



Search Engine Performance Report Q1 2008

An Efficient Frontier Research Paper

April 2008



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Executive Summary

The first quarter of 2008 was closely scrutinized by search marketers and investment analysts alike as they looked for indications of recessionary behavior, and as the media reported on the subprime mortgage crisis and other potentially negative economic indicators.

Efficient Frontier's Q1 2008 Search Engine Performance Report analyzes data from a fixed sample of large U.S. search engine advertisers across multiple verticals, including financial services, travel, retail and automotive. The factors considered were: search engine spend, click-through rates (CTRs), cost per click (CPC), and return on investment (ROI). Following are key findings from the report.

Google Gains across the Board

In Q1 2008, all metrics showed increases for Google. The search engine giant accounted for 77.2% of total search spending, gaining 3.3 percentage points of search advertising share over Q1 2007. The average CTR on Google improved by 19.2% in Q1 2008 versus Q1 2007, average CPCs (excluding financial services advertisers) were up by 11.2%, and ROI increased by 24%.

Google's ongoing efforts to improve the user experience by reducing unnecessary impressions and clicks appeared to increase efficiency for advertisers by improving CTR, thus allowing Google to command a higher price for those clicks. Reported declines in click volume on Google did not impact the large-scale search engine advertisers among Efficient Frontier's client base. This could indicate that Google's quality efforts have not only improved the user experience by delivering more relevant ads, but have increased the value of the engine for larger, more sophisticated search advertisers.

Impression Overload at Yahoo! Search, ROI Increases

Yahoo! Search accounted for 18% of total search spending in Q1 2008, down from 21.2% in Q1 2007. A 66.5% year over year (YOY) impression volume increase on Yahoo! Search resulted in CTRs that were 34.3% below Q1 2007 levels. Syndication partner traffic and user enhancements such as Yahoo! Search Assist may have contributed to the impression increase. Panama, the Yahoo! Search platform launched in the middle of Q1 2007, appeared to contribute to a 33% YOY ROI improvement for Yahoo! in Q1 2008.

MSN Volume Flat

MSN remained relatively flat at 4.9% of total search spending, 0.1 percentage points below Q1 2007. CTRs and CPCs dropped on MSN by 7.1% and 7.0% respectively, while its ROI was the highest among the three engines in Q1 2008, and improved by 29% over the course of the year.

Spend Increases for Most Verticals and Increasing ROI Indicate Positive Outlook for Search

With the exception of financial services, most verticals experienced YOY increases in search spending. Spending by travel advertisers was up 23% in Q1 2008 from Q1 2007, automotive spending was up 10% and retail spending was up 6%. Financial services, however, was hard hit due to the subprime mortgage fallout, and showed a decline in search spending of 17% in the same period.

Each major search engine showed an increase in ROI of over 20% in Q1 2008, leading us to anticipate continued flow of advertising budget allocation into the search marketplaces throughout 2008. In this increasingly complex, competitive and ROI-focused environment, advertisers will need to utilize advanced technology and intelligent strategies to maintain and improve their share of conversions and their campaign performance.

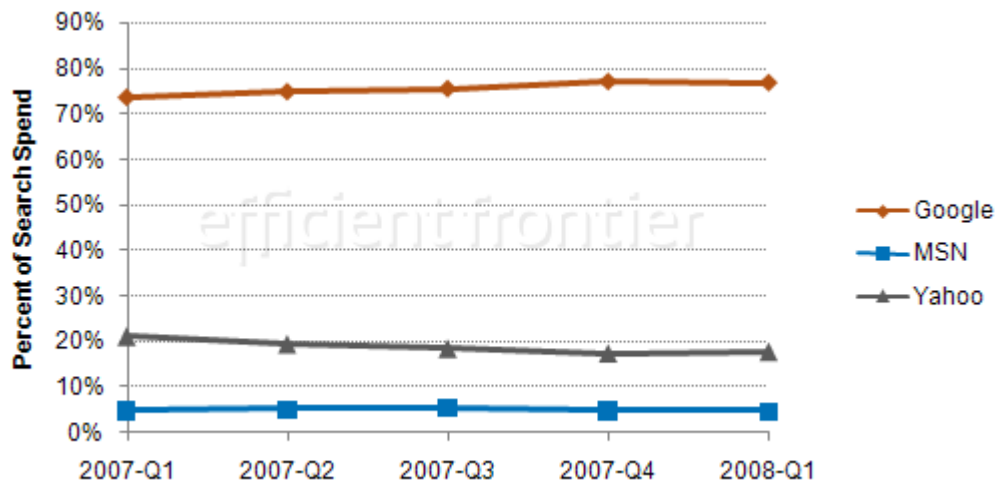
Research Findings

Share of Search Engine Spend

Google Continues to Attract Search Marketing Dollars

Google gained 3.3 percentage points of total search advertising share in Q1 2008 versus Q1 2007, increasing its overall share from 73.8% to 77.2%. Google gained at the expense of Yahoo!, which lost 3.2 percentage points of search share since Q1 2007, finishing Q1 2008 at 18%. MSN remained flat at 4.9% of search spending, 0.1 percentage points below Q1 2007.

Figure 1: Share of Search Engine Spend



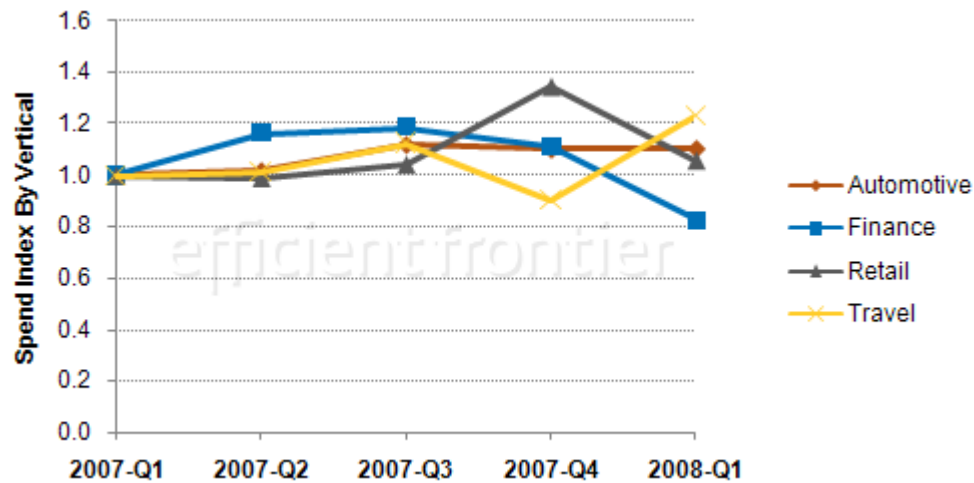
Search Engine Spend by Vertical

Mortgage Fallout Impacts Financial Spending, Travel Spending on the Rise

The widely publicized decline of the subprime mortgage markets had a significant impact on overall search spending by financial services advertisers in Q1 2008. Financial services search spending declined 17% YOY, largely due to reduced spending by mortgage-related advertisers. Other financial services advertisers, including personal loans, credit and insurance, increased or maintained the previous year's spending levels in Q1 2008.

Travel was the bright spot in Q1 2008, with search spending by travel advertisers increasing by 23% in Q1 2008 versus Q1 2007. Automotive advertisers increased search spending by 10% in the same period, and retailers increased spending by 6%.

Figure 2: Trend in Search Spend by Vertical, Indexed to Q1 2007

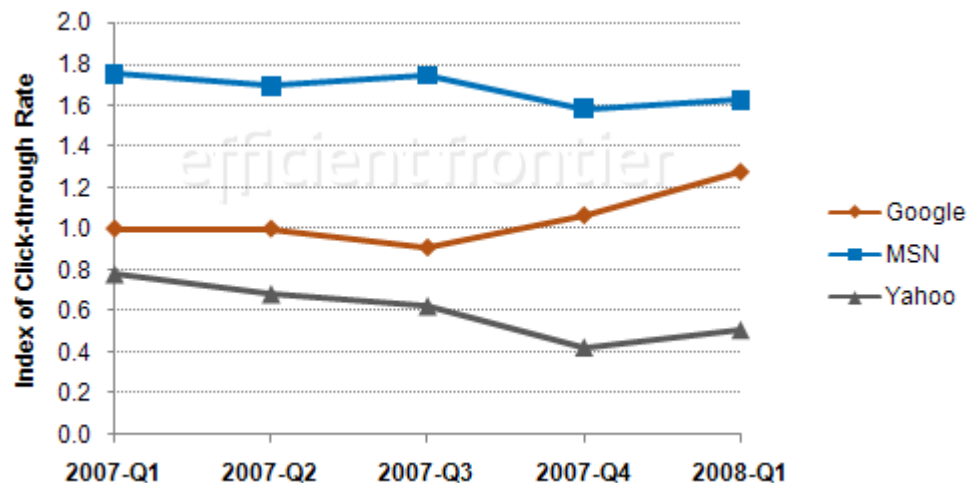


Click-through Rates

Google CTR Improves as Quality Measures Reduce Impression Volume

The CTR on Google improved by 19.2% in Q1 2008 versus Q1 2007. Impression volume on Google decreased by 11.3% in that period, while click volume increased by 5.7%. Google's ongoing efforts to improve the user experience by reducing unnecessary impressions and rewarding qualitatively better sites with higher rankings appeared to increase efficiency for the large-scale advertisers in this sample.

Figure 3: Average Click-through Rate Index by Search Engine



Yahoo! CTR Impacted by Impression Volume Increase

The impression volume increase on Yahoo! Search seen in Q4 2007 continued into Q1 2008. Impression volume was up 66.5% YOY in Q1 2008, while click volume was up only 3.1%, resulting in a CTR drop of 34.3%. It has been suggested that impressions rose as a result of increased syndication partner traffic (on sites such as eBay), in addition the implementation of Yahoo! Search Assist in Q4 2007.

MSN CTR Drops, Still Higher than Average

Historically MSN has had the highest CTR among the engines, but as more advertisers have come to adCenter, average CTRs have dropped. MSN CTR dropped by 12.3% over Q1 2007, showing that the marketplace may be becoming more competitive.

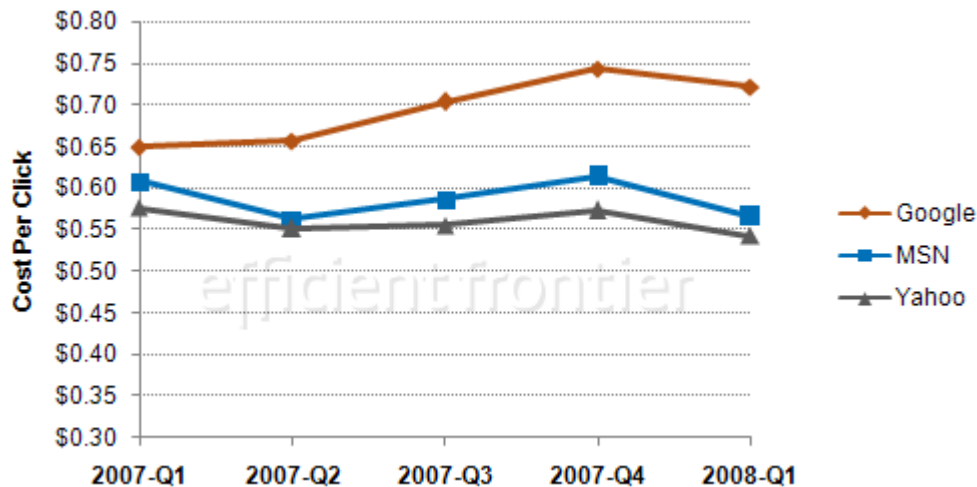
Average Cost per Click

Google Commands Higher CPCs

Average CPCs on Google for non-financial services advertisers were up 11.2% in Q1 2008 over Q1 2007, while CPCs on Yahoo! and MSN fell by 5.8% and 7.0% respectively for those advertisers. Financial services advertisers experienced steeper declines in CPCs on Yahoo! and MSN (32.1% and 49.2% respectively) as they shifted marginal dollars away from lower-volume marketplaces. CPCs for financial services advertisers increased by 3.7% on Google.

Google's increased average CPC, coupled with its 19% increase in CTR indicates that increased efficiency for large-scale advertisers allows it to command a higher price for its clicks. The CPC and CTR declines on Yahoo! and MSN indicate that increasing volume is a key factor in improving traffic monetization for the search engines.

Figure 4: Average Cost per Click by Search Engine, Excluding Financial Services Advertisers



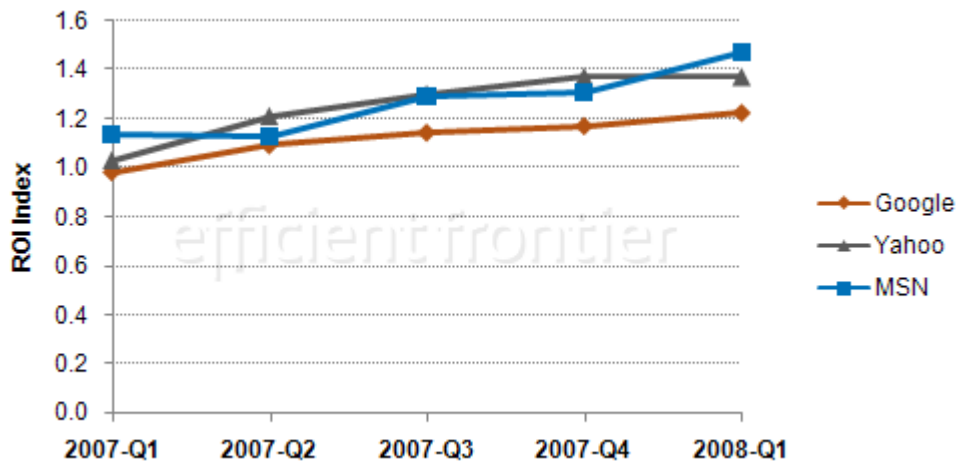
Return on Investment Analysis

ROI Improvement on Google, Yahoo! and MSN

ROI improved on all three major search engines over the course of 2007 and into the first quarter of 2008. Yahoo! Search led ROI improvement, with ROI increasing 33% in Q1 2008 versus Q1 2007, when it launched the Panama advertising platform. Google and MSN ROI improved by 24% and 29% respectively. These improvements indicate that the quality measures and ongoing algorithm changes implemented by search engines throughout 2007 increased efficiency for the large-scale advertisers that comprise Efficient Frontier's client base.

Increased ROI can also be attributed to Efficient Frontier's algorithmic bid optimization methodology, which reacts quickly to market conditions and enables advertisers to maintain or increase ROI in the rapidly evolving and increasingly competitive search engine marketplaces. Other campaign activities, such as sales funnel optimization, keyword expansion and pruning, campaign restructuring and ad copy testing and optimization can contribute significantly to improving search engine advertising ROI.

Figure 5: Return on Investment Index by Search Engine



Methodology

Sample

This analysis was completed based on data from a fixed sample of Efficient Frontier's U.S. clients from Q1 2007 through Q1 2008, and covers nearly 18 billion impressions and more than 310 million clicks on Google, Yahoo! and MSN. It includes data from advertisers in the Finance, Travel, Retail and Automotive verticals.

Relative ROI Index

In order to aggregate and evaluate client ROI data on a common basis, client search engine revenue was weighted by total spend and normalized to Q1 2007. The baseline for performance across all engines in Q1 2008 is 1.0. Measures above 1.0 indicate good performance, and below 1.0 indicates poor performance, thus providing a directional indicator of return on advertising spend by search engine.

About Efficient Frontier

Efficient Frontier is the market and technology leader in providing Search Engine Marketing (SEM) solutions for leading global advertisers and agencies. Founded in 2002, Efficient Frontier pioneered the application of modern portfolio theory to SEM and today combines its core algorithms and bidding technology with comprehensive strategic and tactical services to manage more than \$500MM in global search spend. The largest and most sophisticated advertisers and agencies partner with Efficient Frontier to achieve and sustain optimal return on investment and ongoing campaign growth and efficiencies in highly competitive and volatile search marketplaces. The company has 200 employees and is headquartered in Mountain View, CA with offices in New York, the United Kingdom, France, Germany, Hong Kong and India, and licensing partnerships in Japan and Australia. Efficient Frontier is a privately held company with funding from Redpoint Ventures and Cambrian Ventures. For more information, please visit www.efficientfrontier.com and subscribe to the Efficient Frontier blog at <http://blog.efficientfrontier.com/>.