

# Chapter V

## Search Engine Optimization an Action Research Project: Initial Results and Two Year Follow-Up

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### ABSTRACT

*A Web site that wants to increase its number of visitors can pay for search engine ads or attempt to improve its natural search engine ranking. Nobody really knows, which, if either, of these methods provides a positive return on investment. A search engine optimization (SEO) project was undertaken at a new e-commerce site. The site's search engine rankings and traffic were measured after each phase in the project. The results indicate that SEO is an effective method for improving search engine rankings and site traffic. In addition, the costs and benefits of the SEO project are compared with a pay-per-click (PPC) search marketing campaign. The SEO project proved more cost effective than the PPC campaign.*

### INTRODUCTION

A recent report from DoubleClick.com (2005) reveals that about half of all purchases in the business-to-consumer (B2C) e-commerce category are preceded by a Web search. A business that wants its Web site to be “found” by a potential customer using a search engine has two choices. The first is to pay for advertisements based on the key words or phrases used as search criteria. This

type of advertising is typically sold on a pay-per-click basis (PPC). That is, the site owner only pays when a user clicks on the ad and visits the target site. Certain key words might cost only pennies per click, while highly competitive key words cost up to \$50 per click (CyberWyre 2006).

The other option is for the site to appear toward the top of the search engine results page (SERP). This is the page, or more often series of pages, that list the results of a specific search.

A recent report from iProspect (2006) revealed that 62% of search engine users click on results appearing on the first results page and 90% click on results on the first three pages. In addition, MarketingSherpa's study (2005) of the search engine marketing industry shows that Web sites that are optimized to appear higher in search engine results pages (SERPs) have a higher conversion rate (sales per visit) (4.2%) than PPC ads (3.6%). Clearly, it is important for a site to rank well on the SERPs—within the first three pages and preferably on the first page. Therefore, some Web site owners attempt to manipulate where their sites appear on the SERPs through a process called search engine optimization (SEO).

According to a report by Sherman (2005), 45% search marketers cannot determine whether SEO or pay-per-click advertising provides a higher return on investment. Sherman (2005) specifically found that, "35% [of search marketers] said that algorithmic search engine optimization produces higher ROI than search ads. Just 11% said that search engine optimization produces lower ROI than search advertising. Fully 45% said they cannot determine whether SEO or pay-per-click provides a higher ROI." (para. 10).

The goal of this chapter is to ascertain the impact of a search engine optimization (SEO) project on Web site traffic and determine if such a project provides monetary value to the business. The goal was achieved by implementing an SEO project at a new e-commerce Web site, called My-BestiPodStuff.com (this name has been changed to protect the identity of the actual site) that sells iPods and iPod accessories. At the time of the study, the site has little traffic and no profits. The goal of the SEO project was to increase the site's ranking on the search engines and drive more traffic (and eventually profits) to the site.

Since the goals of the research were aligned with the company's goals and an intervention (in the form of a search engine optimization project) was required in order to gather data, an action research approach was chosen. Action research

was appropriate in this instance since the company wanted the authors to apply their knowledge of search engine optimization to their problem. In addition, both the authors and the company believed that action must be taken in order to solve the problem of low site traffic. The action research methodology has been used successfully in a number of information systems studies (Kohli & Kettinger 2004; Street & Meister 2004) and is discussed in more detail below.

This research makes the following three specific contributions to knowledge in the fields of search engine optimization and search engine marketing: (1) it examines SEO in the context of a working e-commerce site, (2) unlike previous research it uses an integrative approach to SEO, incorporating three main concepts—indexing, use of links, and on-site factors, and (3) since it uses an e-commerce site, the monetary value of the SEO effort can be determined and compared to other search engine marketing approaches—namely pay-per-click advertisements.

The next section of the chapter provides a review of the literature on search engine optimization. The research approach and actions taken are then described. Conclusions are then detailed, along with an analysis of the value of search engine optimization as compared to pay-per-click advertising. Finally, the chapter concludes with a discussion that examines the limitation of this study, contributions for academic and practitioner research, and future directions.

## **LITERATURE REVIEW**

A search engine is simply a database of Web pages (called an index), a method for finding Web pages and indexing them, and a way to search the database. Search engines rely on spiders—software that follows hyperlinks—to find new Web pages to index and insure that pages that have already been indexed are kept up to date.

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