



The Power of Creative Tactics on Paid Search Auctions

When it comes to the volume-efficiency tradeoff in pay per click auctions, it's a rule that as keyword bid increases, conversion volume increases; but efficiency as measured by cost per acquisition remains the same or gets worse. But it may be possible to overcome this barrier by focusing on non-bidding aspects of the campaign:

- a. Improve the creative of your PPC advertisements
- b. Add negative matches
- c. Improve your landing pages
- d. Add keywords
- e. Increase the conversion power of your website as a whole

The Impact of Conversion Rate on Volume and Efficiency

In order to analyze the impact of these tactics, on the two joint goals of pay per click advertising: volume and efficiency, the following equations can be used:

$$A_k = a_k c_k \quad (1)$$

$$CPA_k = \frac{b_k}{a_k} \quad (2)$$

where:

- c_k are the clicks generated by a keyword per hour.
- a_k is the probability of conversion occurring after a visitor arrives at the site from a click-through on keyword k .
- A_k is the number of acquisitions generated by a keyword per hour.
- b_k is the bid price of keyword k .

(1) says that the number of acquisitions you generate is equal to the volume of clicks you receive multiplied by the probability of a customer converting, conditional upon arriving at your site from the keyword. (2) says that your cost per acquisition will equal your bid price over the acquisition probability.

Let's say that you manage to increase the conversion rate a_k through implementing some of the tactics described above. Let's assume that the increase is by a growth factor G . The new number of acquisitions A_k^+ and cost per acquisition CPA_k^+ are below:

$$A_k^+ = G a_k c_k = G A_k \quad (3)$$

$$CPA_k^+ = \frac{b_k}{G a_k} = \frac{CPA_k}{G} \quad (4)$$

Here is where something really exciting happens. Let’s say you originally had an advertisement that said “Buy our widget,” and replaced this with “Buy our fabulous widget,” the conversion rate might increase from 10% to 20%. According to those equations, such an increase is predicted to cause not just one, but actually two affects. It will both cut the CPA in half and double the number of conversions.

It gets better.

You are now operating under the required CPA. You can, therefore, increase your bid price. Just how high can you raise your bid price? A quick inspection of equation (4) reveals that $CPA_+ = CPA$ if $b_{k+} = G b_k$

Returning to the example, let’s say that you were bidding \$2.58. You may now bid \$5.16 and still achieve the original CPA.

The number of additional conversions at the new bid price will depend on how many higher positions in the paid search results you can buy. This, in turn, depends on the distribution of other bidders in the auction. If you are unlucky, your increased spending power will not be enough to buy the next highest position. However, if your increased spending power were able to buy one or more higher positions, it could deliver an exponentially greater number of conversions, since the increase in clicks due to position is generally exponential. We could be talking about a lot of conversions.

To summarize, an increase in conversion rate by a factor of G will:

1. Decrease the CPA by a factor of G.
2. Increase the number of conversions by a factor of G.
3. If still more conversions are desired, allow the bid price to increase by a factor of G while maintaining the same CPA.

Conclusion

Although optimization of bid prices is a critically important area, it is only half of the challenge. Improving your landing pages and advertising creative, adding keywords to your campaign, increasing your site’s conversion power, and adding negative matches all affect the conversions and cost equation. A comprehensive pay per click advertising campaign will combine smart bidding with smart creative tactics.

CREATIVE TACTIC	THE FACTOR THAT IS BEING CHANGED	IMPACT ON CONVERSIONS	IMPACT ON CPA
Add negative matches	The proportion of traffic allowed through to the site. Under best-case scenario, all traffic turned away in this manner is “non-converting”. Eg. $G=3$ means that 1/3rd of the traffic made it to the site, the remainder being non-converters that were turned away before reaching the site.	No change	Improve by G^2
Improve your landing pages	Multiplicative increase in conversion rate due to more relevant landing page. For instance, after clicking on a link for handbag it takes you to a handbag page, as opposed to some irrelevant page. Eg. $G=2$ means that the conversion rate has doubled.	Increase by G	Improve by G
Increase the conversion power of your website as a whole	Multiplicative increase in conversion rate due to better site navigation, more persuasive copy, calls to action, testimonials, etc. Eg. $G=2$ means that the conversion rate has doubled.	Increase by G	Improve by G

(table cont.)

CREATIVE TACTIC	THE FACTOR THAT IS BEING CHANGED	IMPACT ON CONVERSIONS	IMPACT ON CPA
Improve the creative of your PPC advertisements	It is unclear how advertising creative affects conversion rates and traffic. It is possible it could increase both, which is why the effect of this creative tactic could have a lot of potential.	Any	Any
Add keywords	Newly discovered keywords have potentially limitless possibilities for increasing conversions and decreasing CPA. Of course finding them may be difficult in competitive industries.	Any	Any

Figure 1: Quantification of the impact of different creative tactics on conversions and CPA. All results represent “best-case scenarios”. Some of these results are interesting: for example, adding negative matches can dramatically reduce the CPA of a given campaign, although without any associated increase in conversions.