

Chapter 22

A New Web Site Quality Assessment Model for the Web 2.0 Era

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ABSTRACT

To find a strategy for improving the competitiveness of Web sites, it is necessary to use comprehensive, integrated Web site quality dimensions that effectively discover which improvements are needed. Previous studies on Web site quality, however, seem to have inconsistent and confusing scopes, creating a need of reconciliation among the quality dimensions. Therefore, this chapter attempts to provide a Web site quality model that can comprise all the quality scopes provided by previous studies. The relationship between the specific dimensions of the quality model and the characteristics or merits of Web 2.0 was discussed in this chapter with actual Web site examples. It is expected that this study can help Web sites improve their competitiveness in the Web 2.0 environment.

INTRODUCTION

To date, the World Wide Web (WWW) has become rapidly prevalent in our society, tremendously influencing over the length and breadth of human being’s life and business environment. Now it is being utilized as essential media or social infrastructure for personal living and organizations’ business. In spite of these rapid changes and increase in utilization,

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the dot-com bubble in 2001 formed a negative perspective on further development in the WWW (Byrne, 2000; Howcroft, 2001). However, a new concept of Web 2.0 brings us new and innovative changes, breaking these negative views. Such changes include ones in business practices using Web and users’ behavioral patterns as well as service development on the Web. Bughin & Manyika (2007) and O’Reilly (2005), all of which are easily found in the contemporary websites.

Changes related to the Web take place in user behaviors and rich user experience. In terms of changes in user behaviors, users are getting actively involved in producing and sharing contents and discussing about the contents, as collective intelligence which collects various knowledge and experiences together through user interaction widespread, and UCC (User Created Content) or UGC (User Generated Content) becomes popular (Murugesan, 2007; O’Reilly, 2005; Ogawa & Goto, 2006). Technologies such as AJAX (Asynchronous JavaScript and XML), Mashup, Flux, etc. have been applied in website development, providing richer user experiences through robust functions and elegant user interfaces (Murugesan, 2007; O’Reilly, 2005; Ogawa & Goto, 2006). As a result, websites have been greatly improved in quality, focusing more on interactions between websites and users or among users. With these improvements, websites have become an important means for firms in managing the relationship with customers and partners and with internal employees as well (Bughin & Manyika, 2007).

It is important for website administrators to make endeavors to improve website quality by actively utilizing the characteristics and merits of Web 2.0 in order to improve competitiveness of websites. At least two requirements have been emerged to support these kinds of endeavors as follows. First, it is necessary to have comprehensive, integrated dimensions which cover the entire website lifecycle (Murugesan, Deshpande, Hansen, & Giniige, 2001) from conception, development and deployment, to continual refinement, update, and upgrade. Previous studies on website quality, however, have different scopes for considering qualities and so are complementary with each other but incomplete. Second, it is necessary to understand what the characteristics or merits of Web 2.0 are in those terms. One cannot find any explanation on website quality in previous studies, though. Therefore, the purpose of this study is to suggest a website quality assessment model that consists of quality dimensions which are highly relevant to websites’ user experience. We also would like to offer a guideline to help website developers provide services with higher quality and distinctive features of Web 2.0. The outline of this paper is as follows. The next section reviews the related studies, and the following section describes a comprehensive set of website quality dimensions, discussing the related features and advantages of Web 2.0 with their illustrations. The final section concludes this chapter with discussions of future research directions.

**BACKGROUND**

Many studies have provided various website quality dimensions. Among them, we have examined and summarized 28 studies which comprise quality dimensions that are crucial in the usage of website, rather ones relevant to website developers including maintainability and recoverability. Only those with significant characteristics especially from the perspective of customers are explained in this paper.

Barnes and Vidgen have suggested and revised eQual method (previously called WebQual) to assess website quality in various domains of websites including university websites (Barnes & Vidgen, 2000), auction websites (Barnes & Vidgen, 2001), Internet bookstores (Barnes & Vidgen, 2005), and information-extensive websites (Barnes & Vidgen, 2003). Their latest method, eQual 4.0, consists of usability, information, and service interaction instruments (Barnes & Vidgen, 2005).