

A pilot study on PPC schemes and their effect on search engine revenue

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Abstract

Purpose - The primary purpose of this project is to assess the popularity and problems associated with pay-per-click (PPC), also called paid placement schemes.

Design/methodology/approach - The method used is a literature survey of previous research on search engine marketing (SEM), and a pilot study on what the market offers in PPC.

Findings - A December 2004 survey indicates that three quarters of all participating advertisers do participate in paid placement, confirming its popularity among advertisers. It was also found that 83% of participating advertisers plan on increasing their spending on PPC, on average expecting to spend 45% more in 2005. This proves the increasing popularity of PPC. Only 13% of the participants were unhappy compared to 62% that were happy with their PPC program.

It was concluded that users should be aware that most search results are influenced by PPC in some way or another. This however is not necessarily a negative element, as PPC can have a positive impact on search results. Most importantly, they provide search engines with the revenue to supply users with a free search service.

Research limitations - This study was based on a literature review, followed by a pilot study to compare search engines offering paid placement. Other search engines not offering paid placement were also inspected to determine how they generate revenue.

Originality/value/research problem - Many web authors are aware of the multitude of ways they can use to increase their search engine ranking. The research problem is the existence of a negative perception around payment to better the ranking of a website, regardless of its contents (Weideman, 2004). A secondary problem is that no empirical evidence could be found to clarify this contentious issue, and no guidance was evident from the literature regarding available schemes.

Keywords Search engine marketing, Paid placement, Search results

Paper Type Literature review

Introduction

Search engines are the most often used method of locating information (Guenther, 2001). Any user can search the Web, anytime of day, using powerful search engines at no cost. But the hosts of this free service have to cover overheads and make a profit, and are using paid placement to help defray these costs (Goh et al, 2002).

Search engines can generate revenue in a variety of ways. One of the most common methods is by charging advertisers for online banner ads. Most search engines practice this method simply by including flashy banner ads on the search results page. Some search engines show a different ad based on the

surfing habits of the individual user (Hurwicz, 2002). If the user profile shows that a user frequently visits an automobile related website, that user may indeed see an automobile ad on the page.

Another way of generating revenue is by collecting data on consumer habits and selling that data to other companies. Wittenberg documents this practice of user profiling:

"The search engines get information on what you are searching for directly every time you submit a search....By collecting this information over a period of time, the search engines can compile a profile of your interest." (Wittenberg, 2001)

This information can either be used by the search engine itself or sold to companies or to other search engines.

Interestingly, even though search engines compete against each other, they also often cooperate in selling data, information and technology. For example, Overture and Google sell their top results for search terms to several other major search engines.

For most search engines, the normal process for placing a website in a database for searching may take several weeks - and on some occasions the search engine may decide not to include the website at all. Since many websites could lose money while they wait for the submission process, they instead choose to pay for guaranteed and immediate inclusion into search results. This research project focuses on the element of paying to be listed by search engines.

The most controversial method of making money is charging companies for high rankings in search results. Indeed, every major search engine practices some sort of paid placement for their search results. As described next, this practice is very popular among advertisers and has several problems surrounding it. However paid placement is not only negative and this article will attempt to point out some of the benefits of paid placement.

Literature survey

Search engines need for revenue

Large search engines like Google index up to 8.1 billion webpages (Sullivan, 2004b). Although it is claimed that this is not more than 16% of all the webpages on the Internet (Lawrence et al, 1999), the service provided to users by these search engines is priceless. In fact it is claimed that search engines generate approximately 80% of web traffic (BTLookSmart, 2001). Yet listings do not just appear on the screen after a search - search engines go through a number of steps to review, index and generate listings (Thelwall, 2003). And though there are a number of ways to complete these steps, all of them are expensive (Wittenberg, 2004).

Ultimately search engines need to cover these costs and considering that they are for-profit organizations they also need to make a profit. In need of income, the traditional technique used by search engines was to charge users for searches (Wittenberg, 2004). However, end users have become accustomed to search engines as free services for which they are not prepared to pay (Moxley et al, 2004); (Henshaw, 2001). It is clear that search engines need some sort of revenue and if the user is not willing to pay, they have to look elsewhere for income.

Opportunities for revenue – The move towards search engine marketing (SEM)

It is claimed that 80% of Internet users turn to search engines to find information (BTLookSmart, 2001). A survey reveals that adult Web users search the Internet more than they engage in any other activity except using e-mail (Nachmias et al, 2002). Another survey found that half of Web users spend 70% or more of their time searching online (Nachmias et al, 2002). This large number of Internet users combined with a study that has proven that 83% of all webpages are commercial (Lawrence, 1999), created a potential for financial gain through marketing (Weideman, 2003).

Consequently search engines started to sell their users' eyeballs and mouse clicks to advertisers (Moxley et al, 2004). Search engine marketing firstly took the form of banner ads, but quickly started to decline in popularity, as users started to ignore them (Henshaw, 2001); (Kopytoff, 2001).

In further need of revenue, search engines took advantage of the advertisers' need to be visible and visited. Having the advantage of creating the largest amount of Internet traffic (Thelwall, 2001), they offered services that would satisfy the advertiser. Specifically they addressed these advertisers' enthusiasm for more visibility, eagerness for being placed on the first page of returned search results and impatience for waiting to be reviewed and indexed.

SEM services

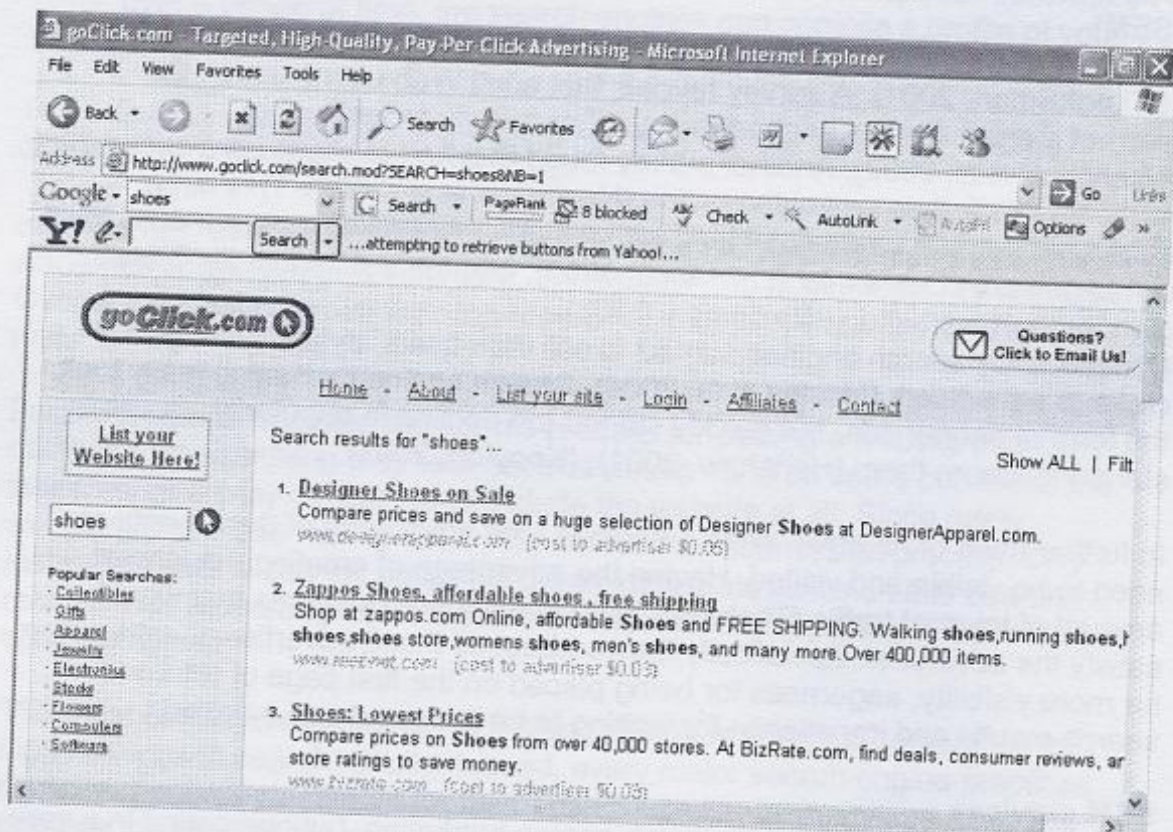
There are quite a few ways of search engine marketing, but competing in a very competitive field, search engines are generally very secretive about their marketing techniques (Wittenberg, 2004). In addition to banner ads, selling marketing data on consumer habits, charging other search engines to use their directory, charging users for searches and charging websites to be included in their database (Mangani, 2003), there is one main service offered by almost all search engines. This service, paid placement, is by far the most contentious and deserves to be looked at in more detail (Moxley et al, 2004).

Paid Placement

This service is also called pay-for-placement (PFP) or pay-per-click (PPC). The term "paid placement" is used to describe a number of overlapping practices, but in essence means linking individual websites to specific keywords for payment (Moxley et al, 2004). This system could become costly as advertisers are locked in an ongoing rivalry for popular keywords (Sullivan, 2003a). As pay-per-click suggests, advertisers also have to pay for every click through traffic they receive from that sponsored link.

Companies place bids for search terms. The bid is the amount of money the company is prepared to pay the search engine every time a user clicks on the link to its website in the search results page. The bid-amount is shown by "cost to advertiser" underneath each link in Figure 1. The highest bidder for a given search term in this case "shoes", will see their website listed as the number one link, www.designerapparel.com who pays \$0.05 for every click through. The second highest bidder, www.reebnet.com who pays \$0.03, gets the number two link, etc.

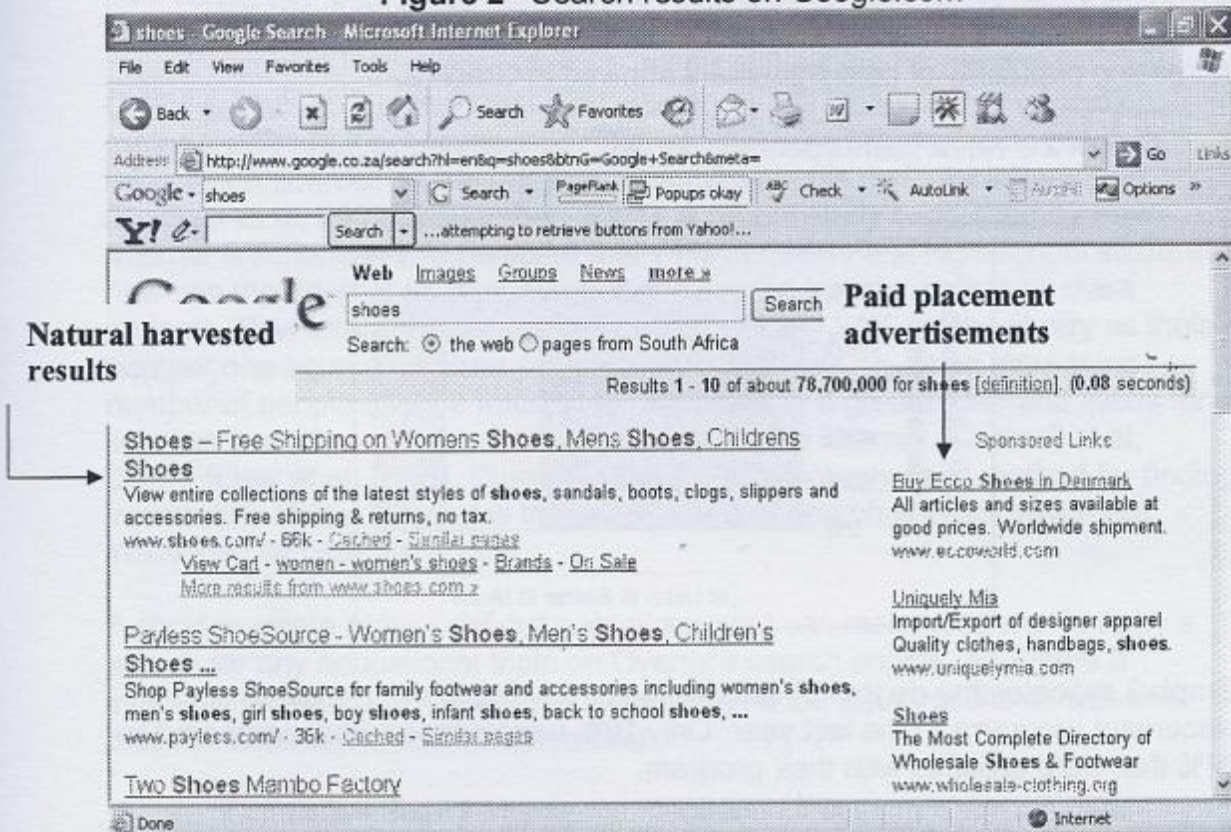
Figure 1 – Sponsored links on goClick.com



Paid placement can also be very dynamic. For example www.designerapparel.com who is the highest bidder at the moment for the search term "shoes" in Figure 1 can be the number one link today. Any advertiser can still at anytime outbid www.designerapparel.com by paying \$0.06 for each click through. That will mean www.designerapparel.com will move to the number two link and the new advertiser will move to the number one spot for the keyword "shoes".

Paid placements are not mixed with naturally harvested search results and are usually offset from them in some way. PPC results appear at the bottom, top or side of the page (Henshaw, 2001). This is usually marked with a term such as "Sponsored Links" or "Featured Links" to distinguish it from natural results. Figure 2 indicates Google's search results when searched for the term "shoes". Google's paid placement is offset from their natural harvested results and is marked with the term "sponsored links", thereby clearly distinguishing it from other results.

Figure 2– Search results on Google.com

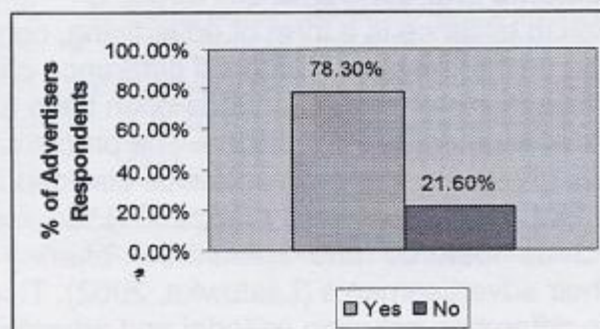


Paid Placement popularity

In December 2004 SEMPO (Survey of Advertisers and Agencies Search Engine Marketing Professional Organization) did a survey on the state of search engine marketing internationally (SEMPO, 2004). The survey was completed by 288 search engine advertisers and some interesting trends became evident.

Graph 1 indicates the percentage of advertisers currently engaged in paid placement programs. It is clear that more than three quarters of all participating advertisers do participate in such a program, confirming its popularity among advertisers.

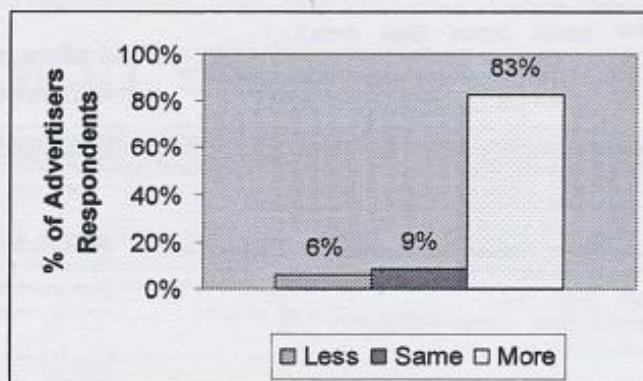
Graph 1 – Percentage of advertisers participating in paid placement



On a question asking how much the advertisers expect to spend on paid placement in 2005 compared to 2004, it was found that 83% of participating

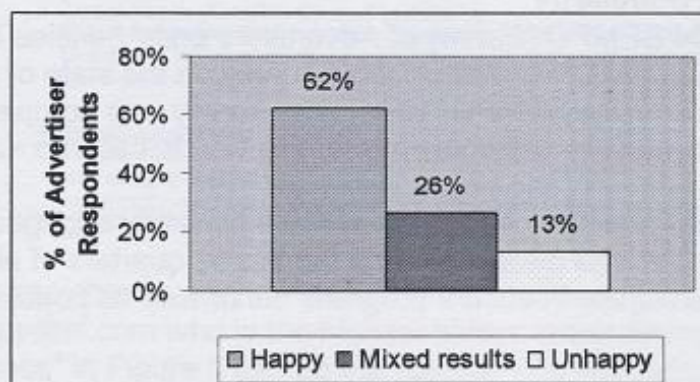
advertisers plan on increasing their spending on paid placement. On the average, participants expect to spend 45% more in 2005. This proves the increasing popularity of paid placement showed in Graph 2.

Graph 2 – Advertisers spending on paid placement programs in 2005 compared to 2004



Graph 3 indicates the degree of satisfaction of advertisers with their paid placement programs in the last year. Only 13% were not satisfied, compared to 62% that were satisfied with their program.

Graph 3 – Advertisers satisfaction with their paid placement programs in the last year



Paid Placement problems and concerns

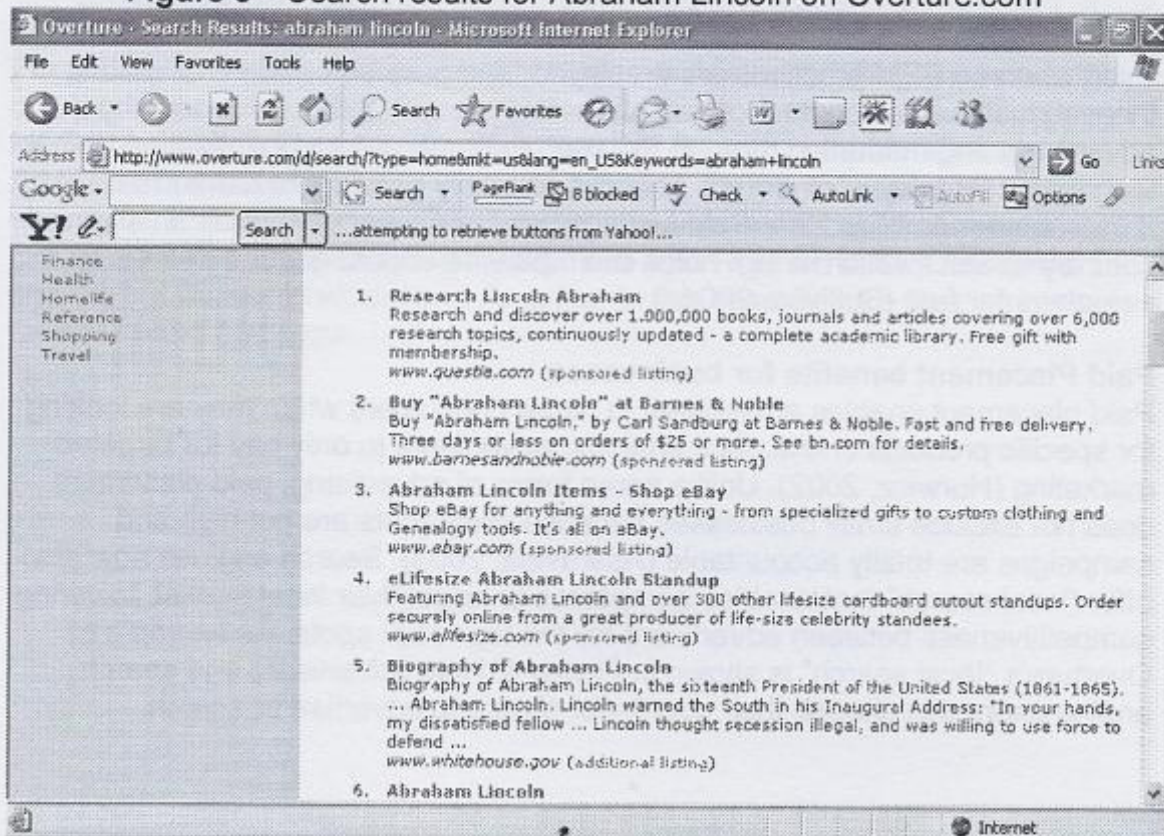
Paid placement, which in essence is a form of advertising, comes very close to mimicking naturally harvested results. This small difference could deceive users. That is why these forms of advertisements often have to carry disclaimers to ensure consumers are not misled. The problem is that search engines do not always give a clear and conspicuous disclosure that certain search results are in fact ads (Commercial Alert, 2001). Confusing terms are sometimes used, such as "featured" and "sponsored", blurring the line between natural results and their advertisements (Lastowka, 2002). This leads to users struggling to note the difference between editorial and advertising content (Sullivan, 2003b); (Goh, 2003) and therefore misleading them. This was proved in a study by Consumer WebWatch with 17 users who were initially unaware of

paid listings, who considered the term "sponsored" to be unclear and misleading (Sullivan, 2003b).

Critics are now concerned that paid placement will make finding educational material difficult, if not impossible. The Internet is rapidly replacing other information sources as the number one place people go to for information (Krueger et al, 2004); (Guenther, 2001). A recent study conducted by Pew Internet & American Life revealed that 71% of middle and high school students now use the Internet as their number one source for information for class projects (Pew Internet & American life, 2002). Only 24% list the library as their number one source for class projects (Guenther, 2001). As an increasing number of people use the Internet for information, a greater demand exists for sources that allow users to find information on the Internet (Cockrell et al, 2002); (Liaw et al, 2003). Currently, the most commonly used method for finding information on the Internet is through the use of search engines which are influenced by paid placement.

A good example of how difficult paid placement can make research is to try a search for any educational topic on Overture search engine. As Figure 3 indicates, a search for Abraham Lincoln returns the top 4 results as websites that sell Abraham Lincoln memorabilia.

Figure 3 – Search results for Abraham Lincoln on Overture.com



A positive look at Paid Placement

Paid Placement benefits for the user

Some search engines believe that SEM and in particular paid placement must not be seen as negative. In fact GoTo.com (now Overture) once claimed that the idea for paid placement was first used as a way to filter out results that did not really apply to what searchers were looking for. By selling top search results, GoTo.com believed users can be guaranteed that the results actually apply to their specific search. Search engines believe that paid placement can actually contribute to search results in three main ways:

- It enhances the relevance of results for commercial queries by the user.
- Sites that have deep content, not normally accessed by crawlers, can have their information presented to the users.
- Sites that have often-changing pages, such as CNN.com, are revised on a regular basis providing the user with the most up to date information.

Cadogan claimed the following at the *Search engine Strategies 2003 Conference* on how search engines view SEM to benefit their users.

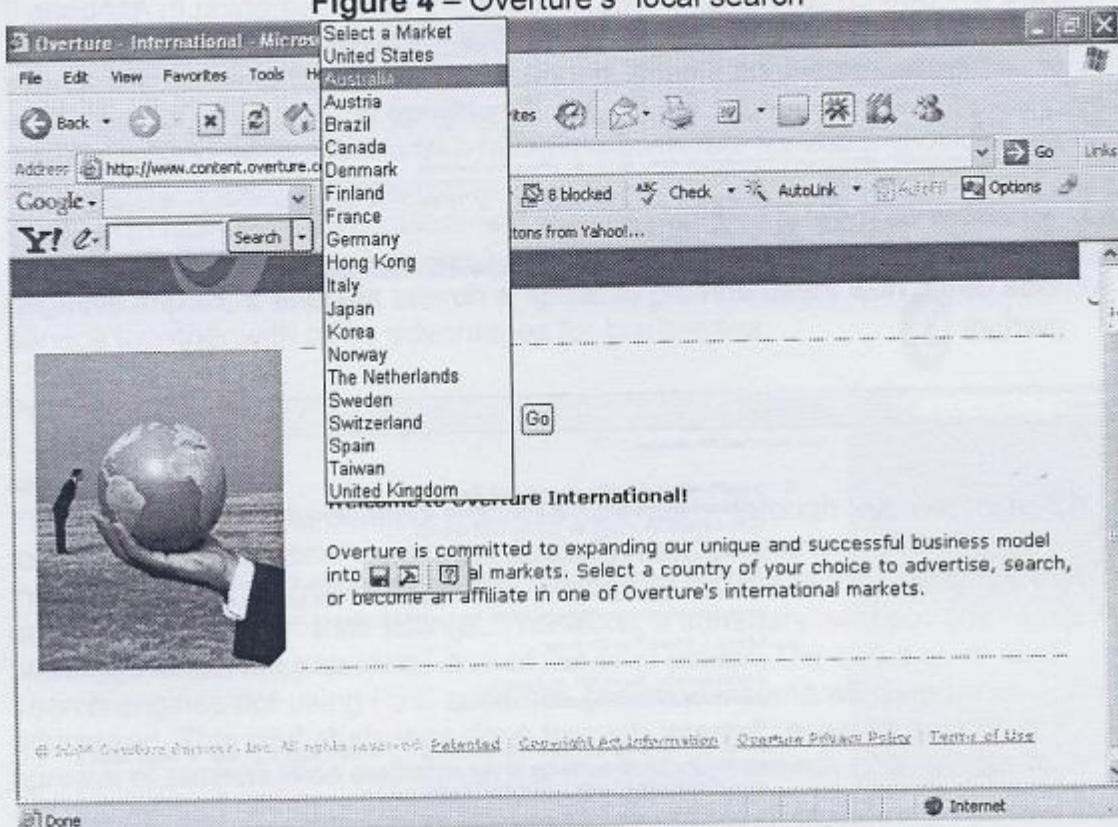
“A search engine company's focus on the best user search experience first; the monetization strategy is not something that goes alongside of the user experience. It is part of the user experience” (Crowell, 2003)

Even when no SEM practices are employed, and pure automated harvesting of the web is used, the content of search results is inescapably influenced by advertising and marketing through the use of search engine optimization (SEO) techniques (Moxley et al, 2004). This can arguably be of more harm than SEM. It must be remembered that Paid Listings generate revenue for search engines, contrary to SEO, which in turn helps them provide unpaid editorial listings to searchers for free (Sullivan, 2004a).

Paid Placement benefits for businesses

Paid placement enables advertisers to target consumers when they are looking for specific products online, thus enabling advertisers to only pay for targeted marketing (Hurwicz, 2002). Unlike some forms of advertising, paid placement does not exclude small businesses because entry costs are not high and campaigns are totally accountable (Asaravala, 2003). Search engines now also offer “local search” that enables companies to target their local market, lowering competitiveness between advertisers for the top result spots. An example of Overture’s “local search” is shown in Figure 4. Here advertisers and search engine users can choose their country of choice to advertise or search.

Figure 4 – Overture's "local search"



For example, Sandra-Dee (a small business in Australia selling shoes locally only), compete for top result spots if a search engine user searches for shoes locally (Australia). Thus Sandra-Dee does not have to compete against American businesses, selling shoes in America, for top result rankings. Figure 5 shows the search results on Overture for a search on "shoes" in Australia. As can be seen Sandra-Dee is the number one link. Figure 6 shows the same search, but for searches done in America. In this case Sandra-Dee is not even ranked on the first page.

Figure 5 – Search results for shoes on Overture while searching in Australia

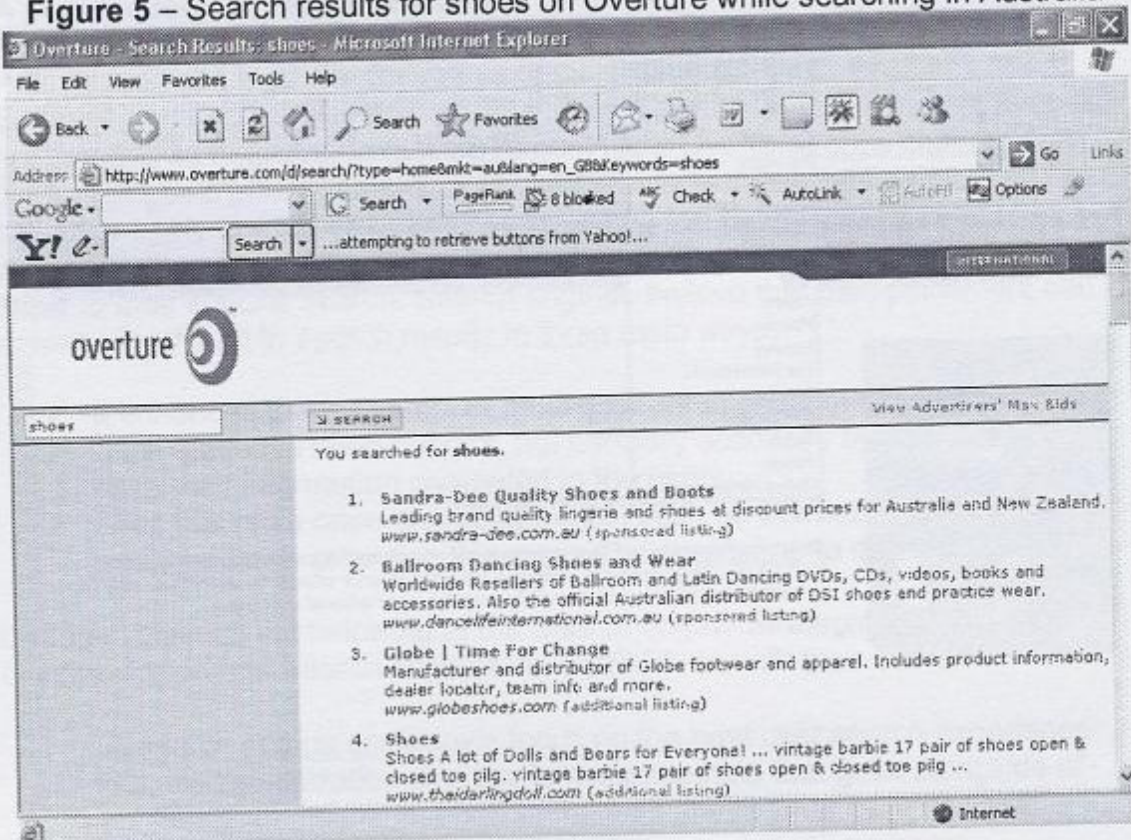
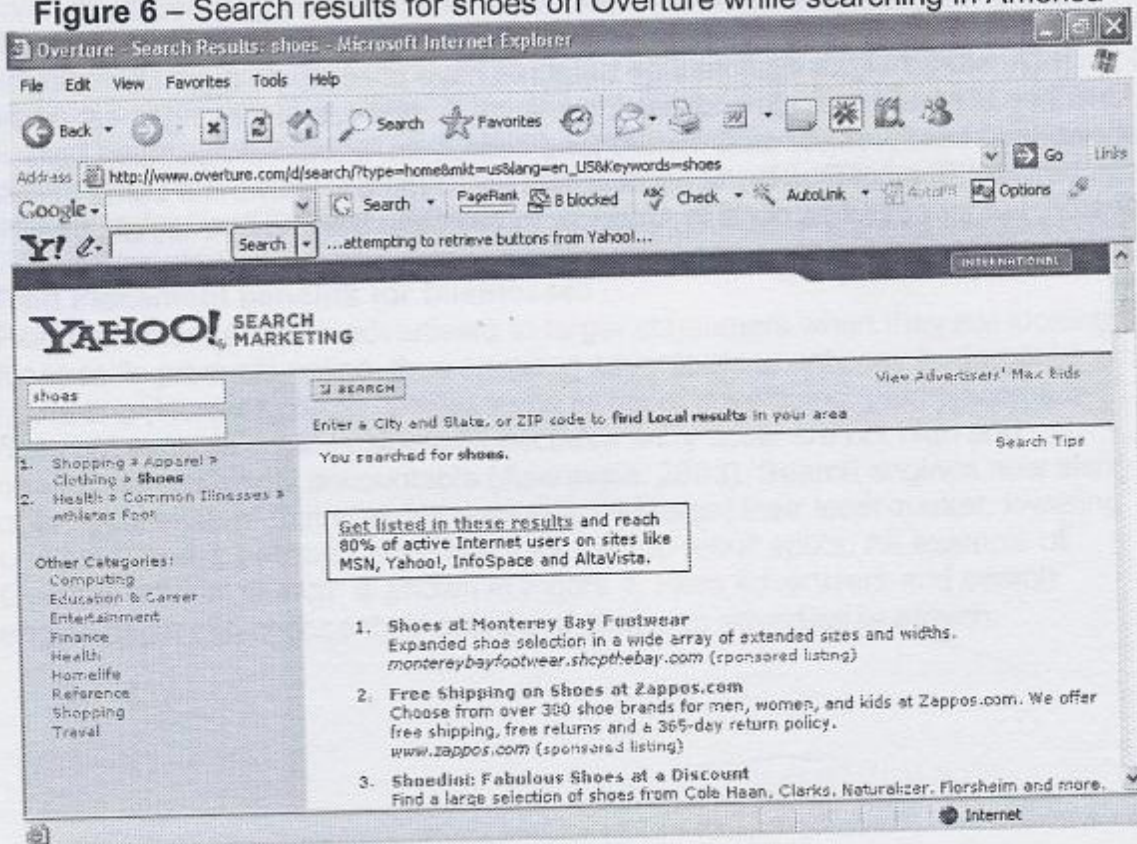


Figure 6 – Search results for shoes on Overture while searching in America



Summary

The results prove that users are not willing to pay for the services offered by search engines and that in need of revenue, search engines must take advantage of other income opportunities. Paid placement proves to be very popular among advertisers with a healthy growth rate for 2005, providing search engines with a source of revenue.

It was also found that paid placement is not a negative system as widely perceived, but on the contrary paid placement may have a more positive than negative impact. It enables search engines to provide users with a free search service together with other advantages for businesses.

Pilot study

Methodology

The author decided to conduct a simple pilot study, through Internet research, to compare various search engines that offer paid placement. In some instances search engines obtain their results by turning to third-party "search providers" to "power" their listings. Therefore, a summary will be made of the two biggest "search providers" and whom they power. The question of how search engines not using PPC schemes generate income will also be addressed. This pilot study was done through Internet research, including surveys of such studies and surveys of the included search engine sites to ensure validity.

Results

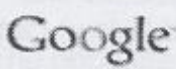
The seven search engines compared in Table I were chosen based on:

- the search engine providing a paid placement service,
- popularity of search engine, and
- availability of information.

It was decided to compare the search engines in 5 fields:

- minimum bid (the lowest amount that can be paid for a click through),
- initial deposit (amount that must be paid before starting the paid placement campaign),
- placement (area where the paid placement links appear),
- traffic (amount of searches on search engine), and
- extras (additional services offered to the advertiser).

Table I – Comparison of leading search engines offering paid placement

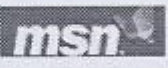
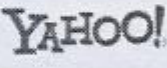
	Minimum Bid	Initial Deposit	Placement	Traffic	Extras
	Not Displayed	£50	Paid placement area listed as "cost to advertiser"	2 Billions Internet Queries Monthly	Customer service: Mon-Fri 9am-6pm
	\$0.05	\$5.00	Ads appear alongside or above the	reaches about 80% of Internet	You can select which

			results on Google.com search results pages	users	countries your ads are displayed in.
overture 	\$0.10	\$50.00	Search results that are sponsored are displayed at the top of the search results	Results go out on Yahoo!	Free \$25 credit
looksmart	\$0.15	\$45.00	In sponsored search results area	Reaches 77% of Internet users	Combine keyword targeting and inclusion targeting
	\$0.05	\$50	Results displayed as sponsored links, highest bid at top	Not Displayed	No editorial review process and no delay in getting listed
	\$0.01	\$10.00	Paid listings are marked with "(cost to advertiser)" next to results.	Network handles over 350 million searches per month	Tools eliminate the monitoring of keyword bids and positions that plague other PPC search engines
KANoodle	\$0.05	\$50	Search results shown as 'sponsored links', featured link on top of search results	410,000,000 searches per month	4 types of targeting to generate targeted traffic.

Table I indicates that Google and goClick are the cheapest paid placement providers. Looksmart and Overture are the most expensive. Taking each search engines traffic into account, Google seems to be the cheapest for the most coverage. It must be remembered that in choosing a paid placement provider, advertisers need to look at more than what is displayed in Table I. Factors like location, target market and the provider's partner sites (as explained below) can play a huge role in choosing the best suited provider.

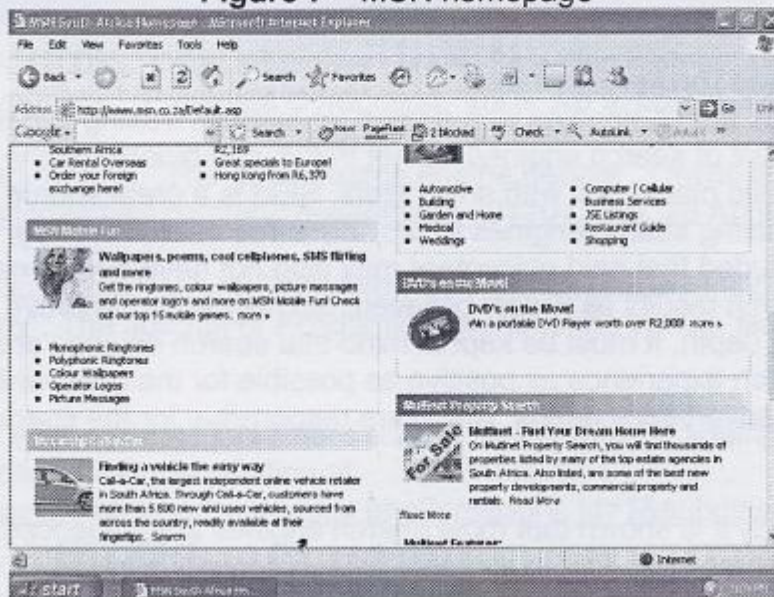
Paid placement search engines do not only make money from advertisers paying for paid placement, but they also sell their top results for search terms to several other major search engines. This is not only an extra way of revenue for search engines, but also good news for the advertisers. If a company advertises with Overture for instance, their advertisement may well appear on Alltheweb.com, MSN.com and Altavista.com (see Table II).

Table II – Providers and consumers of PPC

	Can also appears at				
Paid placement advertisements at Overture					
Paid placement advertisements at Google					

How do search engines like MSN.com that does not offer paid placement make money? These search engines normally purchase their main results from other search engines, thus disabling them from providing paid placement. They do, however, receive payments from carrying paid placement results for other search engines, but not nearly as much as their paid results providers. Figure 7 lists a screen shot of MSN.com homepage. It is evident that there are a lot of advertisements and external links, all paying to appear on MSN's homepage. This explains how MSN and other non-paid placement search engines are able to buy search results and offer a free search service to their users while generating revenue.

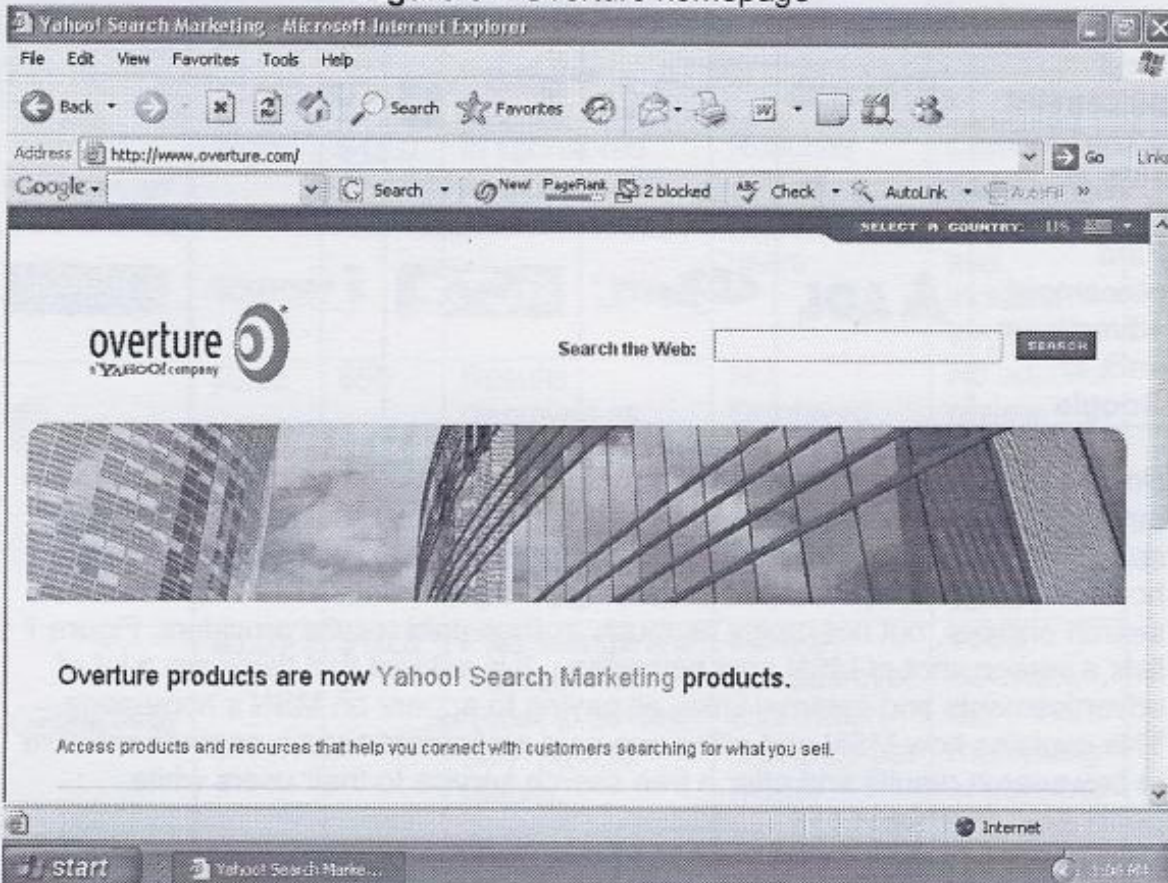
Figure 7 – MSN homepage



The opposite is true for search engines that do offer paid placement. Figure 8 lists a screen shot of Overture.com (which offers paid placement). In this case

the homepage does not have any advertisements or links except for the link to Yahoo! which owns Overture. As mentioned previously, the reason for search engines like Overture being able to have "clean" homepages is because they generate revenue from paid placement and selling their results to search engines like MSN. Overture produces no naturally harvested results to search engine users.

Figure 8 – Overture homepage



Conclusion and further Research

Search engines are companies with a need for income. Taking into the account the huge amount of search engine/Internet traffic, combined with the proven popularity of paid placement with advertisers, SEM is a great source of revenue and profit, enabling search engines to provide a free search service. It is also concluded that paid placement may also not have such a negative impact on search results as widely believed, but may in fact improve their relevance and depth. It must be kept in mind that search engines are trying to make the search experience as positive as possible for the user, while satisfying the advertiser's needs, which are responsible for the search engine's income.

In the pilot study it is shown that most search engines are influenced by paid placement in some way. Paid placement search engines such as Google and Overture generate a lot of income from paid placement schemes and also from selling their results to other smaller search engines. Smaller search engines such as MSN that do not generate their own results need to purchase results from "third-party providers". These smaller search engines are paid to display

paid results from paid placement search engines and are, therefore, also influenced by paid placement. Unable to make money from providing their own paid placement, these search engines turn to advertisements and external links on their homepage to generate revenue.

Future research, based on this study, could include: the use of questionnaires to research the usage and popularity of SEM in small to medium size enterprises (SME) in the South African context. A comparison could also be done between the state of SEM in the South African context and the state of SEM internationally. Another possible future topic could include an investigation on users experience toward search engines as an information retrieval tool. There can then be looked at what problems users experience due to paid placement and other SEM services.

Summary

Search engines are like any other company - they exist primarily to make money. Although one of the purposes of a search engine is to provide users with answers and information, this purpose may not always go hand-in-hand with making money. Users must be aware that most search results are influenced by paid placement in some way or another. This, however, is not necessarily a negative aspect as paid placement can have a positive impact on search results and most importantly provide search engine users with a free search service. Paid placement also benefit businesses, enabling them to only pay for advertisements addressed at their target market. For search engines not making directly use of paid placement, other forms of revenue exists such as advertisements, banners and advertiser linking. Not offering paid placement directly does not guarantee that the search results, provided by the specific search engine, will not contain paid listings as these search engines display paid results in return for money.

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