

## Chapter 7.3

# Self-Service Systems: Investigating the Perceived Importance of Various Quality Dimensions

**Călin Gurău**

*Montpellier Business School, France*

### **ABSTRACT**

The rapid development of online self-service applications has created the need for empirical studies about consumers' perceptions and behaviour during the adoption and use of such systems. An essential condition for understanding the elements that can enhance the adoption and use of these online systems is to identify the main factors that define the quality of self-service applications from the perspective of online users. After a presentation of the main streams of research focused on the analysis of online self-service systems, the article identifies eight quality dimensions defined by previous studies. The analysis of primary data permits a ranking of these quality dimensions in relation to users' perceptions. On the other hand, the study investigates the influence of users' personal characteristics (gender, age, Internet usage frequency and online self-service usage frequency) on the perceived importance of various

quality dimensions, providing specific insights about the needs and wants of various categories of customers. [Article copies are available for purchase from InfoSci-on-Demand.com]

### **INTRODUCTION**

In the last 15 years, the evolution of information technology applications has changed the landscape of the service industry. The implementation of self-service technology has created new service channels and procedures. Nowadays, clients can conduct bank transactions through automated teller machines (ATM) or on the Internet (online banking), make reservations or purchase tickets through online kiosks, check-in automated hotels, or use self-scanning systems in retail stores (Bobbitt, & Dabholkar, 2001). The integration of self-service technology with Internet applications has increased even more the convenience

of information-rich services—the customers can now access the service from their homes or offices, 24 hours a day, without any geographical limitations (Walker, Craig-Lees, Hecker, & Francis, 2002).

On the other hand, the introduction of effective self-service systems allow companies to automatise the repetitive elements of services, concentrating their resources and personnel on more personalised aspects of the company-customer relationship, and thus providing more added-value to their clients (Salomann, Kolbe & Brenner, 2006). However, the implementation of this strategy requires more than the introduction of self-service applications. These self-service systems need to be tied-in with employee-related policies and procedures. The internal procedures must insure that the customer can rely on virtual assistance when using a self-service interface and that can feel comfortable in a range of transactions without human intervention (Kotler et al., 2002).

The production and consumption of services have specific characteristics that permit customer empowerment, but on the other hand, which create challenges related with customer satisfaction and with customer's perception regarding service quality. In comparison with products, the services are (Zeithaml et al., 2002a):

1. Intangible - services cannot be seen, tasted, felt, heard or smelled. This makes evaluating service quality very difficult and potential consumers look for visible indicators of quality.
2. Inseparable - services are produced and consumed at the same time and cannot be separated from their providers. Provider and client must interact for the service to occur and therefore both parties become part of the service provided.
3. Variable - as consumer and producer are both part of the service, the quality of services may vary greatly depending on who provides them and when, where and how

they are provided. Marketers must therefore take steps towards achieving quality control amongst their service providers.

4. Perishable - services must be consumed as they are provided and cannot be stored for later use. This becomes a problem if demand fluctuates and service opportunities are missed. Marketers must develop strategies to either keep demand constant or provide the equivalent supply of service to match the fluctuating demand.
5. No transfer of ownership - services cannot be owned by the user. Marketers therefore should develop strategies to enable consumers to recall the quality of service they received.

The introduction of online self-services has changed the way in which companies relate to their customers. This new technology eliminates firm's personnel from the service interface, replacing it with software applications that can be accessed through real-time Internet connection. On the other hand, the self-service system gives additional responsibilities to the customer, who will initiate, generate and consume the service interacting directly with software applications. Mills and Morris (1986) introduced the idea that the customer should be considered as a 'partial employee' in service organisations, while Wilkström (1996) considers the customer a co-producer involved in a temporary joint venture with the service organisation. Finally, Prahalad and Ramaswamy (2000) argue that nowadays consumers are co-creators of value, becoming part of an enhanced network enabling them to act as collaborators, co-developers and even competitors in the electronic marketplace.

This additional responsibility is not necessarily perceived as negative by the involved customers. In fact, many studies have shown that customers, and especially online service users, enjoy having a greater degree of control over the service they require (Meuter, Ostrom, Roundtree, & Bitner,

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/self-service-systems/44039](http://www.igi-global.com/chapter/self-service-systems/44039)

## Related Content

---

### A General View of Quality Models for Web Portals and a Particularization to E-Banking Domain

M<sup>a</sup> Ángeles Moraga, Julio Córdoba, Coral Calero and Cristina Cachero (2010). *Electronic Services: Concepts, Methodologies, Tools and Applications* (pp. 426-443).

[www.irma-international.org/chapter/general-view-quality-models-web/43963](http://www.irma-international.org/chapter/general-view-quality-models-web/43963)

### A User Centered Innovation Approach Identifying Key User Values for the E-Newspaper

Carina Ihlström Eriksson and Jesper Svensson (2011). *Developing Technologies in E-Services, Self-Services, and Mobile Communication: New Concepts* (pp. 146-183).

[www.irma-international.org/chapter/user-centered-innovation-approach-identifying/54962](http://www.irma-international.org/chapter/user-centered-innovation-approach-identifying/54962)

### Lotus Workforce Management-

Jerh. O'Connor, Ronan Dalton and Don Naro (2010). *Electronic Services: Concepts, Methodologies, Tools and Applications* (pp. 1206-1220).

[www.irma-international.org/chapter/lotus-workforce-management/44009](http://www.irma-international.org/chapter/lotus-workforce-management/44009)

### Towards a Better Understanding of Ubiquitous Cloud Computing

Hamed Vahdat-Nejad, Shaghayegh Ostadi Eilaki and Shaghayegh Izadpanah (2018). *International Journal of Cloud Applications and Computing* (pp. 1-20).

[www.irma-international.org/article/towards-a-better-understanding-of-ubiquitous-cloud-computing/196189](http://www.irma-international.org/article/towards-a-better-understanding-of-ubiquitous-cloud-computing/196189)

### An Assessment Methodology for Hotel Websites: Application to the Top 10 Cities Destination in the World

F. Javier Miranda, Sergio Rubio and Antonio Chamorro (2013). *International Journal of Service Science, Management, Engineering, and Technology* (pp. 1-17).

[www.irma-international.org/article/an-assessment-methodology-for-hotel-websites/101788](http://www.irma-international.org/article/an-assessment-methodology-for-hotel-websites/101788)