

Analysis on the Relationship between “Super Bowl Ads” and Related Companies

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Abstract—Super Bowl, one of the most irreplaceable activities that US families prefer to attend annually, serves as a platform full of opportunities for the business world. The advertisements appeared during the breaks of the game, known as “Super Bowl ads”, have become the most effective means for companies to attract potential customers. From the price of \$37,500 per 30 seconds at Super Bowl I to that of \$4.5 million per 30 seconds at Super Bowl XLIX, this means of propagating products has become increasingly expensive until today [1]. Thus, a question has been inevitably raised that is this worthy for companies to spend millions of dollars just in exchange of the appearance of their logos on a special TV program? Therefore, the research finding the effects on companies after the end of their Super Bowl advertising should be undoubtedly needed and established.

1 INTRODUCTION

This research paper is written on the purpose for the effects on companies after the “Super Bowl ads” being applied. By studying different effects caused by different kinds of Super Bowl advertisements on various companies, corporations are able to utilize the appropriate advertisements or decide whether should advertise their products during the Super Bowl in order to maximize their profits.

2 CUSTOMER ANALYSIS

Before analyzing what effects “Super Bowl Ads” will have on companies, I first need to know who are the people that look Super Bowl. In other words, customer segmentation is needed since companies should be aware of who are the viewers of Super Bowl.

2.1 Age

Knowing how old their potential customers are is the first step companies should take in designing their advertisements. From demographic information of Super Bowl viewers from 2002 to 2011, people from age 18 to 64 (adults) is the major audience and people from age 35-49 possess the dominate position, in particular [2]. As a result, companies should use the platform of Super Bowl to advertise products that specifically satisfy this group of people, such as beer, car, or home cleaning products instead of toys, health-care, or wheelchair. Furthermore, companies should be aware of what types of advertisements their customers like. Unlike children and elders, adults tend to be impatient and hard to persuade. Therefore, Super Bowl Ads should be designed as

attractive, novel, and hilarious as possible to maximize the persuasion as well as recall time of viewers. Moreover, in 2018, 49% of the viewers between age 25-44 chose to watch the Super Bowl outside of TV [3], symbolizing a completely new platform for Super Bowl Ads—mobile devices. Thus, companies could start designing advertisements on mobile devices such as streaming medias specifically for people between age 20-50.

2.2 Gender

Super Bowl has been historically criticized for its sexist and racist advertisements. However, this critique has met the turning point recently as the number of female viewers increases. From 2002, female viewers only took up 43% of the total viewership in US whereas it took up 49% of the viewers within the United States in 2018 as shown below, meaning that female viewers are gradually becoming an extremely crucial part of the audience for Super Bowl Ads [4].

In responding to such trend, advertisements at Super Bowl tend to be more suitable for women. For example, there were 6 Super Bowl Ads that put gender equality in the spotlight during Super LIII, implying the increase of importance for female audience [5]. From 2008 to 2017 female roles were more frequently featured in Super Bowl commercials with a decrease in the number of male-only commercials. However, there is still a small number of commercials that women appeared as principal cast, showing up frequently. Moreover, women significantly appear more as celebrities or in commercials that contain sexual appeals. Over the period from 2008 to 2017, men appeared as principal characters more than twice often as women, and in terms of celebrity endorsers, male celebrities appeared 261% more often than the appearances of female celebrities. In this case, although

female roles appear more frequently in Super Bowl advertisements, they tend to participate as minor or even background roles rather than standing in the center of the stage, lacking role prominence [6]. Furthermore, women appear to be much more interested in Super Bowl commercials than the game itself. According to a study directed by TVision, women scored 110 on the attention scale for commercials on Super Bowl LII compared to 87.2 for men [4]. Also, there are 52.92 million women who watched Super Bowl LII on TV, more than Grammys, Oscars, and Emmys combined [7]. Therefore, advertisers should be reminded to pay more attention on female viewers since they are the people who care about the commercials. Fortunately, women have been played increasingly important roles in Super Bowl Ads. In 2017, only 20.6% of the roles in advertisements were featured by women, which increased to 27.4% in the following year and eventually reached 34.5% in 2019. What is more, from 2017 to 2019 [8], advertisements for products that women might be more interested in such as home cleaning, skincare, and traveling appeared in the list of top 10 ads by total viewership, showing that commercials designed for female viewers are capable of attracting attention [9].

2.3 Income

Being aware of the purchasing power of potential consumers is the next step companies should take in analyzing their consumers. From 2003 to 2013, the percentage of Super Bowl viewers who had household income more than \$100K was generally increasing [10], showing that the audience of Super Bowl is becoming rich.

Despite the increase in affluent viewers, people who had household income between \$25K and \$75K are still possessing the dominant position [2]. In this case, companies should be clear that even though the number of people with high income is increasing, people who receive medium salary are still their primary target.

According to the “Profiles of Super Bowl Fans X Sponsors” by Hitwise.com, people with high income more than \$100K responded to automobile companies mostly frequently while food & beverages companies cover a wider range of customers [11].

3 MARKET ANALYSIS

As introduced in the abstract, the price for a Super Bowl advertisement is continuously rising, presenting Super Bowl as an extremely valuable platform for business advertising.

However, the increase of price for Super Bowl ads does not mean an increasingly brighter prospect for Super Bowl TV advertising. According to the data of TV viewership of Super Bowl in US, the viewership of Super Bowl continuously dropped from its peak of 114.4 million in 2015 to 98.2 million at Super Bowl LIII [12], despite the attractive history and rivalry of different styles between Patriots and Rams.

In this case, one cannot draw the conclusion that the rise of price for commercials makes Super Bowl a prosperous platform for business in the future. Nonetheless, this does not mean that all the companies do not make money at Super Bowl. Therefore, marketing segmentation is needed in order to evaluate performance of different Super Bowl commercials from different markets.

After collecting data about appearance of commercials at Super Bowl in the 21st century by industry [13] and data cleaning of eliminating industries that neither appeared more than 3 times at each Super Bowl and during more than 10 years nor with a maximum number of 10 in at least one year, 8 industries have been reserved. Also, since the remaining industries have two distinct characteristics, they are divided into group 1 in which all industries have a steady appearance at Super Bowl and group 2 in which all industries had increased dramatically in recent. The result is shown below:

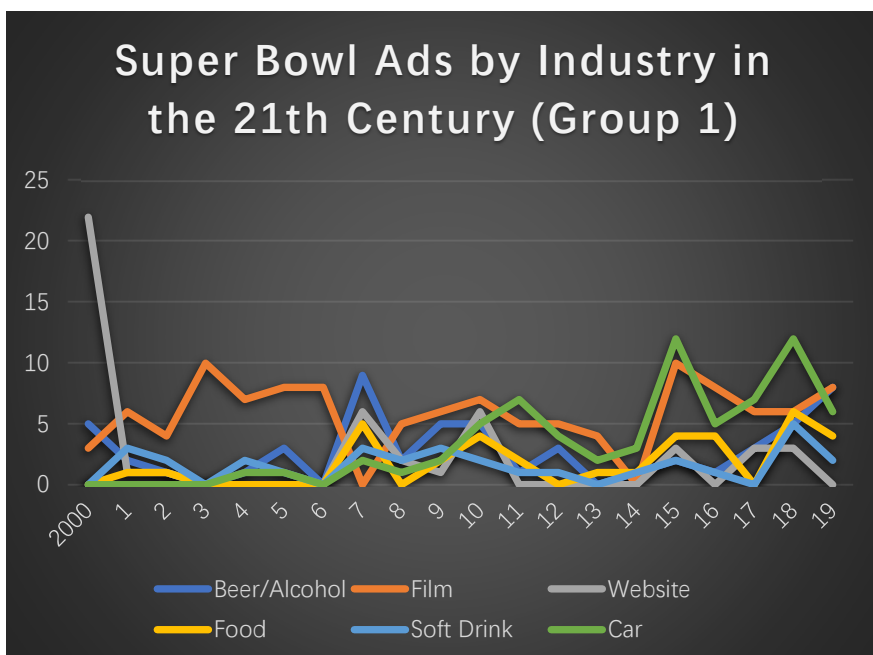


Figure 1. Super Bowl Advertisements by Industry in the 21th Century (Group 1).

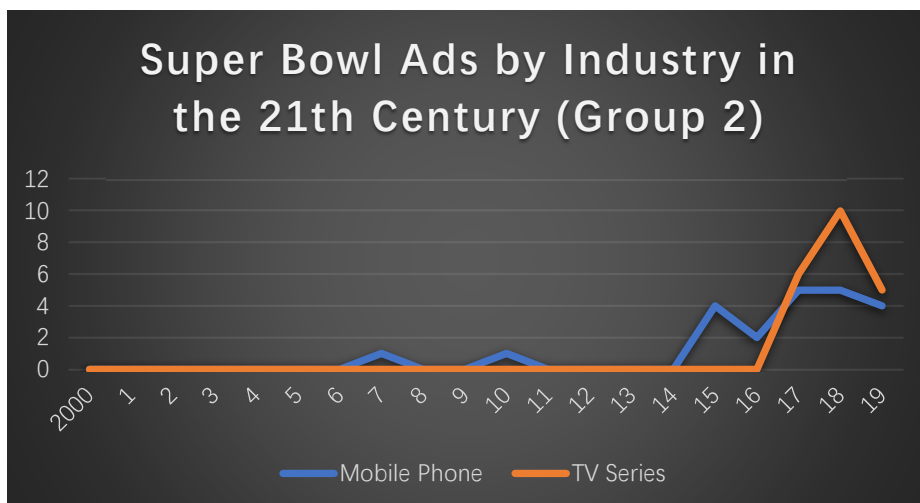


Figure 2. Super Bowl Advertisements by Industry in the 21th Century (Group 2).

As the result shown, Super Bowl is a bright platform for advertising products that have a strong customer base or deal with a general need, such as food & beverage, film, and automobiles satisfying crucial needs of eating, entertainment and travel respectively. Therefore, companies should first be aware of whether their products are capable of satisfying a general or strong need and then enter the stage of Super Bowl. For group 2, the two industries, mobile phone and TV series, had tremendously increased their frequency of appearance at Super Bowl in recent years. In this case, for industries that had just entered this expensive stage, time is the only factor that decides whether Super Bowl is a wonderful platform. In a word, for industries in group 2, they still need time to testify whether it is worthy to spend millions of dollars on Super Bowl.

After the general analysis for number of appearances at Super Bowl for each industry, we need to take a deep dive to find out how did each industry in group 1 perform at Super Bowl.

3.1 Food & Beverages (including beer/alcohol, food, and soft drinks)

After entered the 21st century, advertisements about food & beverages had only been absent for 2 Super Bowls out of 20 [13]. Its frequent appearance at Super Bowl is not for no reasons. According to the share of respondents to “Super Bowl ads” by percentage, food & beverages industry has shown its consistently dominant position for approximately 80% of respondents over years, four times as other four categories combined [14].

Even though already received enough benefits from Super Bowl, food & beverages industry is still consolidating its dominant place. In 2017, this industry only took up 3 places in the top 10 Super Bowl ads that caught most attention, but it soon proved who is the industry that the audience liked most by producing 6 advertisements in the same list in 2018 and 7 commercials in 2019 [9].

The bright prospect of this industry does not mean every single company participated in Super Bowl advertising acquired what it wanted. According to number

of purchases made on Amazon in 2019, both Doritos and Pringles whose advertisements had been listed on top 10 most viewed commercials unexpectedly experienced a drop of sales on Amazon [11].

This phenomenon could be caused by the fact that viewers tend to buy those products before the Super Bowl. In resolving this unexpected special plight, they should strive for using effective selling strategies, such as discounts or cooperation with other popular companies to retain sale at the same level as before the Super Bowl. These companies could also design some post game sales that only last a short time or provide membership for people who buy their products both before and after game in order to retain consumers in the long run. In conclusion, despite the fact that food & beverages industry possesses the brightest prospect in Super Bowl advertising and is still enlarging this advantage, companies should figure out how to retain or even increase sales since this is also a special industry in which most of the sales are made before Super Bowl.

3.2 Film

Super Bowl has always been a favorite platform for film industry. In 21st century, there were only 2 sessions of Super Bowl where film commercials were absent. When compared to food & beverages industry, one of the most successful industries in Super Bowl advertising, there are 9 times that film industry beat food & beverages industry by the number of commercials while only lost 8 times. In other words, the film industry views Super Bowl as an even more valuable platform than does the food & beverages industry [13].

Film advertising creates national effect and does not bounded by regional restrictions. Even though some fans from one of the playing teams that lost the game turned off TV earlier than the end of the match and were unable to see some advertisements, such as fans of Pittsburgh Steelers in 2005, it only takes up a small portion of the entire audience and has nearly no effect on the effects of advertisements. For 70 movies that were advertised during the 2004-2014 Super Bowls, an average increase of \$8.4 million in the opening weekend office box was

received compared to 3 million dollars spent on Super Bowl advertising [15].

In order to discover some basic tendencies of film advertising, I decide to divide the 21st century into 2 parts, the 2000s and 2010s respectively.

For type of films that appeared at Super Bowl in the 2000s (as shown below), action movie possesses the dominant place by appearing 26 times at Super Bowl, followed by fiction film with appearance of 18 times. On the contrary, types of film that appeared least frequently are horror and romance movies.

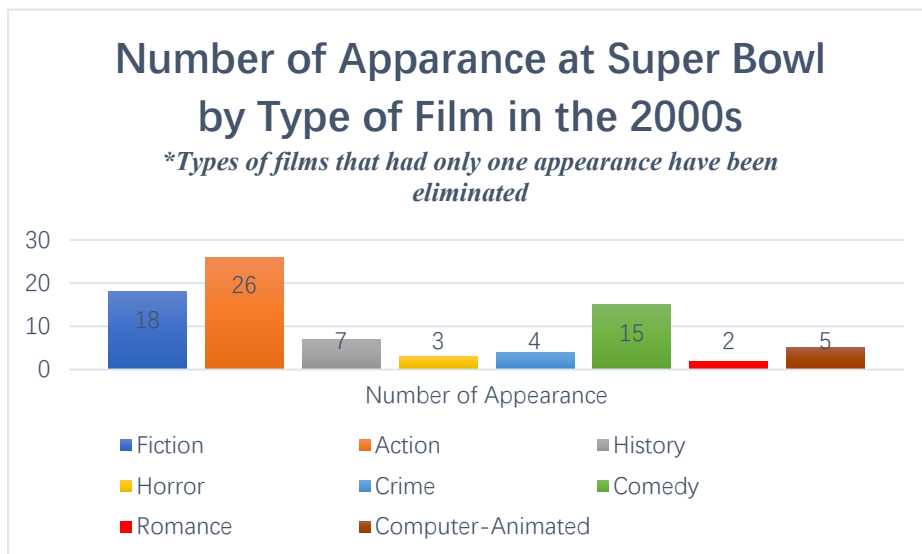


Figure 3. Number of Appearance at Super Bowl by Type of Film in the 2000s.

The result tends to be overall understandable since the audience of Super Bowl in the 2000s primarily consisted of male viewers, leading to a higher frequency of appearance for fiction and action film and a low frequency of appearance for romantic film. Also, because Super Bowl is a sports event that is supposed to entertain people in a relaxing way, commercials for horror has a

low frequency of appearance; in contract, movies that tend to make people laugh, such as comedy takes the 3rd place in this list.

However, things dramatically changed as the 2010s advanced. For the same list in the 2010s (as shown below).

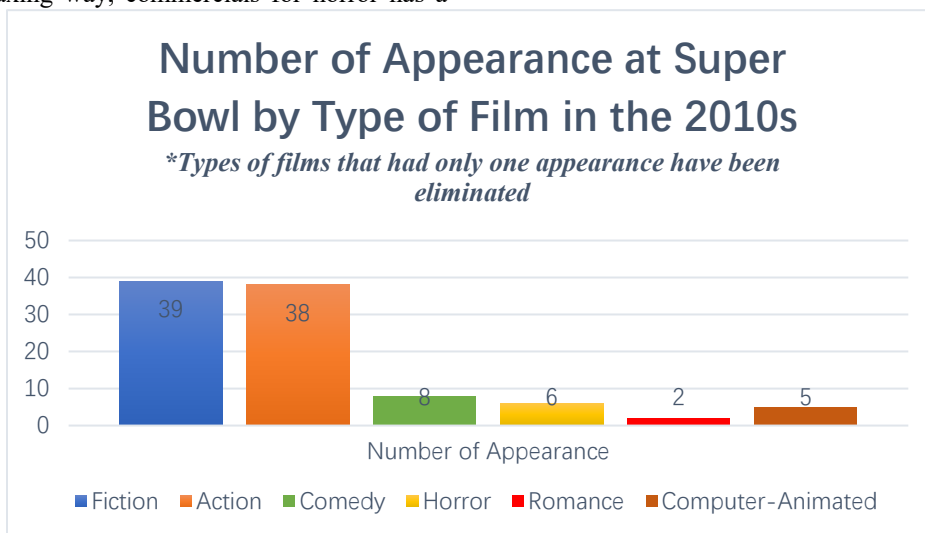


Figure 4. Number of Appearance at Super Bowl by Type of Film in the 2010s.

The change of the graph basically shows the fact that viewers for Super Bowl are becoming less conservative. Fiction films were most favored by the audience, eliminating both history and crime films. Also, the shift of favor from viewers is also shown in the increase of horror film and the decrease of comedy movie, reflecting the new favor from the new generation. Besides, female viewers are still largely ignored by companies. Two types of films, romance and computer-animated that are likely to attract women received extremely low attention,

despite the increase of female viewership. Therefore, it is crucial for film companies to perceive the potential of women audience by increasing the commercials for specific types of films, such as romance, family, and computer-animated films.

3.3 Automobiles

Unlike food & beverages and film industries, automobiles industry has just entered the stage of Super Bowl in the 2010s. This is a special sector since it is persuading the audience to spend thousands of dollars on their products. Looking at the data for searching volume of four brands after their Super Bowl commercials in 2019, the two that received a drastic increase on page views are advertising either cheap product or the car full of technology [16]. Therefore, since this is the product that customer will possess in the long run, the price and the technology might be the primary factors that attract customers.

4 EFFECT ON COMPANIES

Basically, the best way to evaluate the performance of an advertisement is to find out how does it affect its relevant company. By the same token, to evaluate whether a Super Bowl advertisement is a success, I plan to work on the search volume and the stock price of related companies after the Super Bowl. Taking Super Bowl LIII for example, almost every food & beverages and film commercials that appeared at Super Bowl helped increasing the searching volume of the keywords; in contrast, searching volume did not increase for all the automobile companies after the Super Bowl, proving the fact that it is harder to make someone interested in a product that is quite expensive [17].

The data on stock price for these related companies basically tells the same story. The drink and food companies that had gone public, such as Pepsi, had experienced an increase on stock price. However, automobile companies had even experienced a drop in the stock price in the Monday following the game. Investors tend to not view advertising as a predictor of better performance of the company compared to its huge expenditure on advertising and there is no relationship between Super Bowl ads performance and stock price, leading to an insignificant increase or even drop on stock price [18]. This is largely because advertising on Super Bowl does not represent the prospect of the related companies in the long run since companies rarely advertise products that are entirely new or products that possess cutting-edge technology, which could provide tremendous return in the long-term for companies. Even if the stock price does not show a dramatic uplift, the stock prices for the top competitors of these companies, such as Coca Cola and BMW, had clearly decreased, showing the negative impact on the companies whose competitors had entered the stage of Super Bowl [19].

5 OPPORTUNITIES ON SOCIAL MEDIA

As time passes by, more people start watching Super Bowl on their cellphones. Specifically, people are particularly in favor of viewing Youtube during breaks at Super Bowl, which had become the social media that has the most searching volume for the word "football" in 2017 [14]. Thus, Youtube has proven itself as a valuable platform on which companies can insert their commercials at the time when opening the Youtube or in videos about Super Bowl. Also, football fans are the

particular group that is more likely to spend their time on watching game highlights on Youtube. In this case, commercials on Youtube have to be specifically designed for this group of people. Other than Youtube, other social medias, such as Facebook, Instagram, and Twitter are also full of opportunities owing to huge volume of interactions.

6 SUGGESTIONS

First of all, female viewers should be recognized as an important group of consumers by every industry. Next, companies, especially those in food & beverages industry, should strive to ensure increase in both searching volume and sale after Super Bowl by giving customers attractive selling plans. Thirdly, automobile companies should emphasize more on the price and technology of their products in their Super Bowl commercials. Furthermore, companies should start discovering new platform for Super Bowl advertising, specifically on social media. Last but not the least, Super Bowl should not be viewed as valuable for every company, so industries that just entered Super Bowl should adjust as quickly as possible based on current data.

7 CONCLUSION

To make sure money is used for the right purpose, companies should be aware of whether Super Bowl is a worthy investment by analyzing the audience of commercials, what industries they are in, how did Super Bowl advertising influence companies historically, and where are the potential opportunities. The audience for Super Bowl is concentrated between ages 18-49 with a recently drastic increase of female viewers under the trend that most people are becoming richer. Food & beverages and film industries are generally positively affected by their Super Bowl advertising, whereas mobile phone and TV series industries just entered the field and need more time to evaluate the Super Bowl effect. Besides, automobile industry is quite special where the quality of their advertisements is extremely crucial because of the difficulty of persuading people to buy a relatively expensive product, but with the increase of household income, automobile has a bright future with Super Bowl. In response to the importance of mobile phones, social media could be a new and valuable platform for Super Bowl advertising, waiting for companies to discover. According to these results from the analysis, companies should be aware of the importance of the female viewers and social media platform. In particular, food & beverage companies should secure the increase of both searching volume and sale after the Super Bowl, and automobile companies should provide more emphasis on the price and technology of their products. Above all, all the companies should adjust quickly according to the latest data since Super Bowl is an extremely competitive platform.

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REFERENCES

1. Gough, C. US. (2019) Super Bowl average costs of a 30-seconds TV advertisement from 2002 to 2019. <https://www.statista.com/statistics/217134/total-advertisement-revenue-of-super-bowls/>.
2. Sportsbusinessdaily.com. US. (2012) Gap Between Number of Male, Female Super Bowl Viewers Is Shrinking. <https://www.sportsbusinessdaily.com/Daily/Issues/2012/02/01/Research-and-Ratings/SB-demos.aspx>.
3. Unruly US. (2018) Which ads had the biggest impact on consumers, Super Bowl LII Video Impact Study.
4. Salkowitz, R. US. (2018) Data Shows Women Paid More Attention to Super Bowl LII Than Men. <https://www.forbes.com/sites/robsalkowitz/2018/02/05/data-shows-women-paid-more-attention-to-super-bowl-lii-than-men/#6b11ded45c4a>.
5. McCarthy, J. US. (2019) 6 Super Bowl Ads That Put Gender Equality in the Spotlight. <https://www.globalcitizen.org/en/content/super-bowl-s-ads-gender-equality/>.
6. Taylor, C., Mafael, A., Raither, S., Anthony, C., Stewart, D. (2019) Portrays of Minorities and Women in Super Bowl Advertising. *The Journal of Consumer Affairs.*, 53: 1550-1551., 1555-1556., 1559-1562.
7. Lorinkas, J., Redrup, E. US. Men, Women and the Super Bowl: The Science Marketers Should Note. <https://www.martecgroup.com/men-women-and-the-super-bowl-the-science-marketers-should-note/>.
8. Poggi, J. US. (2019) Super Bowl LIII Commercials: The Year of The Women. <https://adage.com/article/special-report-super-bowl/super-bowl-liii-commercials-year-woman/316428>
9. Marketingcharts.com. US. (2017) Top 10 Super Bowl Ads by Total Views Online in 2017. <https://www.marketingcharts.com/television-74246>., US. (2018) Top 10 Super Bowl Ads by Total Views Online in 2018. <https://www.marketingcharts.com/featured-82221>., US. (2019) Top 10 Super Bowl Ads by Total Views Online in 2017. <https://www.marketingcharts.com/featured-107169>.
10. Statista Research Department. US. (2014) Share of affluent households among Super Bowl viewers from 2003 to 2013. <https://www.statista.com/statistics/286395/super-bowl-share-of-affluent-viewers/>.
11. Hitwise.com. US. (2019) Which Brand Saw the Biggest Uplift, Super Bowl LIII. <https://www.hitwise.com/en/wp-content/uploads/sites/2/2019/02/Hitwise-Super-Bowl-LIII-2019-Report.pdf>.
12. Gough, C. US. (2020) TV Viewership of the Super Bowl in the United States from 1990 to 2020. <https://www.statista.com/statistics/216526/super-bowl-us-tv-viewership/>.
13. Wikipedia.com. US. (2020) List of Super Bowl commercials. https://en.wikipedia.org/wiki/List_of_Super_Bowl_commercials.
14. Gough, C. US. (2019) Do you plan to purchase any of the following for Super Bowl Sunday. <https://www.statista.com/statistics/251077/super-bowl-planned-consumer-purchases/>.
15. Stephens-Davidowitz, S., Varian, H., Smith, M. (2017) Super returns on Super Bowl ads?. *Quantitative Marketing and Economics*, 15: 10-11., 19.
16. Hitwise.com. US. (2018) Super Bowl LII Online Search Trends Report. <https://www.hitwise.com/en/whitepapers/super-bowl-data-sheet/>.
17. Trends.google.com
18. Kim, J., Morris, J. (2003) The effect of advertising on the market value of firms: Empirical evidence from the Super Bowl ads. *Journal of Targeting, Measurement and Analysis for Marketing.*, 12: 62-64.
19. Marketwatch.com