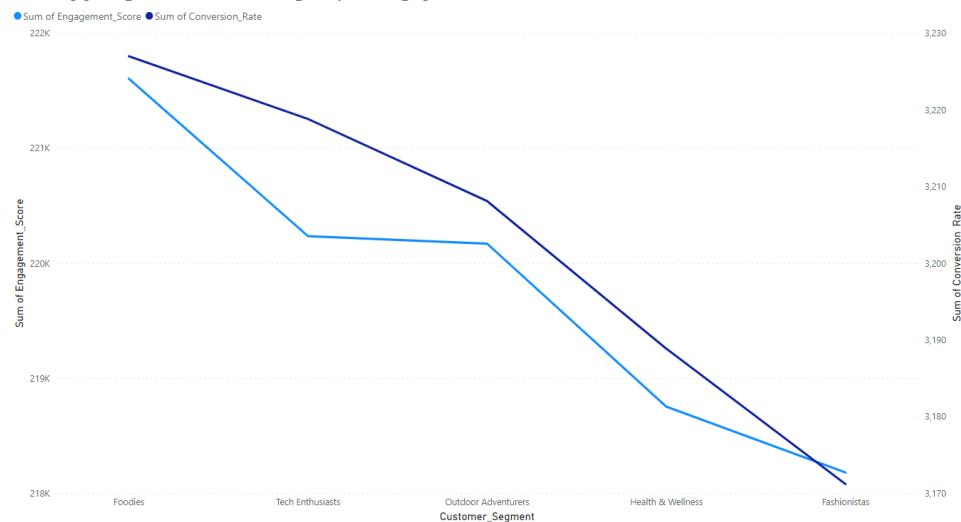
## 19. How will we measure the impact of our social media campaign on brand awareness, brand sentiment, and overall brand perception?



Sum of Engagement\_Score and Sum of Clicks by Customer\_Segment

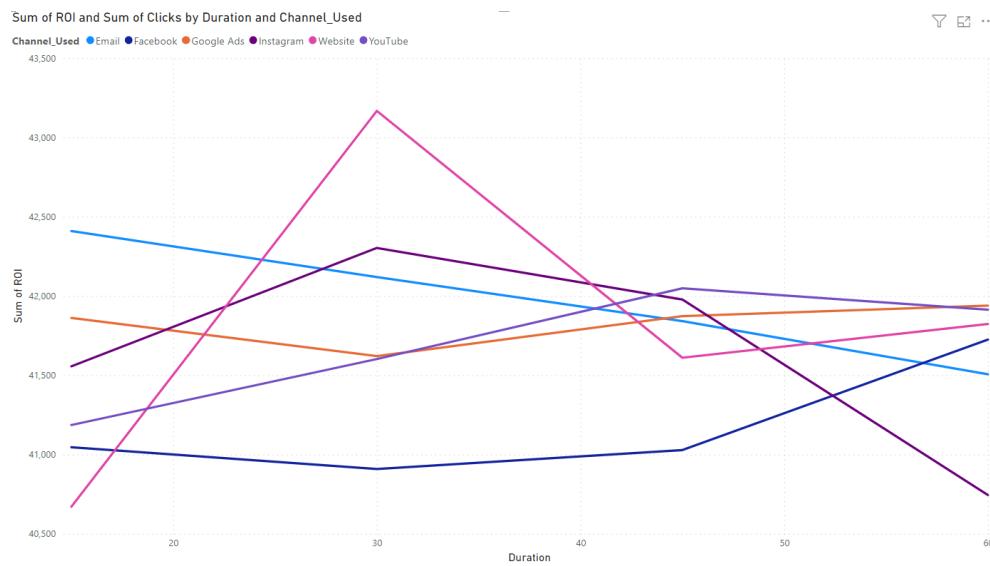


Sum of Engagement\_Score and Sum of Conversion\_Rate by Customer\_Segment



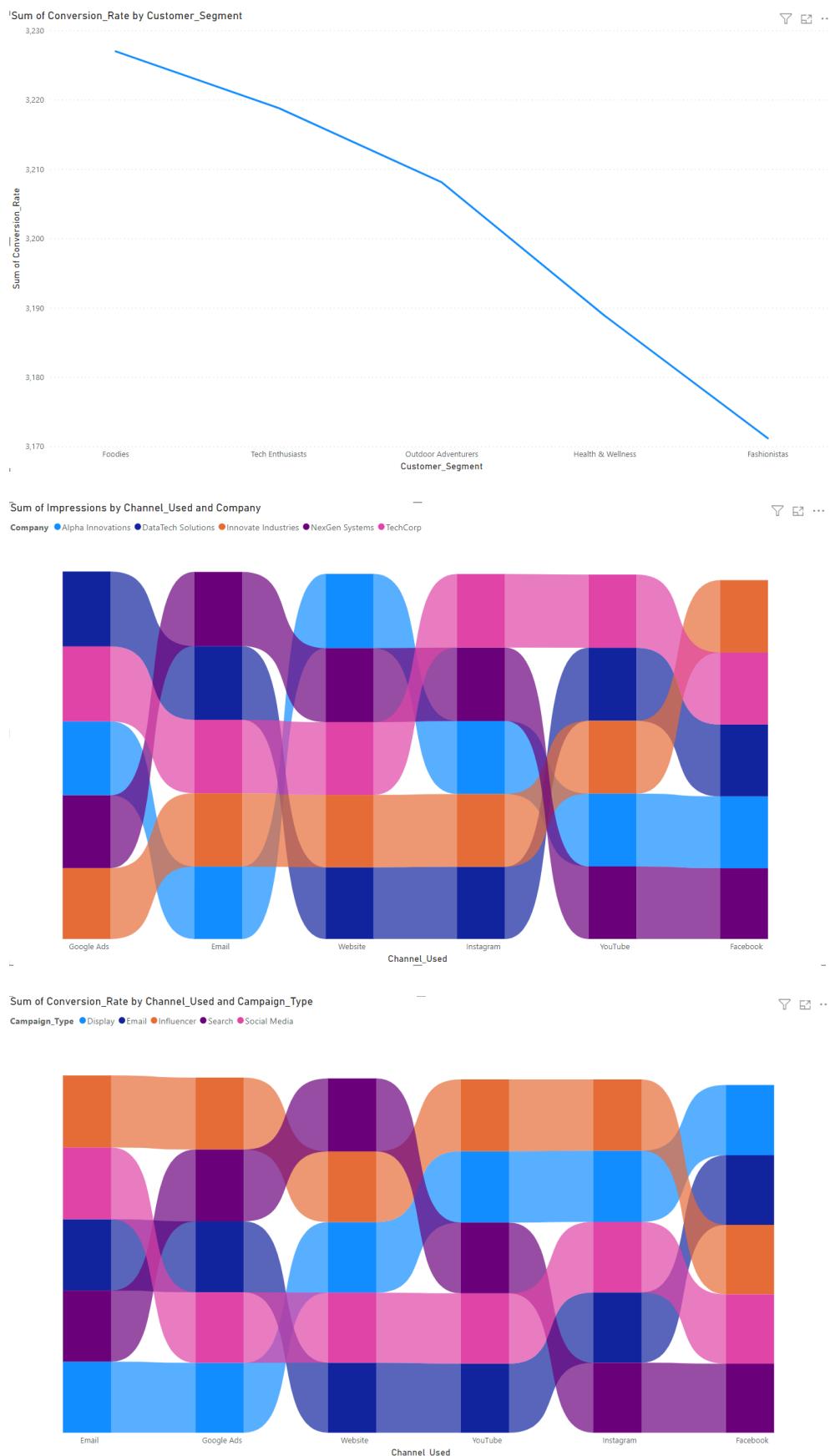
**19.** For brand awareness we can see the graph of companies versus clicks, for awareness we can use brand versus engagement, and for overall brand perception we can consider the after sales feedback if available or the conversion rate.

## 20. How did the social media campaign perform against its goals?



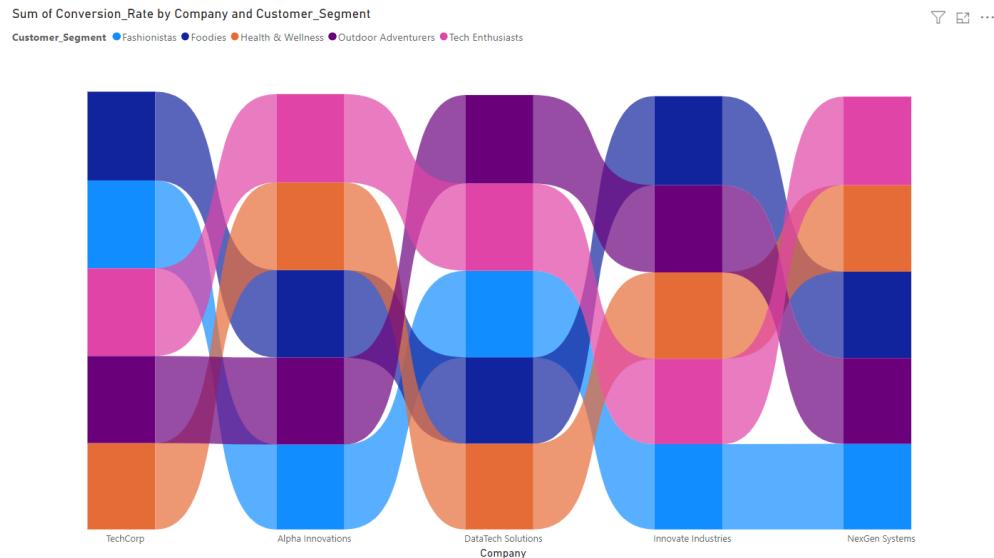
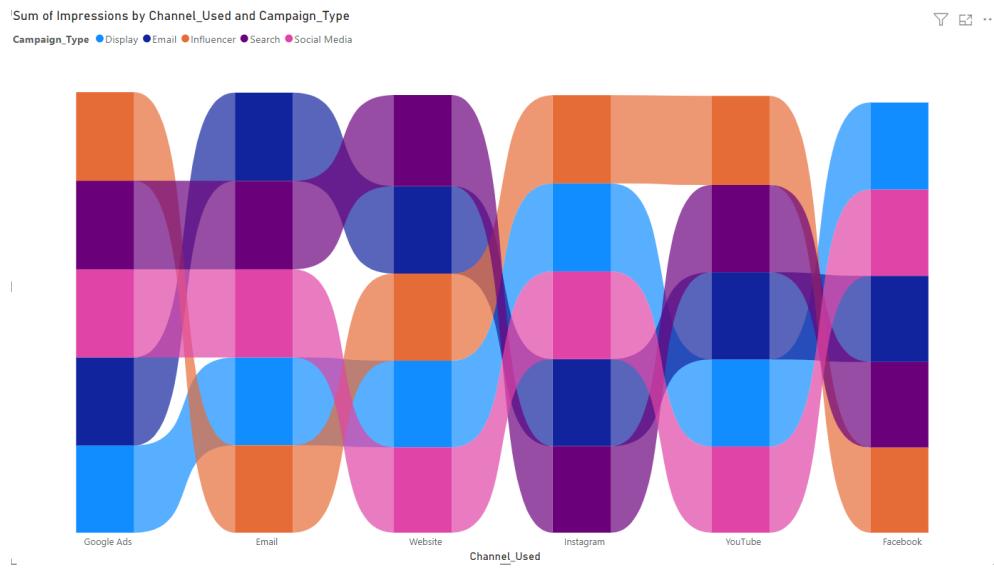
**20.** We can see the duration of the campaign to get the maximum gain and get the understanding of the goals of duration or average advertisement release goals. And consider the conversion rate versus engagement and the impression vs. clicks graph, and impression vs engagement graph of the brands to understand how brands performed during the campaign.

## 21. What are the lessons learned from the social media campaign?



**21.** We went through the different kind of the campaign types. The different campaign types were having different channels used with different brands. There were different languages effective for different regions. Therefore, in the analysis we got to know about different aspects and different aspects were effective in different conditions. And hence we need to identify those possibilities and work according to it.

## 22. How can the lessons learned from the social media campaign be applied to future social media campaigns?



**22.** We need to identify the peak points and the low points. And we get to know how the market performs. We need to connect the dots of the reason which were responsible for the peak points. And identify the reasons which were responsible for the low score. And hence need to mimic these responsible positive points where there were negative impacts, to avoid loss and take maximum advantage of the situation.

## **1. Campaign Performance Analysis:**

- Analysis: Analyze the performance of different campaigns.
- Importance: Identify the most effective campaign types and optimize marketing strategies.
- Requirements: Company, Campaign\_Type, Conversion\_Rate, Acquisition\_Cost, ROI.
- Visual Graphs: Bar chart or column chart to compare performance metrics (Conversion Rate, ROI) for different campaign types.

## **2. Audience Segmentation Analysis:**

- Analysis: Segment the target audience based on various criteria.
- Importance: Understand the characteristics of different audience segments for personalized marketing.
- Requirements: Company, Campaign\_Type, Target\_Audience, Customer\_Segment.
- Visual Graphs: Pie chart or stacked bar chart to show the distribution of audience segments across different campaign types.

## **3. Channel Analysis:**

- Analysis: Evaluate the performance of different marketing channels.
- Importance: Determine the most effective channels for reaching the target audience.
- Requirements: Company, Campaign\_Type, Channels\_Used, Clicks, Impressions.
- Visual Graphs: Stacked bar chart or line chart to compare the performance metrics (Clicks, Impressions) of various channels.

## **4. Time-based Analysis:**

- Analysis: Analyze the campaign performance over time.
- Importance: Identify trends, seasonality, or patterns in marketing efforts.
- Requirements: Company, Campaign\_Type, Date, Conversion\_Rate, Acquisition\_Cost.
- Visual Graphs: Line chart or area chart to visualize changes in Conversion Rate and Acquisition Cost over time.

## **5. Location Analysis:**

- Analysis: Analyze campaign performance based on geographic locations.
- Importance: Identify regions with high engagement or conversion rates for targeted marketing.
- Requirements: Company, Campaign\_Type, Location, Engagement\_Score, Conversion\_Rate.
- Visual Graphs: Map visualization or bar chart to show the performance metrics (Engagement Score, Conversion Rate) across different locations.

## **6. Language Analysis:**

- Analysis: Analyze the impact of language on campaign performance.

- Importance: Understand the preferences and behaviors of different language-speaking audiences.
- Requirements: Company, Campaign\_Type, Language, Conversion\_Rate, Clicks.
- Visual Graphs: Bar chart or line chart to compare Conversion Rate and Clicks for different languages.

## **7. Duration Analysis:**

- Analysis: Analyze the relationship between campaign duration and performance metrics.
- Importance: Determine the ideal campaign duration for optimal results.
- Requirements: Company, Campaign\_Type, Duration, Conversion\_Rate, Clicks.
- Visual Graphs: Scatter plot or line chart to visualize the relationship between Duration and Conversion Rate/Clicks.

## **8. Cost Analysis:**

- Analysis: Analyze the relationship between Acquisition Cost and campaign performance.
- Importance: Understand the cost-effectiveness of different campaigns.
- Requirements: Company, Campaign\_Type, Acquisition\_Cost, Conversion\_Rate, ROI.
- Visual Graphs: Bubble chart or stacked bar chart to compare Acquisition Cost, Conversion Rate, and ROI for different campaign types.

## **9. Customer Segment Analysis:**

- Analysis: Analyze the performance of different customer segments.
- Importance: Identify the most valuable customer segments and tailor marketing strategies accordingly.
- Requirements: Company, Campaign\_Type, Customer\_Segment, Conversion\_Rate, Engagement\_Score.
- Visual Graphs: Stacked bar chart or column chart to compare Conversion Rate and Engagement Score across different customer segments.

## **10. Click-Through Rate (CTR) Analysis:**

- Analysis: Analyze the Click-Through Rate for different campaigns.
- Importance: Assess the effectiveness of campaigns in generating user engagement.
- Requirements: Company, Campaign\_Type, Clicks, Impressions.
- Visual Graphs: Line chart or bar chart to track and compare the CTR for different campaign types.

## **11. Campaign Language Analysis:**

- Analysis: Analyze the performance of campaigns based on the language used.
- Importance: Determine the impact of language choice on campaign success.
- Requirements: Company, Campaign\_Type, Language, Conversion\_Rate, Clicks.
- Visual Graphs: Stacked bar chart or line chart to compare Conversion Rate and Clicks for different campaign languages.

## **12. Campaign Engagement Analysis:**

- Analysis: Analyze the engagement score of campaigns.
- Importance: Measure the level of user interaction and interest in campaigns.
- Requirements: Company, Campaign\_Type, Engagement\_Score, Clicks.
- Visual Graphs: Line chart or area chart to track and compare the Engagement Score over time for different campaign types.

## **13. Daily Performance Analysis:**

- Analysis: Analyze the daily performance of campaigns.
- Importance: Identify daily trends and patterns in campaign performance.
- Requirements: Company, Campaign\_Type, Date, Conversion\_Rate, Clicks.
- Visual Graphs: Line chart or area chart to visualize the daily trends in Conversion Rate and Clicks for different campaign types.

## **14. Campaign Efficiency Analysis:**

- Analysis: Analyze the efficiency of campaigns based on the Conversion Rate and Acquisition Cost.
- Importance: Evaluate the cost-effectiveness of campaigns.
- Requirements: Company, Campaign\_Type, Conversion\_Rate, Acquisition\_Cost.
- Visual Graphs: Scatter plot or bubble chart to compare the Conversion Rate and Acquisition Cost for different campaign types.

## **15. Campaign Comparison Analysis:**

- Analysis: Compare the performance of different campaigns.
- Importance: Identify the most successful campaigns and learn from their strategies.
- Requirements: Company, Campaign\_Type, Conversion\_Rate, Clicks, Impressions.
- Visual Graphs: Stacked bar chart or column chart to compare the performance metrics (Conversion Rate, Clicks, Impressions) of different campaigns.

## **16. Language and Location Analysis:**

- Analysis: Analyze the performance of campaigns based on language and location.
- Importance: Understand the impact of language and location on campaign success.
- Requirements: Company, Campaign\_Type, Language, Location, Conversion\_Rate.
- Visual Graphs: Heatmap or stacked bar chart to visualize the Conversion Rate for different language-location combinations.

## **17. Campaign Duration and Engagement Analysis:**

- Analysis: Analyze the relationship between campaign duration and engagement score.

- Importance: Determine the optimal campaign duration for maximum engagement.
- Requirements: Company, Campaign\_Type, Duration, Engagement\_Score.
- Visual Graphs: Scatter plot or line chart to visualize the relationship between Duration and Engagement Score.

## **18. Channel Performance Analysis:**

- Analysis: Analyze the performance of different channels based on Conversion Rate and Clicks.
- Importance: Evaluate the effectiveness of channels in driving conversions.
- Requirements: Company, Campaign\_Type, Channels\_Used, Conversion\_Rate, Clicks.
- Visual Graphs: Stacked bar chart or line chart to compare the Conversion Rate and Clicks for different channels.

## **19. Time-based Engagement Analysis:**

- Analysis: Analyze the engagement score over time for different campaigns.
- Importance: Identify trends in user engagement and evaluate campaign effectiveness.
- Requirements: Company, Campaign\_Type, Date, Engagement\_Score.
- Visual Graphs: Line chart or area chart to visualize the engagement score trends over time for different campaign types.

## **20. ROI Analysis:**

- Analysis: Analyze the return on investment (ROI) for different campaigns.
- Importance: Measure the profitability of campaigns and optimize resource allocation.
- Requirements: Company, Campaign\_Type, ROI.
- Visual Graphs: Bar chart or column chart to compare the ROI for different campaign types.

## **21. Target Audience Analysis:**

- Analysis: Analyze the performance of campaigns based on target audience segments.
- Importance: Understand the preferences and behaviors of different target audience segments.
- Requirements: Company, Campaign\_Type, Target\_Audience, Conversion\_Rate, Clicks.
- Visual Graphs: Stacked bar chart or column chart to compare the Conversion Rate and Clicks for different target audience segments.

## **22. Campaign Effectiveness Analysis:**

- Analysis: Evaluate the effectiveness of campaigns based on conversion rate and impressions.
- Importance: Assess the impact of campaigns in generating conversions and impressions.
- Requirements: Company, Campaign\_Type, Conversion\_Rate, Impressions.

- Visual Graphs: Scatter plot or line chart to visualize the relationship between Conversion Rate and Impressions for different campaign types.

### **23. Acquisition Cost Analysis:**

- Analysis: Analyze the acquisition cost for different campaigns.
- Importance: Evaluate the cost-effectiveness of acquiring customers through different campaigns.
- Requirements: Company, Campaign\_Type, Acquisition\_Cost.
- Visual Graphs: Bar chart or column chart to compare the acquisition cost for different campaign types.

### **24. Customer Segmentation by Location:**

- Analysis: Segment customers based on location and analyze their engagement.
- Importance: Understand the geographical distribution of engaged customers.
- Requirements: Company, Location, Engagement\_Score.
- Visual Graphs: Map visualization or stacked bar chart to show the engagement score distribution across different locations.

### **25. Clicks vs. Impressions Analysis:**

- Analysis: Analyze the relationship between clicks and impressions for different campaigns.
- Importance: Understand the click-through behavior of users based on the number of impressions.
- Requirements: Company, Campaign\_Type, Clicks, Impressions.
- Visual Graphs: Scatter plot or bubble chart to visualize the relationship between Clicks and Impressions for different campaign types.

### **26. Language and Conversion Rate Analysis:**

- Analysis: Analyze the impact of language on conversion rates.
- Importance: Determine the effectiveness of different languages in driving conversions.
- Requirements: Company, Campaign\_Type, Language, Conversion\_Rate.
- Visual Graphs: Bar chart or column chart to compare the conversion rates for different languages.

### **27. Campaign Type and Engagement Analysis:**

- Analysis: Analyze the engagement score for different campaign types.
- Importance: Evaluate the level of user engagement across various campaign types.
- Requirements: Company, Campaign\_Type, Engagement\_Score.
- Visual Graphs: Bar chart or column chart to compare the engagement scores for different campaign types.

## **28. Acquisition Cost and ROI Analysis:**

- Analysis: Analyze the relationship between acquisition cost and ROI.
- Importance: Evaluate the profitability of campaigns based on the cost of customer acquisition.
- Requirements: Company, Acquisition\_Cost, ROI.
- Visual Graphs: Scatter plot or line chart to visualize the relationship between Acquisition Cost and ROI.

## **29. Language and Customer Segment Analysis:**

- Analysis: Analyze the distribution of customer segments based on language.
- Importance: Understand the preferences and behaviors of different customer segments across languages.
- Requirements: Company, Language, Customer\_Segment.
- Visual Graphs: Stacked bar chart or column chart to show the distribution of customer segments for different languages.

## **30. Campaign Performance by Duration and Language:**

- Analysis: Analyze the performance of campaigns based on their duration and language.
- Importance: Determine the optimal campaign duration and language for maximum performance.
- Requirements: Company, Campaign\_Type, Duration, Language, Conversion\_Rate.
- Visual Graphs: Heatmap or grouped bar chart to compare the conversion rates for different campaign durations and languages.

## **31. Date and Engagement Analysis:**

- Analysis: Analyze the engagement score over different dates.
- Importance: Identify patterns and trends in user engagement over time.
- Requirements: Company, Date, Engagement\_Score.
- Visual Graphs: Line chart or area chart to visualize the engagement score trends over different dates.

## **32. Customer Segment and Conversion Rate Analysis:**

- Analysis: Analyze the conversion rates for different customer segments.
- Importance: Understand the effectiveness of campaigns in driving conversions across customer segments.
- Requirements: Company, Customer\_Segment, Conversion\_Rate.
- Visual Graphs: Bar chart or column chart to compare the conversion rates for different customer segments.

## **33. Campaign Type and Click-Through Rate (CTR) Analysis:**

- Analysis: Analyze the click-through rates for different campaign types.
- Importance: Understand the effectiveness of different campaign types in generating user clicks.

- Requirements: Company, Campaign\_Type, Clicks, Impressions.
- Visual Graphs: Bar chart or column chart to compare the click-through rates for different campaign types.

#### **34. Language and Impressions Analysis:**

- Analysis: Analyze the number of impressions for different languages.
- Importance: Understand the reach and exposure of campaigns across different languages.
- Requirements: Company, Language, Impressions.
- Visual Graphs: Bar chart or column chart to compare the number of impressions for different languages.

#### **35. Duration and Conversion Rate Analysis:**

- Analysis: Analyze the relationship between campaign duration and conversion rates.
- Importance: Identify the optimal campaign duration for maximizing conversions.
- Requirements: Company, Campaign\_Type, Duration, Conversion\_Rate.
- Visual Graphs: Scatter plot or line chart to visualize the relationship between campaign duration and conversion rates.

#### **36. Location and Clicks Analysis:**

- Analysis: Analyze the number of clicks for different locations.
- Importance: Understand the engagement level in different geographical areas.
- Requirements: Company, Location, Clicks.
- Visual Graphs: Map visualization or bar chart to compare the number of clicks for different locations.

#### **37. Channel and Conversion Rate Analysis:**

- Analysis: Analyze the conversion rates for different marketing channels.
- Importance: Evaluate the effectiveness of various channels in driving conversions.
- Requirements: Company, Campaign\_Type, Channels\_Used, Conversion\_Rate.
- Visual Graphs: Stacked bar chart or column chart to compare the conversion rates for different marketing channels.

#### **38. Campaign Type and Duration Analysis:**

- Analysis: Analyze the distribution of campaign durations across different campaign types.
- Importance: Understand the duration patterns for different campaign types.
- Requirements: Company, Campaign\_Type, Duration.
- Visual Graphs: Box plot or grouped bar chart to compare the distribution of campaign durations for different campaign types.

#### **39. Language and Acquisition Cost Analysis:**

- Analysis: Analyze the acquisition cost for different languages.
- Importance: Understand the cost of customer acquisition across different languages.
- Requirements: Company, Language, Acquisition\_Cost.
- Visual Graphs: Bar chart or column chart to compare the acquisition cost for different languages.

#### **40. Campaign Type and ROI Analysis:**

- Analysis: Analyze the ROI for different campaign types.
- Importance: Evaluate the profitability of different campaign types.
- Requirements: Company, Campaign\_Type, ROI.
- Visual Graphs: Bar chart or column chart to compare the ROI for different campaign types.

#### **41. Language and Customer Segmentation Analysis:**

- Analysis: Analyze the distribution of customer segments across different languages.
- Importance: Understand how customer segments vary based on language.
- Requirements: Company, Language, Customer\_Segment.
- Visual Graphs: Stacked bar chart or column chart to compare the distribution of customer segments for different languages.

#### **42. Duration and Clicks Analysis:**

- Analysis: Analyze the relationship between campaign duration and the number of clicks.
- Importance: Understand how campaign duration affects user engagement.
- Requirements: Company, Campaign\_Type, Duration, Clicks.
- Visual Graphs: Scatter plot or line chart to visualize the relationship between campaign duration and clicks.

#### **43. Language and Engagement Analysis:**

- Analysis: Analyze the engagement score for different languages.
- Importance: Determine how language affects user engagement.
- Requirements: Company, Language, Engagement\_Score.
- Visual Graphs: Bar chart or column chart to compare the engagement scores for different languages.

#### **44. Date and Conversion Rate Analysis:**

- Analysis: Analyze the conversion rates over different dates.
- Importance: Identify patterns and trends in conversion rates over time.

- Requirements: Company, Date, Conversion\_Rate.
- Visual Graphs: Line chart or area chart to visualize the conversion rate trends over different dates.

#### **45. Location and Conversion Rate Analysis:**

- Analysis: Analyze the conversion rates for different locations.
- Importance: Understand the effectiveness of campaigns in different geographical areas.
- Requirements: Company, Location, Conversion\_Rate.
- Visual Graphs: Map visualization or bar chart to compare the conversion rates for different locations.

#### **46. Language and Click-Through Rate (CTR) Analysis:**

- Analysis: Analyze the click-through rates for different languages.
- Importance: Evaluate the effectiveness of different languages in generating user clicks.
- Requirements: Company, Language, Clicks, Impressions.
- Visual Graphs: Bar chart or column chart to compare the click-through rates for different languages.

#### **47. Campaign Type and Impressions Analysis:**

- Analysis: Analyze the number of impressions for different campaign types.
- Importance: Understand the reach and exposure of different campaign types.
- Requirements: Company, Campaign\_Type, Impressions.
- Visual Graphs: Bar chart or column chart to compare the number of impressions for different campaign types.

#### **48. Location and Conversion Rate Comparison:**

- Analysis: Compare the conversion rates across different locations.
- Importance: Identify geographical variations in conversion rates.
- Requirements: Company, Location, Conversion\_Rate.
- Visual Graphs: Choropleth map or stacked bar chart to compare the conversion rates for different locations.

#### **49. Customer Segment and ROI Analysis:**

- Analysis: Analyze the ROI for different customer segments.
- Importance: Understand the profitability of different customer segments.
- Requirements: Company, Customer\_Segment, ROI.
- Visual Graphs: Bar chart or column chart to compare the ROI for different customer segments.

## **50. Language and Acquisition Cost Comparison:**

- Analysis: Compare the acquisition costs across different languages.
- Importance: Identify cost variations in customer acquisition based on language.
- Requirements: Company, Language, Acquisition\_Cost.
- Visual Graphs: Bar chart or column chart to compare the acquisition costs for different languages.

## **51. Campaign Type and Engagement Score Comparison:**

- Analysis: Compare the engagement scores for different campaign types.
- Importance: Understand the level of user engagement across different campaign types.
- Requirements: Company, Campaign\_Type, Engagement\_Score.
- Visual Graphs: Bar chart or column chart to compare the engagement scores for different campaign types.

## **52. Date and Clicks Analysis:**

- Analysis: Analyze the number of clicks over different dates.
- Importance: Identify trends and patterns in user clicks over time.
- Requirements: Company, Date, Clicks.
- Visual Graphs: Line chart or area chart to visualize the trends in the number of clicks over different dates.

## **53. Target Audience and Conversion Rate Analysis:**

- Analysis: Analyze the conversion rates for different target audience segments.
- Importance: Evaluate the effectiveness of campaigns in converting different target audience segments.
- Requirements: Company, Target\_Audience, Conversion\_Rate.
- Visual Graphs: Bar chart or column chart to compare the conversion rates for different target audience segments.