Assessing the impact of using the Internet for competitive intelligence

Thompson S.H. Teo*, Wing Yee Choo

Department of Decision Sciences, Faculty of Business Administration, 15 Law Link, Singapore 117591, Singapore

Received 1 October 2000; accepted 18 January 2001

Abstract

The Internet, as an information-rich resource and an interorganizational communications tool, has transformed the way that firms gather, produce and transmit competitive intelligence (CI). Yet, there is little empirical work on the impact of the Internet on CI and the subsequent effects on the organization. This study fills that gap by studying downstream impact of Internet usage on both CI and the organization. A questionnaire survey is used to gather data for the study. The findings indicate that research and external use of the Internet is significantly related to quality of CI information. However, the relationship between internal use and quality of CI information is not significant. The study also provides empirical evidence that quality of CI information is positively related to organizational impact. Implications of the results are discussed. © 2001 Elsevier Science B.V. All rights reserved.

Keywords: Internet; Competitive intelligence; Quality; Benefits; Information use; Structural equation modeling

1. Introduction

Over the past two decades, competitive intelligence (CI) has grown from a small area of interest into an internationally recognized and practised discipline. CI is not just market research [26] or business scanning. CI is a process of knowing what the competition is up to and staying one step ahead of them, by gathering information about competitors and, ideally, applying it to short and long-term strategic planning [21].

Among the newest sources of data is the Internet. It provides access to on-line databases as well as an exploding set of other resources. As a CI resource, the Internet is both an additional source of information and a cost-effective means of disseminating information to decision-makers [30]. Marketing is able to use the Internet to obtain knowledge of customer preferences through interactive Web sites and agents. Online sales reveal information that facilitates continuous forecast of sales, resulting in competitive advantages in terms of better production planning and less inventory stockpiles. It allows manufacturing to improve supplier selection [6] and learn about competitors’ process technologies. Top management is also able to access critical external knowledge, market research and economic trends to allow more effective strategic planning.

Although there is an expanding number of articles concerning the use of the Internet for CI activities, none have addressed its organizational impact in an empirical study. Recent studies involving the Internet have concentrated on upstream effects such as its

*Corresponding author. Tel.: +65-874-3036; fax: +65-779-2621.
E-mail address: fbateoeh@nus.edu.sg (T.S.H. Teo).
diffusion and its acceptance as an innovation [51]. Research made on the business use of the Internet has primarily been exploratory in nature [5,12].

In the area of CI research, several empirical studies have explored the relationship between usage of CI and corporate performance. A review of several studies by Glueck and Jauch [27] demonstrated a positive correlation between environmental assessment and performance. However, the studies conducted were independent of Internet usage.

This study aims to fill that gap by studying downstream impact of Internet usage on both CI and the organization. Specifically, this research seeks to examine the relationship between Internet usage and quality of CI information as well as the relationship between quality of CI information through the Internet and organizational strategic benefits (in terms of revenue generation, cost reduction and managerial effectiveness). The results provide some insights on the impact of the Internet on the quality of CI information and its subsequent impact on organizational performance.

2. Literature review

CI is a process of knowing what the competition is up to and staying one step ahead of it, by gathering information about competitors and ideally, applying this information in short- and long-term strategic planning. It refers to actionable information about the external business environment that could affect a company’s competitive position [24]. CI is not industrial espionage. A key maxim of CI is that 90% of all information that a company needs to make critical decisions and to understand its market and competitors is already public or can be systematically developed from public data [43].

CI involves three major functions: the collection and storage of data, the analysis and interpretation of data, and the dissemination of intelligence [9]. The process can have a discrete beginning and end or it can be ongoing and iterative, designed to gather and disseminate information throughout an individual organization, or ultimately, throughout an entire business ecosystem.

A considerable amount of research has emerged on the subject of CI and its relationship to the strategic planning process. The literature based on CI often stresses its importance on organizational performance. Glueck and Jauch [27] examined several studies (e.g. [31,44]) and determined that in all of the studies that they reviewed, a positive correlation between environmental assessment and performance was demonstrated.

Intelligence gives a company a competitive advantage [18] and better firm performance [16] by allowing better business planning [28]; new product introduction success and new market development [1]. Brockhoff [10] contends that better information, including competitor technological intelligence information, is needed to better support strategic decisions. A study on CI activities among companies in Singapore [40] also shows a positive relationship between use of CI and higher organizational effectiveness.

Organizations also try to measure the CI’s value to organizations [35]. Subramanian and Ishak’s [50] empirical study of 85 firms’ competitor analysis practices revealed that firms having advanced systems to monitor their competitors’ activities exhibited greater profitability than firms that did not have such systems.

The general trend of these studies has been to suggest theoretical models of competitor analysis. Empirical studies on the topic were also performed, along with periodic perspectives on the ethical issues of competitor analysis practices.

The growth of the Internet has led to CI professionals exploiting its information richness and hypermedia capabilities for CI activities [29]. Commercial enterprises of all shapes and sizes are finding that the Internet provides opportunities for competitive advantage [15]. Small- and mid-sized businesses are also interested in making use of the Internet to obtain additional resources [32]. This includes information gathering and intelligence dissemination.

It is important to note that the Internet is quite different from traditional computer applications in that the Internet is inter-organizational and supports multiple business functions, from human communications to business transactions [46]. By using the Internet, a company can monitor (manually or by using intelligent agents) the presence, posture, products, and prices of other players in its industry. It can track the views of customers and seek out new ideas and expertise internationally. It can also draw upon files and databases from government agencies, foundations, universities, and research centers to broaden
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات