Chapter 2.14
Designing Digital Marketplaces for Competitive Advantage

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ABSTRACT
In today’s digital world the majority of companies, including small and medium-sized enterprises (SMEs) and large firms, aim to have an online presence. However, SMEs differ from large-sized companies in terms of financial and staffing resources, which have implications for the development of e-business strategies. Thus, SMEs must not only overcome these barriers but must also take care of critical success factors (CSFs), including developing a good website and ensuring that their websites are listed among the top search engine results. This chapter discusses three elements (i.e., design principles, web usability and search engine optimization), which are vital to the effective design of a successful digital marketplace. The chapter discusses the importance of integrating these three elements in website design especially for SMEs.

INTRODUCTION
Consumers (or users of business services) have different types of informational and goods/services needs. There are generally two ways that individuals explore digital spaces to satisfy their
perceived needs: 1) either users know of specific resources (e.g., websites where they can find the answers they need); or, users use search engines (such as Google, AltaVista, Yahoo and MSN) to identify available resources in cyberspace. In cases when users rely on search engines to identify resources, users formulate a query based on their perceived needs and enter the query term(s) in the search box of the search engine. Generally, users’ queries are presented in natural language and the search engines are designed to handle queries in this form (Ding et al., 2004). A large number of published papers and books (e.g., Brin and Page (1998); Morgan and Hunt (2006)) have described details regarding how search engines work, including how users query search engines, mechanisms for indexing billions of webpages, the different types of data collected from webpages (e.g., contents, title, tag and link details) and the complexities involved in webpage ranking and search engine optimization (SEO) techniques. Search engines match the indexed webpages with the user’s query terms and then return results which include both paid search results (i.e., where companies have paid for ranking and placement in the search engine’s results) and organic search results (i.e., where pages are retrieved based on metadata relevant to the query). The organic search results presented to the user are ordered based on relevance criteria determined by a complex page rank algorithm which uses a large number of criteria to rank the webpages. The user then explores the search results to seek answers to his/her perceived needs.

Xing and Lin (2004) reported survey results from a study conducted at the Georgia Tech University in which it was found that 85 percent of users use search engines. The findings of the study reflect the importance of search engines in identifying resources for consumers and, at the same time, highlight the value of having a website indexed by the search engine and consistently retrieved among the top ranked websites. Once users identify useful resources (i.e., websites), users will then explore these sites to satisfy perceived needs. This leads to the next issue of how well the consumer can explore the website, itself (i.e., web usability), and how easy it is for the user to complete the information-seeking activity. For example, in an e-commerce context, how easy is it for the user to search for a particular product on a company’s website, place an order for that selected product and complete the sales transaction? All of these steps are dependent on the usability aspects of the website (e.g., ease of navigation; intuitive organization of information) which emanates from appropriate website design. Thus from the perspective of both search engine optimization and usability, a well-designed website is integral to ensuring consumer success in looking for web-based information and goods/services (see Figure 1).

*Figure 1. Inter-relatedness of Website design, Usability and SEO*
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