



**CHAPTER TWO**

**Service Quality  
in the Virtual World:  
The Case  
of Extranets**

Beverley Hope  
Victoria University of Wellington, New Zealand

The Internet has taken globalization of the marketplace from hyperbole to present-day reality. In this marketplace, information technology can be used to create and sustain market share. One such technology is the extranet. Extranets are increasingly being used to add value through business-to-business information sharing and transaction handling in a secure environment. Yet there is limited research into perceptions of service quality in Web-based Internet environments such as extranets. In this chapter we relate the literature on services and service quality to the developing literature on extranets. Five dimensions of service quality from the physical world are applied to the virtual world of commerce. It is concluded that dimensions of quality in human-to-human interactions may also apply to human-to-computer interactions, but that the factors which contribute to each dimension may differ.

**INTRODUCTION**

In competitive environments organizations must take every opportunity to strengthen relationships with existing customers. Information technologies are increasingly being used for this purpose. As Abrahamson and Telford (1998) observe:

Organizations which harness the powerful new benefits of information [technology] to establish intangibles, such as service quality, should enjoy an enhanced and sustainable competitive advantage (cited in Lloyd & Boyle, 1998, p. 93).

This chapter appears in the book, *Managing Internet and Intranet Technologies in Organizations: Challenges and Opportunities* by Subhasish Dasgupta. Copyright 2001, Idea Group Inc.

One information technology which is increasingly being used to improve customer service is the extranet. Extranets are “permeable yet secure commerce-enabled networks, which electronically link distributed organizations over the Internet in a private forum” (OneSoft, 1998). They are IP networks which allow a company to run Web applications for customers, suppliers and trusted partners, enhancing communications, improving relationships and reducing costs (Vlosky & Fontenot, 1999). They differ from e-commerce retailing in that they are open only to selected partners and tend to involve greater information sharing on the part of the host firm.

Extranets, together with enterprise portals, are the technology of the future. Business-to-business markets are expected to account for the vast majority of e-commerce for the foreseeable future (Kalakota, Olivia & Donoth, 1999). Extranets first caught on in vertical industries and have been used to automate the supply chain (see Benjamin & Wigand, 1995). Strong use is expected in the near future from the finance and health industries (Shein & Neil, 1998). For example, in New Zealand we see strong moves into extranets by government and quasi-government agencies supplying information to producers and exporters. An early adopter was the Ministry of Agriculture and Fisheries (MAF) whose extranet supplied complex and changing regulatory information to primary producers.

Currently, there is little reported research dealing with the success of extranet systems. We have some understanding of service quality in the physical world. We have some understanding of interface issues and Web usability. But we have limited insight into customer perceptions of quality in the virtual world. In this chapter we seek to address this deficiency by reviewing the literature on services and service quality, and relating that literature to extranet systems.

## BACKGROUND

### Services

Commerce has come a long way since 1776 when Adam Smith distinguished between productive and unproductive labor on the basis of whether the labor produced goods (productive labor) or services (unproductive labor) (Smith, 1977). Today we live and work in an economy dominated by services. Even manufacturing firms compete to some extent on the basis of service. In the production of commodities, good products are no longer sufficient for businesses to remain competitive; service quality becomes the distinguishing characteristic (Gronroos, 1990; Mastenbroek, 1991).

But service quality has proved an elusive construct which is difficult to delimit and to measure. Four characteristics of services contribute to this difficulty: service intangibility, customer-producer inseparability, performance heterogeneity and service non-storability (Gronroos, 1990; Zeithaml, Parasuraman & Berry, 1990).

12 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/service-quality-virtual-world/25885](http://www.igi-global.com/chapter/service-quality-virtual-world/25885)

## Related Content

---

### Innovation in Business Models of Banks in Europe: Towards a Methodological Approach

Konstantinos Liakas and Anastasia Constantelou (2014). *Approaches and Processes for Managing the Economics of Information Systems* (pp. 363-378). [www.irma-international.org/chapter/innovation-in-business-models-of-banks-in-europe/94300](http://www.irma-international.org/chapter/innovation-in-business-models-of-banks-in-europe/94300)

### Linking the Strategic Importance of ICT with Investment in Business-ICT Alignment: An Explorative Framework

Bjorn Cumps, Stijn Viaene and Guido Dedene (2010). *International Journal of IT/Business Alignment and Governance* (pp. 39-57). [www.irma-international.org/article/linking-strategic-importance-ict-investment/40957](http://www.irma-international.org/article/linking-strategic-importance-ict-investment/40957)

### Examining Cross-Domain Alignment: The Correlation of Business Strategy, IT Management, and IT Business Value

Anna Wiedemann and Heiko Gewald (2017). *International Journal of IT/Business Alignment and Governance* (pp. 17-31). [www.irma-international.org/article/examining-cross-domain-alignment/180692](http://www.irma-international.org/article/examining-cross-domain-alignment/180692)

### Guidelines for IT Governance and Multisourcing in the Networked Economy

Laurence Lock Lee (2009). *IT Governance in a Networked World: Multi-Sourcing Strategies and Social Capital for Corporate Computing* (pp. 295-313). [www.irma-international.org/chapter/guidelines-governance-multisourcing-networked-economy/24754](http://www.irma-international.org/chapter/guidelines-governance-multisourcing-networked-economy/24754)

### Success of IT Deployment: The Role of IT Investment Consistency

Tomi Dahlberg, Hannu Kivijärvi and Timo Saarinen (2015). *International Journal of IT/Business Alignment and Governance* (pp. 16-32). [www.irma-international.org/article/success-of-it-deployment/128804](http://www.irma-international.org/article/success-of-it-deployment/128804)