Profitable Search Engine Marketing for Financial Services

ON THE INTERNET, SEARCH ENGINES INFLUENCE THE BEHAVIOR OF AN INCREASING PART OF CUSTOMERS. BANKS MAKE USE OF SEARCH ENGINES TO PROMOTE PRODUCTS BY USING KEYWORD AUCTIONS TO PURCHASE A PLACE OF THEIR ADVERTISEMENTS IN THE SPONSORED SEARCH LISTINGS. WE DESCRIBE HOW TO BID IN KEYWORD AUCTIONS AND HOW TO MEASURE THE SUCCESS OF SEARCH ENGINE MARKETING.

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Introduction

Nowadays, 20% of German Internet users make use of search engines to find financial products or services. Not surprisingly, the financial services industry plays an important role in the market for search engine marketing (SEM). SEM is a popular, well measurable pay per click marketing instrument, where advertising space is sold dependent on the searched keyword. It is also called pay per click advertising, paid search or sponsored search marketing. In 2006, German expenditures for SEM were 710 Mio. €, one fifth of these (8.6% of the total online marketing) was spent by the financial services industry (OVK Online-Report 2006/2). This article describes how to best bid in keyword auctions and how to measure success of search engine marketing.

Search Engine Marketing in the Financial Services Industry

SEM works as follows: A consumer types a keyword, e.g., "payday loan", into a search engine. He will receive two types of results (see Figure 2). One part of the screen, the lower part on the left, shows the "unsponsored search results". The ranking of these results are determined by the search algorithm. The other part, the one on the top and on the right side, presents the "sponsored search results". Financial service institutes need to pay for the displays in the "sponsored search results", which are considered as ads. We concentrate on those ads. By clicking on one of the ads, the consumer is directed to the advertising financial service institute's landing page, which provides further information about the keyword, such as payday loans, and an opportunity to act (e.g., to buy or to register).

At the same time the advertiser pays the search engine provider for the click on the ad of the consumer. The price per click is a result of a keyword auction, in which search engine providers ask advertising companies, e.g., financial service institutes, to submit a bid for a keyword with the price they are willing to pay for each click on the ad (also called "maximum cost per click"). Figure 1 mirrors that those bids are the highest for keywords that are of interest for insurance companies and financial services. On average, financial service institutes, e.g., banks, pay a price of 2 € for each click of a consumer.

The search engine then weights those bids by so-called quality scores. The specific calculations for those scores are not published, but are essentially determined by the keyword's click through rate, that is the percentage of users searching who click on the displayed ad, and the ad text relevance. The weighted bids determine the ranks of the ads in the "sponsored search results" accordingly.



Figure 1: Average Price per Click at Rank 1 in Different Industries on February 2007 (Source: Department of Electronic Commerce, University of Frankfurt)

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Figure 2: Search Results in Google

Figure 2 displays two ads on top of the unsponsored search results (ranks 1 and 2) and five ads on the right side of the screen (rank 3-7). Ads on the top ranks are usually more attractive for financial institutes because they lead to more awareness, consequently more clicks and thus very likely more customers. However, the prices per click for those ranks are also higher. These effects require financial service institutes to tradeoff between the number of acquired customers and the acquisition cost per acquired customer.

Profitable Search Engine Marketing

The costs of SEM should be regarded as acquisition costs. To ensure the profitability of SEM, the costs per acquired customer have to be smaller than the expected return. Financial service institutes can measure the success of search engine marketing by the change in customer lifetime value and the additional number of acquired customers. The product of both, minus the corresponding acquisition costs, reflects the change in customer equity, which should serve as the central measure of success for SEM. Increases in customer lifetime value allow for higher acquisition costs per customer, consequently higher bids for keywords, and hence higher position of the ad in the "sponsored search results".

The number of acquired customers per keyword is computed by the clicks per keyword times the conversion rate, which is the share of consumers who clicked on the ad and finally bought the product. The number of clicks per keyword is the number of users searching times the click through rate. The average acquisition cost per acquired customer is the average price for the click divided by the conversion rate.

For example, if we assume 5,000 users searching for the keyword of a bank "payday loan" with an average lifetime value per customer of 100 \in , an average bid for this keyword of 2.00 \in , a conversion rate of 5%, and a click through rate of 8%, then the costs per acquired customer are 40 \in . 400 users click on the ad. Consequently, the bank acquires 20 customers and increases customer equity by 20 (100 \in - 40 \in) = 1,200 \in .

Bidding Decision Problem in Search Engine Marketing

SEM campaigns frequently contain more than a thousand keywords. Due to the number of keywords as well as the uncertainty and complexity of keyword auctions, SEM managers frequently follow rather simple bidding guidelines for campaigns such as "always be among the top 3 ranks" or "never pay more than 2.00 \in per click". Such bidding guidelines are dangerous because they do not aim at maximizing the profitability of a marketing campaign and easily result in suboptimal bids. Higher bids result in top ranks which consequently generate more clicks and very likely more customers. However, the prices per click for those ranks are also higher. Again, that requires to tradeoff between the number of acquired customers and the acquisition cost per acquired customer. Our research shows that the most profitable bidding strategy differs significantly between keywords. To show how big those differences between keywords might be, we present some results for a marketing campaign on "payday loan" for which we assume an average lifetime value of 300 € per customer. Figure 3 shows the prices per click for two keywords related to a marketing campaign that aims at selling payday loans using the Yahoo! Germany open keyword auction in January 2007: Top ranks in the "sponsored search results" of Yahoo! for the keyword "instant payday loan" were much more expensive $(2.91 \in at)$ rank 1) than for the keyword "online payday loan" (1.56 € at rank 1).

Assuming that 1% of all clicks convert into new customers, a bid of $2.91 \in$ for the keyword "instant payday loan" generates the highest number of acquired customers, but also leads to the highest acquisition costs of $309.04 \in$ per customer. These acquisition costs exceed the return,

08 researchreport





Figure 3: Differences in Price per Click on Different Ranks for the Keywords "Online Payday Loan" and "Instant Payday Loan"

measured in form of the customer lifetime value of $300 \in$, which in turn results in a negative customer equity at rank 1. As the acquisition costs per customer decrease with bids at lower ranks, these costs at lower ranks do not exceed the given customer lifetime value, making customer equity at lower ranks positive and maximal. This effect illustrates Figure 4: the customer equity maximizing bid for the keyword "instant payday loan" is $1.22 \in$, which places the ad at rank 5 in the "sponsored search results".

In the second case, rank 1 for keyword "online payday loan" is rather inexpensive,

consequently the acquisition costs per customer within all ranks are small. It makes efficient to bid $1.56 \in$ at rank 1 in order to generate the highest number of acquired customers and to realize the maximum customer equity. The lower ranks diminish customer equity in the case of the keyword "online payday loan" (see Figure 4).

Rules for Optimal Bids

Our model for customer equity maximizing bidding behavior and our research show that banks and insurance companies should submit bids for top ranks in the "sponsored search results" only if:

- the profitability of the offered products, respectively of the acquired customers, is high,
- rank 1 is rather inexpensive,
- the conversion rate (the share of clicks that leads to new customers or sales of products) is high,
- the conversion rate on top ranks is not significantly lower than the one on lower ranks,
- the number of clicks on the ad strongly decreases on lower ranks.

Our research shows that optimal positions of different keywords change frequently over time. Competition sometimes raises prices for keywords to a level that makes bidding for the top position unprofitable. SEM campaign management at the keyword level is of particular importance, as simple guidelines on campaign level frequently lead to under- and overpayment and, therefore, substantial losses. Careful trakking, precise measurement, and analyses of the campaign performance are a prereguisite for successful SEM.

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