

# Chapter 11

## Development of an E–Service Quality Model (eSQM) to Assess the Quality of E–Service

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### ABSTRACT

*E-service quality is known as a critical factor for successful implementation and decent performance of any business in electronic environment. Although many researches have been carried out in the field of service quality, there is a clear need for a theoretical model that integrates all aspects of e-service quality. This chapter responded to this need by developing a theoretical model to assess the quality of e-service. In the first phase, e-service quality dimensions were extracted from the literature. Exploratory factor analysis was applied to cluster the factors effectively in developing the conceptual model. Confirmatory approach was conducted with structural equation modeling to test and validate the proposed model. The contribution of this research is the integration of various relevant dimensions affecting e-service quality into a unified e-service quality model (eSQM).*

### INTRODUCTION

Today, the Internet is using with a wide range of industries to deliver or receive the required services. In fact, the term “service” has a variety of meaning depending on the angle that is viewed (Kardaras & Karakostas, 2006). Yang, Peterson, and Cai (2003) defined services as “a benefit providing object of transaction that is a more or less abstract activity or process of activities essentially produced, marketed and consumed in a simultaneous interaction”. Besides, Hoffman and Bateson (1997) defined service as efforts, deeds or performance and also Lovelock (2001) defined it as “an act or performance offered by one party to another”. The main distinction between electronic services and traditional services are the channels they use to deliver their services and they interact with their users (Taherdoost, Sahibuddin,

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& Jalaliyoon, 2013). According to Taherdoost et al. (2012), e-service is defined as “the provision of interactional, content centered and electronic-based service over electronic networks”.

Service is an endeavor of an enterprise, and it is achieved by satisfying the needs of customers by increasing the quality of the provided service (Chang, Pang, Tarn, Liu, & Yen, 2015). Consumers commonly use service quality as the comprehensive superiority of an enterprise. Raising the quality of services provided electronically will help organizations to achieve their goal which is making their customers satisfied (Chang et al., 2015). In a recent competitive business environment, the delivery of high-quality service to customers is very crucial for business survival, sustainability, growth and profitability (Suki, 2014). Thus, managers, developers and researchers need to understand what the quality determinants are to address them in order to increase user satisfaction.

Furthermore, lack of physical and direct human interaction in an electronic environment raised up the concern of organizations about the quality of their services (Grigoroudis, Litos, Moustakis, Politis, & Tsironis, 2008; Manasra, Zaid, & TaherQutaishat, 2013). Although measuring the quality of e-services is more complex than good/product (Manasra et al., 2013), there is no integrated method to evaluate the e-service quality (Loiacono, Watson, & Goodhue, 2007; Manasra et al., 2013). The notion of e-service has increasingly recognized as one of the key determinants in successful e-service by both researchers and practitioners. In brief, there is no particular technique to evaluate the interactional, content centered and electronic-based services.

In this research, the theoretical foundation of e-service quality is reviewed and we examined through in-depth exploratory and confirmatory analysis. In the first phase, the e-service quality dimensions are extracted from the literature and then survey is distributed among e-service users to categorize the quality dimensions using exploratory factor analysis. After introducing the e-service quality factors, an instrument is developed by extracting the related measurement items from previous studies. Afterward, validity (discriminate and convergent) and reliability tests are examined to validate the measurement tool. Finally, structural equation modeling is applied to validate the proposed model and instrument. The contribution of this chapter relates to the fact that the proposed theoretical framework integrates in a holistic way various relevant factors affecting e-service quality into a single template.

## **E-SERVICE QUALITY**

Service quality is a key determinant in differentiating service offered and building competitive advantage (Bauer, Hammerschmidt, & Falk, 2005; Gronroos, Heinonen, Isoniemi, & Lindholm, 2000; Santos, 2003), the importance of measuring and monitoring e-service quality has been recognized by managers and academics (Johnson & Whang, 2002). Service quality determines the willingness of customers to purchase a service again in the future or to accept additional add-on services (Chang et al., 2015).

Service quality can potentially increase attractiveness, hit rate, customer retention, stickiness, and positive word-of-mouth. It can maximize the online competitive advantages of e-service. The concern about e-service quality becomes greater important because of the absence of direct human interaction in offered services (Grigoroudis et al., 2008).

As stated by Einasto (2014), quality development requires a well-defined quality concept, for which it is necessary to understand how users estimate the quality. To do so and thereby deliver superior service quality, decision makers of companies providing e-services need to first understand what is the percep-

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