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## **Paid search engine versus organic results: young consumer preferences**

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### **Abstract**

The primary objective of this research project was to investigate the student perception and acceptance of natural versus paid search engine results. It was established that only 47.1% of search engine users with a university or postgraduate qualification select search engine advertising results (PPC) as more relevant. This research aimed to establish the trend amongst younger consumers, specifically university students. The research methodology includes a survey of relevant literature and a questionnaire carried out by using a sample of students at a few local universities. The questionnaire was designed and a pilot study was done in order to test its accuracy. The final version of the questionnaire was completed during practical sessions in computer laboratories. The results indicated, amongst other things, that clear differences exist in preference, based on attributes such as gender, age, race and Internet skills. Conclusions drawn revealed that online advertisers should consider the results mentioned above, as they reflect the views of a percentage of young consumers in the Cape Town area. Further research could enable one to generalize the findings. Young consumers, especially students, form a very important social and economical category of the population and this should be considered while running online businesses. High rankings on Google and other search engines can make the difference between a successful online business and a failure.

**Keywords:** Paid, organic, results, search engine, preferences.

### **1. Introduction**

The Internet is considered by some to be the most unique and greatest gift of

technology to modern society. Throughout the literature review and studies have shown that Internet usage over the past decade has grown exponentially. The increase in the number of Internet users and reciprocal number of potential online clients has escalated the need for advertisers to be visible on the Internet. On the other hand, as a result of the rising number of websites, attracting potential clients to an advertiser's website is a difficult task. However, Internet users also face a similar challenge of obtaining specific information within the context of a vast number of websites. This necessity created the establishment of search engines, which enable users to obtain specific information.

For a website to be visible to the majority of search engine users, it needs to be ranked in the top search results. This visibility can be achieved with a Pay-Per-Click (PPC) campaign to produce results faster than an organic search engine optimization (SEO) campaign. On the other hand, organic SEO campaigns are capable of producing results without ongoing costs (Jerkovic, 2010) or attract a large number of users. PPC has the advantage that ranking improvements could occur almost instantly. It can be utilized for seasonal business and for producing advertisements during certain months of the year.

There is a considerable body of research on user behaviour in respect of information retrieval (IR) systems, even though research on retrieval from the World Wide Web (WWW) is not as common. Observations of the average web searcher (Spink et al., 2004; Ellis, 1989) point out that ineffective use may be caused by a lack of understanding on how a search engine interprets a query. There are additional factors that can lead to ineffective usage, namely trust, satisfaction of the search and time spent to retrieve information online.

In order to assist advertisers in selecting an optimal Search Engine Marketing (SEM) strategy, this research further undertook to identify different Internet marketing preferences among young consumers. Websites advertisers can make use of the results to associate it with their target market profiles and optimize their SEM strategy.

## **2. Literature Review**

### **2.1 The Internet**

The Internet has become an indispensable part of every aspect of Western life (Wellman and Haythornthwaite, 2002). It is not only the fastest mode of providing information, it also assists individuals in several other ways. One of the foremost benefits that Internet users enjoy is communication (Bargh and McKenna, 2004). People residing in opposite corners of the world can easily and effortlessly communicate with each other by way of the Internet. Equipped with most modern interactive tools, such as email, chat, SMS (Short Message Service) and voice SMS, the Internet provides fast and simple communication (Bargh and McKenna, 2004). Unlike post offices and telephone connections, the Internet is accessible from all corners of the world. As the Internet is a 24 hours a day service it is accessible to users

at all times.

Online marketing assists in reaching large communities faster than traditional technologies and without barriers (Herbig and Hale, 1997). Internet users are able to obtain detailed information about individuals and their respective companies with a click of the mouse at any time and from any place. For business dealers, regular communication between all entities concerned in the business channel, such as manufacturers, suppliers, buyers, sellers, wholesalers and dealers is of utmost importance. With its modern interactive tools, the Internet facilitates business organizations in creating a supply chain management that keeps all entities of the business closely linked. The Internet aids "producers" and "sellers" to identify the dynamic development of a business opportunity by way of advertising (Preiss, Goldman and Nagel, 1996). Therefore, it becomes crucial for all websites to ensure a clear connection and good visibility to search engines.

## **2.2 Search Engines**

Search engines are tools that help a user to retrieve information when a query is typed into the search text box, where after the user will click on the search button (Jansen, 2006). A substantial amount of information can be easily retrieved when a search is done for a particular query; this is also known as keywords or keyphrase.

Search engines have large databases that store information such as webpages, images, products, news, videos and many other types of files. Information is listed according to search engine internal algorithms (Jansen, 2006).

When performing a search for a keyword, the webpage lists results on the left hand side of the browser page. Here, the internal algorithms display the most relevant webpage results for the keywords. Most search engines follow their own algorithm and a few combine or share with others. This highlights the fundamental importance of a strategy for all website owners in order for them to properly plan the way in which visitors can locate a particular website. According to Thurow (2008), search engines are the main way in which Internet users notice websites. According to Thurow (2008) approximately 81% of 256 million Internet users visited a particular search engine during December 2006. At the time of completing this paper, the average searcher viewed 93 Search Engine Results Pages (SERPs) per month. The number of people searching the Internet, and the time people spend searching, continues to increase over time. Nowadays, organizations of all sizes are realizing the importance of online marketing, especially by means of search engines.

## **2.3 Search Engine Marketing**

SEM is a form of Internet marketing that aims to promote websites by increasing their

visibility in SERPs (Thurow, 2008). The aforesaid is achieved through the use of natural results, paid placement, contextual advertising and paid inclusion.

At the present time, users are more likely to land on a webpage via a search engine than by visiting it directly. In fact, to show the importance of SEM, Jupiter Research revealed that for a Forrester Research company, 81% of users find their desired destination through a search engine (Schossow, 2008).

Internet Marketing involves numerous components (Bateman, 2007), including paid search and organic search. Several search engine users do not know the difference between the aforementioned terms. Others are not aware under which circumstances each should be used, especially young consumers and students.

## **2.4 Organic Results - SEO**

Organic search refers to free listings making up the bulk of SERP space (Jerkovic, 2010). Organic search rankings are earned or achieved by convincing the search engines that a keyword or phrase is more relevant for a particular product than those below them in the rankings. The method of achieving high search engine rankings is known as Search Engine Optimisation (SEO). SEO rankings are driven by relevance. The relevance of a keyword or phrase is driven by high quality content, in the form of articles, press releases, podcasts, blogging and videos, to name but a few. It is the regular introduction of new, unique, non-duplicate content to the website which will increase the number of organic backlinks that form the essence of SEO. A well designed SEO-friendly website architecture and the promotion of the content will have the same effect.

SEO is a process that maximizes web page visibility in search engines for users' search queries by keyword or key phrase (Jerkovic, 2010). SEO informs search engines what the content is of the webpages. Descriptive page titles, meta tags, alt attributes, anchor text, search friendly HTML tags and code, optimizing quality content, keyword optimization and link building strategies all contribute to SEO.

SEO provides numerous benefits, which include better quality SERPs, a historical trust factor and a lower cost of ownership. These benefits are long-lasting (Jerkovic, 2010). According to the same author, people generally trust organic search results. Nearly 60% of users click on organic search results and the percentage is even higher for individuals with more Internet experience.

## **2.5 Pay-Per-Click Results - PPC**

Paid Search is the placement of advertisements on SERPs. They are generated based

on the searcher's entry of a keyword or a keyword phrase (Jansen, 2006). The availability of advertising space on the first page of the search results is the most appealing. Most paid search systems, such as Google Adwords, are driven by a bidding model where the advertiser must bid on keywords in order to have their ad placed. The bid is for keywords/phrases that the advertiser wishes to have visibility for. Paid search ads generally appear above and to the right of the organic results; so, in essence, paid ads compete with naturally occurring results for the attention of users. Having the advantage of creating a large amount of Internet traffic, search engines provide advertisers with better placements on early SERPs.

The global paid search advertising market is predicted to have a 37% compound annual growth rate (CAGR). This growth is estimated to be in excess of \$33 billion in 2010 and has become a critical component of firms' marketing campaigns (Ghose and Yang, 2008). This is not surprising, according to Ghose et al (2008), in view of the fact that 94% of consumers use search engines to attain information on the Web, and 81% who use search engines find the information they are looking for every time they search.

The results of implementing a PPC campaign are immediate (Jerkovic, 2010). On the other hand, an organic SEO campaign may take up to three months or more for results to be apparent. In this case, PPC is advantageous for those who are looking to promote an initiative that will go live in a short amount of time, or whose business is seasonal in nature and who can therefore only arrange promotions during certain months of the year.

## **2.6 Visibility**

Since the introduction of the Internet the definition of business development has changed dramatically. Unlike in the past, quality and quantity are no longer the only benchmarks for the growth and development of a business. Nowadays, visibility in the market is a more important factor. Company branding should ideally reach the global market. Company products and service must be visible everywhere. Potential clients, across the world, ought to recognize the brand. Bowen (2002) established that the visibility of a firm or company does not depend on its size. Dewenter et al (2001) demonstrated how complexity might dominate visibility for potential external conflicts of diversified business groups. Today, product promotion and campaigning are the most important criteria for achieving success in a business. Successful product promotion and campaigning depend on an improvement in communication and interaction with people. Lee (2005) suggests a model-driven business transformation approach for new business methods supported by technology.

Visibility is a strategy which should be utilized by all website owners with the aim to increase targeted organic traffic, create brand identity, increase global online presence, list ahead of the competitors, reach potential customers and for long-term sales conversion.

### **3. Research Methodology**

The analysis incorporated a survey of relevant literature and a questionnaire completed by a sample of 164 undergraduate students from the Cape Peninsula University of Technology (CPUT). The questionnaire was designed and a pilot study was carried out first in order to test its accuracy. The final version of the questionnaire was completed during practical sessions in computer laboratories.

Data was collected from survey questionnaires set in surveymonkey.com (June - August 2010).

The variables in this study were measured by subdivided questions. The first part was designed to indicate respondent demographics. The respondents had to rate the remaining questions, which addressed issues such as trust, awareness of sponsored links, relevance, time spent on searching for information, value to the visitor and where they click.

### **4. Results**

Approximately 73% of respondents were female and aged below 22 years. The most dominant ethnic group was African with 66%, followed by Coloured with 32%. No students of Asian descent were included in the survey. The most common language for respondents was Xhosa with 58%, followed by English with 19% and Afrikaans with 13%.

#### **4.1. Student perceptions and preferences**

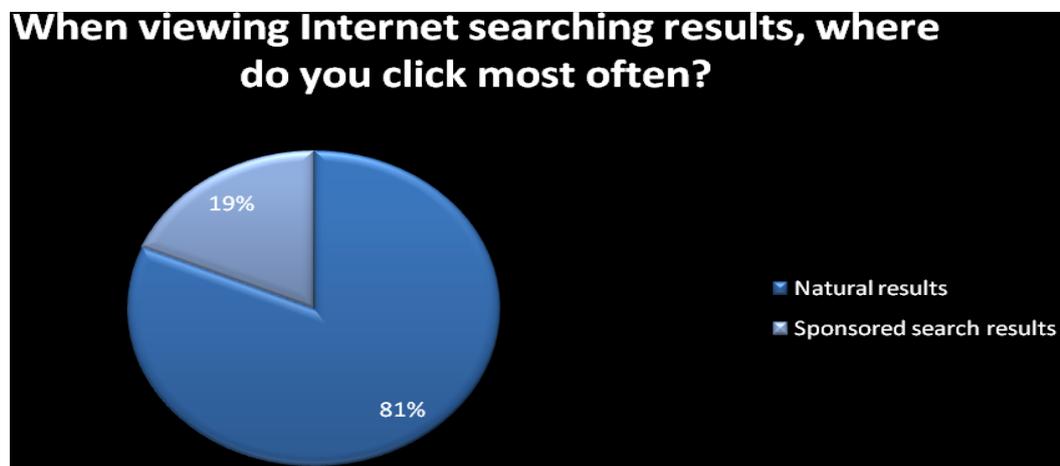
Evaluation is concerned with establishing confirmation that a service meets its most basic requirement. These are the primary operating features of the product or service. However, the concept is fundamentally concerned with identifying basic aspects of a product or service, which users will expect to be present and on which they will make an immediate judgement. The most basic quality related question is "Does the service retrieve a list of relevant documents and information needed?" Perceptions and preferences of consumers, especially young consumers and students, are crucial factors that impact on the performance of a company. The criteria below were selected to determine the preferences of young students.

### 4.1.1 Propensity to click

Numerous studies indicate that Internet users are less likely to click on paid search advertisements than on results from organic SEO. One study found that search users are up to six times more likely to click on the first few organic results than they are to choose any of the paid results. An eye tracking study established that 50% of users begin their search by scanning the top organic results (Buresh, 2006).

Figure 1 indicates that 81% of undergraduate students surveyed clicked on the natural results. It confirms Buresh's findings, but with a higher percentage for young students.

Figure 1: Propensity to Click

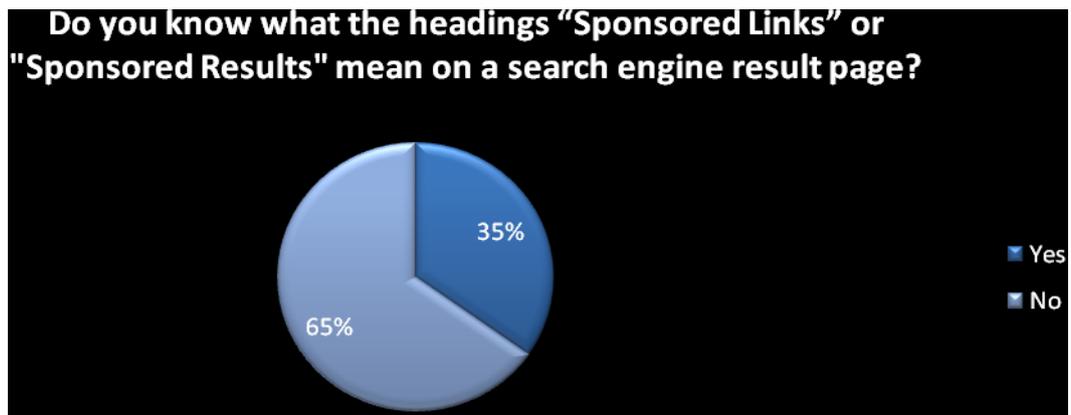


### 4.1.2 Awareness of Pay-Per-Click as Advertising Tool

As more and more people turn to the Internet for research and information purposes, more users are becoming aware of paid results as a marketing tool. One study done by eMarketer (2003), reported in Buresh (2006), and showed that only 38% of Internet users were aware of the distinction between paid and unpaid results.

Figure 2 shows that the abovementioned tendency continues. Only 35% of the respondents were aware of the difference between sponsored and natural results.

Figure 2: Awareness of Pay-Per-Click

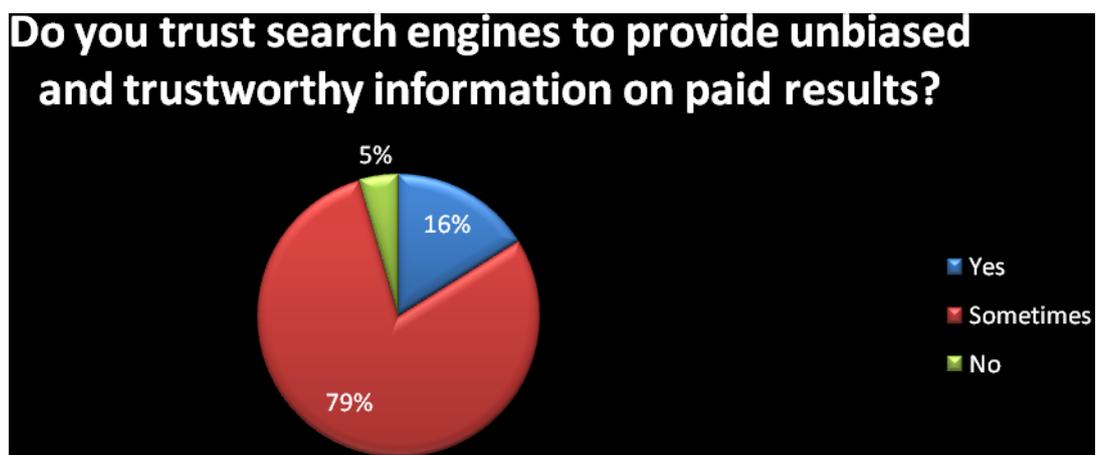


#### 4.1.3 Trust

Studies have started to indicate that the trust level for organic results is much higher than for paid results and that paid results are considered a nuisance by some searchers. Buresh (2006) indicates that a study done by eMarketer (2003) reveals that only 14% of searchers trust paid listings; 29% report being "annoyed" by them; and 66% of users distrust paid ads.

Figure 3 confirms that, among young students, only 16% of students trust search engines to provide unbiased and trustworthy information. The percentage of trust among students is slightly higher than Buresh's (2006) finding. However, the most important result is that 79% of students may be converted to trustful users of search engines and paid results.

Figure 3: Trust in search engine results

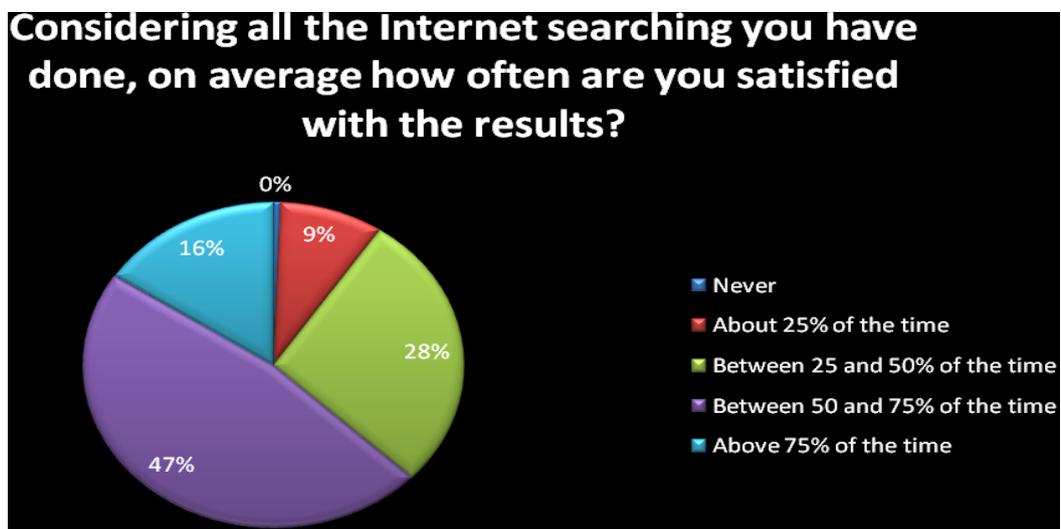


#### 4.1.4 Satisfaction of Visitors

Organic search engine results tend to be regarded as non-biased, and are therefore able to provide visitors with more valuable information. Trends have shown that more of the sales that result from search engines originated in organic search listings (Buresh, 2006).

Figure 4 shows that only 16% of respondents were satisfied more than 75% of the time that they searched for information. Approximately 84% of respondents were satisfied less than 75% of the time that they searched for information.

Figure 4: Satisfaction of Visitors



#### 4.1.5 Using a Search Engine to buy online

This was one of the important factors the researchers wished to investigate, especially for businesses targeting young consumers. It appears as if the majority of young consumers do not yet purchase products online.

Figure 5: Using a Search Engine to buy online

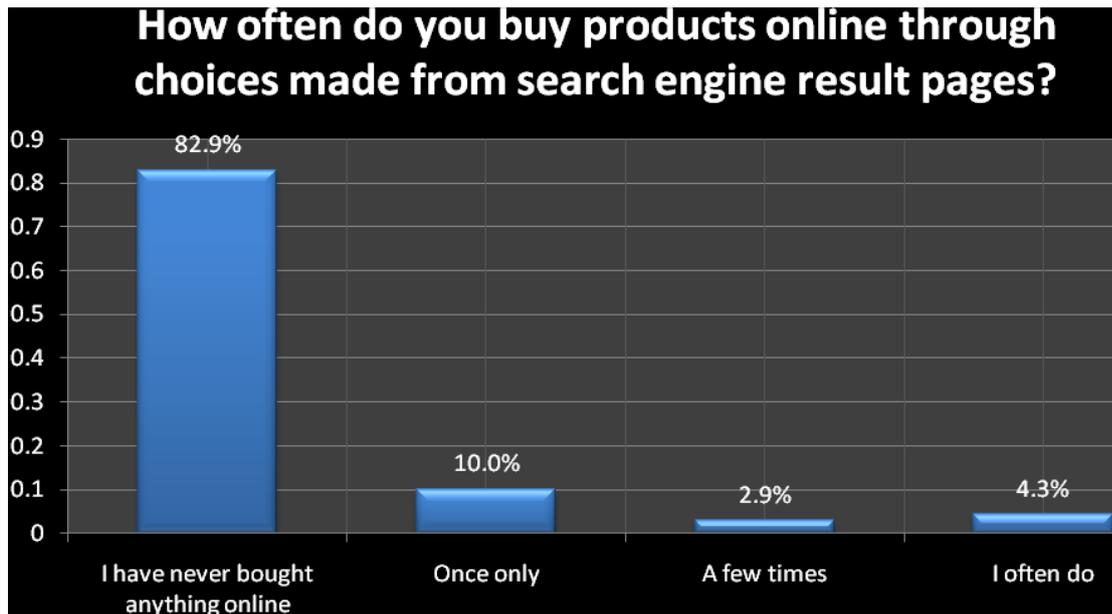


Figure 5 indicates that nearly 83% of respondents have never purchased anything online. Roughly 7% of respondents have bought something online at least once. These young consumers form a very important economical category, as they are society's future leaders.

#### 4.1.6 Time spent to search a piece of information

This factor is an indication of how much time the target group was willing to spend on searching.

Figure 6: Time spent to search a piece of information

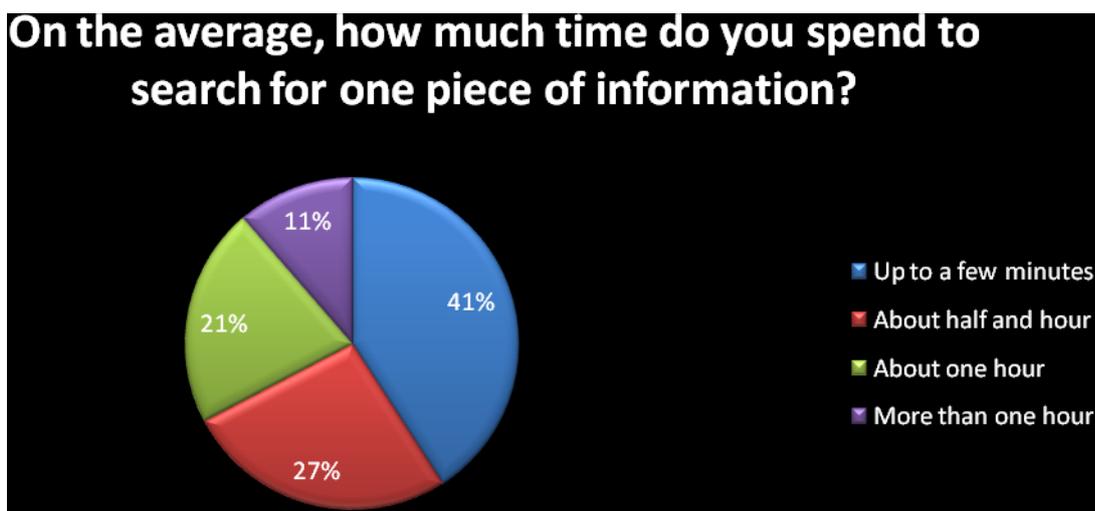


Figure 6 reflects that 41% of respondents spend up to a few minutes to obtain a piece of information, while 27% spend up to an hour to find relevant information. Approximately 32% of respondents continued to spend an hour or more to retrieve a piece of information. This may possibly be the case in all developing countries; therefore, web designers should attempt to enable users to easily locate appropriate information. Students rely on the Internet to obtain information to facilitate them with their studies. Consequently, a great deal of effort needs to be put in by web designers to allow students to retrieve information with more ease.

#### 4.1.7 Relevance and willingness to return to other sources of information

Users rated organic search engine results as more relevant than paid results. On Google, 72.3% considered organic results to be more relevant, while only 27.7% rated paid results as more applicable to their specified search requirements.

Figure 7: Willingness to return to other sources of information

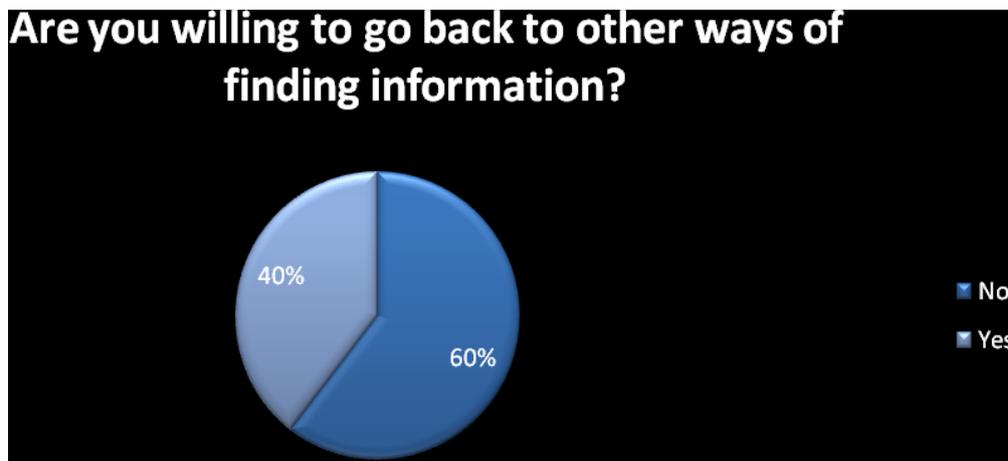


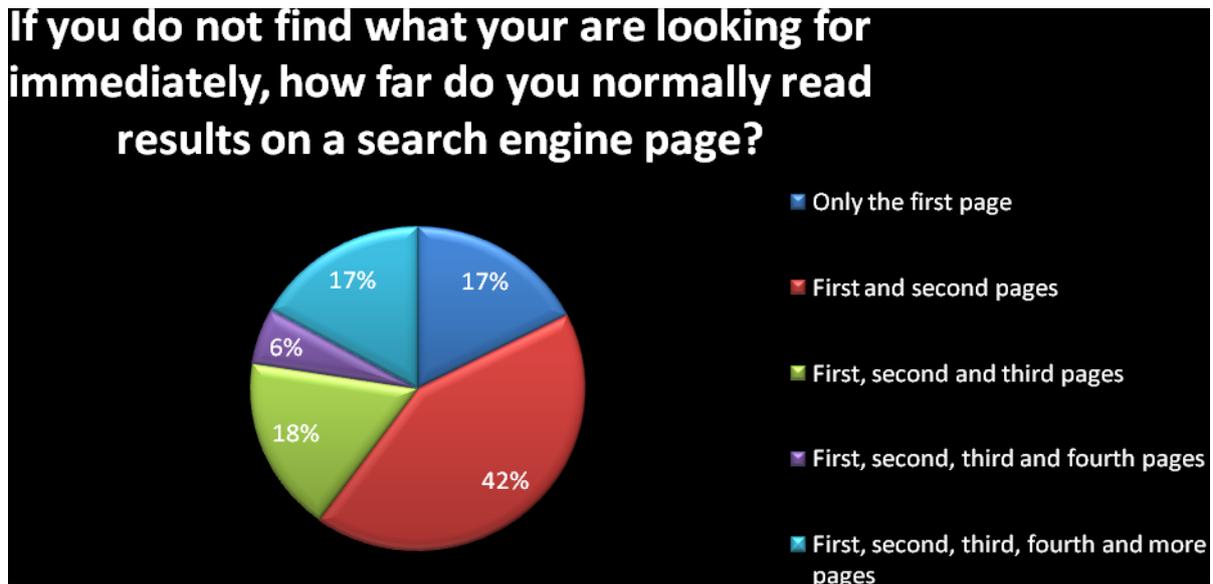
Figure 7 shows that 40% of respondents were willing to revert to other sources of information, such as books, newspapers and magazines. However, 60% of respondents felt that the Internet search engines were doing a good job of distributing information.

#### 4.1.8 Termination point

Figure 8 summarizes the question: "If you do not find what you are looking for immediately, how far do you normally read results on a search engine page?".

Results reveal that nearly 77% of respondents do not go beyond the first three pages of the search results. Almost 60% of respondents do not look after the first two pages. This confirms the results from previous studies. Neethling (2007) found that 83% of respondents do not go beyond three pages.

Figure 8: Termination point

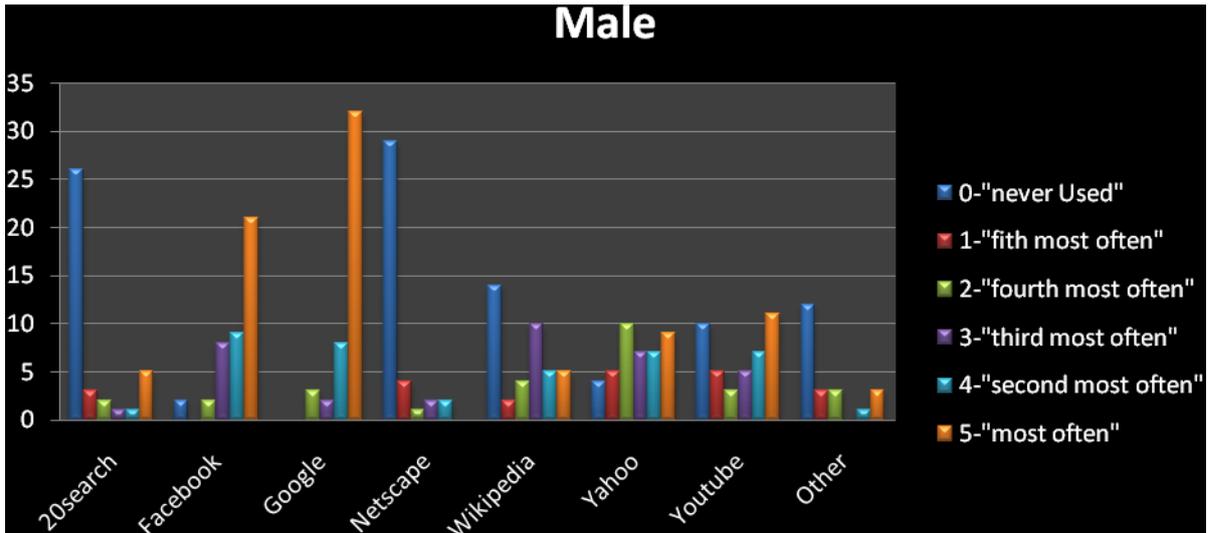


Both these and previous results raise awareness to advertisers to do what is required to enable their websites to be listed on the first three pages of search engine results, especially those selling products or services online.

#### 4.1.9 Search engine popularity

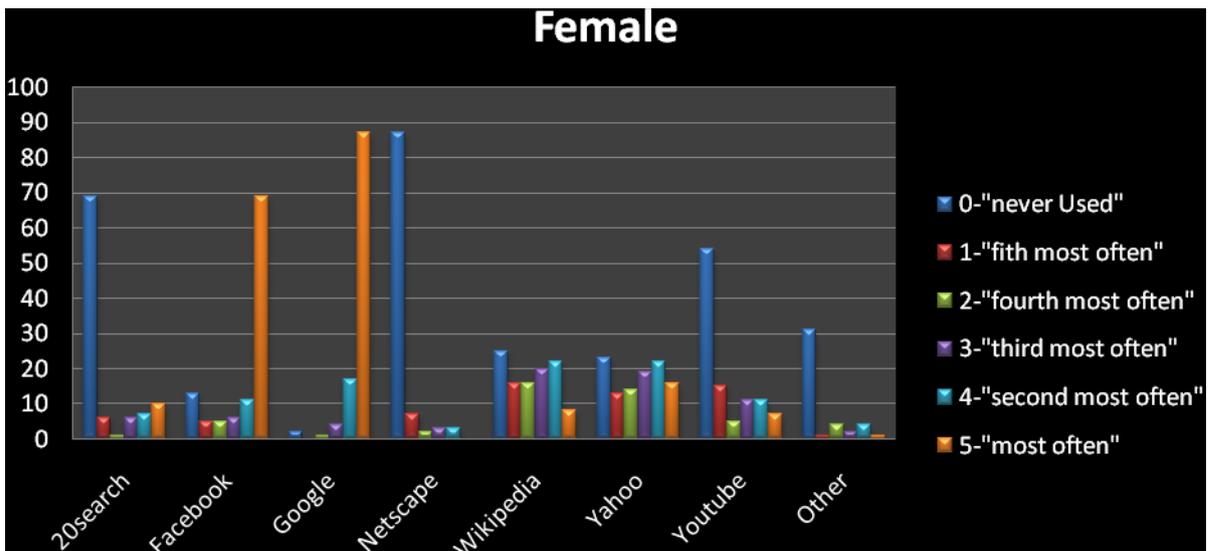
Weideman (2009) indicated that Google is, without doubt, the current world leader in search, whichever measurement one wishes to choose. Student results contained in the survey confirm this statement.

Figure 9: Male popular search engine



Figures 9 and 10 summarize the responses to the question: "Rank the search engines below by indicating how often you use them".

Figure 10: Female popular search engine



Google ranks highest with 71.1% and 78.4% of male and female respondents respectively using it most often as their search engine - refer to Figures 11 and 12. Facebook is second in popularity, as approximately 50% of male and 63.3% of female respondents use it most often as their search engine - refer to Table 1.

The third most popular search engine is Youtube for male and Yahoo! for female with respectively 26.8% and 15.0% of respondents using it as their search engine- refer to Table 1

Figure 11: Google as male popular search engine

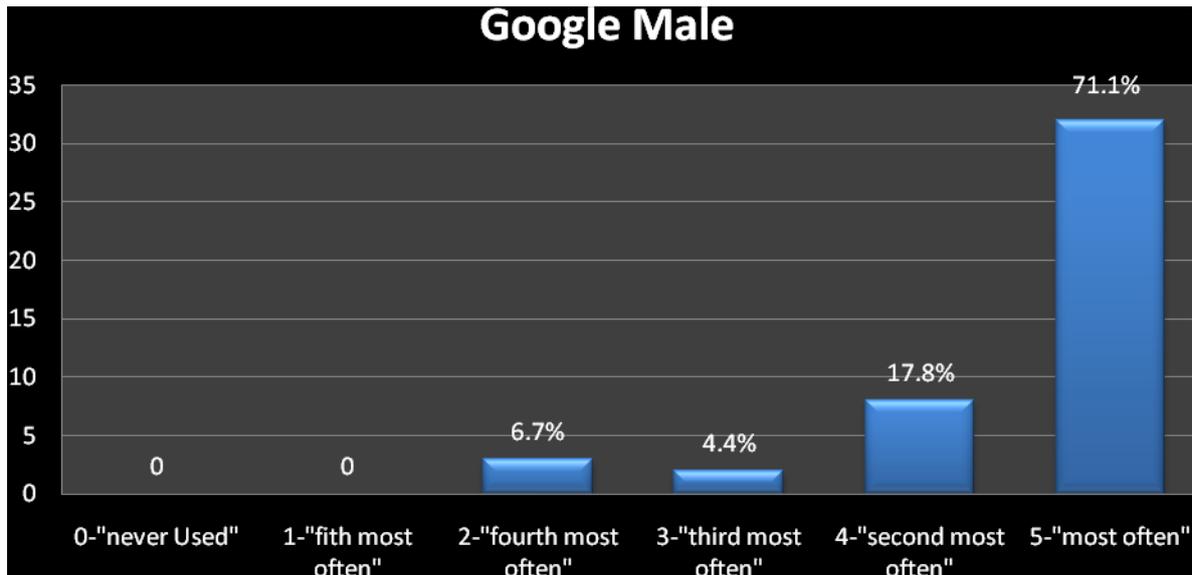


Figure 11 and 12 indicate that female uses Google than male with 7.3% difference. It reveal also that 100% of male uses Google while 1.8% of female never used it as their search engine refer to Figures 11 and 12.

Figure 12: Google as female popular search engine

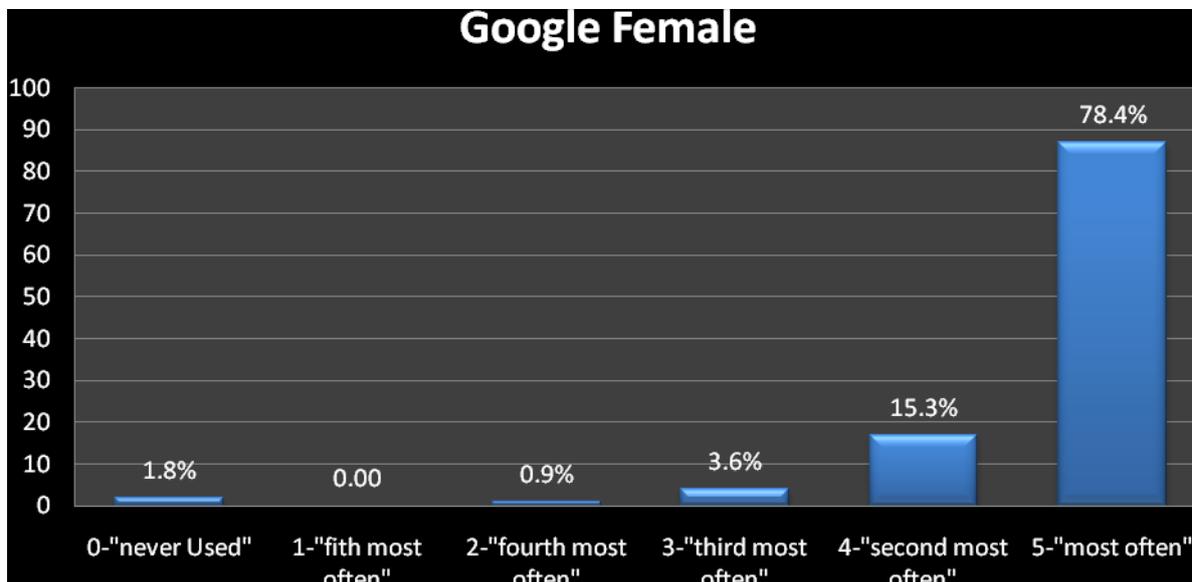


Table1 indicates that Facebook is emerging as an important search engine marketing tool. It is the second most popular among young consumers. However, nearly 5% of male and 12% of students surveyed have never utilized it as search engine, but only as a social networking website.

**Table 1: Summary of popular search engines by gender**

Search engines	0-"never Used"		1-"fifth most often"		2-"fourth most often"		3-"third most often"		4-"second most often"		5-"most often"	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
20search	68.4%	69.7%	7.9%	6.1%	5.3%	1.0%	2.6%	6.1%	2.6%	7.1%	13.2%	10.0%
Facebook	4.8%	11.9%	0.0%	4.6%	4.8%	4.6%	19.0%	5.5%	21.4%	10.1%	50.0%	63.0%
Google	0.0%	1.8%	0.0%	0.0%	6.7%	0.9%	4.4%	3.6%	17.8%	15.3%	71.1%	78.0%
Netscape	76.3%	85.3%	10.5%	6.9%	2.6%	2.0%	5.3%	2.9%	5.3%	2.9%	0.0%	0.0%
Wikipedia	35.0%	23.4%	5.0%	15.0%	10.0%	15.0%	25.0%	18.7%	12.5%	20.6%	12.5%	7.5%
Yahoo	9.5%	21.5%	11.9%	12.1%	23.8%	13.1%	16.7%	17.8%	16.7%	20.6%	21.4%	15.0%
Youtube	24.4%	52.4%	12.2%	14.6%	7.3%	4.9%	12.2%	10.7%	17.1%	10.7%	26.8%	6.8%
Other	54.5%	72.1%	13.6%	2.3%	13.6%	9.3%	0.0%	4.7%	4.5%	9.3%	13.6%	2.3%

Yahoo! was the third most popular among female students surveyed. More than 9% of male and 21% of female users had never before used it as search engine. More than 36% of users have often only used it as a fourth option. One can say that there is a steady decline in Yahoo!'s popularity. It took the lead in late 1990 from AltaVista and is the most popular in terms of the number of users (Weideman, 2009).

## 4.2. Conclusion

The results of this study confirmed the importance of SEM in the literature survey. Young consumers, as a very important economic category, have their own preferences that have to be taken into consideration when operating an online business.

Table 2 shows that the majority of the students surveyed were female - 73% against 27% male. These are users that trust natural results over paid results. From the results, it is clear that younger users are hesitant about using paid results - refer to Figure 3. Table 3 indicates that roughly 85% of respondents were below 23 years. Most of them did not know what sponsored results were and were not happy to spend a great deal of time searching for one piece of information – refer to Figures 2 and 6. The aforementioned frustrations may possibly advocate the return to older sources of information.

Table 2: Gender Summary

My gender is:		
Answer Options	Response Percent	Response Count
Male	27.4%	45
Female	72.6%	119
<i>answered question</i>		<b>164</b>
<i>skipped question</i>		<b>0</b>

Table 3: Age Summary

My age is:		
Answer Options	Response Percent	Response Count
20 or below	50.0%	82
21	21.3%	35
22	13.4%	22
23	5.5%	9
24 or above	9.8%	16
<i>answered question</i>		<b>164</b>
<i>skipped question</i>		<b>0</b>

Table 4 shows that approximately 67% of respondents were Black/African and 32% Coloured. There were no respondents of Indian descent. Table 5 indicates that 58% of the respondents' home language was Xhosa, while 19% were English and 13% were Afrikaans speaking.

Table 4: Ethnic Group Summary

My ethnic group is:		
Answer Options	Response Percent	Response Count
Asian	0.0%	0
Black/African	66.5%	109
Coloured	31.7%	52
White	1.2%	2
Other	0.6%	1
<i>answered question</i>		<b>164</b>
<i>skipped question</i>		<b>0</b>

Table 5: Home Language Summary

My home language is:		
Answer Options	Response Percent	Response Count
Afrikaans	13.4%	22
English	18.9%	31
Xhosa	57.9%	95
Other	9.8%	16
If you ticked "Other ", please specify your home language in the box below		16
<i>answered question</i>		<b>164</b>
<i>skipped question</i>		<b>0</b>

From this study it is clear that advertisers who are targeting young consumers have to occupy a high rank on natural results pages, as 81% of young consumers prefer natural above sponsored results -refer to Figure 1. Studies have to be carried out in order to determine how one can build trust in the 79% of users that were hesitant to trust search engine results, mostly paid ones - refer to Figure 3.

A way must be found to encourage young consumers, particularly students, to partake in online business activities. Results indicate that nearly 82% of these future leaders

and decision-makers of tomorrow have never purchased anything online - refer to Figure 5. SEM tools should be utilized to raise awareness and build trust, in order for these future leaders to be converted to potential clients of online businesses. Studies and investigations must be conducted to establish why young students are not buying online. It is possible that they do not have a credit card or a bank account. It may be as a result of them not knowing what sponsored links are (65% of students surveyed did not know - refer to Figure 2). The results also show that 77% of younger Internet users do not go beyond the third page of a SERP. Weideman (2009) claimed that 91% of visitors do not look beyond the three first pages of search results. A comparison of those two results indicates that this figure is surprisingly high.

From the above results, it may be concluded that online young consumer targeted businesses should be ranked high in the first natural results page in order to attract traffic to the advertisers' websites. A well organized SEO campaign of young African consumer targeted businesses will fair well.

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