

# ICROSSING SEARCH SYNERGY

NATURAL & PAID SEARCH SYMBIOSIS

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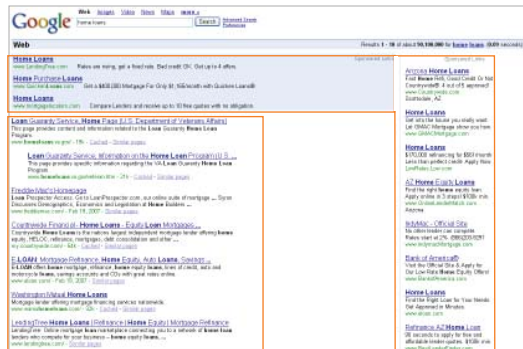
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**NATURAL AND PAID SEARCH SYNERGY**

SYNERGY: TWO OR MORE DISCRETE INFLUENCES OR AGENTS ACTING TOGETHER TO CREATE AN EFFECT GREATER THAN THE SUM OF THE SEPARATE EFFECTS OF THE INDIVIDUAL AGENTS.

Online marketers have long touted the positive synergy between natural and paid search. The relevant question to ask is, “Does running a natural search campaign and a paid search campaign together create more value than running them in a non-integrated manner?” In other words, does one plus one equal three?

Previous industry research has demonstrated the synergy between natural and paid search. For example, Nielsen ReelResearch found that when a brand name appeared in both natural search and paid search results, the brand attracted 92 percent of the total clicks (clicks are attributed to the brand when a consumer searches and selects the brand from the resulting search query).



However, without paid search, the brand name from natural search results attracted only 60 percent of the clicks. This illustrated the combined effect of natural and paid search to a certain degree. However, we were curious to see if the model could be taken further. Might the synergy between natural and paid search also affect other performance metrics such as actions, orders, page views, etc.? We set out to test this hypothesis.

The report that follows conclusively demonstrates that running an integrated natural and paid search campaign leads to improved online performance over running either a natural search or paid search campaign alone. This finding manifests the benefits of a holistic search engine marketing strategy as part of an overall online marketing plan and should be of great interest to companies spending a significant portion of their online marketing budget on paid search but not focusing on natural search.

This report demonstrates the crucial role of natural search ranking in an efficient search engine marketing and overall online marketing strategy.

The fact that search engine visibility is of paramount importance to any marketing strategy is irrefutable. Also irrefutable is the fact that companies continue to grow their paid search budgets. This report demonstrates the crucial role of natural search rankings in an efficient search engine marketing and overall online marketing strategy.

**WHAT IS THE SYNERGY BETWEEN NATURAL AND PAID SEARCH? AND HOW DO WE DEMONSTRATE IT?**

To help conceptualize search synergy we built a model to illustrate the symbiotic, or synergistic, effect between natural and paid search on online performance. We conducted a series of statistical analyses on data collected from iCrossing’s search analytics tool, Interest2Action™. The results obtained from the analyses show strong support for a mutually beneficial relationship between natural and paid search to enhance online performance. In particular, while paid search campaigns have a positive impact on online performance in general, online performance is dramatically improved if keywords purchased for a paid search campaign are also ranked in natural search.

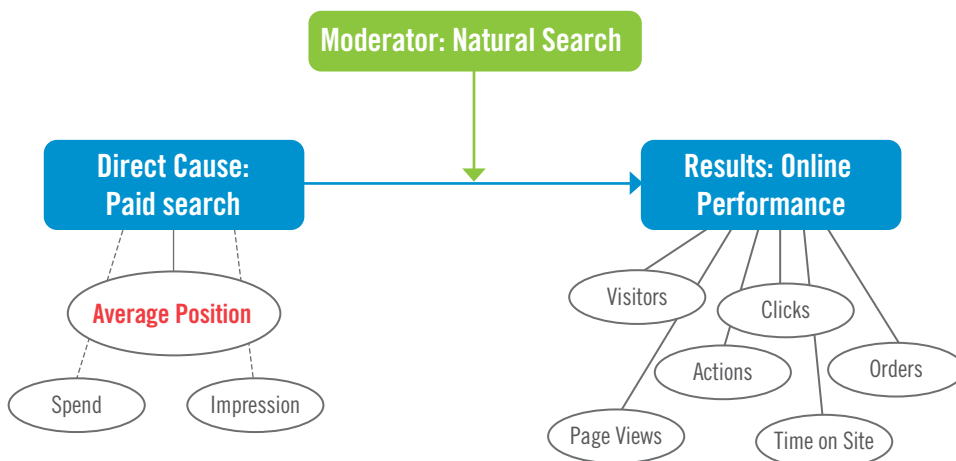
Online performance is dramatically improved if the keywords purchased by paid search are also ranked in natural search.

For example, when we incorporated natural search into an existing paid search campaign and compared its performance to the performance of the sole paid search campaign:

|              |                |                     |                     |                     |
|--------------|----------------|---------------------|---------------------|---------------------|
| <b>TOTAL</b> | <b>CLICKS</b>  | increased by 91.80% | <b>PAGE VIEWS</b>   | increased by 43.63% |
|              | <b>ACTIONS</b> | increased by 45.00% | <b>VISITORS</b>     | increased by 40.69% |
|              | <b>ORDERS</b>  | increased by 44.92% | <b>TIME ON SITE</b> | increased by 38.91% |

**A MODERATION MODEL:  
THE SEARCH SYNERGY  
EFFECT**

We proposed a moderation model for natural search on the causal relationship (cause and effect) between paid search and online performance, with natural search as the moderator (relationship strengthener) to illustrate the search synergy concept, the implication being that while running paid search campaigns drives online performance, simultaneously optimizing for and achieving high rankings for the same keywords in natural search will boost overall online performance. In this model, paid search serves as the direct cause, online performance is the result, and natural search becomes the moderator.



We looked at three variables that could represent paid search as the direct cause: average position of the keywords, keyword impressions and keyword spend. Six variables were used to represent online performance: clicks, actions, orders, page views, visitors and time on site (seconds). After running the statistical analyses we found that average position of the keywords had the most impact on online performance.

To demonstrate the model, we used a comprehensive data set including roughly 20,000 branded and non-branded unique terms spanning both natural and paid search. From this set of terms we selected a random sample of approximately 200 keywords for the moderation effect test. These 200 keywords are representative of 2,000 unique keywords, engines and medium (natural, paid or both) data point combinations used in paid search as well as ranked in the first three pages of natural search results on the major U.S. engines (Google, Yahoo!, Ask, MSN and AOL).

**HOW DID WE GO ABOUT INVESTIGATING THE SEARCH SYNERGY EFFECT? WHAT DID WE FIND?**

We tested the causal relationship between paid search and online performance for the keywords used only in paid search campaigns. A causal relationship was confirmed with positive and significant results, meaning in this case that running a paid search campaign was effective in driving visitors, clicks, actions, orders, page views and time on site. Then we looked at the keywords used for paid search campaigns and also ranked in the top three pages of natural search results. The strength of the causal relationship increased significantly, meaning that simultaneously running paid search campaigns and optimizing for natural search (i.e. having keywords ranked in natural search) was the most effective way to improve online performance.

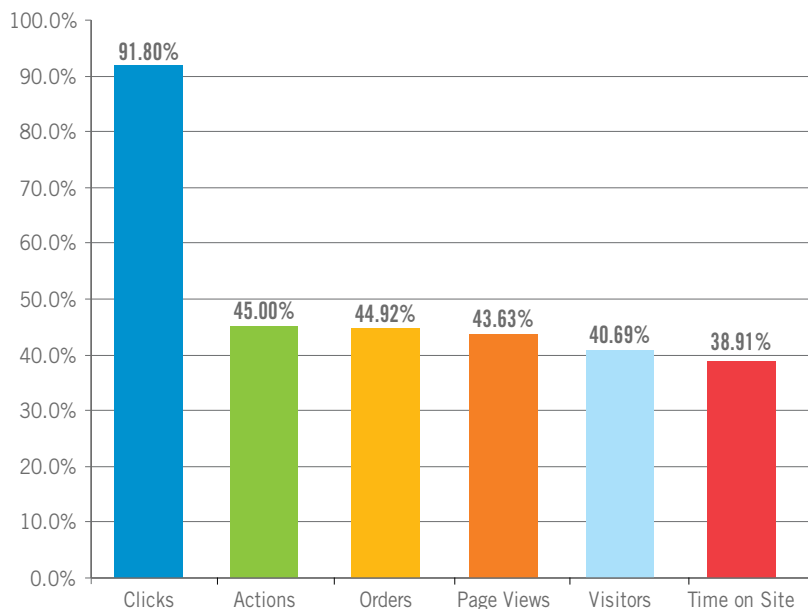
These results strongly support the theory that a positive synergy exists between natural and paid search. That is, when a keyword was used in both natural and paid search campaigns – particularly if it was ranked in the first three pages of natural search results – it significantly outperformed those keywords that were not ranked in the first three pages of natural search results, but that were purchased for a paid search campaign.

When comparing the keywords used in paid search and ranked in natural search with keywords used only in paid search and using Average Position as the direct cause in this model, online performance increased notably across all variables – ranging from 38.91percent (time on site) to 91.8 percent (clicks). On the other hand, when using Impression and Spend as the direct causes, the causal relationship was not significant or did not affect the online performance variables to the same degree as Average Position.

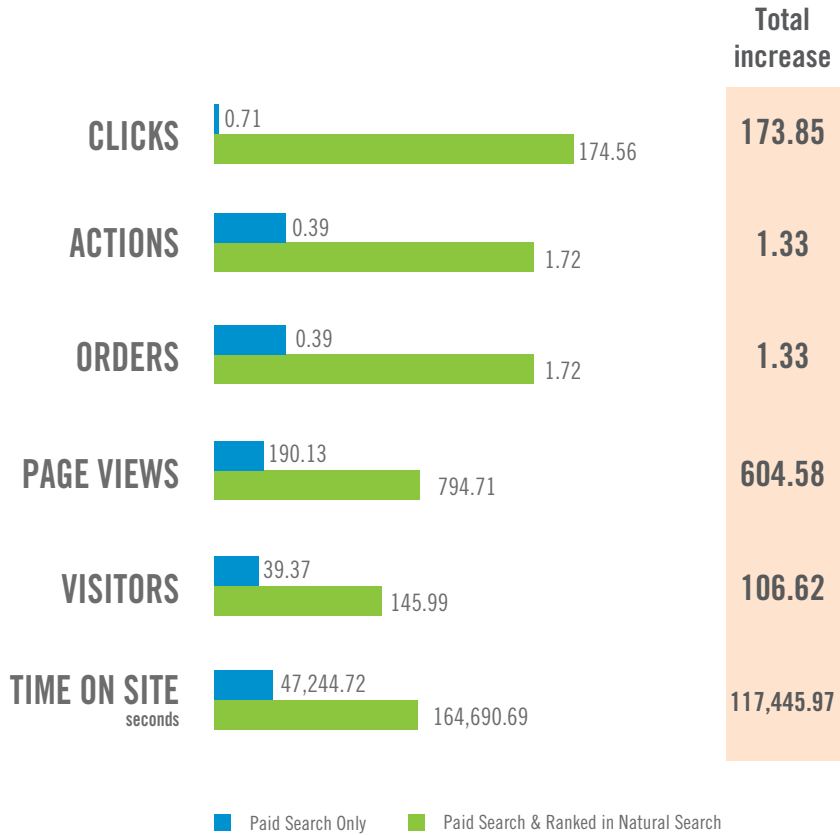
Natural search was used as the moderator or the strengthening agent for online performance in this model. Gaining a natural search engine presence through relevant content, optimization strategies, and page indexing can take months in some cases, in contrast to the immediate opportunities presented through paid search. Adopting a holistic approach, however, generates demonstrable benefits to brand and online performance goals.

Running natural and paid search campaigns in an integrated manner will drive superior online performance versus running either of them alone.

**ONLINE PERFORMANCE PERCENTAGE CHANGE WHEN INTEGRATING NATURAL SEARCH AND PAID SEARCH**



COMPARISON TABLE: AVERAGE OF ONLINE PERFORMANCE RESULTS



## IMPLICATIONS AND RECOMMENDATIONS

Based on the results of the analysis, iCrossing recommends a holistic approach to search engine marketing strategies as part of an overall online marketing plan. Specifically, we recommend that companies:

- + Should consider implementing paid campaigns to support their business model, as the net effect will greatly increase overall online performance if they are currently only utilizing natural search optimization for their online branding and performance goals.
- + Should consider implementing natural search optimization techniques if they are currently only utilizing paid campaigns for their online branding and performance goals.

Specifically, companies should:

- + Analyze their current paid campaign keyword strategies against their natural search results for the same terms. If they are not ranking on one of the first three pages of natural search results, keyword and website content relevancy should be targeted around these non-ranking terms.
- + Implement search engine optimization techniques against industry standard best practices, allowing for search engine spiders to easily read, index and provide results to interested searching consumers.

**APPENDIX:  
MASTER EFFECT SIZE  
COMPARISON TABLE**

**TABLE 1. DIRECT CAUSE: AVERAGE POSITION OF THE KEYWORDS**

| Online Performance | PS-R-NS     |  |                                      | PS-NS       | PS          |
|--------------------|-------------|--|--------------------------------------|-------------|-------------|
|                    | Effect Size | Adjusted Percentage Change against PS-NS | AdjustedPercentage Change against PS | Effect Size | Effect Size |
| Clicks             | 18.728      | 45.34%                                   | 91.80%                               | 9.724       | 0.191       |
| Actions            | 0.254       | 44.37%                                   | 45.00%                               | 0.138       | 0.134       |
| Orders             | 0.253       | 44.13%                                   | 44.92%                               | 0.139       | 0.134       |
| Pageviews          | 117.151     | 42.33%                                   | 43.63%                               | 69.568      | 65.804      |
| Visitors           | 21.531      | 41.57%                                   | 40.69%                               | 13.180      | 13.625      |
| Time on Site       | 24,277.600  | 42.45%                                   | 38.91%                               | 14,343.400  | 16,351.100  |

PS-R-NS: Keywords used in Paid Search and Ranked in Natural Search

PS-NS: Keywords used in both Paid Search and Natural Search (including both ranked and non-ranked)

PS: Keywords used only in Paid Search

**TABLE 2. DIRECT CAUSE: IMPRESSION OF THE KEYWORDS**

| Online Performance | PS-R-NS     |  |                                      | PS-NS       | PS          |
|--------------------|-------------|--|--------------------------------------|-------------|-------------|
|                    | Effect Size | Adjusted Percentage Change against PS-NS | AdjustedPercentage Change against PS | Effect Size | Effect Size |
| Clicks             | 0.022       | NA                                       | 69.08%                               | 0.024       | 0.002       |
| Actions            | NS          | NA                                       | NA                                   | 3.22E-005   | NS          |
| Orders             | NS          | NA                                       | NA                                   | 3.21E-005   | NS          |
| Pageviews          | NS          | NA                                       | NA                                   | 0.014       | NS          |
| Visitors           | NS          | NA                                       | NA                                   | 0.002       | NS          |
| Time on Site       | NS          | NA                                       | NA                                   | 1.932       | NS          |

**TABLE 3. DIRECT CAUSE: SPEND OF THE KEYWORDS**

| Online Performance | PS-R-NS     |  |                                      | PS-NS       | PS          |
|--------------------|-------------|--|--------------------------------------|-------------|-------------|
|                    | Effect Size | Adjusted Percentage Change against PS-NS | AdjustedPercentage Change against PS | Effect Size | Effect Size |
| Clicks             | 2.055       | NA                                       | 49.24%                               | 2.249       | 0.867       |
| Actions            | 0.015       | NA                                       | NA                                   | 0.015       | NS          |
| Orders             | 0.015       | NA                                       | NA                                   | 0.015       | NS          |
| Pageviews          | 6.348       | NA                                       | NA                                   | 6.192       | NS          |
| Visitors           | 0.894       | NA                                       | NA                                   | 0.893       | NS          |
| Time on Site       | 894.598     | NA                                       | NA                                   | 880.182     | NS          |

Notes: The original effect sizes of Average Position in Table 1 were negative due to the fact that the Average Position is on a reverse scale (i.e. 0 is the highest). They became positive after applying additive inverse for the purpose of easy reading. The adjusted percentage change in Table 1 came from the logistic functional calculation of the direct percentage change of the effect sizes.