Unleashing

The Power of Gameday Data

White Paper
by

Data Chargers - Graduate Team 16
VENKATACHALAM | VINAY KUMAR | AKASH | SOLOMON

Introduction:

The 2023 GameDay Analytics Challenge is focused on examining the Superbowl Advertisements' social media buzz on Twitter.

The Super Bowl is a major cultural event in the United States, and it is widely watched around the world. As such, it is a significant platform for advertisers to showcase their products and services. The reason companies are willing to pay an arm and a leg for time during the game is pretty simple -- a lot of people watch the **Super Bowl.**

Twitter is a popular social media platform that people use to discuss and share their thoughts about the game and the ads that aired during the event. Twitter provides several insights and analytics for advertisers who want to measure the impact of their Super Bowl ads. These include metrics such as the number of views, engagement rate, retweets, and impressions.

Advertisers can also use Twitter's Ad Studio to create and manage their campaigns, target specific audiences, and track their ad performance in real-time. Additionally, Twitter offers various tools and resources to help advertisers optimize their ad campaigns, such as best practices, case studies, and research reports.

Overall, Twitter is a valuable platform for advertisers to monitor and measure the impact of their Super Bowl ads, and they can use the platform's insights and analytics to make data-driven decisions to improve their campaigns.

The Purpose of this white paper is to provide suitable advice to the ad sponsors of the Super Bowl game whether the amount spent has provided the indispensable evidence that could influence the decision-making processes regarding current and prospective customers.

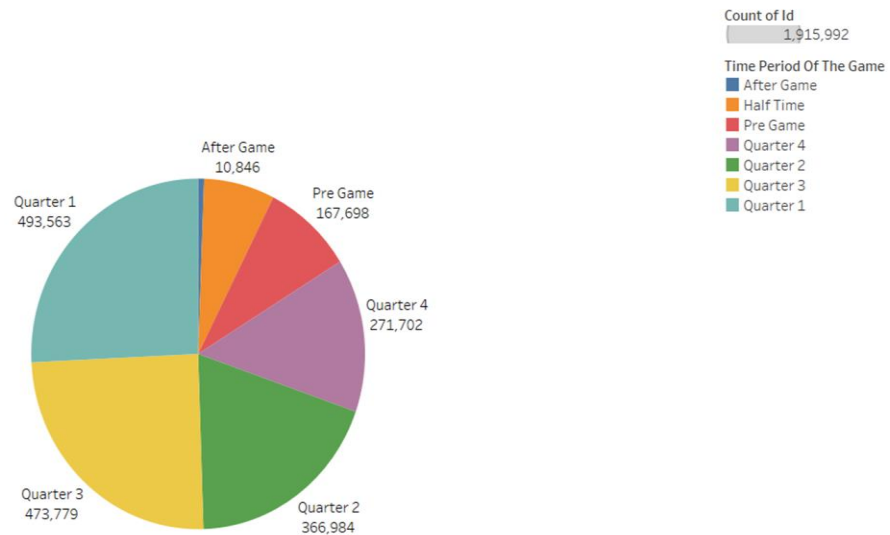### *Gameday Stats at a glance:*

No of Viewers : **113 Million**
No of Tweets: **19.16 Million**
Average Cost per 30 sec Ad-Spot: **$7.0 Million**
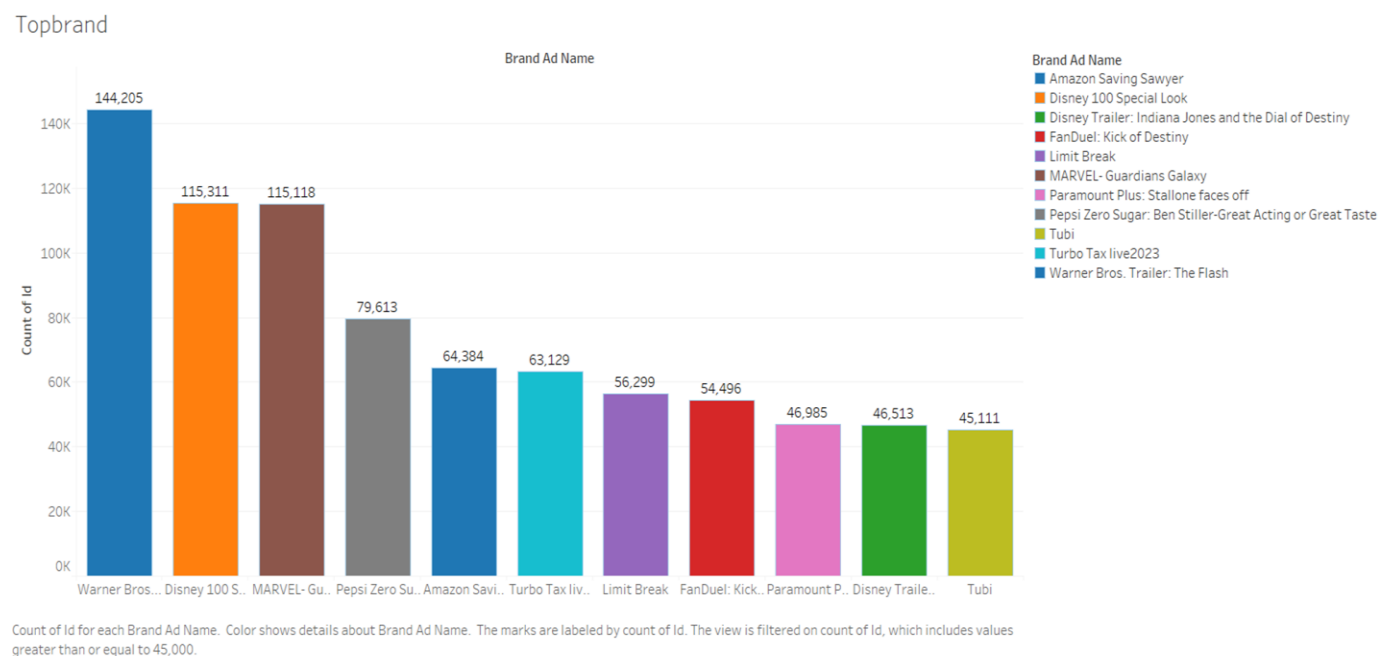Total Commercials air time: **50 minutes**
Total Ad business revenue: **$ 700 Million**

Below is the graphical representation of **19.15 million** tweets spread across all quarters of the game event.

.

In total, there are **19,15,993** tweets during the total duration of 5 hours. Quarter 1 followed by Quarter 3 had the highest number of tweets. In Q4, the twitter engagement is comparatively less due to strong audience connection with the game. Hence, any advertisement in the Q1/Q3 has maximum twitter reach.

Below are the Top Brand ads and the respective Tweet count for each of the brands.

Count of Id for each Brand Ad Name. Color shows details about Brand Ad Name. The marks are labeled by count of Id. The view is filtered on count of Id, which includes values greater than or equal to 45,000.

Warner Bros: Trailer The Flash ad has garnered 1,44,205 tweets followed by Disney and Marvel. Due to its infamous characters and craze, the trailer created high buzz among tweeters.

Twitter Engagement Vs Brand

Above is the **heat map** of the various brands that were discussed at various durations of the game. When an ad was aired during the game, tweet engagement regarding that particular ad was done which can be observed with the spikes that occurred. For instance, the "Tubi ad was aired around 8 Pm and the buzz is clearly visible for after 8 pm with steep spike.

Further, we can infer that **Warner Bros** and **TurboTax ads** were discussed consistently right before start to the end of the game.

Analysis by geographical tweet location:
Being USA the major market for the superbowl, analysis was confined to various states in USA and California is the clear winner with highest tweet engagement.
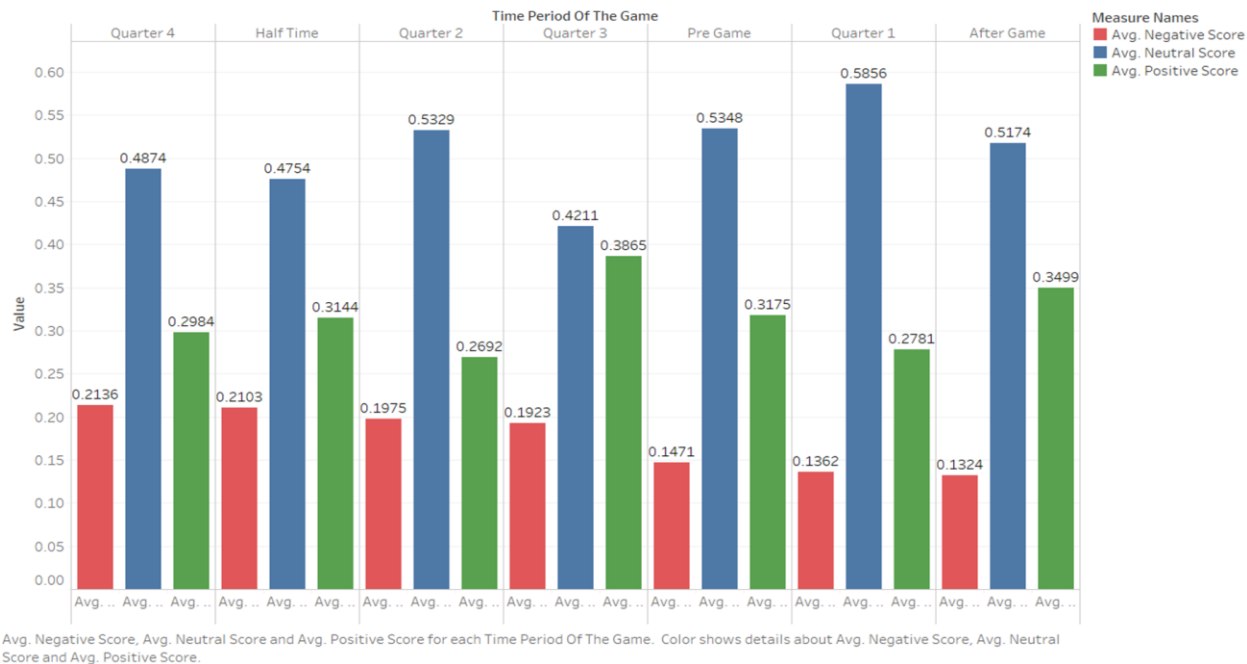

Tweets- Geographical spread(USA)

Sentimental Analysis of Trending Brands:
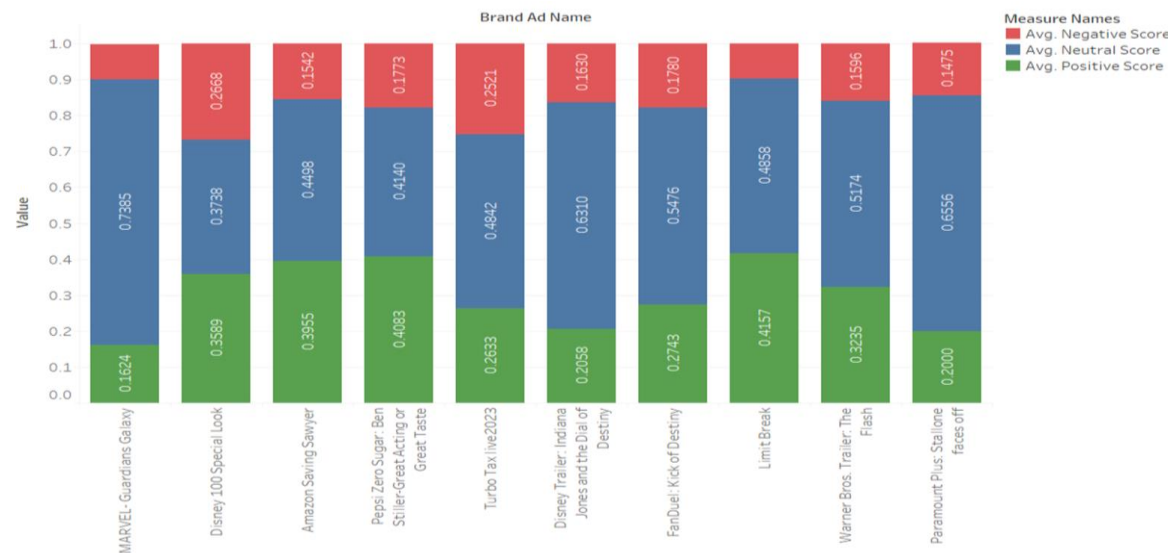
Sentimental analysis is carried out to obtain valuable insights into how people are feeling about a particular brand commercial on social media. The overall sentiment scores of all the ads observed to be mostly neutral to positive , indicating the well reception of the brand across various customer segments. The top 10 brand commercials are depicted above.

Sentimental analysis- Quarter wise

Avg. Negative Score, Avg. Neutral Score and Avg. Positive Score for each Time Period Of The Game. Color shows details about Avg. Negative Score, Avg. Neutral Score and Avg. Positive Score.

Further analysis was carried out to analyze the people overall feelings during the game across various quarters. It is noted that the overall neutral/ positive scores are observed in Q1.

## Twitter Engagement of Brands across game duration
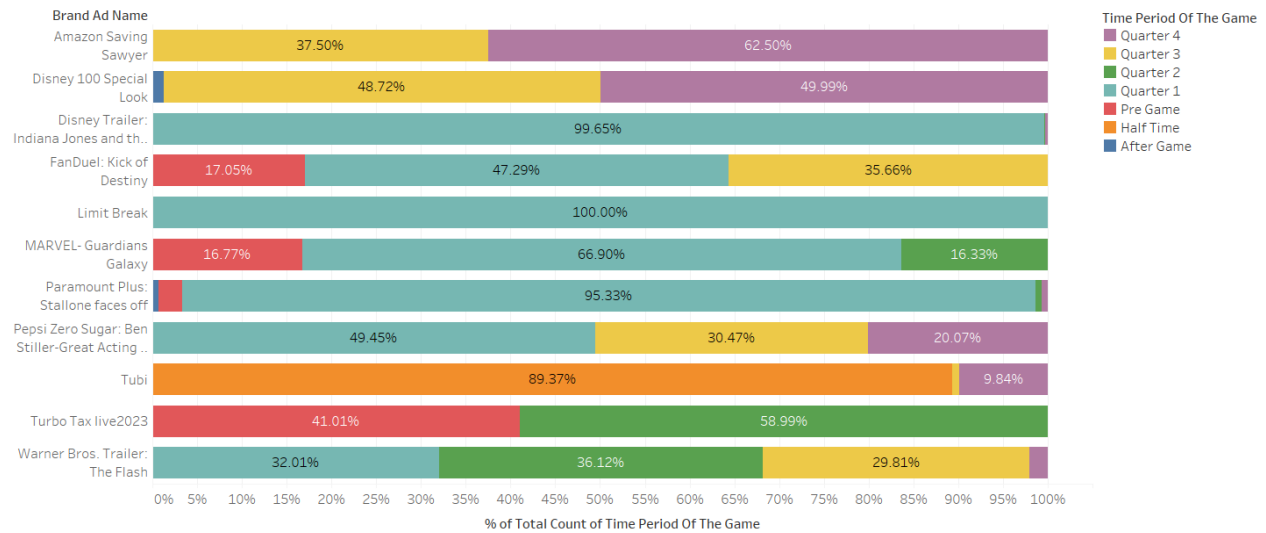
Above chart indicates the distribution of the ads across various the length of the game. It is observed that certain brand commercials have twitter engagement across the game duration , where as certain commercials have engagement either in a particular quarter. For example, the flash commercial has full length engagement where as " Tubi" has engagement is last two quarters.

Diving Deep into the analysis of Top commercials across geographical location and a business case of " Tubi in TEXAS"

Further, deep analysis is carried out to identify the region wise twitter engagement for trending brands. Certain commercials have uniform share of reception across various locations whereas certain brands such as "Tubi " has variation across various geographical markets.

As per the graph, Tubi has highest twitter mind share in " TEXAS" with 20.58% and has 11-12% share in other major markets. Further, the sentiment analysis of "Tubi" is carried out and observed that the sentiment scores are almost equal across markets.
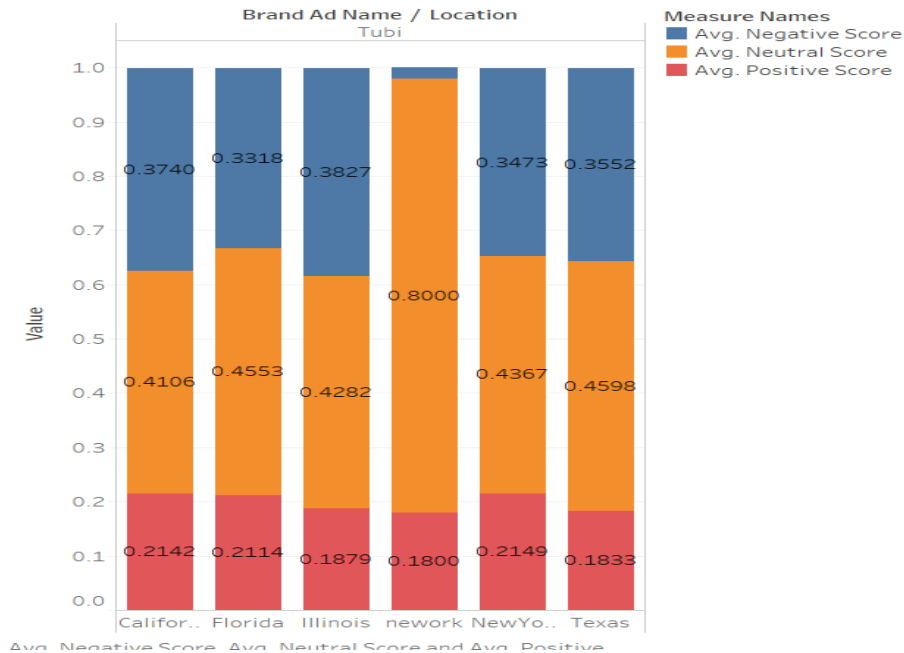
With the above analysis of twitter reach at various markets and sentimental analysis, " Tubi" can deploy sufficient resources to convert twitter engagement in TEXAS into product users and focus on adverting into other areas such as california, Newyork ,florida and illionis.

Return on investment(Cost/ tweet)
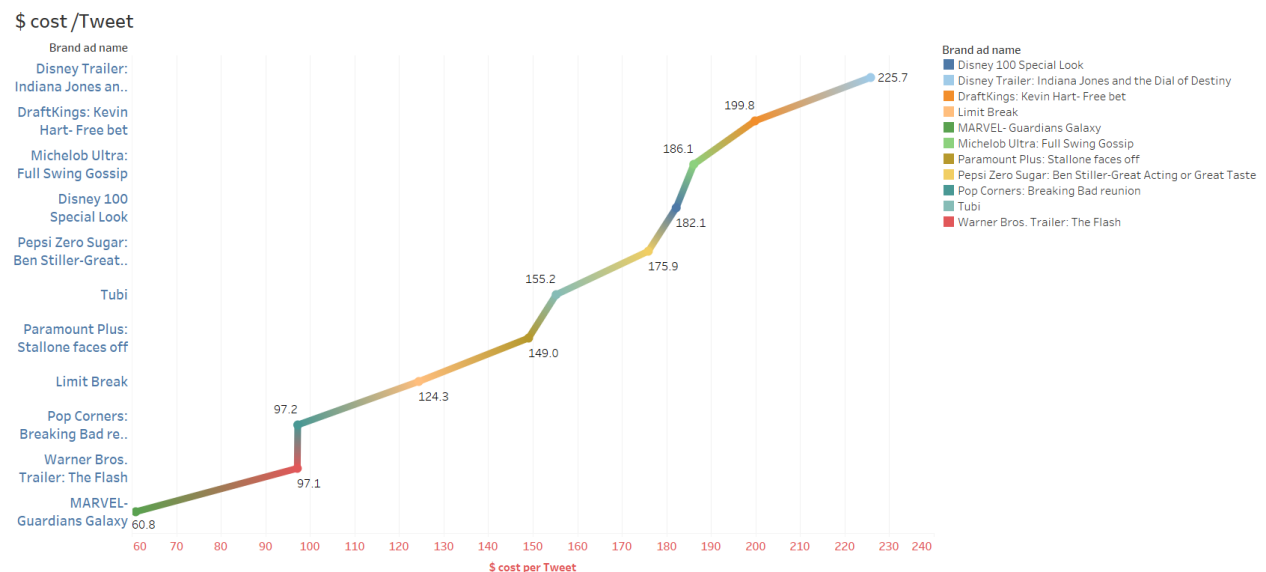
The trend of sum of $ cost per Tweet for Brand ad name. Color shows details about Brand ad name.

The above line graph indicates the cost per tweet for various top brands and noted that MARVEL got best buck for the bang with the lowest tweet cost of $60 and Disney Trailer with the highest cost per tweet at $225.7. The More the engagement the lower the cost per tweet for a given air duration.

Word Cloud of Twitter #Hashtags

     All the twitter hashtags of various tweets are analyzed and "word cloud" is created.The Superbowl-LVII is the highest trending hashtag, followed by "The Flash" and "Sweepstake".

Keywords analysis:
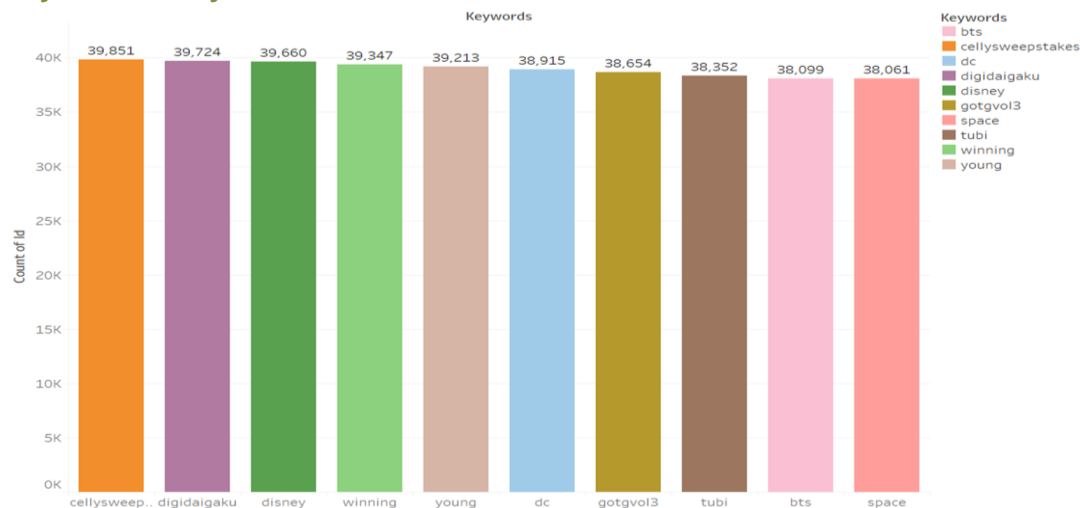
The keyword **"cellysweepstakes"** is refers to the sweepstakes or contest hosted by a company "Budlight". Sweepstakes is a type of promotional contest for generating buzz and engage with customers or followers. **"Bud Light"** has been successful in generating the most buzz across the Twitter platform during the game where its keyword was the most tagged Keyword.

The second Keyword which is the most talked on the Twitter during Super Bowl was **"Digidaigaku".** DigiDagaku, an NFT project by Web3 gaming company Limit Break, aired an ad touting a free mint of its Dragon Eggs collection(tokens) during the game. While the tokens themselves did not cost anything to mint, **their value on the secondary marketplace soared** following their Sunday night ad.

Ingenious ad by "Tubi" and the customer connect:

In the highly competitive market and super buzz shows, drawing customer attention needs high creativity. Tubi, a streaming service bought by Fox in 2020, broadcasted two during the Super Bowl ads a 15-sec "Interface Interruption" and the 60-sec ad "Rabbit Hole."

With "Interface Interruption" commercial, Tubi had everyone scratching their heads and searching for their TV remotes like a crazy game of hide and seek when their 2023 Super Bowl ad aired on Sunday. The 15-second spot was a wild ride that left viewers on the edge of their seats and the tweet engagement spike during the ad is clearly visible in the charts.

Key- Findings:

1. Retweets are directly correlated to the number of likes during the game. Likewise with verified users.
2. Data shows that "Tubi" with the right strategy and approach can convert the higher twitter engagement at " TEXAS" to business opportunities.
3. The time of airing ad also plays a vital role in the social media reach.
4. Media and entertainment industry followed by Food and beverage industry are major contributors.
5. Ingenious ad by " Tubi" aroused user emotions and created indelible impact.
6. Sometimes, even presence of celebrity may create disasters in creating social media connect . For example, Remy Martin ad by Serena Williams fumbled during big game.

Summary:

In Conclusion, Based on our data driven analysis, we can conclude that Twitter is one of the many platforms to make an assessment whether airing an ad during a Super Bowl game was effective or not.

When it comes to social media reach, everything matters to grab the attention of viewers be it the timing of the ad(Q1/Q2/Q3/Q4/ halftime), connect to the customer, ad duration, ingenious display of creativity , celebrity presence and sweepstakes . The Winning combination of great commercial in this time crunching and high buzz gaming event is the mix of everything that arouse the emotions of audience.

The success of the commercial that generate buzz on twitter and social media platforms, word-of-mouth impressions, foster brand loyalty and receive additional exposure—all of which eventually result in increased revenues.