

LITERATURE REVIEW: SERVICE QUALITY IN EDUCATIONAL INSTITUTIONS

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Abstract

Service is an identifiable, intangible activity that is the main objective of transaction that serve to meet the needs of customers. Service quality is the ability of the organization to meet or exceed customer expectations. The SERVQUAL model and IPA (Importance Performance Analysis) could be adapted to study the service quality in the education industry. The SERVQUAL model compares the customers' expectation and perception of service in terms of tangible assets, reliability, responsiveness, assurance, and empathy. The IPA combines the perceived importance and perceived performance of the customers. The

SERVQUAL model has been widely used in the study of service industry in general and education service in particular. One area of interest is the service quality of the administrative units of private universities in Thailand.

1. DEFINITION AND DIMENSIONS OF SERVICE QUALITY

An all-embracing definition of service quality is notoriously difficult to produce (Parasuraman, Zeithaml, & Berry, 1985; Carman, 1990; Mattsson, 1994; Bolton & Drew, 1991). Parasuraman, Zeithaml, and Berry, (1985) described service quality as the ability of an organization to meet or

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exceed customer expectations. Sasser, Olsen, & Wyckoff (1978), listed seven service attributes which they believe adequately embrace the concept of service quality. These include:

- *Security* - confidence as well as physical safety;
- *Consistency* - receiving the same treatment for each transaction;
- *Attitude* – politeness;
- *Completeness* – the availability of ancillary services;
- *Condition* - of facilities;
- *Availability* – spatial and temporal customer access to services;
- *Training- of service providers*;

Gronroos (1991) held that service quality is made up of three dimensions: the “technical quality of the outcome”, the “functional quality of the encounter”, and the “company corporate image”. Lehtinen (1982) also described service quality in three dimensions: the “physical quality” (of products and/or services), the “corporate quality” (the company image) and “interactive quality” (interaction between the consumer and the service organization). These authors argue that in examining the determinants of quality, it is necessary to differentiate between quality associated with the process of service delivery and quality associated with the outcome of service, judged by the consumer after the service is performed.

Johnston, Silvestro, Fitzgerald, & Voss (1990), identify fifteen

dimensions of service quality categorized as “hygiene factors”, “enhancing factors” and “dual-threshold factors”. “Hygiene factors” are expected by the customer and dissatisfaction of customers would occur if they are not delivered. “Enhancing factors” will lead to customer satisfaction but will not necessarily lead to customer dissatisfaction if they are not delivered. Failure to deliver “dual-threshold factors” will cause dissatisfaction and will enhance customer’s perceptions of service and lead to satisfaction if they are delivered above a certain threshold.

Parasuraman Zeithaml and Berry (1985) list ten determinants of service quality that can be generalized to any type of service. The ten dimensions include:

- *Tangibles* - the physical evidence of the service, physical facilities, appearance of personnel, tools or equipment used to provide the service, other customers in the service facility;
- *Reliability* - consistency of performance and dependability;
- *Responsiveness* - willingness or readiness of staff to provide service;
- *Competence* - possession of the required skills and knowledge to perform the service by the contact personnel as well as operational support personnel;
- *Access* - approachability and ease of contact;

- *Courtesy* - politeness, respect, consideration, and friendliness of contact personnel;
- *Communication* - keeping customers informed in language they can understand;
- *Credibility* - trustworthiness, believability, and honesty;
- *Security* - the freedom from danger, risk, or doubt. (e.g. physical safety and confidentiality);
- *Understanding* - making the effort to understand the customer's needs.

These ten dimensions were regrouped in the well known five dimensions in the SERVQUAL model (Parasuraman, Zeithaml and Berry 1990) which include “tangible”, “reliability”, “responsiveness”, “assurance”, and “empathy”:

- *Tangible* - appearance of physical facilities, equipment, personnel, and communication materials;
- *Reliability* - ability to perform the promised service dependably and accurately;
- *Responsiveness* - willingness to help customers and provide prompt service;
- *Assurance* - knowledge and courtesy of staff and their ability to convey trust and confidence;
- *Empathy* – caring and individualized attention to the customer.

2. INSTRUMENTS TO MEASURE SERVICE QUALITY

Discussion of the SERVQUAL Model

Parasuraman, Zeithaml and Berry (1990) proposed to subjectively measure service quality by finding out the extent of discrepancy between customers' expectations or desires and their perceptions of the actual quality of performed service. Good service quality exists when customer expectations are met or exceeded and is studied in five dimensions as mentioned in the last section: tangible, reliability, responsiveness, assurance, empathy. The methodology of comparing customer's expectation and perception in five dimensions is the popular SERVQUAL (Danuta Ann Nitecki, 1996).

The discrepancy between customers' expectations or desires and their perceptions of the actual service performance was elaborated in the *Disconfirmation of Expectations Paradigm* (Patterson 1993) which related satisfaction to customer's pre-purchase expectations and perceptions of service performance and identified any difference as *Disconfirmation*. The comparisons which form the basis of the model are as follows:

Comparison Process

Result

- | | |
|---|-----------------------------|
| 1. Perceived Performance > Expectation: | High satisfaction (Delight) |
| 2. Perceived Performance = Expectation: | Merely Satisfied |
| 3. Perceived Performance < Expectation: | Dissatisfaction |

The publication of the first results of the SERVQUAL instrument provoked a debate on how best to measure service quality and in the subsequent decade there have been many attempts to demonstrate the efficacy of the SERVQUAL instrument. It is generally agreed, however, that SERVQUAL instrument is suitable for measurement of service quality because it measures key aspects of service quality. Asubonteng (1996), moreover, claims that SERVQUAL is popular with managers because it combines ease of application and flexibility. Managers know that results obtained using the model are probably not objective truth but that they help identify the direction in which the firm should move.

Some researchers have, however, suggested that SERVQUAL model also has weak points both theoretically and operationally. SERVQUAL's five dimensions may not cover all service aspects of the organization and are not universals. The number of dimensions comprising service quality is contextually determined; Babakus and Boller (1992) suggested that the number of service quality dimensions is dependent on the particular service being offered. Andersson (1992) pointed to SERVQUAL's failure to

draw on previous social research, particularly economic theory, statistics, and psychological theory.

The methodology of comparing the gap between expectation and perception has also attracted criticism. Cronin and Taylor (1992; 1994) argued that SERVQUAL is paradigmatically flawed because of its ill-judged adoption of the disconfirmation model. Babakus and Boller (1992) found that the use of a "gap" approach to service quality measurement is "intuitively appealing", they suspected that the "difference in scores does not provide any additional information beyond that already contained in the perception component of the SERVQUAL scale". They found that the dominant contributor to the gap score is the perception score.

Lewis (1993) criticized the use of a seven-point Likert scale for its lack of verbal labeling for points two to six which may cause respondents to overuse the extreme ends of the scale. Babakus and Mangold (1992) suggested using five-point Likert scale on the grounds that it would reduce the "frustration level" of respondents and increase response rate and quality. The double administrations of perception

and expectation questionnaires may lead to boredom and confusion (Bouman & Van Der Wiele, 1992) and may also be deemed too time consuming (Carman, 1990).

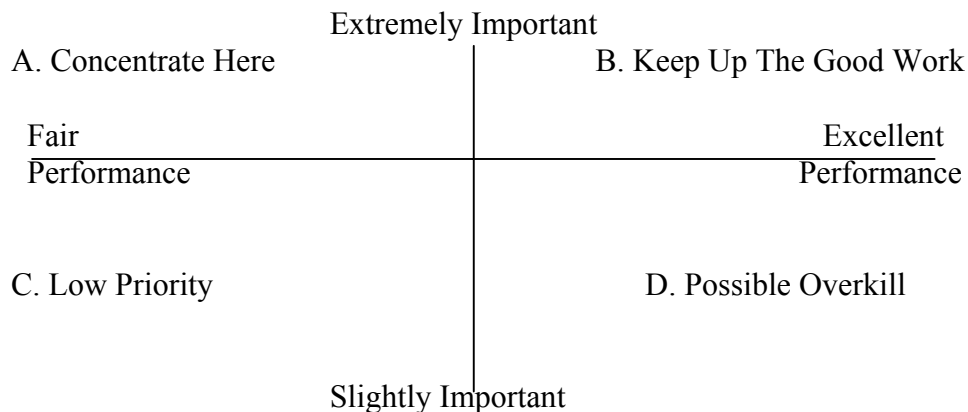
Discussion of the Importance-Performance Analysis (IPA) technique

The Importance-Performance Analysis conceptually rests on multi-attribute models. This technique identifies strengths and weaknesses of a market offering in terms of two criteria that consumers use in making a choice: the relative importance of attributes and evaluation of the offering in terms of those attributes. A particular application of the technique starts with an identification of the attributes that are relevant to the choice situation being investigated. The list of attributes can be developed after canvassing the relevant literature, conducting focus group interviews, and using managerial

judgment. Otherwise, a set of attributes pertaining to a particular service (or goods) are evaluated on the basis of how important each is to the customer, and how the service or goods is perceived to be performing relative to each attribute.

By using a central tendency (e.g. mean, median or a rank-order measure) the attribute importance and performance scores are ordered and classified as high or low; then by pairing these rankings each attribute is placed into one of the four quadrants of the importance performance grid (Crompton and Duray, 1985). Mean performance and importance scores are used as coordinates for plotting individual attributes on a two-dimensional matrix as shown in Figure 1. This matrix is used to prescribe prioritization of attributes for improvement (Slack, 1991) and can provide guidance for strategy formulation (Burns, 1986)

Figure 1. The Original IPA Framework



The traditional importance-performance analysis, however, has two inherent weaknesses. First, while the technique considers an object's own performance in terms of a particular attribute, it ignores its performance relative to competitors (Burns, 1986). Second, while the technique takes into account attribute salience (i.e. importance), it does not recognize the determinance of an attribute. Determinant attributes are those that discriminate well among competing products (Engle & Blackwell, 1990) and directly influence consumer choice. An attribute, say price, may be very salient to consumers, but if the consumer feels that alternative products are about the same price, then price is not a determinant attribute. Hence, solely focusing on salience at the expense of determinance may misguide strategy.

A modified IPA model might, however, be constructed on the basis of comparing perceived performance and the importance of each service attribute of the five dimensions of the SERVQUAL model.

3. SERVICE QUALITY IN EDUCATION INDUSTRY

Customers of Education Industry

Griffin (1996), defined a customer as anyone who pays money to acquire an organization's products or services. Stanton, Etzel, and Walker (1994)

suggested that customer is the individual or organization that actually makes a purchase decision, while a consumer is the individual or organizational unit that uses or consumes a product. In education students are customers who come to contact with service providers of an educational institution for the purpose of acquiring goods or services. Hill (1995) mentioned that as a primary customer of higher education services, the student should focus on expectations. Waugh (2002), however, suggested that viewing students as customers created some tensions in universities by making universities seem to be too aligned with businesses. Some researchers also view academic faculties as customers of university administration. Pitman (2000) examined the extent to which university staff perceived students and academics as customers in Australia.

Although the primary participant in the service of education is the student, there is also a strong underlying assumption that the "customer" of education includes industry, parents, Government, and even society as a whole. The link between satisfaction, payment, and repeat custom is much less direct in education industry, and the simple approach of only considering the bottom line is not available even if it were acceptable.

Service Quality in Universities

It is also interesting to note the application of SERVQUAL to

education, for example, to business schools (Rigotti and Pitt, 1992) and higher educational institutions (Ford et al., 1993; McElwee and Redman, 1993). The extent to which students perceive the level of service performance meets their expectations reflects the quality of service (Zammuto *et al.*, 1996). It was found that perceived poor service quality will ultimately affect funding and viability in the university sector by reducing the popularity of the institution and thus the number and standard of applicants, but that the effect is indirect and relatively slow. Nonetheless, dissatisfaction expressed by the direct users of the service, students, will have an effect. Student dissatisfaction, if on a sufficient scale, will result in reduced applications in subsequent years as the reputation for poor quality increases, even though existing students are likely to be constrained to remain.

The earlier researches on service quality in higher education emphasized academic more than administration, concentrating on effective course delivery mechanisms and the quality of courses and teaching (Athiyaman, 1997; Bourner, 1998; Cheng and Tam, 1997; McElwee and Redman, 1993; Palihawadana, 1996; Soutar and McNeil, 1996; Varey, 1993; Yorke, 1992). The measurement of service quality of courses and programmes often rely on research instruments (e.g. student feedback questionnaires) devised by representatives of the higher education institutions. Kamal and

Ramzi (2002), however, attempted to measure student perception of registration and academic advising across different faculties and other administrative services to assure positive quality service that complements the academic.

There are many reasons for focusing the administrative service quality in a university (Anderson 1995): The first exposure of the student to the university is through the admission and registrar's services so providing high quality service to students contributes to the positive assessment of the university. Compared with the academic units, the administrative departments of the university, such as the registration office, financial office or library, are more likely to be a replication of the bureaucratic units of governmental or public institutions (Salem, 1969). While registration in the Western universities has rapidly adopted the banking touch-tone telephone systems, universities in developing countries attempt to struggle with bureaucracies and inefficient infrastructure; hence registration remains tied to a traditional manual process (Spencer, 1991).

4. RELEVANCE TO HIGHER EDUCATION IN THAILAND

Globalization and information technology have brought challenges to educational institutions in Thailand. The education service providers are

facing with an increasing competition as more new programs offered, new delivery means of the existing program (i.e. distant learning or e-learning) are introduced, new institutions are established (both public and private), and new foreign entities enter the market. With this, service quality perceived by students becomes one of the key success factors.

There are 26 private universities which serve 207,136 students in Thailand (MUA. Annual report, 2002). Some have been established for over 25 years and have become full-fledged universities with their own undergraduate, Master and Ph.D. programs while others have been established more recently. The private universities do not have the government funding and must be more student-oriented, must have strong service quality and high academic standard.

A student orientation strategy calls for a study on service quality based the SERVQUAL and IPA models. What is the expectation of the students? What are their perception of service quality? Is there a gap between the expectation and perception? How can the students be provided with reliable, responsive, assured and friendly service in an enjoyable environment? The SERVQUAL model and the Importance- Performance Analysis (IPA) reviewed above provide an important theoretical foundation for answering these questions.

Although the relevance of the five dimensions to the education service may be examined and reestablished through qualitative research, a guiding framework of quality attributes could be developed based on the SERVQUAL model. The five attributes of the model, however, may be redefined to enhance its relevance to the education service: Reliability: the institutional arrangements (e.g. policy and structure) to deliver the services promised; Assurance: the capability of the academic and support staff; Responsiveness: the ability to update, adjust or customize the contents and delivery within a particular context; Empathy: a caring and student centered soft environment; Tangible: appropriate physical infrastructure.

The SERVQUAL model compares the two static statuses (expectation and perception). The quality generation and assurance of education service is, however, a more dynamic process. The five attributes of service quality may therefore be integrated into an input-process-output framework. The quality of the output depends on the quality of input and the quality control of the process by the educational institution.

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