

THE IMPACT OF SEARCH ENGINE OPTIMIZATION ON WEBSITE AND BUSINESS PERFORMANCES OF SMALL AND MEDIUM-SIZED ENTERPRISES

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ABSTRACT

Search engines have become an important channel for increasing SMEs' global reach as well as competing with larger companies. Therefore, SMEs are enhancing their business visibility through search engine optimization (SEO). With effective SEO techniques, small companies can appear ahead of large, well-known companies on search results. In this study, we use multiple firms as cases to empirically illustrate how SEO initiatives by SMEs impact their' website performances. The concern of this study has been to gain insight into the use of SEO by SMEs and the factors that enable SMEs to be successful in adopting SEO in business.

Keywords: Brand Management, Websites, SEO, Case Studies

INTRODUCTION

Search engines play an critical role in online search as more than half of all visitors to websites tend to arrive there from a search engine (Introna and Nissenbaum 2000) and 91% of users report that they always or most of the time find the information they are seeking when they use search engines (Purcell et al., 2012). Therefore, optimizing the business website to improve its ranking in the search engine result page (SERP) is crucial for today's businesses, particularly for SMEs which cannot afford other marketing channels to enhance their business visibility. A recent survey indicates that many users believe that companies whose websites appear at the top of SERPs are the top companies in that field (iProspect 2006). This kind of ranking schema has also been verified in a study, which investigated how car buyers perceived the best fuel efficient car on a SERP. When the test car, Honda, was placed in the first position on the SERP, users perceived it as more fuel efficient; however, when Honda was not placed in the first page, users did not perceive it to be important. Research has also shown that users do not look past the first two or three pages of the result set (Roussinov and Chen, 2001).

As Internet technologies have been changing the way business is conducted, small and medium-sized enterprises (SMEs) are investing in such technologies and taking advantage of e-commerce to access global markets and compete with the large companies in their industries. e-Commerce sales grew from 72 billion US dollars in 2002 to 228 billion US dollars in 2010 (www.statista.com). A small and medium- sized enterprise (SME), which refers to a small business with fewer than 500 employees, independently owned and operated, and not dominant in its field of operation, plays a significant role in the growth and change of economies (Trumbach et al, 2006; Ramdani et al, 2009; Obafemi, 2009) in international markets. For SMEs, creating a website that allows online transactions is the easy part. The more daunting task lies in

making the website visible to potential customers. If SMEs do not market their businesses strategically in the digital age, they could be left behind in the global marketplace.

Search engine optimization (SEO) service is an essential organization service that can improve an SME's market exposure with relative ease. Search engines have become an important channel for increasing global reach as well as competing with larger companies. Internet advertising spending is currently growing faster than any other form of advertising and is expected to grow from \$23.4 billion in 2008 to \$34 billion in 2014 (Hallerman 2009). Two types of marketing activities can be conducted through search engines. One is through paid sponsorships advertising, where companies pay to have their website links displayed in the "sponsored section" of a SERP. The other is through search engine optimization. SEO involves a series of different methods to improve the ranking of a website through organic searches on SERPs. Industry observers argue that companies should pursue organic search rankings if their goal is to obtain a long-term, sustainable branding impact (Noaman 2006).

SEO can level the playing field for SMEs, because well-known companies do not necessarily reside in the top positions on SERPs (Fusco 2006). With effective search engine optimization techniques, unknown small companies can appear ahead of large, well-known companies. However, little research is available to show the various tangible benefits SMEs may receive through engaging SEO. In this study, we use firms as cases to empirically illustrate how SEO initiatives by SMEs impact their' website performances.

LITERATURE BACKGROUND

Search engines are an important promotional method for e-Commerce websites and they represent an effective way new e-Commerce sites market themselves. Jansen and Molina (2006) evaluated the effectiveness of search engines in the retrieval of relevant e-Commerce links. They examined the effectiveness of five different types of search engines in response to e-Commerce queries by comparing the quality of e-Commerce links using relevancy ratings. They found that links retrieved using a major search engine is significantly better than those obtained from most other engines.

Search engines are likely to have a significant impact on organizational performance. Rangaswamy et al. (2009) explored strategic implications of search engines and they suggested that search engines are no longer just convenient information tools but are powerful agents of a transformation that makes the business environment more transparent and more competitive. The primary benefit of SEO naturally lies in the fact that the improvement of the website through SEO contributes directly to new customer acquisition. Hansell (2007) notes that search engines are responsible for many visitors to a company's website, specifically new customers who search for information regarding products and services. Small companies that do not use SEO to increase their website rankings tend to remain unnoticed and limited in its geographical reach (Rangaswamy et al., 2009).

Leveraging search engine optimization to improve organic search ranking is believed be more effective than other search engine related marketing initiatives, such as search engine advertising via sponsored links. Hotchkiss et al. (2004) found that more than 77% of the 425 respondents

surveyed favored organic results rather than sponsored links. Even in an e-commerce-like scenario, survey respondents would still choose organic over sponsored links. In a follow-up study, Hotchkiss (2004) found that participants rated the sponsored listings as lower quality. In their study, the results also indicated that many users ignored or did not notice the sponsored results, mainly due to their location on the right side of the page. Greenspan (2004) also found that users preferred organic listings compared to sponsored links and that users would eventually select sponsored listings when they were not identified as such on the SERP. It seems that users felt that sponsored listings were another form of advertisements pushed to them by the companies; whereas, organic results were based on how relevant the results were to the query. Brooks (2004a) found that the likelihood of a searcher selecting a sponsored listing is a curvilinear function of its placement on the page (i.e., based on rank). The higher the link's placement in the results listing, the more likely a searcher is to select it. The study found similar results with organic listings. The difference between the 1st and the 10th positions is a 20 to 30% drop in click through for the listing. In a related study, Brooks (2004b) reported that the conversion rate (i.e., customers who interact with the company through purchasing an item or filling out a contact form) drops nearly 90% between the 1st and 10th positions.

There are limited studies on the use of SEO by SMEs, and the benefits of such use are thus unclear. The need for research in the impact of SEO, particularly among SMEs, therefore, is warranted. Among the few prior studies that examined the benefits of SEO includes an action research by Malaga (2007), who found the benefit of an SEO project is more cost-effective than a Pay Per Click (PPC) campaign. However, this study only used one website and one type of product, findings of the study on the benefits of SEO may not be generalizable to other websites or products. In addition, the cost of the SEO project for the organization might be significantly lower since the author conducted it himself. Whereas, in reality, SMEs would often hire SEO consulting companies to engage in SEO, which could have skewed the ROI in Malaga's study. In this study, rather than focusing on one case study, we will conduct multi-case studies to provide an understanding of the various performance indicators that SMEs encounter when engaging in SEO through a consulting firm.

RESEARCH PROPOSITIONS

Proposition 1: The use of SEO by an SME positively impacts the number of visits to the company's website.

Various studies are examining how the role of TV will play in marketing relative to other forms of media (Rubinson, 2009). The worldwide print industry faces intense competition from newer forms of media (Kanso and Nelson, 2004; Gallagher et al., 2001). Additionally, as "the sheer volume of visual stimuli that simultaneously call for attention surpasses the processing capacities" of audiences, consumers are becoming increasingly resistant to traditional advertising (Pieters and Wedel, 2007, p. 225). Advertisers are seeking new ways to reach customers and have shifted media budgets away from traditional media, such as television or print to new media such as the Internet, where customers can be targeted more precisely (Hample et al. 2012). Internet marketing is the best alternative to reduce cost and expenses (Dehkordi et al. (2012). Kay from Caton Radio stated, "As someone who grew up in the Paper and TV advertising world it is sometimes hard to wrap your head around the idea of paying a company to 'optimize a

website'. He and the other CEOs have to "be open-minded to this method of advertising", says Kay. Dahan from Express Countertops used SEO since the start of the company's website. The importance of increasing web traffic stems from the fact that traffic reflects users' interest in the website and potential sales, which can be a reasonable proxy for sales (Pan et al. 2002). Therefore, the factors that increase web traffic are also predictors of sales at a retailer level (Brynjolfsson and Smith, 2000). Furthermore, web traffic is also a measure of success for Internet websites, since higher traffic can generate higher advertisement revenues.

Following Dreze and Zufryden (2004), we define visibility as the extent to which a user is likely to come across a reference to a company's website in his or her online environment. It is important to have your website visible since there is a growing number of websites on online as well as the increased competition that companies engage in to attract customers to their websites (Adamic and Huberman, 1999). Previously, website visibility was often completed by advertising, publicity, or word of mouth through blogs and reviews. Studies show that online ads influence customer loyalty scores and website visits (Briggs and Hollis 1997; Ilfeld and Winer 2002). However, Dreze and Zufryden (2004) found that the total advertising spent by companies is uncorrelated to website traffic.

Proposition 2: The use of SEO by an SME positively impacts the average time duration of users visiting the company's website.

Internet users can easily move from one website to another. Furthermore, the nature of the Internet has enabled users to search for information and compare prices and services with little costs. Therefore, the challenge for businesses is how to attract the attention of the customers. When utilizing SEO techniques, a company's website is ranked higher so that it can be easily accessed by Internet users. However, if the user does not stay on the website to learn more about the products or services, ranking higher on the search results page becomes useless. Therefore, it is in the best interest of the company to keep the website visitor as long as it can, since the probability of making a sale increase as the customer stays there longer (Bhatnagar and Ghose 2004).

Therefore, an equally important performance measure to determine SEO success is the visit duration. Visit duration is defined as the amount of time a user is on a website and has become a standard measure that is reported by Internet measure agencies, such as ComScore Media Metrix, Hitwise, and Nielsen/NetRatings. There are many advantages to measure visit duration. First, it is directly tied to a website's revenue and promotional benefits (Bhat et al., 2002; Briggs and Hollis, 1997; Bucklin and Sismeiro, 2003; Danaher and Mullarky, 2003; Danaher et al. 2006; Dreze and Zufryden, 1997). Second, longer visit duration helps maintain the users interest in a site (Bucklin and Sismeiro 2003; Hanson 2000) and gives user more time to make decisions and complete purchase transactions (Bucklin and Sismeiro 2003). User interest also helps generate repeat visits, which have shown to lead to long-term sales (Moe and Fader, 2004). Some investors use website durations as an indicator of future earnings and studies have shown that longer visit duration leads to higher monthly stock returns (Demers and Lev, 2001).

Visit duration is sometimes referred to as "stickiness" (Bhat, et al. 2002). As a result of repeat traffic and more time spent on the website, customers become much stickier to the websites and the transaction volumes increase (Zott et al.2000). Likewise, a web user's intention to stay longer

on a website is believed to be influenced by their perception of how valuable the website is. Therefore, a user's perception of the website value will influence their intention to stick (Lippert and Wilder 2001).

Proposition 3: The use of SEO by an SME positively impacts its annual sales revenue.

By utilizing SEO, the companies in this study saw an increase in web traffic to the site and visit duration, which enabled the companies in this study to see an increase in overall sales revenue. We will need to identify the sales revenue from various companies to provide support for this proposition.

RESEARCH METHOD

This research aims to study the impact of SEO on performance of SMEs. To date, most of the research on SEO has been focused on the development of different algorithms for SEO and how consumers review ranked results to find relevant information. Little is done to evaluate how SEO impacts websites and eventually business performance; empirical evidence in that regard in an SME context is even scarcer.

In this study, we employ multiple case study methodology to explore the impact of SEO on website and business performances. A case study is an "empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially where the boundaries between the phenomenon and context are not clearly evidenced" (Yin, 1994). A methodology consisting of a case study provides rich and relative data, and it is the most used qualitative method in information systems research (Benbasat et, 1987; Orlikowski and Baroudi, 1991; Yin, 1994). It is appropriate to use a case study when theoretical knowledge on the phenomenon which is being studied is limited and there is not sufficient knowledge on the topic (Benbasat et al, 1987). The benefits of the multi-case study have been discussed by other information systems researchers (Yin, 1994; Benbasat et al, 1987). According to Yin (1994), a case study can involve single or multiple cases and various levels of analysis. Benbasat et al. (1987) argue that multiple case studies enable the researcher to relate to differences in process and outcomes. Miles and Huberman (1984) added that multiple cases enable the researcher to verify that findings are not merely the result of idiosyncrasies of the research setting.

To gather information about the companies in our case study, we first administered a brief structured survey to twenty-two SMEs that had business relationship with an SEO consulting firm. The survey collected data on the firms and their investment and use of SEO as well as the impact of such use. Then we contacted the CEOs of the firms and requested for an opportunity for in-depth interview and further collection of archival information related to their use of SEO. Further interviews are needed with CEOs for this multiple case study methodology.

CONCLUSION

There has been little or no previous study done to investigate the applicability of theories or models in the SME context to examine the effects of SEO on SMEs. The central concern of this study has been to gain deep insight into the use of SEO by SMEs and the factors that enable SMEs to be successful in their decision to adopt SEO in business. The study was presented

through three case studies and the experiences of the SMEs who have adopted SEO in their business. The study's propositions provided significant support to past findings in literature to support the findings from the case studies.

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