



## **Chapter II**

# **Assessing Customer Perceptions of Web Site Service Quality in Digital Marketing Environments**

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### **ABSTRACT**

*E-commerce literature has rarely addressed the measurement of customer perceptions of web site service quality in digital marketing environments. It is argued that the current SERVQUAL and IS-SERVQUAL instruments need to be refined and validated to fit the digital marketing environment, as they are targeted primarily towards either traditional retailing or information systems contexts. This article validates and refines a comprehensive model and instrument for measuring customer perceived service quality of web sites that market digital products and services. After a discussion of the conceptualization and operationalization of the service quality construct, the procedure used in modifying items, collecting data, and validating a multiple-item scale is described. Subsequently, evidence of reliability and validity on the basis of analyzing data from a quota sample of 260 adult respondents is presented. Implications for practice and research are then explored. Finally, this chapter concludes by discussing limitations that could be addressed in future studies. The final EC-SERVQUAL instrument with good reliability and validity*

*will be essential to the development and testing of e-business theories, and provide researchers with a common framework for explaining, justifying, and comparing difference across results.*

## INTRODUCTION

Digital marketing<sup>1</sup> is one of the most significant phenomena having taken place in the e-commerce environment in the last five years. Because most firms have only begun to position themselves to exploit the business opportunities presented by e-commerce, it is difficult to know how best to measure the success and effectiveness of an e-business's efforts. To provide better management of e-business, more empirical research and theoretical development are required with respect to the effectiveness measure of web sites.

As Kettinger & Lee (1994) noted, developing measures of effectiveness has long been a focus of MIS field (Delone & McLean, 1992; Zmud, 1979). Such techniques as system usage (Ein-Dor & Segev, 1982; Lucas, 1974), cost/benefit analysis (King & Schrems, 1978), information economics (Maish, 1979), and critical success factors (Zahedi, 1987) have all been used with mixed results to gauge the contribution that information systems and the information services function make to firms and individuals. While acknowledging the contribution of these approaches, the most commonly used measures of effectiveness within the MIS field are users' perceptions of satisfaction (Delone & McLean, 1992; Melone, 1990). Traditionally, both the User Information Satisfaction (UIS) and End-User Computing Satisfaction (EUCS) instruments have been used as surrogate measures of system effectiveness to evaluate user satisfaction toward information systems (e.g., Bailey & Pearson 1983; Ives et al. 1983; Doll & Torkzadeh 1988). To more comprehensively measure IS service quality, Kettinger & Lee (1994) validated and refined the IS-SERVQUAL and used it to enhance the effectiveness measure of information services function. Accordingly, the effectiveness of web sites can be measured by different techniques, such as system usage, cost/benefit, and customer perceptions of web site service quality. In our study, customer perceptions of web site service quality was also used as a surrogate measure of e-commerce system effectiveness. The effectiveness measure of web sites must incorporate different aspects of service quality to become a diagnostic instrument for practical and theoretical use. Such purposes cannot be achieved when effectiveness is captured using only a single aggregated scale.

To assess the extent and specific nature of customer perceptions of service quality rendered by web sites, different dimensions of service quality must be theoretically and operationally defined. The development of such multidimensional instrument can (1) capture multiple aspects of web site service quality that may be subsumed within general (single scale) measures, (2) provide insight into the nature of inter-relationships among web site service quality dimensions, and (3) provide a more accurate diagnostic tool to assess digital marketing activities within organizations.

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