Search Engine Optimization and Pay-per-Click Marketing Strategies

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SEARCH ENGINE OPTIMIZATION AND PAY-PER-CLICK MARKETING STRATEGIES

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Any e-commerce venture using a website as the main shop front should invest in marketing its website. In this study, the relationship between website owners having invested in search engine optimization (SEO) and pay-per-click (PPC), respectively, is investigated. The design used in this research involves an empirical field experimental approach in which implementation of both SEO and PPC are considered, with subsequent comparison of results. Data were gathered from Google search results after performing both Fat Head and Long Tail keyword searches based in various categories. Websites that were listed among the top 10 in the sponsored section of search results were recorded. These websites were then checked to see if they also had an SEO ranking within the top 100 for both the Fat Head and Long Tail keyword-phrase searches. It is found that website owners seldom invest in SEO as part of a search engine marketing (SEM) campaign. This seems to confirm some of the findings by other authors. This research has important implications for SEO and PPC practitioners, and for website owners. It should influence the way budgets on search engine marketing are applied. Finally, it could be used by marketing managers in better utilizing their limited SEM dollars. No evidence could be found that this kind of empirical research has been done, hence the results are considered to be unique.

Keywords: pay-per-click; search engine marketing; search engine optimization; website

1. INTRODUCTION

Kennedy and Kennedy (2008) have claimed that it is important for all businesses to have a Web presence. With an estimated $102.1 billion spent by more than one billion users on online sales in 2006, it makes financial sense to acknowledge this trend (Burns 2007). The key to being found by the right people at the right time, according to the same authors, lies with search engines. There are two ways a customer will find a business website via a search engine: through an organic result listing (based on search engine optimization—SEO) or a pay-per-click (PPC) listing.

When search engines add PPC to organic results, they provide a second list of ranked results on the same page as the organic results. This generates more competition among websites, especially commercial websites. Not only do the traditional organic results have to compete for the top 10 positions among each other, but now another entrant has been added to chase for a first position—PPC.

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Empirical evidence shows that most Search Engine Marketing (SEM) spending (approximately 82%) has gone toward PPC campaigns, with only 12% spent on SEO and another 6% on other SEM strategies (Sullivan 2002, as cited by Sen, 2005). Research by Sen (2005) showed that even if the total cost of implementing an SEO and a PPC campaign were the same, the PPC campaign would still prevail as the SEM strategy of choice for most online marketers. Other research on SEM has reported that 60%–86% of search engine users click on the displays in the main section (natural results) when conducting online queries, whereas only 14%–40% select the sponsored links (Hotchkiss 2004, as cited by Sen 2005). Neethling’s (2008) research confirmed this trend, and also claimed that ignoring either PPC or SEO as part of a SEM strategy will cause a company to lose a large number of potential clients.

SEO and PPC each has their own advantages and disadvantages. PPC can ensure a website being listed immediately and, furthermore, can ensure high rankings, assuming a high bid price and quality score. One disadvantage is that PPC can be costly, especially with the growing competition for popular keywords. SEO, on the other hand, cannot ensure top rankings (Visser and Weideman 2011), but could be cheaper to implement.

Furthermore, it can take time to experience ranking increases as a result of SEO implementation on a website (Zuze 2011). The main hurdle to implementing an effective SEO program is the fact that each search engine has its own requirements, which means that a website optimized for one search engine is not necessarily optimized for the others (Sen 2005). A further complexity is that search engines also continuously change their ranking algorithms in order to prevent search engine spamdexing. Due to this factor, websites need to be constantly updating their SEO strategy, which can become costly. SEO also has advantages, the biggest being that SEO listings occupy the main area of a search engine’s result page, and thus search engine users cannot easily ignore them (Neethling 2008).

There is a paucity of empirical evidence containing guidelines for online marketers striving to maximize traffic to their website by employing both PPC and SEO campaigns simultaneously.

At the same time, the literature offers little clarity about how website owners generally split their budget between natural and paid results. The objective of this research is to examine those who have invested in PPC, and determine whether or not they also invest in increasing rankings in natural results.

2. BACKGROUND

More than a decade and a half ago, it was already claimed that the growth of the Web has given rise to a wide collection of new information sources, which resulted in users being faced with the daunting task of determining which sources are valid and which not (Abels, White, and Hahn 1997). Most users rely on the Web due to the low cost of information retrieval, as opposed to the expense of having to buy a book or make use of a library. Other advantages of the Web include the convenience in terms of time and access as well as the ability to easily record results. The Web is not just about promoting one’s work but is also about the interactive exchange of information, which has now evolved into a powerful business tool (Applegate et al. 1996; Green 2000; Holsapple and Singh 2000). The Web continues to attract businesses in the millions, with the main application areas being:
• publicity
• marketing and advertising
• direct online selling
• research and development
• communication and collaboration

This highlights the importance of ensuring that an organization’s website is visible to search engines.

2.1. Search Engines

Search engines are programs that offer interaction with the Web via a frontend interface through which a user can enter a search term, or make successive selections from relevant directories. The search engine software then compares the search term against contents of an index file that contains information about countless websites. Matches found are returned to the user via the frontend. The index is updated regularly either by human editors or by automated programs (e.g., spiders, robots, crawlers) (Weideman 2005).

Green (2000) provided a very basic definition of a search engine: “A database that contains massive amounts of data about websites.” Kritzinger and Weideman (2005) further stated that search engines provide the average Web user with a mostly free, relatively easy way to find general information on the Web.

Search engines are the primary search tools used for information retrieval on the Web (Spink and Xu 2000). It has been estimated that around 80% of Web users employ search engines to obtain information from the Web (Thelwall 2001). This highlights the fundamental importance of webpages being listed with search engines. An important strategy for any website owner is planning how visitors can find their way to their particular website (Thelwall 2001).

According to Flosi (2011) the search engine companies that generate the most searches on the Web are Google, Yahoo!, MSN, Ask and AOL (see Figure 1). The data were taken from the ComScore Media Metrix qSearch service, which measures search-specific traffic on the Web. Data are gathered by monitoring the Web activities in the United States (Flosi 2011). Each of the search engine companies listed in Figure 1 consists of different sites whose results were combined into one overall figure for the company’s entire network. For example:

![Figure 1](Color figure available online).
Google: Produces results from any Google-owned website such as google.com or Google Image Search.
Yahoo!: Produces results from any Yahoo!-owned website including those of AltaVista, AllTheWeb, and Overture.
MSN: Produces results from any MSN-operated website such as the search engine Bing.
AOL: Produces results from any Time Warner-owned website, including AOL Search and Netscape Search.
Ask: Produces results from Ask and any site within the Ask-owned Excite Network, including Excite, iWon, MyWay.com and My Web Search.

Search engines have been praised because of their ability to quickly locate a vast array of information on an extraordinary range of topics. Despite this fact, they have fallen victim to criticism as well. Many users feel that search engines tend to retrieve irrelevant information, which does not satisfy their information needs (Mukhopadhyay et al. 2007). In addition, they have been criticized for the tendency to retrieve duplicates. In view of the fact that there are many different types of search engines, the issue surfaces of what ranking criteria they use to decide which websites are “good enough” to deserve inclusion in the engine’s search database. Each has its own rules for searching and establishing which websites to include (Mukhopadhyay et al 2007).

2.2. Search Engine Marketing

The term SEM was introduced by Sullivan (2001a) to refer to a variety of activities involved in performing SEO, managing PPC listings, submitting websites to directories, and developing online marketing strategies for businesses, organizations, and individuals. Further, Sullivan (2010) defined SEM as a form of Web marketing that seeks to promote websites by increasing their visibility in search engine result pages (SERPs). Methods include SEO, PPC, contextual advertising, digital asset optimization, and paid inclusion (PI). Moreover, Curran (2004) observed that:

Some companies are budgeting enough for payment to search engines and they have to. Deciding not to, is a bit like launching a media campaign and deciding to ignore one whole media, like TV.

According to Winterberry Group (2012), search spending of $17.6 billion in 2011 was expected to rise by 12.4% in 2012 to $19.8 billion. A study by PricewaterhouseCoopers (2011) reported that, in 2010, 46% of global online advertising spending was devoted to SEM, with U.S. advertisers spending $12 billion. Among all types of online advertising, SEM is becoming the dominant type (Berman and Katona 2011). It is the fastest growing type of online advertising (Shih, Chen, and Chen 2013).

PI is a SEM strategy that ensures inclusion in a search engine’s index normally in exchange for a once-off payment (Sullivan 2001b). Furthermore, PI ensures that changes made to a website will be updated in the search engine index more quickly, as websites using PI will be visited more regularly. However, PI also varies from one search engine to the next. Some search engines (e.g., Yahoo!) offer a PI service for payment, whereas others (e.g., Google) do not (Neethling 2008).

However, PI cannot guarantee high rankings in search results. In fact, PI does not even guarantee placement in search engine results (Sullivan 2001b), although websites that
do invest this way are likely to receive more traffic than websites that do not. This is due to the fact that a website can wait for weeks, or even months, for a search engine crawler to index it, whereas websites using PI may see results within days (Zuze 2011).

Two types of marketing activities can be performed through search engines in an e-commerce setting (Dou et al. 2010). First, companies pay to have links to their websites displayed in the sponsored section of a search engine results page. This is referred to as PPC. Second, using SEO, companies strive to push the ranking of their websites higher in the organic results of search engines through the implementation of a variety of techniques. In this case, no payment is made to search engines. To ensure top rankings, a website owner could invest in either one or both of these two SEM strategies (Neethling 2008).

2.3. Pay-per-click

PPC was designed as a method of creating revenue for search engines. Over the past 15 years, users have become accustomed to search engines offering free services for which they are not prepared to pay (Moxley, Blake, and Maze 2004; Henshaw 2001). Search engines go through a number of steps to review, index, and generate listings. Although there are a number of ways to complete these steps, all of them are costly (Wittenberg 2004).

PPC or Pay for Placement is used to describe a variety of overlapping practices that in essence refer to linking individual websites to specific keywords for payment (Moxley et al. 2004). As a result, potential clients are immediately taken to a website by selecting keywords that their specific target market will use in a search (Curran 2004). It is also important for a webmaster to research the possible keywords that may be used in a search for their specific product or service (Curran 2004). PPC could become costly as advertisers are locked in an ongoing competition for popular keywords (Sullivan 2003). As PPC suggests, advertisers also have to pay for every click they receive via that sponsored link (Jansen and Schuster 2011).

As noted previously, search engine sponsors need some sort of income to cover expenses. If the user is unwilling to pay for basic search results, they have to look elsewhere for income. As a result, search engines take advantage of advertisers’ need to be visible and visited. Having the advantage of creating the largest amount of Web traffic and of generating ranking results, they offer services that appeal to the advertiser. Specifically, they address these advertisers’ eagerness for more visibility, enthusiasm for being placed on the first page of returned search results, and impatience for waiting to be reviewed and indexed (Thelwall 2001).

Most search engines offer PPC services in order to generate revenue (Neethling 2008). Google manages Google AdWords, Yahoo! has Yahoo! Search Marketing, while Bing runs Microsoft AdCentre. Companies can place bids for search terms at their preferred PPC search engine. When a user now enters this search term, the search engine will display the companies’ website links in a given order that equals their rank for that specific term. The ranking sequence is determined by the customer bid price times the (Google) quality score for that page. The bid represents the amount of money the company is prepared to pay the search engine every time a user clicks on the link to its website on the SERP (Neethling 2008).

2.4. Search Engine Optimization

The process of improving website visibility is referred to as SEO, which involves designing or modifying websites in order to improve SERP ranking (George 2005). SEO
can also be described as the process of improving the volume and quality of traffic to a website from search engines via “natural” (“organic” or “algorithmic”) search results for targeted keywords (Anonymous 2008).

Usually, the earlier a website is presented in the search results or the higher it “ranks,” the more searchers will visit that website. SEO can also target different kinds of search, including image search, local search, and industry-specific vertical search engines.

Within this context, according to Zhang and Dimitroff (2004):

Every Web publisher wants good Web page visibility in search engine results so as to increase accessibility of their Web pages. Unfortunately, many websites have poor visibility in search engine rankings or may not be listed at all due to various reasons.

There are many techniques available to achieve the visibility goal, and many of them result from the way search engine algorithms operate. First, the SEO professional will develop a list of keywords and/or phrases (Malaga 2008). The competitiveness of each term is also determined, as well as how often each of the terms is used in search engines. The second step is to get the website into the search engine index as quickly as possible. This can be achieved by manually submitting the URLs to the search engines for consideration (Weideman 2012). During the third step, the SEO professional manipulates the on-page elements (such as metatags, page content, and site navigation) to make the website more attractive to search engine crawlers (Malaga 2008).

The importance of ranking well in a SERP for queries on specific terms is undeniable (Clay 2006a). Recent research on user behavior shows that 91% of users ultimately view results only within the first three pages, and 67% of searchers look only at the first page of search results (Weideman 2009). All this means that if a website is not on the first SERP, only one third of viewers will continue viewing other pages. If the website is not in the top 30, it has almost no chance of being read by a user (Clay 2006a).

Organic SEO is still the most popular form of SEM according to SEMPO’s annual State of Search Engine Marketing survey (Sherman 2007). Organic search listings outperform PPC listings three to one in click-through and are also known to achieve higher conversion rates (Clay 2006b).

Weideman (2009) used three academic SEO models, namely the Binnedel, Chambers, and Visser models, and combined them plus industry views to form the Weideman model. This model ranks the elements that contribute to website visibility (both positive and negative) according to a scoring scheme based on the four contributing factors (see Figure 2).

2.5. Fat Head, Chunky Middle, and Long Tail

Popular search terms (those that experience at least 500 to 5000 searches per day) make up less than 30% of the overall searches performed on the Web (see Figure 3). The 18.5% of searchers with the highest occurrence is known as the Fat Head. The next 11.5% is termed the Chunky Middle, while the rightmost 70% is called the Long Tail, made up from hundreds of millions of unique searches that might be performed on any given day (Anonymous 2011). The long tail satisfies the majority of the world’s demand for information through search engines. These search queries normally consist of four or more keywords per search phrase (Anonymous 2011).
Figure 2 The Weideman model: Relative magnitude of positive elements’ scores (Weideman 2009).

Figure 3 The Search Demand Curve (Anonymous 2011) (color figure available online).
2.6. Dual-Strategy SEM Campaigns

With increasing use of the Web as a marketing tool, business owners are trying to come to grips with new strategies to gain market share within the online environment. Many of these business owners are not well versed with Web marketing tactics. Because of this, it is difficult to choose the best strategy for their business growth.

SEO is very seldom part of an SEM campaign (Sen 2005). Even when assuming that the implementation of SEO costs the same as investing in PPC, and the benefits include the assurance of always being part of a user’s consideration set, SEO is still not the optimal SEM strategy for website marketers. A possible explanation for this situation is provided by Sen (2005). When the probability of being listed in the main results of a search engine is high, any investment in SEO is redundant—high ranking will most likely be achieved without it. On the other hand, there could be a low probability of ranking well in the organic results. In this case, users could visit the sponsored links for this website. Investing in PPC could therefore make economic sense.

In addition, if it is assumed that SEO costs more than PPC (Jarboe 2005, as cited by Sen 2005), then PPC becomes much more attractive than SEO. Therefore, it should not be surprising that SEO is not a part of a company’s SEM strategy. This outcome is supported by the distribution of SEM dollars, which is biased toward PPC investments, and by the fact that the websites of fewer than 10% of the Fortune Magazine top 100 companies use SEO as part of their SEM strategy (Anonymous 2004, as cited by Sen 2005).

One of the major reasons for the quick adoption of the PPC strategy is that it is very similar to a traditional paid advertisement strategy and business owners can manage such campaigns on their own. SEO on the other hand requires a prerequisite set of skills to ensure a website places within the top rankings on search engine results through various on-site optimizations and off-site organic SEO strategies (Waltzer 2008). Another reason why businesses may prefer PPC is that they have better control over the entire program and they know exactly how and where their investment is spent. Results can easily be viewed through PPC campaign reports. They also do not have to change their tactics each time the search engines change their algorithms, which can prove to be a problem, especially for those who are only interested in quick, short-term results. Organic SEO might seem like too much effort, with no guaranteed results for short-term goal seekers (Waltzer 2008).

Organic SEO, as a Web marketing strategy, requires patience. However, the rewards are there. Organic optimization is not the first choice for many (depending on the brand and business model), but it does have inherent benefits that are unparalleled by sponsored or paid advertising tactics. The benefits and results last for longer periods than for PPC (Waltzer 2008).

While a PPC campaign can deliver leads with relative ease, it can be a money drain and has no longevity—once the online marketer stops investing in PPC, the resulting website traffic disappears. SEO and link building require much more creative effort, but can have more sustainable results. It also allows a business to target a larger base of users, as most studies reveal that 75%–80% of searchers click on organic listings as opposed to paid listings (Waltzer 2008).

In the past, Web surfers did not understand the difference between sponsored and organic results. Over time, as Web surfers have become more Web literate, a growing number of users click on organic links on the first page of results. This is attributed to their argument that if a website makes it into the top 10 without paying for it, it should be one of the best websites available to match the original search query (Waltzer 2008).
3. RESEARCH OBJECTIVES

Given the foregoing background, it is clear that some contradictions exist in terms of spending on SEO and/or PPC for a given website. One author claims that spending on SEO does not make financial sense, while others have proven that more users click on organic than on PPC results. The investigation reported here examines whether or not website owners who have invested in PPC, also invest in SEO.

4. METHODOLOGY

This research project uses an empirical field/natural experimental design. According to Mouton (2003), the definition of this kind of research design is:

Studies that are usually quantitative in nature and which aim to provide a broad overview of a representative sample of a large population.

For the purpose of this research, we investigate only SEO and PPC. An experiment is conducted to test whether or not website owners in the sample, who invested in PPC marketing, also did so for SEO.

Thirteen industry categories were selected as defined in Google’s directories. These categories are:

- Beauty & Personal Care
- Computers
- Consumer Electronics
- Family & Community
- Finance
- Food
- Gifts & Occasions
- Home & Garden
- Hobbies & Leisure
- Real Estate
- Sport & Fitness
- Travel & Tourism
- Vehicles

Next, a large number of experimental searches were done to gather data. Although only one set of results is noted and shown (due to the large volume of results), the data of all searches across all 13 categories were used in this study. Two search queries were generated for each of the 13 categories: one a Fat Head search phrase (short, wider and less focused—the key-phrase consists of at most two keywords) and the other a Long Tail key-phrase (longer, more focused and specific—the key-phrase consists of at least four keywords). The Fat Head queries for each of the categories were then entered separately in Google. In each instance the 10 websites that invested in PPC were identified from the SERP results, and recorded. A search was then performed to test whether these same websites also had an organic listing within the top 100 results for the Fat Head key-phrases. The results are recorded (e.g., as in column A of Table 1).

After the Fat Head search queries were executed and recorded (both PPC and SEO results), an additional search was conducted, this time using the Long Tail key-phrases.
Table 1 Extract of results—travel & tourism.

<table>
<thead>
<tr>
<th>Fat Head search query: “cheap flights”</th>
<th>Long Tail keyword: “cheap flights from Cape Town to Durban”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> PPC results</td>
<td><strong>B</strong> Fat Head SEO results</td>
</tr>
<tr>
<td>1 <a href="http://www.flymango.com">www.flymango.com</a></td>
<td>N/A</td>
</tr>
<tr>
<td>2 <a href="http://www.travelstart.co.za">www.travelstart.co.za</a></td>
<td>N/A</td>
</tr>
<tr>
<td>3 <a href="http://www.sacheapflights.co.za">www.sacheapflights.co.za</a></td>
<td>N/A</td>
</tr>
<tr>
<td>4 <a href="http://www.virgin-atlantic.com/flights">www.virgin-atlantic.com/flights</a></td>
<td>N/A</td>
</tr>
<tr>
<td>5 <a href="http://www.airfrance.com/london">www.airfrance.com/london</a></td>
<td>N/A</td>
</tr>
<tr>
<td>6 <a href="http://www.britishairways.com">www.britishairways.com</a></td>
<td>N/A</td>
</tr>
<tr>
<td>7 <a href="http://www.lowfares.com/cheap-flights">www.lowfares.com/cheap-flights</a></td>
<td>87</td>
</tr>
<tr>
<td>8 <a href="http://www.kulula.com">www.kulula.com</a></td>
<td>N/A</td>
</tr>
<tr>
<td>9 <a href="http://www.bookflights-travelsa.co.za">www.bookflights-travelsa.co.za</a></td>
<td>N/A</td>
</tr>
<tr>
<td>10 <a href="http://www.flights.travelsupermarket.co.za">www.flights.travelsupermarket.co.za</a></td>
<td>7</td>
</tr>
</tbody>
</table>

The 10 websites that invested in PPC were recorded. We then performed the search again, this time with the Long Tail key-phrases, to see if the 10 websites that invested in PPC had natural listings within the top 100 of the search results. Results were recorded (e.g., column B in Table 1).

Finally, we perform a cross check, meaning that the PPC websites that were generated by the Fat Head key-phrases were checked to see whether they have organic results for the Long Tail key-phrases. Results were recorded. Finally, we checked the PPC websites that were generated by the Long Tail key-phrases to see whether they have organic results for the Fat Head key-phrases. Results were recorded.

5. RESULTS

Due to the large volume the recorded results occupy, an extract only is provided here. See Table 1 for an example of the results of two searches recorded for the Travel & Tourism category.

The websites were then tested to see if they had Fat Head and Long Tail keyword SEO results. Originally, there were 13 industry sectors. For each one, two key-phrases were defined, for a total of 26 key-phrases. For each sector key-phrase, the top 10 PPC results were recorded, yielding 260 PPC results. These 260 results were then checked to see if they had SEO listings for both Fat Head and Long Tail key-phrases in the top 100 search engine results. Websites that had no SEO results were marked as N/A. All N/A results were removed from the result tables and a new table was compiled, yielding Table 2. The top half shows all websites that have PPC results for Fat Head keywords. These websites were then
tested to see if they had SEO results for both Fat Head and Long Tail keywords. The second half of the table shows all websites that have PPC results for Long Tail keywords.

### 6. DISCUSSION AND CONCLUSION

From Table 1, when a user searches for the keyword “cheap flights,” the website Flymango is listed in first place in the PPC results. However, Flymango has no SEO results for the same key-phrase. But when a user searches for “cheap flights from cape town to Durban,” the Flymango website earns an SEO position of 27 and a first place position in the PPC results. From Table 2, it is clear that for all the websites with both PPC and SEO, the results are better for Long Tail key-phrases. When implementing a dual strategy, the website owner should be careful not to cannibalize his or her budget. It could happen that users click through to the website via the PPC results (instead of from the free SEO result listing) with the consequence that the website owner must pay for that click.

Results show that, for both Fat Head and Long Tail key-phrases, very few websites that invest in PPC have organic listings within the top 100. This finding confirms the statement by Sen (2005) that online marketers very seldom use SEO as part of a SEM campaign. Even when assuming that the implementation of SEO costs the same as investing in PPC, and the benefits include the assurance of always being part of a user’s consideration set, SEO is still not the optimal SEM strategy for website marketers.
However, in a recent survey conducted on the website Search Engine Land a very different picture is portrayed (Sullivan 2011). Out of 254 respondents, 20 (7.9%) said that they use only PPC, while 93 (36.6%) said that they only use SEO. The remaining 141 (55.5%) said they use both SEO and PPC. This seems to point to a contradiction on the respective popularities of SEO and PPC. However, Sullivan’s survey was hosted on the Search Engine Land website, whose readership consists mainly of SEM practitioners who understand the importance of both SEO and PPC. Given that the audience of Search Engine Land is mainly SEM practitioners, and not necessarily Marketing Managers of companies, the contentions made by Waltzer (2008) are supported. One of the major reasons for quick adoption of the PPC strategy is that it is very similar to traditional paid advertisement strategies and business owners or marketing managers can manage such campaigns on their own.

Many of the companies that invest in PPC do not necessarily have the skill/training to implement SEO on their own. They must outsource this to SEM companies that do this on their behalf. Some website owners have heard of SEO before, but do not know what it is or what benefits it could have for their websites. Until they do, the logical way for them to get traffic to their website quickly and effectively will remain traditional advertising methods like radio, newspaper, flyers, and brochures, plus PPC.

This study contributes to the existing body of knowledge in the field of SEM by providing evidence that SEM expenditure in an unbalanced way seems to be the norm. It then confirms that both SEO and PPC are required for maximum website exposure.

REFERENCES


**AUTHOR BIOS**

**W. T. Kritzinger** is pursuing a doctoral degree, contrasting Search Engine Optimization and Pay-per-Click as means to achieve overall website visibility. His dissertation specifically focuses on the role webpage keywords play in website visibility. He is currently employed as Senior Search Engine Optimization Consultant at R.O.I. Media, one of the most authoritative South African digital agencies. Mr. Kritzinger holds a Master’s degree in Business Information Systems from the Cape Peninsula University of Technology in Cape Town.

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