

A COMPARATIVE SURVEY OF PERFORMANCE MEASUREMENT TECHNIQUES FOR SERVICE PROVIDERS

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ABSTRACT

The increasing of importance of services is today the dominant trend in the global world. A main objective of the service industry is to develop profitable and long-term relationships with customers. Particularly, business services have been continuously growing as companies tend to focus more on their core competencies with less cost. Despite this benefit, they should be aware of associated risks. A particular risk that the companies often overlook is the assessment and assurance of service quality perceived from the providers. Although there are a number of tools for monitoring and controlling the providers' performance, most of such instruments have been originally developed on the basis of manufacturing industry rather than service industry. As such, this paper focuses on performance measures appropriate for service business. Strengths and weaknesses of the measure techniques are studied in order to obtain better understandings of their applications to b2b services. This research leads the industrial customers and providers to greater confidence in managing and sustaining their partnerships. It also provides researchers with better understandings of performance measurement in business service industry.

KEY WORDS

Service Quality, Performance Measurement and Gap Analysis

1. Introduction

Service business has become a main area not only for penetrating new markets but also for seeking competitive edge in today's marketplace. As such, service organisations pay more attention to improving service quality to enhance productivity and to reduce costs, as well as increasing customer loyalty, market share and profits [1] and [2]. Research on service quality has grown correspondingly, covering such aspects as the measurement of service quality and the relationship

between service quality and customer satisfaction. In spite of the quality of service, the service sector lags behind the manufacturing sector in embracing philosophies of quality management and continuous improvement. This paper might be part of a moment to address this challenge.

A primary aim of this paper is to study various service quality models and to discuss dimensions of service quality, providing a guideline for evaluating quality of service.

2. Definition of Service Quality

Service quality has been defined by a number of researchers and practitioners (e.g. [3], [4], [5], [6] and [7]) These definitions focus on meeting the customers' requirements, and how well the service delivered matches the customers' expectations of it. Expectations are "pre-trial beliefs about a product or service" [8]. Therefore, service quality can be defined as the discrepancy between what the customer feels a service provider should offer and his/her perceptions of what the service firm offers.

Unlike the manufacturing sector which can measure goods in a subjective way regarding their physical and technical specifications, the service sector has encountered challenges for controlling and improving quality of services because of their inherent characteristics. These particular characteristics include [9]:

- Inseparability of production and consumption: It arises from an involvement of consumer in the delivery process. This leads to co-creation of value. The consequence of this participation is that service companies should capture all factors of the operation which are vital to customer satisfaction.
- Intangibility: Many services are intangible. Therefore, it is difficult for the companies to describe service and for the customer to ascertain its likely virtues.

- Perishability: Services can not be stored in a period of time for consumption later on. This implies that the service providers have to get the service right first time and every time.
- Heterogeneity: It occurs in a consequence of explicit and implicit service elements, relying on individual preferences and perceptions [10].

According to the definition and characteristics of service, a measurement of service quality plays an important role for monitoring quality of service in order to meet the customer's requirements.

3. Models of Service Quality

Sustained and continuous improvement in service quality is not possible without measurements of quality. As such, many researchers and practitioners have developed service quality models. This paper reviews five conceptual models of service quality.

1.1 Technical and Functional Quality Model

Managing service quality requires the service provider to match the expected service and perceived service to each other so that customer satisfaction is achieved. The perceived service is a combination of three elements of service quality which are [11]:

- Technical quality: It refers to the quality of what the consumer receives as a result of their interaction with the service provider and is important to the customer and to their evaluation of the quality of service.
- Functional quality: It is how the customer gets the technical outcome. This is important to him and to his/her views of service he/she has received.
- Image: It is the result of an integration of technical and functional quality of service and other factors such as tradition, ideology, word of mouth and pricing. Although image is not considered as direct attribute of service, it is very crucial for the service firm to make an initial impression to their customers.

The service quality model has been constructed on the basis of these three service dimensions, as shown in Figure 1.

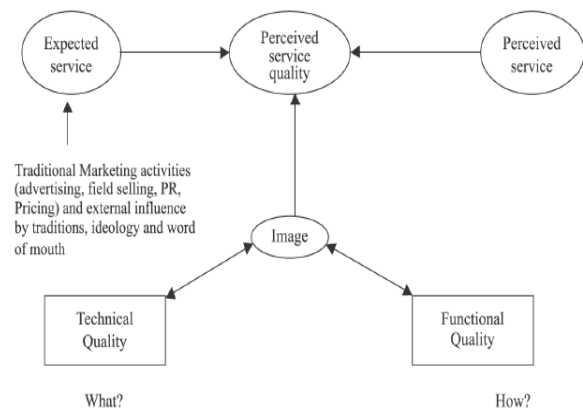


Figure 1: Service Quality Model [11]

Although this model describes the essential components of service quality, it does not explain how to measure functional and technical quality and corporate image.

1.2 Gap Model

Gap model has been developed on the basis of the differences between expectation and performance along the quality dimensions [12]. With gap analysis, a service quality model is constructed as shown in Figure 2. The gaps visualized in the model are:

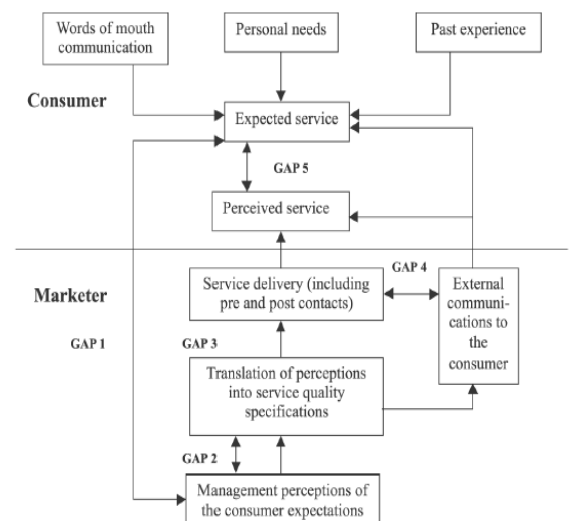


Figure 2: Gap Model [12]

- Gap 1: This is a discrepancy between executive perceptions and consumer expectations. In other words, the service firm executive do not know and understand what consumers expect [13].

- Gap 2: It is a difference between management's perceptions of consumers' expectations and service quality specifications. The consequence of this gap is that the company are unable to identify proper service-quality standards.
- Gap 3: Although the service quality standards are determined correctly, service quality may be destroyed by the firm's employees. This is a difference between the service quality specifications and service actually delivered, which is called the service performance gap.
- Gap 4: It is a discrepancy between service delivery and external communications to the customer about service delivery. The external communication can affect not only customer expectations about a service but also customer perceptions of the delivered service.
- Gap 5: It is a difference between customer's expectation and perceived service. This gap depends on size and direction of the four previous gaps inherent with the delivery of service quality.

With the gap analysis and service quality model, SERVQUAL which is a multiple-item survey instrument, was developed for measuring customer perceptions of service quality [14]. The instrument consists of 22 items which are categorized into five main dimensions of service quality. They are reliability, responsiveness, tangibles and assurance. Although SERVQUAL has become the quality measurement standard for service business, it has raised questions about the need to measure expectations, the interpretation and operationalisation of expectations, the reliability and validity of SERVQUAL's difference-score formulation and SERVQUAL's dimensionality (e.g. [15], [16], [17], [18], [19] and [20]). In particular, the first weakness has been widely criticised. As a result, a performance-based model (SERVPERF), which will be explained the next section, is an improved means of measuring the service quality in comparison with SERVQUAL scale.

1.3 Performance-Based Model

The performance-based model (SERVPERF) is an improved version of SERVQUAL which has been criticized with respect to the conceptualization and measurement of service quality and its relationship of customer satisfaction and behavioural intentions. SERVPERF explains that service quality is a form of customer attitude and the performance only measure of service quality is an enhanced means of measuring service quality [15]. This means that service quality is measured based only on customers' perceptions of the performance of a service provider [21]. This paradigm of service quality measurement has become a framework for

developing service quality models such as the ideal value model of service quality by [22] and the antecedents and mediator model by [23]. However, SERVPERF needs to be generalized for all types of service settings. It should also explain a quantitative relationship between customer satisfaction and service quality.

1.4 Antecedents and Mediator Model

The antecedents and mediator model, shown in Figure 3, is an extension of SERVPERF. The model tends to determine meaningful and actionable links between service quality, customer satisfaction, service process and service outcome [23]. It also examines two conceptual issues in service quality. They involve the relevant factors related to service quality better conceived as components or antecedents and the relationship between customer satisfaction and behavioural intentions [24].

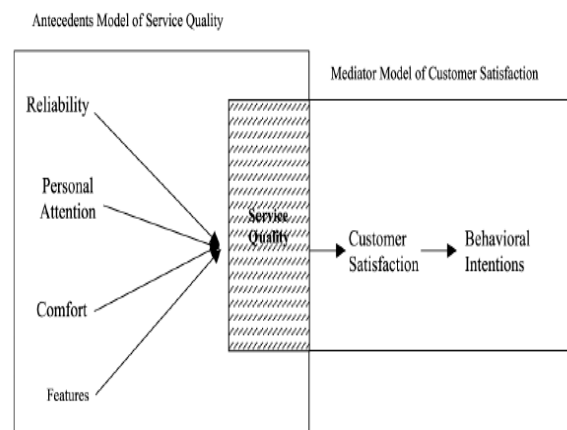


Figure 3: Antecedent and Mediator Model [23]

Although the model provides a deeper understanding of the components and links of service quality, it does not explain what antecedents of customer satisfaction are and how to measure actual behavior rather than behavioral intention presented in the model.

1.5 P-C-P Model

P-C-P model takes a form of a hierarchical structure of three attributes of service quality, Figure 4 [5]. These attributes include pivotal (outputs), core and peripheral.

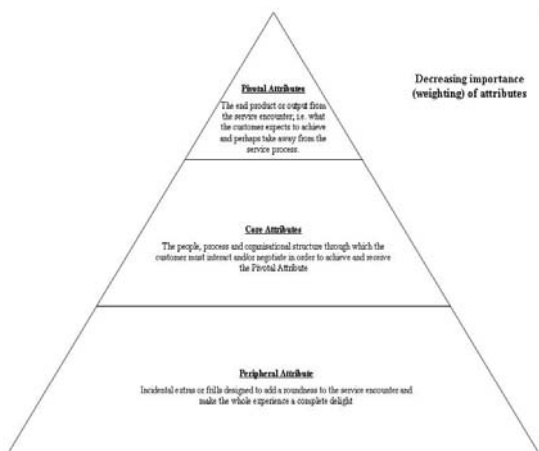


Figure 4: P-C-P Model [5]

- Pivotal attributes: they are defined as end product or output from the service. In other words, they are what the customer expects to receive when the service process is completed.
- Core attributes: they are described as the amalgamation of the people, processes and the service organizational structure through which the customer must interact so that they can achieve the pivotal attributes.
- Peripheral attributes: they refer to the incidental extras designed to add roundness to the service encounter and make the whole experience for the consumer a complete delight.

The model is similar to the systems model which consists of inputs, processes and outputs. However, it has never been empirically validated in any type of services. It is also lacking in providing general dimensions to three levels of attributes.

These five conceptual service quality models provide a comprehensive view of quality control of service. In addition to the frameworks for monitoring quality, the service companies need to identify indicators and dimensions of service quality.

4. Dimensions of Service Quality

Quality in a service organization is a measure of the extent to which the service delivered meets the customer's expectations. This implies that the perception of quality is influenced not only by service outcome but also by service process [25]. As such, the measure of service quality should capture significant dimensions of both process and outcome of service. There are a studies on

determinants of service quality, which are discussed in this section.

Sasser et. al. stated that there are seven attributes essential for service quality delivered [26]:

- Security: confidence as well as physical safety.
- Consistency: receiving the same each time.
- Attitude: politeness and social manners.
- Completeness: ancillary services available.
- Condition: of facilities (clean and comfortable)
- Availability: access, location and frequency.
- Training: propitious execution

In addition to these seven attributes, the authors stated that customers' perceptions of service quality are developed by making judgements of the service offered. These judgements are based on: one overpowering attribute, a single attribute which provide the others achieve a threshold minimum, or a weighted average of attributes.

Parasuraman et. al. identified ten service quality dimensions which were further refined into five main categories [14]:

- Tangibles: physical facilities, equipment and appearance of personnel.
- Reliability: ability to perform the promised service, along with dependability and accuracy.
- Responsiveness: willingness to help customers, and to provide prompt service.
- Assurance: knowing customers' needs, and being courteous and able to inspire confidence
- Empathy: caring individual attention.

These determinants are divided into 22 items, which are components of SERVQUAL. This has been treated as the base for examining the work of other researchers.

Haywood-Farmer also discussed a model of service quality which recognizes three distinct attributes [27]:

- Physical facilities and processes
- People's behaviour
- Professional judgement.

Each of these attributes is closely relevant to several of the dimensions recognized by Parasuraman et. al.

Lehtinena and Lehtinen also contend that service quality has three dimensions which are [28]:

- Physical quality: this includes such items as the condition of buildings and enabling equipment.
- Corporate quality: it refers to the organizations' image and profile
- Interactive quality: it derives from the interaction between service providers' personnel and the customer as well as the interaction between customers.

The authors argue that these three determinants of quality are the result of differentiation between the quality associated with the process of service delivery and the quality associated with the outcome of the service. Moreover, the dimensions seem to be similar to the three dimensions that Gronroos explained which are functional attribute, technical attribute and corporate image. They are also related to several of the dimensions identified by Parasuraman et. al.

Johnston et. al. also identified 15 dimensions of service quality which have been categorized into three main factors [29]:

- Hygiene factors: they refer to those factors which are expected by the customer and if they are not delivered will cause dissatisfaction.
- Enhancing factors: they are the factors which lead to customer satisfaction but where failure to deliver will not essentially cause dissatisfaction.
- Dual-threshold factors: where failure to deliver will cause dissatisfaction and delivery above a certain level will enhance customers' perceptions of service and lead to satisfaction.

These attributes of service quality are likely to be appropriate for service quality in the hospitality service industry particularly for hotel business.

The importance and utility value of each dimension of service quality is dependent on the nature of the service. Therefore, to identify suitable attributes of service quality requires service providers to have a comprehensive view of their service delivered, corporate strategy, goals and core competencies. This will enable the companies to match the customers' expectations with the customers' perceptions, eventually improving customer satisfaction.

5. Conclusion

Service quality has been increasingly recognized as a key factor in differentiating service products and building competitive advantage. As certain characteristics of service such as intangibility and perishability are difficult for controlling and measuring, the service providers have to ensure that approaches employed are appropriate for measuring the services offered. This is typically based on an analysis of the relationships between customer expectations of service and their perceptions of the quality of provision. The five conceptual service quality models, presented in this paper, particularly the gap model seem to be the widely accepted frameworks for the measurement of service quality. Additionally, the service companies should identify determinants and attributes of services delivered to their customers based on the nature of service. The widely accepted elements of service quality

include, for example, physical attributes, reliability, availability and responsiveness. With the quality control of service, the service companies are able to increase the customer satisfaction and customer loyalty as well as improving the business performance. Additionally, this will be a guideline for researchers to further explore and study an application of the measurement of service quality.

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