

# Chapter 13

## Measuring the Quality of E-Business Services

**Mark Springer**

*Western Washington University, USA*

**Craig K. Tyran**

*Western Washington University, USA*

**Steven Ross**

*Western Washington University, USA*

### ABSTRACT

*Electronic service quality, or e-service quality, refers to the quality experienced by the user of a service delivered via the Internet. Over the past several years, researchers have developed different models of e-service quality with the objective of identifying those aspects that are most important for customer satisfaction and loyalty. The current authors develop a framework to compare and contrast these models. While there is some agreement between existing models regarding the key dimensions of e-service quality, these models focus almost exclusively on retail e-commerce Web sites. Additional research is needed not only to resolve the differences between existing quality models for e-commerce Web sites, but also to develop e-service quality assessment tools for the entire range of e-business services.*

### INTRODUCTION

With the advent of the e-business era, more and more organizations rely on the Internet to support communication and transactions with constituents. Examples range from electronic retailers such as Amazon to health care providers to government agencies. For many organizations, a Web site is a primary way in which the organization's customers or constituents interact with the organization.

Given the important role of such websites, it is critical for organizations to provide high quality electronic services and delivery via a website. High quality electronic services can promote customer satisfaction and loyalty, while poor services may result in dissatisfied and lost customers (Parasuraman, Zeithaml, & Malhotra, 2005).

In recent years, researchers have begun to actively explore the factors associated with electronic service quality and the assessment of electronic service quality. This research has been conducted to provide guidance to website system developers

DOI: 10.4018/978-1-61520-611-7.ch013

and marketers who work with e-businesses that rely on websites for customer interactions. This article provides a review of the existing research concerning electronic service quality. The authors summarize recent developments in the measurement of e-service quality and suggest directions for future research.

## **BACKGROUND**

Much of the work regarding electronic service quality is directly or indirectly grounded in earlier research regarding traditional, or non-electronic, service quality. As summarized by Parasuraman, Zeithaml, and Berry (1985), service quality differs significantly from physical goods quality due to the intangible, heterogeneous, and inseparable nature of services. This led Parasuraman et al. (1985) to conclude that service quality was more difficult for consumers to evaluate than goods quality; that consumer quality assessment depends on a comparison of prior expectations with perceived service performance; and that the process of service delivery as well as the outcome of the service were both vital in the customer's evaluation of quality.

Parasuraman, Zeithaml, and Berry (1988) subsequently developed SERVQUAL, a service quality model and assessment tool designed to incorporate these differences. SERVQUAL assessed service quality along five dimensions via a forty-four question customer survey. A key element of the original SERVQUAL was the "gap model" of service quality, defining service quality as the difference between a customer's expectations of service and her actual service experience. The forty-four questions of the survey consisted of twenty-two paired questions; the first question in the pair asks the customer to rate her expectation of some aspect of the service, and the second question asks the customer to assess her actual experience with that aspect. The five

service quality dimensions the authors derived were service tangibles (e.g., the appearance of the service facility), reliability (e.g. consistency of the service), responsiveness (e.g. promptness of reply to customer needs), assurance (e.g. trustworthiness of the servers), and empathy (e.g., apparent personal concern for the customers).

After its introduction, SERVQUAL was applied to a wide range of traditional services including retail businesses (Teas, 1993), support services (Pitt, Watson, & Kavan, 1995), and health care applications (Babakus & Mangold, 1992). Several authors, however, questioned the utility of the gap model in assessing service quality (e.g., Asubonteng, McCleary & Swan, 1996; Babakus & Boller, 1992). As an alternative, Cronin and Taylor (1992) introduced SERVPERF, which directly measured the service quality perceived by the customer in lieu of assessing the gap between expectation and experience. The survey items used in the SERVPERF model are largely based on the survey items in SERVQUAL, suggesting some consensus regarding the critical aspects of traditional service quality.

Both SERVQUAL and SERVPERF remain well-used measures of traditional service quality (Carrillat, Jaramillo, & Mulki, 2007). Virtually all models and assessment tools for e-service quality have adopted the direct measurement approach of SERVPERF rather than the gap theory approach of SERVQUAL.

## **THE ASSESSMENT OF E-SERVICE QUALITY**

Several instruments have been developed to assess e-service quality. To provide a way to compare and contrast the different instruments, we present a framework that organizes the research findings based on the key dimensions of e-service quality that have been examined. Using the framework, we summarize the common research issues that

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/measuring-quality-business-services/41175](http://www.igi-global.com/chapter/measuring-quality-business-services/41175)

## Related Content

---

### Antecedents to Online Shopping: Factors Influencing the Selection of Web Portal

Sanjeev Prashar, T. Sai Vijayand Chandan Parsad (2015). *International Journal of E-Business Research* (pp. 35-55).

[www.irma-international.org/article/antecedents-to-online-shopping/124254](http://www.irma-international.org/article/antecedents-to-online-shopping/124254)

### A Semantic Similarity Analysis for Data Mappings between Heterogeneous XML Schemas

Jaewook Kim and Yun Peng (2011). *Electronic Business Interoperability: Concepts, Opportunities and Challenges* (pp. 37-52).

[www.irma-international.org/chapter/semantic-similarity-analysis-data-mappings/52148](http://www.irma-international.org/chapter/semantic-similarity-analysis-data-mappings/52148)

### Effect of Perceived Risk on E-Commerce Acceptance: State of the Art and Future Research Directions

Ángel Herrero-Crespo and Ignacio Rodríguez-del-Bosque (2010). *Encyclopedia of E-Business Development and Management in the Global Economy* (pp. 693-700).

[www.irma-international.org/chapter/effect-perceived-risk-commerce-acceptance/41230](http://www.irma-international.org/chapter/effect-perceived-risk-commerce-acceptance/41230)

### Pure Play vs. Bricks-and-Clicks: Who Reaps the Benefits of Virtual Retailing?

Youlong Zhuang and Albert L. Lederer (2006). *International Journal of E-Business Research* (pp. 1-20).

[www.irma-international.org/article/pure-play-bricks-clicks/1866](http://www.irma-international.org/article/pure-play-bricks-clicks/1866)

### The Interaction Between Banks and Brazilian Customers Through Facebook: A Framework From the Perspective of Affordances

Marcelo Silva de Fraga and Marcirio Silveira Chaves (2021). *International Journal of E-Business Research* (pp. 1-16).

[www.irma-international.org/article/the-interaction-between-banks-and-brazilian-customers-through-facebook/267946](http://www.irma-international.org/article/the-interaction-between-banks-and-brazilian-customers-through-facebook/267946)