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A conceptual framework for understanding and measuring B2B online service quality

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A CONCEPTUAL FRAMEWORK FOR UNDERSTANDING AND MEASURING B2B ONLINE SERVICE QUALITY

A thesis submitted in fulfilment of the requirements for the
award of the degree

DOCTOR OF PHILOSOPHY

From

UNIVERSITY OF WOLLONGONG

By

LOIS ANN BURGESS BInfotech, Hons (*UOW*)

School of Information Technology and Computer Science

2006

Declaration

The work presented in this thesis is the original work of the author except as acknowledged in the text. I hereby declare that I have not submitted any of the material presented in this thesis for a degree at this or any other institution.

Lois Ann Burgess

27 November 2006

Dedication

This thesis is dedicated to my children James and Madison for their love, unfailing support and understanding. To my mother, for her constant encouragement even thorough her own adversity. To the memory of my late father, Herbert Burgess (1916-1989) and sister, Donna Phillips (1956-1994) who continue to guide me towards my life goals. Finally, to my mother's cousin, Professor Allan Wilson, whose unfailing dedication to scientific research inspired me to undertake this journey.

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Abstract

As more and more businesses move online, research into the determinants and measurement of online service quality has become a research imperative (Zeithaml *et al.,* 2000; Bitner, Parasuraman *et al.,* 2005). Notwithstanding, research in this area is still in its infancy and much of the existing research is largely anecdotal, centering on consumer perceptions and ignoring the business customer perspective. As a result, to date, limited insights have been gained. This study represents a first attempt at addressing this gap in the scholarly literature.

A two-phase study design was used to 1) explore the meaning of B2B online service quality, 2) identify its key determinants and 3) develop a valid and reliable measure for the construct.

In Phase I of the study, 16 in-depth interviews with business customers from a range of industry sectors were conducted. Results revealed that business customers expect online service levels at least equal to that provided in offline service environments. The results also revealed that business customer's assessment of online service quality is formed across ten key determinants: Website Design, Ease of Use, Technical Reliability, Usefulness, Intuitiveness, Presentation, Accuracy, Availability, Service Reliability and Flexibility.

In Phase II of the study, a measure of online service quality (OLSQ scale) was developed and empirically tested and validated from data collected from 699 customers of a large Australian corporate supplier. Items included in the measure were derived from the Phase I interviews and refined through an expert review

process. Two plausible measurement models were then specified and data-model fit of each of the models examined. A second-order factor structure, comprising three dimensions, Service Quality, Web Quality and Technical Quality, consisting of 20 items was derived from the evaluation. Validity and reliability of the measure were then assessed and confirmed. Collectively, the results provide support for the soundness of the measure's factor structure and its psychometric properties.

The attributes of OLSQ identified in this study provide a starting point on which providers can base the development of their online service strategy and modifications to strategy as customer needs and expectations change over time. In order to do this, providers need a valid and reliable instrument to gather information about customer service requirements and indicators of the quality of their online service offering as perceived by customers. It is envisaged that the OLSQ measure will also act as a diagnostic tool, assisting providers in pinpointing weaknesses in their online service strategy, enabling them to take corrective action where necessary. The results of this study also provide a starting point from which providers can base future research into the determinants and measurement of B2B online service quality.

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Publications

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