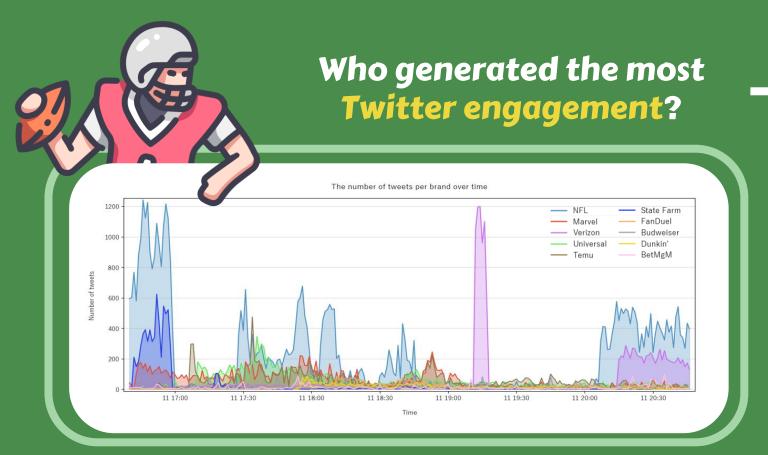
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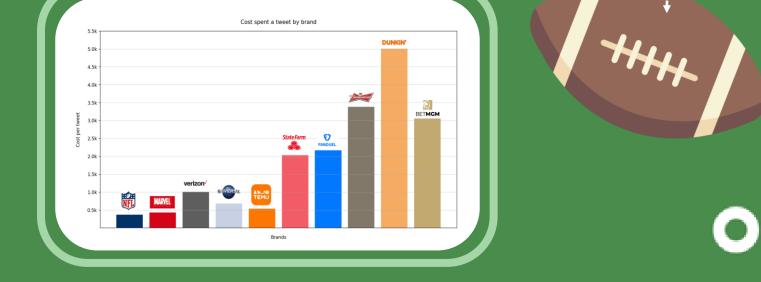
EFFECTIVE SUPER BOWL COMMERCIAL BRANDS OF 2024

In America, the Super Bowl unites most of the country for all football fanatics every year. However, the commercial ads have also made a lasting and memorable impact on its viewers, especially when featuring popular celebrity cameos and endorsements. Here are 10 memorable Super Bowl commercial ads of 2024.



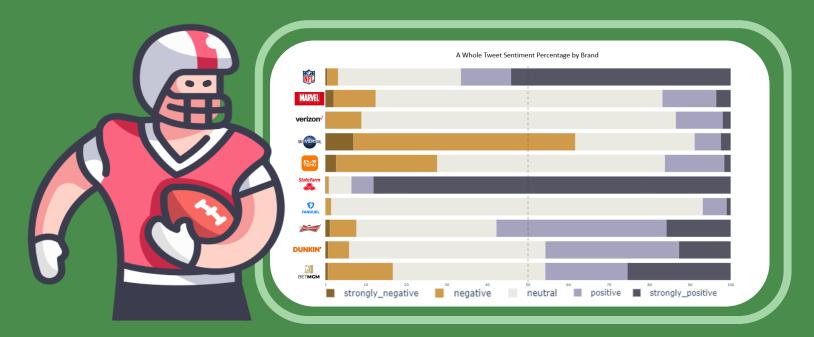
This graph depicts the number of tweets related to each brand during the Super Bowl game. The notable observation is the skyrocket in the number of tweets related to a specific brand immediately following its advertisement. Verizon, which advertised in the third quarter, is notable brands. Which is more effective consistent tweets received throughout the entire period like Marvel and Universal, or intensive tweets received only at specific times like Verizon?

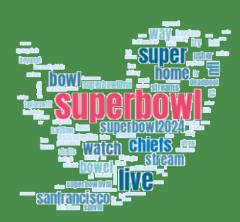
Who made the most efficient expenditure?



This graph estimates the cost each brand incurred to produce one tweet. An interesting is that Marvel and Universal, which consistently had tweets, had a more efficient expenditure compare d to Verizon. However, this result does not necessarily mean that creating a sharp increase in advertisement is an ineffective strategy. This is because Temu, which appeared on the graph two times above Marvel and consistently remained below Marvel during time periods, appeared to have spent a similar amount of money to Marvel. Now we know that evaluating brands based solely on two metrics is inadequate. What other criteria could be used to evaluate effective bra nds? And what factors contributed to the significant differences in costs among brands?

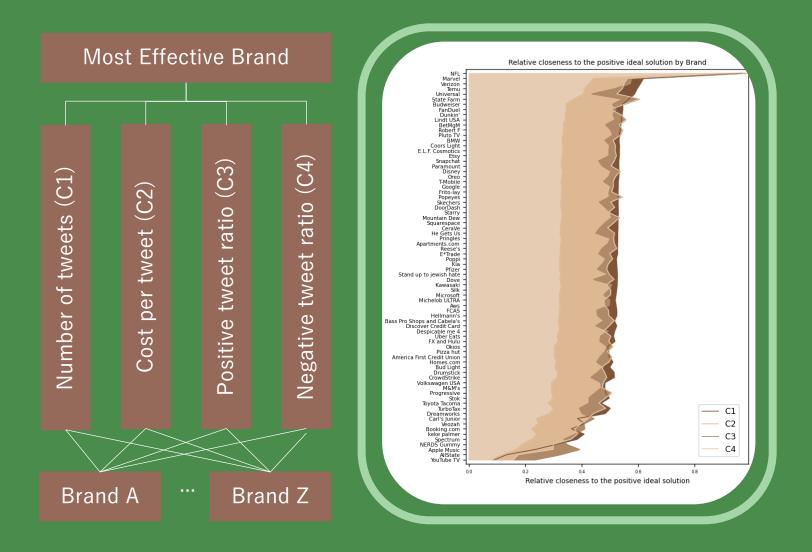
Who garnered the most favorable response?





To answer above questions, it is essential to consider the reactions of the viewers to the advertisements. This graph represents the result of sentiment analysis conducted on tweets related to each brand. A fascinating observation is that Universal, among the top 10 brands with the most efficient expenditure, has the highest number of negative tweets. On the contrary, having a relatively small total number of tweets and higher costs, State Farm received overwhelmingly positive tweets. However, it's important to acknowledge that there is no single company excelling in all aspects. Therefore, determining the most effective advertising company requires a comprehensive consideration of various factors.

Who achieved both Effectiveness & Efficiency?



So, we utilized the AHP(Analytic Hierarchy Process) and TOPSIS(Technique for Order Preference by Similarity to Ideal Solution) model to structure complex decision problems and consider various factors comprehensively. The left diagram provides an overview of the AHP model, while the right diagram visualizes the TOPSIS results. This figure represents the results of experiments conducted by adjusting the weights of each evaluation creation in AHP.



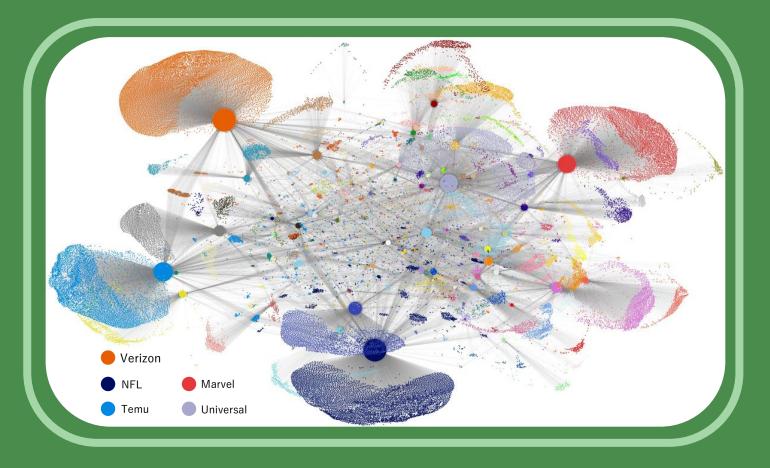
Who is the real winner?



The notable point is that, except for the case when the negative tweet ratio was given the highest weight, the ranking of the top brands did not change significantly. Additionally, NFL overwhelmingly took the first place, with Marvel and Verizon following behind.

At this point, can we argue that NFL is the winner achieving both Effectiveness and Efficiency? Could it be interpreted as a natural outcome due to the NFL hosting the Super

Bowl game? Then what about Marvel? Isn't Marvel's high ranking attributed to its already substantial fan base?



To answer the above questions, we visualized the relationship between tweets related to the brands that advertised during the Super Bowl period as a network. The size of the nodes represents how many tweets each brand received, and we observed some surprising results. Verizon took the first place, with NFL and Temu ranking second and third, respectively. It's quite intriguing to see that NFL, which had secured the top spot by a significant margin according to TOPSIS results, had its raking overturned. However, this result does not imply that only the Social Network Analysis is valid. Both perspectives are valid methods for evaluating the effectiveness of advertising, and they should be appropriately utilized to gain a comprehensive understanding.

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