Applying mixed methods to identify what drives quick service restaurant's customer satisfaction at the unit-level

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ABSTRACT

The current study addresses issues related to developing a set of critical quality attributes. The primary research objective was to address drawbacks of importance–performance method and develop a novel approach that identifies satisfaction drivers for unit-level quick service restaurant (QSR). The new approach is based on synthesis of qualitative, PRCA, and importance grid methods. Basic (taste, temperature, and accuracy), performance (friendliness) and excitement (cleanliness, speed, and ease of understanding) factors were identified for a QSR context. The current findings help to resolve the problem of performance optimization and identify an optimal set of QSR attributes to allocate resources. Taste, temperature, and accuracy must be ensured as top priority. Then, friendliness should also be ensured and only after that the resources should be allocated to cleanliness, speed, and ease of understanding. Generalizability of the findings is bounded by the fact that only one QSR chain was examined. Additionally, only a limited number of QSR attributes was examined.

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1. Introduction

The foodservice industry is highly competitive, with 29% of all restaurant sales coming from the quick service restaurant (QSR) segment (QSR Magazine, 2012a). In such an environment, customer satisfaction is considered to be a critical indicator for the businesses' future; as high levels of customer satisfaction tend to lead to loyalty, which in return leads to profits (Chen, 2012; Matzler and Hinterhuber, 1998). Additionally, customer satisfaction reduces price sensitivity, increases cross-buying, and increases positive word-of-mouth (Matzler et al., 2004).

The widely accepted satisfaction-profit chain framework suggests that profits stem from customer retention that arises from high levels of customer satisfaction, which is achieved by delivering quality product or service (Anderson and Mittal, 2000). The conceptual logic underlying the satisfaction-profit chain stems from the idea that by improving product or service attributes or quality, customer satisfaction should increase. When customer satisfaction increases based on attributes of the restaurant experience, this in turn will lead to greater profitability, revisit intentions, customer traffic, and sales (Gupta et al., 2007).

It should be noted that there has been little agreement on the primary drivers of restaurant satisfaction, in large part because each segment of the restaurant industry can have different expectations of the product and service. What is commonly agreed on, is that knowing and delivering the optimal set of product or service attributes that produce the highest level of customer satisfaction is crucial to the competitive edge of businesses (Mikulić and Prebežac, 2011). With this idea in mind, numerous attempts have been made to identify critical service or product attributes that generate customer satisfaction in order to stay abreast of competitors (Deng et al., 2008). Customer satisfaction determinants at an attribute level are generally operationalized through the Importance–Performance Analysis (IPA). In this prominent approach, a list of attributes is generated first, and then, customers are asked to rate a product or service on the degree of how each of the attributes is delivered. Also, consumers are asked to rate the importance of each attribute. Finally, an overall score is computed as a sum of individual attribute scores weighed by the level of their importance (Martilla and James, 1977).

In spite of its dominance, the IPA method has numerous flaws and can be misleading in attempts to identify an optimal set of product or service features (Deng, 2007; Matzler et al., 2003; Oh, 2001).

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IPA does not provide clear definition for the concept of importance and does not take into account whether the attribute is important for its presence or its absence (Deng et al., 2008). Additionally, IPA's underlying assumption is that importance and performance are two independent entities, however, numerous studies have confirmed that the relationship between attribute performance and attribute importance was causal and attribute importance changed as attribute performance did (Matzler et al., 2003; Oh, 2001; Oliver, 1997). Another one of the major IPA's assumptions is that the customer satisfaction function is linear and additive in nature, though it was proven otherwise (Bartikowski and Llosa, 2003; Hui et al., 2005; Matzler et al., 2004; Slevitch and Oh, 2010). Therefore, the IPA approach is innately geared toward performance maximization, not optimization, consequently, leaving the problem of optimal deployment of resources unaddressed (Chen, 2012; Mittal et al., 1998). More importantly, both academics and practitioners report that equally investing in greater performance along all service attributes in order to increase satisfaction would not be effective and does not justify additional investments (Busacca and Padula, 2005; Cadotte and Turgeon, 1988; Lin et al., 2010; Mittal et al., 1998).

As Oh (2001) states, hospitality academics and practitioners continue to use IPA without giving critical considerations to its conceptual and practical validities. Oh (2001) further suggests that though easy applicability is always desirable, simplicity and convenience should not be the predominant criteria when choosing and applying a research method. Oh (2001) concludes that thorough reassessment of IPA as a tool is necessary.

Therefore, the current study attempts to address the issues raised by previous researchers with regard to IPA (Deng, 2007; Oh, 2001) and tackle the problem of a better method to identify satisfaction determinants. Several alternatives, such as Kano et al.'s model, PRCA, and qualitative approach, address many of the IPA's drawbacks (Chen, 2012). The main objective of this study is to synthesize several existing methods that overcome shortcomings of IPA as summarized by Oh (2001) and Mikulić and Prebežac (2011), and to test them in the context of QSR – an area where intense competition makes knowing satisfaction determinants a matter of survival. More specifically, through mixed methods, this study will examine unit-level QSR attributes rated by independent sets of consumers. The significance of the current study is grounded in utilizing a mixed methods design, which addresses some of the limitations of the IPA method by providing a novel and useful tool to assess attributes and their relationships to customer satisfaction. The latter would have a significant practical significance, as the new method would allow hospitality practitioners to truly define what drives customer satisfaction and optimize their resource allocation. A visual depiction of this research framework of mixed methods can be seen in Fig. 1.

2. Literature review

Multiple attempts have been made to develop a better method of identifying a critical set of quality attributes (Mikulić and Prebežac, 2011). Some studies have modified IPA with the basic framework remaining largely the same, however several researchers presented a framework that rectifies the flaws of the original IPA model (Matzler et al., 2003). Methods that address issues of performance–importance dependence and the asymmetric nature of the customer satisfaction function stem from Kano's Theory of Attractive Quality, which is often referred as Kano's model (Kano et al., 1984). In turn, Kano's theory is grounded into Herzberg's work on job satisfaction where Herzberg introduced two categories of factors, hygiene and motivators, based on their dissimilar effect on satisfaction (Herzberg, 1967).

The original Kano's model distinguishes between five different quality attribute types: *attractive*, *one-dimensional*, *basic*
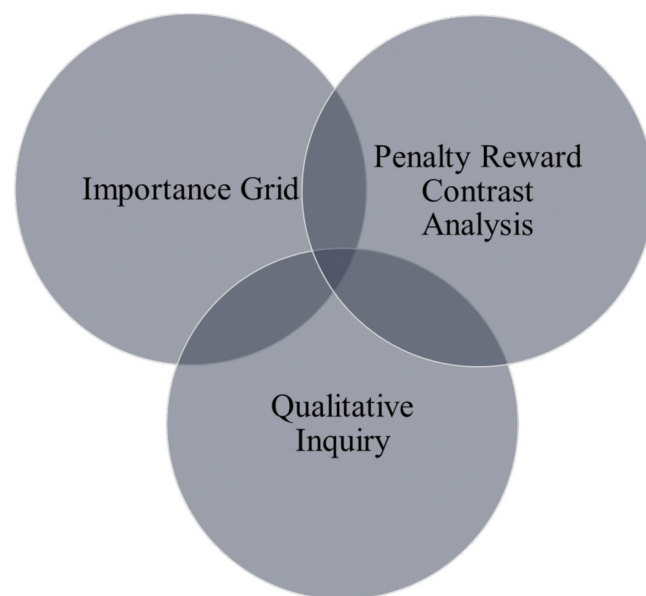

Fig. 1. Present study's research framework adapted from Mikulić and Prebežac (2011).

(*must-be*), *indifference*, and *reverse*. Each category influences customer satisfaction differently. Inadequate performance on must-be attributes leads to dissatisfaction while adequate performances on these attributes has minimal or no effect on satisfaction. One-dimensional attributes have equal impact on customer satisfaction in cases of over- and under-fulfillment. Attractive attributes produce satisfaction in a fulfilled state, but result in minimal or no impact when performance is low.

To categorize quality attributes, Kano et al. (1984) developed a special questionnaire based on the critical incident technique (CIT). The questionnaire contains pairs of questions for each attribute of a given product or service. Each pair contains a question about respondents' feelings in the case of performance fulfillment (functional question – how would you feel if food tastes good?) and another question for a situation of under-fulfillment (dysfunctional question – how would you feel if food does not taste good?). Then, a special evaluation table is used to categorize attributes based on response frequencies.

Though the Kano questionnaire remains the most appropriate approach to identify original Kano categories, it is also found too complex and difficult to implement in real world situations (Chen, 2012; Mikulić and Prebežac, 2011). As Chen (2012) states, it takes much longer to respond to the Kano's questionnaire than typical IPA questionnaires, because two similar questions are asked for each attribute and that tends to decrease the willingness of respondents to complete the questionnaire. Additionally, respondents are easily confused when required to envision opposite conditions (functional and dysfunctional).

In attempts to overcome this problem, several researchers found that regression methods provided a better fit for attribute categorization (Busacca and Padula, 2005; Lin et al., 2010; Löfgren and Witell, 2008; Matzler et al., 2003; Ting and Chen, 2002; Vavra, 1997). The biggest operational advantage of these regression methods is that they apply data from attribute-level performance and customer satisfaction measurement, which are far easier to collect than answers to functional and dysfunctional questions suggested by Kano et al. (1984). The present study utilizes three of the methods that fall under the critical incident technique method including qualitative methods, penalty–reward contrast analysis (PRCA) and the importance grid method.