

A Conceptual Model of B2B Online Service Quality

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This paper presents a conceptual model on the determinants of Business-to-Business (B2B) online service quality. It is derived from a study of literature and the results of a set of interviews where participants had extensive experience with online customer service.

The literature

Although service quality research has been a major field of enquiry in services for more than twenty years, research into the determinants of online service quality is still in its infancy (Zeithaml et al. 2000). Existing studies explore consumer interactions with a range of online technologies. In this body of research, several approaches to studying online service quality have been proposed. The first utilises existing services theory (see for instance, Gronroos et al. 2000; Kaynama & Black 2000; Zeithaml et al. 2000; O'Neill et al. 2001). A second category utilises generated new categories for Self-Service Technologies (SSTs) (see for instance, Dabholkar et al. 1996; Meuter et al. 2000), or e-services (Szymanski & Hise 2000; van Riel et al. 2001;), while a third category is grounded in information systems and web quality theory (Barnes & Vidgen 2000; 2001; 2002; Aladwani & Palvia 2001). However, much of this body of research is largely anecdotal, centring on consumer perceptions and ignoring the business customer perspective. As a result, limited insights have been gained. The study detailed in this paper seeks to address this gap in the scholarly literature by answering the question 'What are the determinants of service quality in B2B online service interactions?'

According to Roberts (2003), the economics that are driving business in the B2B online space are considerably more compelling than those in the Business-to-Customer (B2C) space, and, while much of the early research interest in online service quality has focused on B2C markets, B2B represents a much larger market (Roberts 2003). For example, B2C accounted for 7% of e-commerce in the US in 2002, compared to 93% for B2B (US Department of Commerce). Additionally, a number of studies have shown significant differences in the nature of the market orientation in consumer firms compared to business firms (Parasuraman et al. 1983; Avlontis & Gounaris 1997). Business services are also more specialised and technology driven than consumer services (Jackson & Cooper 1988). According to Lovelock et al. (1996), B2B services are much more complex and require management of a large number of service parameters to ensure flawless service provision and outcomes. Jackson and Cooper (1988) further stressed that selecting, evaluating and deciding on the continuation of the relationship with the service provider is not a routine task. In business markets, what firms actually purchase is more often than not, a customer-specific and unique solution to a specified problem (Patterson 1995). Webster (1992) added that business priorities are also likely to be different. Therefore, it is conceivable that the determinants and measurement of online service quality in consumer markets may not be relevant to business markets (Gounaris 2005).

The interviews

Given a lack of background literature, exploratory research was required to develop an understanding of the determinants in B2B online service quality. In-depth interviews were used to provide input for the development of a conceptual model of B2B online service quality. A total of 16 participants from a range of industry sectors, with extensive experience with online

customer service and support systems were recruited for the study. A semi-structured question format, using a set of pre-defined questions (utilising the same wording and order) specified in an interview protocol was used (Brewer & Hunter 1989; Crano & Brewer 2002). Questions relating to both positive and negative service experiences were used in the interviews and participants were probed on the meaning of the criteria expressed (Zeithaml, et al. 2000). At the conclusion of each interview, transcripts were typed and sent to participants to confirm correct recording of responses.

The data obtained from the interviews was then analysed and coded using a descriptive coding procedure consistent with that proposed by Glaser (1992) and Miles and Huberman (1984). This process enabled codes to emerge progressively during data analysis to avoid the problem of force fitting data to pre-existing codes (Miles & Huberman 1984).

Common themes emerging from the interviews formed the basis for the development of the conceptual model. Although participants placed different levels of emphasis on each attribute, the nature and determinants of OLSQ was consistent across all business types and industry sectors. A total of 10 determinants derived from the interview data were clustered into three dimensions: Web Quality, Information Quality and Service Quality, derived *a priori* from a literature survey. Each of the dimensions and related attributes is depicted in Table 1 below.

B2B OLSQ dimensions and associated attributes

Web quality

Website Design refers to site aesthetics, i.e. visual appeal, the representation of site components; the ease of navigation, i.e. don't have to 'drill' too far into the site to locate information required; the quantity, functionality and relevance of hyperlinks; simplicity and functional aspects of site design;

Ease of Use – The search facility is available within the site and is adequate for user needs; degree to which the site is well laid out and easy to move around; how simple the site is to understand and comprehend; how easy the site is to learn to use; and, the degree of user-friendliness of the user interface.

Technical reliability refers to the technical function of the site and the degree to which site components and hyperlinks function properly; there are no broken or redundant links on the site; system response time is within reasonable limits; fast web page load time; fast download time; and, the site is up and running and available for business *when* and *where* needed.

Usefulness refers to how well the site meets the service and support needs of users, the ability of the site to facilitate resolution of customer service problems; the degree of *fit for purpose* i.e., the degree to which the provider's perceived online service objectives meet customer service needs.

Intuitiveness –The degree of *alert-driven* interaction between organisation and users; and, the degree to which the site learns about user information needs and responds accordingly.

Information quality

Presentation refers to the organisation of information provided on the site; and, the amount, the structure and representation of information provided on the site.

Accuracy– Degree to which information on the site is free of errors, i.e. the correct versions of product technical support information are provided; and, the degree of assurance that user organisation account data has not been altered, tampered with or corrupted.

Service quality

Availability is high when multiple points of contact for the service provider are detailed on the website. This also refers to the ease of contacting the service provider; the approachability of the service provider; and/or, the completeness of the service provided through the site, i.e. *one-stop* service provision.

Service reliability refers to consistent, timely, dependable and unfailing service delivery; the service provider consistently delivers on service promises; the timeliness of service response (turnaround time within 12 hours); the service provider provides an immediate response to mission critical service requests; and, the reputation of the service provider for the delivery of high quality service.

Flexibility– A range of available service and support options are provided from the site; a number of access options are provided; a number of download options are provided; and, a number of contact options are provided.

The ability to attain high levels of service quality provides obvious benefits for the service provider. The model presented in this paper, provides a comprehensive framework of B2B online service quality and its determinants.

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