

Cloverleaf Analytics Case

MSBA 6250, Spring 2019

Group 2

Mike Brucek, Kevin Grady, Danny Moncada, Andrea Montez, Jack Quick

University of Minnesota

Cloverleaf currently has stores in over 300 malls and shopping centers throughout the United States, but the firm is now turning its focus towards e-commerce. The digital marketing team at Cloverleaf has been tasked with maximizing Cloverleaf's e-commerce by optimizing the firm's search engine results when a customer searches for products stocked by Cloverleaf. Cloverleaf wants to specifically focus on how the firm's spend on search keywords affects the placement of ads on a Search Engine Results Page (SERP), as well as the click-through rate and conversion rate of Cloverleaf ads. Search engine algorithms and customer behavior are constantly changing, which only further complicates any analysis of keywords in search engine results. Assessing how keywords affect click-through rate and conversion rate is valuable, although it cannot answer Cloverleaf management's question of what causes a customer to click on one ad rather than another.

Ads that receive higher clickthrough rates direct a larger number of shoppers to the Cloverleaf website where a conversion takes place. Increasing the conversion rate of shoppers who land on the Cloverleaf webpage will in turn increase total revenues. Cloverleaf should focus on improving both clickthrough and conversion rates as a means to increase revenue.

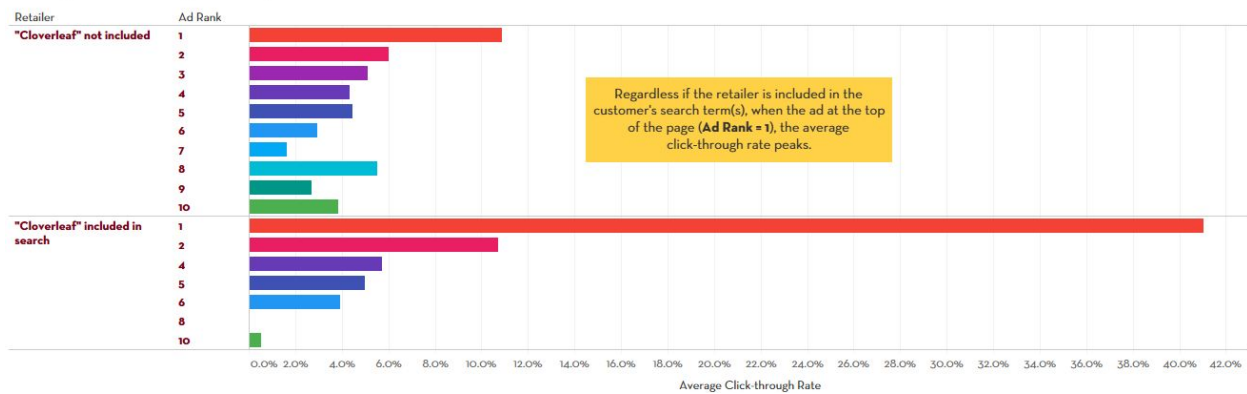
Cloverleaf should first look to increase clickthrough rates on their advertisements by placing bids that would ensure ad placement at the top of the results page. Ads placed at the top of the SERP have significantly higher clickthrough rates than ads in any other position on the page (Appendix A). In addition, Cloverleaf should include the word "*Cloverleaf*" in their list of sponsored keywords. Users who include the term "*Cloverleaf*" in their search have a significantly higher clickthrough rate than people who do not specifically search for Cloverleaf (Appendix A). The combination of being the top search result and having the company name as a keyword will put Cloverleaf's web page in a better position to receive clicks from both people who do and do not specifically search for the company.

The next step in increasing overall revenue is to improve the conversion rate. Approximately 76% of total impressions from Cloverleaf advertisements are from people who do not specifically search for the company by name. Despite the high volume of impressions, non-Cloverleaf searches only represent one-third of total conversions and revenue (Appendix B). Cloverleaf should focus on converting more of this group, as it represents a large number of consumers and a large opportunity for increased revenue. Increases in landing page quality are shown to have significantly higher conversion rates among searches that don't include "*Cloverleaf*" (Appendix C). The company should seek to make improvements on landing pages that receive traffic from Cloverleaf advertisement click-throughs. Potential improvements to consider include streamlining the purchasing process and adding information about the customer's proximity to nearby stores, as well as the availability of searched items at that location when applicable.

Placing a higher priority on the top advertisement placement will come at a higher financial cost to the firm through an increase in total bid amounts. However, an increase in clickthrough rate will hopefully result in a higher conversion rate that is brought on by Cloverleaf's new landing page. Designing and implementing landing page improvements will also add development costs. There is also the potential for a new landing page to have lower quality scores. Cloverleaf should implement various A/B tests to evaluate the efficacy of features they intend to add. The additional traffic generated by securing the top SERP placement will increase the number of users who see Cloverleaf ads. The improved website design will ideally increase conversion rate, ultimately resulting in higher revenues and a larger customer base.

Appendix A

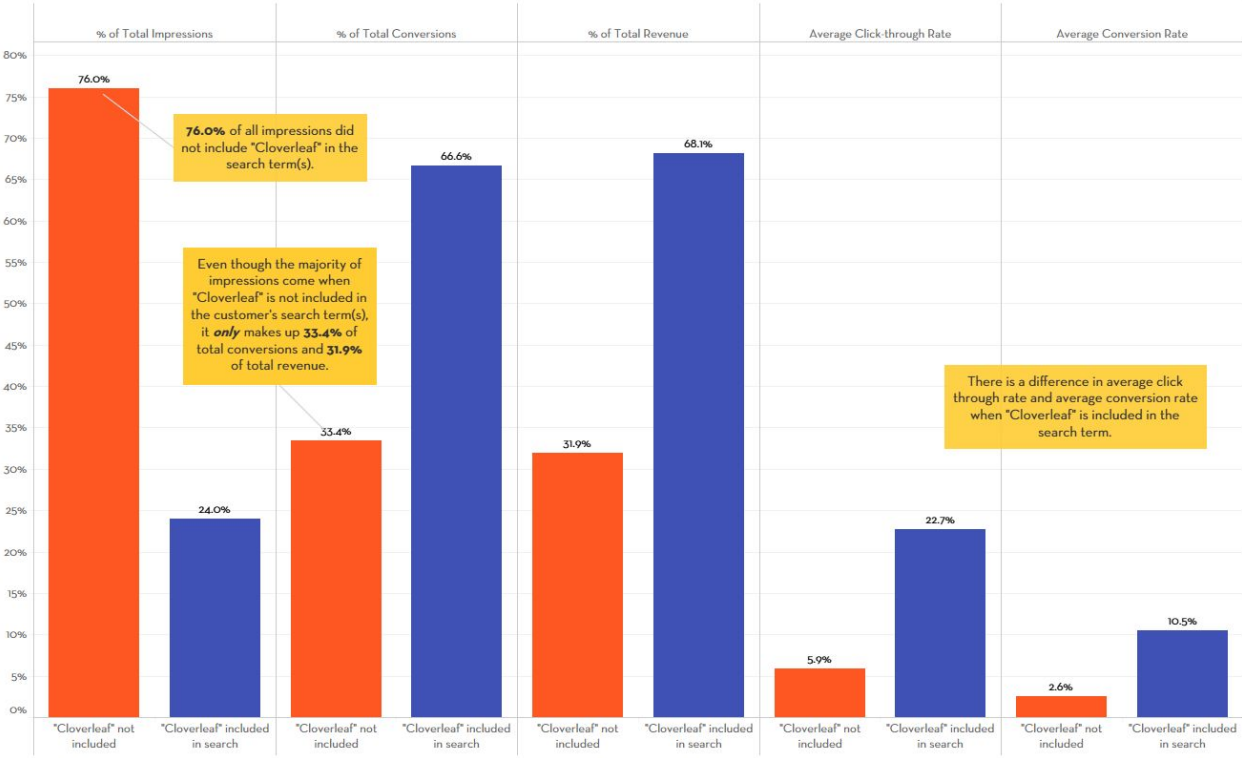
Average Click-through Rate by Ad Rank & if Retailer is Included in Search Term



As illustrated above, Cloverleaf advertisements that are at the top of SERP appear to have significantly higher clickthrough rates. A Tukey's honest significant difference test was completed on the difference between the clickthrough rate of advertisements that are at the top of the page and all others yields a difference of approximately 0.15 ($p < 2.2e-16$). We can also inspect the differences in conversion rates of ads placed in the first position with all others across the two groups of users who either searched for or did not search for Cloverleaf by name. Of the users who searched for Cloverleaf by name, advertisements placed at the top of the page saw clickthrough rates that were approximately 0.39 higher ($p < 2.2e-16$). Of the users who did not search for Cloverleaf by name, advertisements placed at the top of the page saw clickthrough rates that were approximately 0.08 higher ($p < 2.2e-16$).

Appendix B

Total Impressions, Total Conversions, Total Revenue, Average Click-through Rate and Average Conversion Rate If Retailer Name Included in Search Terms



Appendix C

Among users who did not search for Cloverleaf by name, the conversion rate increases by 0.7% for each increment of landing page quality ($p = 0.0023$).