

Contents lists available at SciVerse ScienceDirect

Expert Systems with Applications

journal homepage: www.elsevier.com/locate/eswa



Enhancement of condominium management based on the effect of quality attributes on satisfaction improvement

Yao-Chen Kuo a,1, Jui-Sheng Chou b,*

- ^a Graduate Institute of Project Management, Kainan University, 1, Kainan Road, Luzhu Shiang, Taoyuan 338, Taiwan
- b Department of Construction Engineering, National Taiwan University of Science and Technology (Taiwan Tech), 43, Sec. 4, Keelung Road, Taipei 106, Taiwan

ARTICLE INFO

Keywords: Condominium management Service quality Resident satisfaction IPA Multivariate analysis Corporate strategy

ABSTRACT

Condominium management (CM) businesses rely on continuous improvements to service quality (SQ) to increase consumer satisfaction (CS) and thereby improve operations. Lacking knowledge of SQ and CS results in poor efficiency. To develop cost-effective strategies for improvements, the relationship between SQ and CS must be investigated. This work proposes novel procedures to explore the relationship between identified SQ attributes and CS in the CM business. First, we conduct exploratory factor analysis to cluster intrinsically similar attributes into three constructs and identify significant attributes for subsequent assessment. Furthermore, resident satisfaction scores (RSSs) are computed to assess the relative importance rate (RIR) of investigated attributes by applying an adapted multivariate method to regress the RSSs on the performance of SQ attributes. To facilitate the decision-making process, the service-quality model evolved from the integration of an improved Kano's approach and importance–performance analysis (IPA) is utilized to develop a prioritized strategy for satisfaction improvements in the CM business.

© 2011 Elsevier Ltd. All rights reserved.

1. Introduction

The numerous high-rise residential buildings and multi-house communities in urban and metropolitan areas have strained condominium management (CM) services. Contracting professionals in the building maintenance, management, and services delivery business is the most efficient and effective solution for managerial decisions related to residential community issues such as community safety, community interactions and co-owned community assets. The CM business thereby gains excellent prospects for future generations with numerous business opportunities in highly developed cities.

The capital requirements for market entry are low for CM businesses, as most services do not require highly specialized skills or advanced equipment to achieve an acceptable level of service quality; this has resulted in a highly competitive CM industry. This competitiveness and lack of a reliable system for measuring service quality have forced CM companies to pursue low-price strategies to increase market share.

Although some interviewed chief executive officers of CM companies address a significant need to improve service quality (SQ) to gain competitiveness, attempting to enhance SQ without knowledge of SQ and consumer satisfaction (CS) measurements is inefficient or frequently employed strategies that are then quickly abandoned. The current greatest challenge facing CM services in terms of improving service quality is a lack of information regarding SQ measurements, leading to insufficient comprehension of which services need to be set as first priority so as to increase resident satisfaction.

Service quality is a significant antecedent of CS, and strongly influences profitability, productivity, market share, return on investment, and cost reduction (Anderson & Fornell, 2000; Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Lin, 2007; Oliver, 1997; Olsen, 2002; Park, Robertson, & Wu, 2006; Wen, Lan, & Cheng, 2005). That is, improved SQ can increase, CS reduce the number of customer complaints and enhance customer loyalty. Continuously improving SQ is very important, especially for attributes affecting CS in strengthening the loyalty to CM businesses, as well as enhancing operations competency.

Prior to SQ improvements, decision-makers must determine the empirical relationships between SQ and CS, and their measurements. Empirical research demonstrated that CS is a function of both expectations related to certain service attributes and the assessment of attribute performance (Deng & Pei, 2009; Hawes &

^{*} Corresponding author. Tel.: +886 2 2737 6321; fax: +886 2 2737 6606. E-mail addresses: yckuo@mail.knu.edu.tw (Y.-C. Kuo), jschou@mail.ntust.edu.tw (J.-S. Chou).

¹ Tel.: +886 3 341 2500x6174.

Rao, 1985; Martilla & James, 1977; Matzler, Bailom, Hinterhuber, Renzl, & Pichler, 2004; Tao, Chen, & Chang, 2009). Both relationships between SQ and CS or customer expectations provide information relevant to enhancing CS; however, these are complex relationships in the marketing field and require detailed analyses. To implement SQ measurements to improve CM businesses, the structural relationships between SQ attributes and CS are investigated in this study.

Importance–performance analysis (IPA) is a conventional means of evaluating or identifying service operations and attributes important to CS and perceived performance ratings (Deng, 2008; Martilla & James, 1977; Shieh & Wu, 2009; Wu, Tang, & Shyu, 2009). Notably, IPA provides insight into which service attributes a firm should focus on and can identify problems such as inefficient resource utilization.

However, in conventional IPA studies and applications, respondents were typically asked to evaluate the importance of investigated attributes without consideration of interactive effects with other attributes. In some cases, multiple regression analysis (MRA) was employed to evaluate the importance of SQ predictor variables (PVs) to a CS criterion variable with an unrealistic assumption of independence. Neglecting the multicollinearity of multiple PVs can generate incorrect effects on the criterion variable. Additionally, when importance rates were evaluated without the clear defined purpose for improving CS, conventional IPA may not be an effective tool to develop management strategies (Oh, 2001).

This work presents novel procedures combining multiple methods, including factor analysis, the multivariate statistical technique, and IPA (Bacon, 2003; Martilla & James, 1977; Wu et al., 2009), and then applies the service quality model adapted from Kano (Kano, Seraku, Takahashi, & Tsuji, 1984; Lin, 2007; Yang, Jou, & Cheng, 2011) to effectively deploy service quality strategies so as to continuously improve resident satisfaction with CM services.

First, SQ attributes were identified on the basis of theoretical support and literature findings, and then narrowed down to a manageable size utilizing factor analysis. The relative importance rates of retained SQ attributes were explored using a multivariate statistical technique to investigate the contributions of interested attributes to total variance in the predicted resident satisfaction score (RSS). Then, IPA was employed to assess the relationship between relative importance rates and the performance of SQ attributes. Based on the theory of Kano's model, reliable, effective and efficient management strategies can be deployed to enhance resident satisfaction.

The rest of this paper is organized as follows. Section 2 reviews literature and methods used to measure and investigate SQ and CS and to implement the importance–performance analysis (IPA) as the caution that must be employed when SQ and CS is measured and IPA is adopted. Section 3 then outlines the research methodology utilized for analyses. Next, Section 4 describes the profile of survey data and exploratory factor analysis (EFA), including empirical results of extracted SQ constructs and associated attributes. Section 5 presents an empirical assessment of the relative importance rates using IPA and Kano's model. Conclusions are finally drawn in Section 6, along with managerial implications and recommendations for CM services.

2. Literature review

Parasuraman, Zeithaml, and Berry (PZB) (1985) conducted an exploratory study of potential constructs of perceived SQ and identified ten overlapping constructs of perceived SQ (Parasuraman et al., 1985). These constructs were tangibility, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing a customer, and access. These 10 constructs were employed to develop service quality attributes in the SERVQUAL study by PZB and the well-known SERVQUAL tool

was established. Since its development, SERVQUAL has been a preeminent tool used by scholars and practitioners to evaluate service performance. Applications of SERVQUAL have generated extensive discussion related to quality measurement, discrepancy paradigms, and instrument applications (Babakus & Boller, 1992; Carman, 1990; Cronin & Taylor, 1992, 1994; Kumar, Smart, Maddern, & Maull, 2008; Teas, 1993).

However, major concerns in applying SERVQUAL include ambiguous conceptual definition and impractical operational approach for perceived SQ. The discrimination of "perceptions-minus-expectations" defined the value of expectations as a normative standard for evaluating the level of SQ. Some scholars identified ambiguity in the definition of expectation measurement arising from the fact that expectation measurements were based on respondent statements of what an excellent service "should" involve (Cronin et al., 1992, 1994; Teas, 1993). To eliminate concerns regarding definitional and operational problems of the "performance-minus-expectations" paradigm, SERVPERF (Cronin et al., 1994) was proposed to assess SQ using a performance-based approach. Without measuring expected value, SERVPERF had better reliability and predictive validity than SERVQUAL (Cronin et al., 1992; Thomas, Victor, & Leon, 1999).

Another major concern is that the stability of selected determinants of SQ with the application of SERVQUAL is not robust for various businesses. In a general SERVQUAL study, five inter-correlated determinants were identified and applied as generic measures to analyze SQ (Fandos Roig, Garcia, & Moliner Tena, 2009). During the last two decades, these five determinants have been widely utilized as service constructs to evaluate SQ in practical and academic projects involving different service industries. However, many studies (Babakus & Boller, 1992; Carman, 1990; Cronin et al., 1992) argued that the structure of determinants should be adjusted according to domain characteristics. Previous studies suggested that to pursue SQ information with enhanced reliability for implementation in service settings other than the five service categories in the SERVQUAL study, re-examining SQ constructs is imperative for confirmatory analysis.

Good product (or service) performance results in enhanced CS influences subsequent consumer purchase intention (Anderson & Fornell, 2000; Chou & Kim, 2009; Fandos Roig et al., 2009; Fornell et al., 1996; Liu & Zhao, 2005; Oliver, 1997; Olsen, 2002; Park et al., 2006; Wen et al., 2005). SQ is commonly used by both academics and practitioners to examine CS, which is defined as a psychological decision made based on a specific service encounter when customers and service providers interact (Lin, 2007). Oliver (1997) conceptualized satisfaction as a composite construct and defined it as "the consumer's fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant." Oliver further discussed loyalty as an outcome of CS and demonstrated that CS has three phases—the cognitive, affective, and conative phases. Thus, SQ and CS are strongly correlated and SQ is an antecedent of CS (e.g. Anderson & Fornell, 2000; Churchill, 1982; Liu & Zhao, 2005; Olsen, 2002). In this work, the cause-and-effect relationship between service quality and consumer satisfaction serves as the assumption for factor exploration.

Kano's model (Kano et al., 1984), another well-known evaluation approach, was widely utilized to classify SQ attributes to enhance the effectiveness in increasing CS. Kano's model categorized SQ into Attractive, One-dimensional, Must-be, Indifferent, and Reverse attributes. The classification in this model is based on the trend of the variance ratio in the fulfillment of SQ and the extent of CS. The variance ratio corresponds to the relative importance rates of SQ attributes to CS improvements. Most previous attempts (Chen & Lee, 2006; Kuo, 2004; Yang, 2005) implanting Kano's model typically utilized non-subjective approaches and the assumption of independent attributes to investigate and classify SQ attributes. This work

دريافت فورى ب متن كامل مقاله

ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
 - ✓ امكان دانلود نسخه ترجمه شده مقالات
 - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
 - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات