

# SERVICE QUALITY AND PROPERTY MANAGEMENT SERVICE: A CONCEPTUAL FRAMEWORK

Zarita Ahmad Baharum<sup>1</sup>, Abdul Hadi Nawawi<sup>2</sup>, Zainal Mat Saat<sup>3</sup>

<sup>1,2,3</sup>*Department of Estate Management, Faculty of Architecture Planning & Surveying, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia*  
zarit928@salam.uitm.edu.my

## ABSTRACT

The purpose of this study is to develop a service quality framework for property management service using gap analysis, a model that offers an integrated view of the consumer-company relationship. Integrating the SERVQUAL instrument and other work in the service quality literature, this paper develops a conceptual model for understanding the interactions between tenants' satisfaction and property management. This conceptual paper develops three constructs: functional, technical and image, which are very important in delivering quality service. The proposed model links these three constructs with 11 dimensions of service quality. It is not an empirical investigation of tenants' satisfaction. The paper does not review in detail the impact of the three constructs on property management services. The proposed model will provide valuable insights about the interactions between tenants' satisfaction and property management services. This paper provides an important conceptual framework for evaluating the relationship between tenants' satisfaction and property management.

**Keyword** Service quality, tenants' satisfaction, property management, purpose built office buildings.

**Paper type** Conceptual paper.

## 1. INTRODUCTION

Service quality is an abstract and elusive concept because of the well-known distinctive features of services – intangibility, perishability, heterogeneity, and inseparability of production and consumption (Parasuraman et al, 1985). It is due to these features that definition of quality can vary from person to person, and from situation to situation (Kandampully, 2002). The roots of the service quality research reside in early conceptual work from Europe such as Lithenen & Lithenen (1982), Gronroos (1998); Americans such as Parasuraman, Zeithaml and Berry (1985, 1988), as well as customer satisfaction theory.

The notion that service quality is a function of the expectations-performance gap was reinforced by a broad-based exploratory study conducted by Parasuraman et al (1985). Based on this study, Parasuraman et al defined service quality as the degree and direction of discrepancy between customers' service perceptions and expectations. Delivering consistently good service quality is difficult but profitable to service organizations (Parasuraman et al, 1991).

## 2. THE IMPORTANCE OF SERVICE QUALITY RESEARCH

Customer satisfaction, combined with product and service quality, has been one of the most powerful marketing tools. Companies are striving to deliver to their customers not only their products and services, but also 'quality' and 'satisfaction' that may lead to increased economic returns on investment. This

industry-wide effort to deliver exceptional product/service quality and total customer satisfaction continues to intensify in the marketplace as it is directly connected to the survival of the company. Customer satisfaction and service quality is emerging as the single most powerful tool for achieving and sustaining a competitive advantage (CEL and Associates, 1996; Dean and Lee, 1998; Kandampully, 2002), as determinant of business success and failure (BOMA, 1998) and as a barometer of corporate performance (Patrick et al, 1996).

In the property industry, customer service and satisfaction have also become the management buzzwords (John, 1992). Quality service, unlike pricing or cost differentials, wins customers and clients for life (CEL and Associates, 1996). Therefore, service is now the criterion upon which the clients, customers, and users of real estate products and services differentiate one organization from another. The goal of leading real estate firms is to build customer's and client's loyalty through excellence and to secure new customers and clients because of service excellence.

### 3. SERVICE QUALITY RESEARCH

#### 3.1 Across industries

Since the introduction of the SERVQUAL, it has become the favourite, the most adopted, the best service quality measurement applied across industries and nationwide. Appendix 1 highlights the various studies that were carried out in a diverse range of industries. The majority of studies support the applicability of the SERVQUAL instrument as the only tool that has been tested statistically in terms of validity and reliability, for measuring service quality. Appendix 1 shows research of service quality nationwide and across 23 industries. This confirms that it is the most researched area in marketing.

#### 3.2 Service quality research in property industry

Service quality research in the property industry is very limited. To date there are six service quality researches as shown in Table 1 below and they are all in the estate agency services. In contrast with the table in Appendix 1 of service quality research across industries, this supports the much needed research of service quality in the property management services as none has been done so far, particularly in property management service in Malaysia.

**Table 1: Service Quality Research in Real Estate**

	Year	Author(s)	Title
1	1988	Johnson, Linda L.; Dotson, Michael J.; Dunlap, B.J.	Service Quality Determinants and Effectiveness in The Real Estate Brokerage. <i>Journal of Real Estate Research</i> , Summer88, Vol. 3 Issue 2, p21, 16p
2	1994	Mc Daniel, J., Lourgand, Marc A	Real estate brokerage service quality: An examination. <i>The Journal of Real Estate Research</i> 9(3): 339, 12 pgs.
3	1995	Nelson, Susan Logan; Nelson, Theron R.	RESERV: An Instrument for Measuring Real Estate Brokerage Service Quality. <i>Journal of Real Estate Research</i> , 1995, Vol. 10 Issue 1, p99, 15p;
4	2000	Seiler, Vicky L.; Webb, James R.; Whipple, Thomas W.	Assessment of Real Estate Brokerage Service Quality with a Practicing Professional's Instrument. <i>Journal of Real Estate Research</i> , Jul-Oct2000, Vol. 20 Issue 1/2, p105, 13p,
5	2004	Teoh Poh Huat	Measuring Service Quality Using SERVQUAL: Findings and Insights from an Exploratory Study in the Malaysian real estate Agency Business. <i>Unpublished dissertation DBA</i>
6	2005	Pratibha A. Dabholkar, Jeffrey W. Overby	Linking process and outcome to service quality and customer satisfaction evaluations: An investigation of real estate agent service <i>International Journal of Service Industry Management</i> ; Volume: 16 Issue: 1; 2005 Research paper

### **3.3 Service quality research in Malaysia**

Service quality and gap analysis in Malaysia is still not fully researched. Appendix 2 summarises the studies done in Malaysia by years and industries, for example, banking, public services (road transport as well as telecommunications), telemarketing, hospitals, higher education, tourism, and hospitality to name a few.

There are 14 service quality studies that had been conducted in Malaysia between 1997 and 2005. The instrument used to measure service quality was mainly SERVQUAL, for example, Sharifuddin (1997), Ismail and Khatabi (2002), Mohd Kasim and Bojei (2003), Sohail (2003), Teoh (2004), Che Ros et al (2004), Ding (2004), Ashroff (2005), and Pei et al (2005). Only three studies, Ahmad and Haron (2002), Fadzly and Ahmad (2004), and Wai-Ching and Lock K (2005), used their own instrument. In regards to the added dimensions in the instrument, only Ismail and Khatabi (2002) and Che Ros et al (2004) attempted to include other dimensions besides the five dimensions of SERVQUAL; reliability, assurance, tangible, empathy and responsiveness. Most of the studies are quantitative studies except for Che Ros et al (2004) where there is a combination of quantitative and qualitative study.

Of the 14 studies listed, none of them covered the property management services in Malaysia. Thus, this study may extend the literature of research of service quality in the property management services, particularly in Malaysia. In addition, this study will utilise a triangulation or mixed methodology, a combination of quantitative and qualitative research design. The researcher will also adopt a modified SERVQUAL as the instrument to measure the perceived service quality in property management services.

## **4. PROBLEM STATEMENT**

Property management is a very demanding and challenging profession. It involves organizing an efficient system as well as directing, coordinating and controlling all the skills available towards maximizing income from a property and at the same time ensuring maximum protection of its fabric from deterioration and wastage through proper upkeep and maintenance (Chin, 1986). The duties and responsibilities of the Property Manager vary and can include (Kyle et al, 1999); (1) marketing and keeping the property leased, (2) lease management includes the renting of the property, lease accounting and handling any related court cases, (3) collection of property income, (4) financial reporting and (5) maintaining the physical integrity.

The primary roles, responsibilities and expectations of property managers have changed dramatically through the years due to the fact that tenants have become more demanding and the business environment has become increasingly competitive. Moreover, office building has become even more sophisticated with applying high technology – and this requires a very knowledgeable manager to manage it effectively and efficiently. These have also made the property management profession a rapidly growing profession, attracting many new entrants into the market (Chin & Poh, 1999). Therefore, in order to remain competitive, property managers must listen and respond to tenants' needs, concerns and expectations, as well as opinions, and use this information to quantify their performance and compare them with best practice (Muhlebach, 1998).

A study on the status of property management practice in Malaysia shows that only 30% of the property managers use quality as their management tool. It also shows that property managers have focused only on those performance variables that can be easily and readily available, for example, the investment based performance measurement and the occupancy cost performance (Zarita et al, 2004). That is basically the reason why property management industry is very slow in adopting such measure. The property managers have been forced to measure end results as opposed to the incremental processes that actually combine to make up the end result. These measurements tend to explain 'what' but provide little insight into the 'why'. As a result, managers can only hypothesize or guess the actual cause (Schwenker, 1999). Thus to answer the 'why', the property managers need to focus on customer based performance measurement in order to set themselves apart from their competitors (Muhlebach, 1998). This is essential in order to attract and retain tenants as well as implementing benchmarking policies that will enable them to effectively compete in the marketplace.

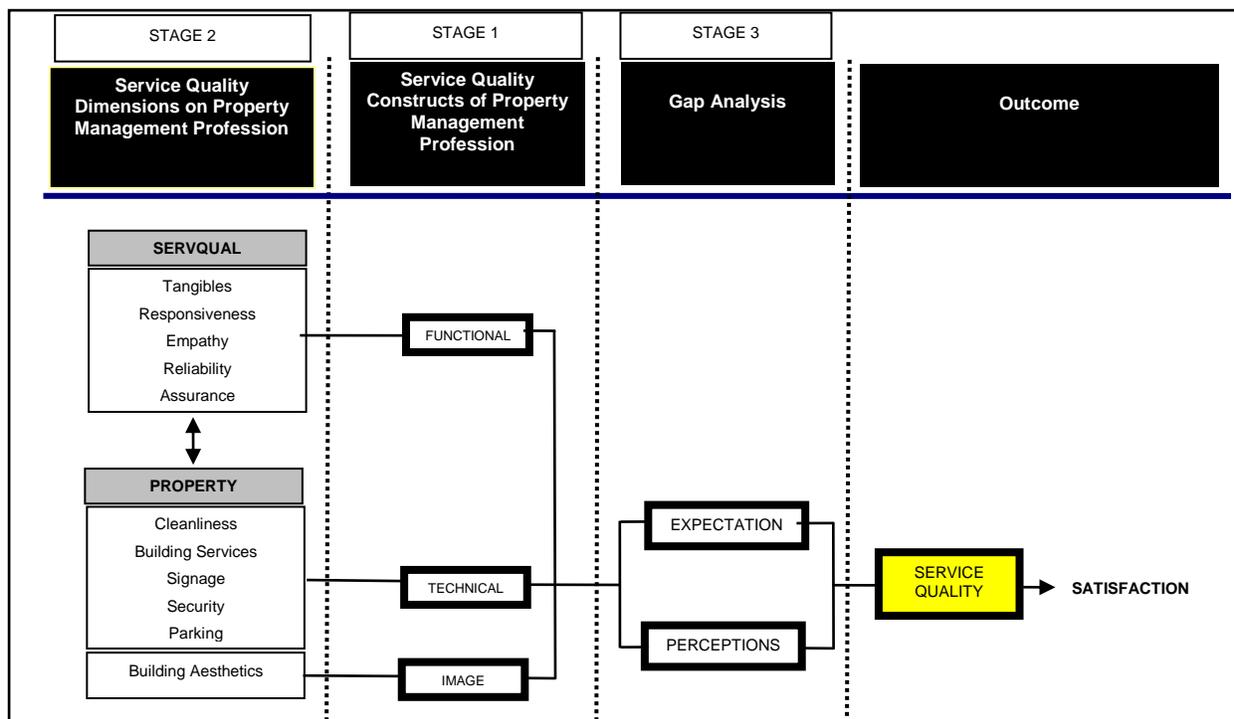
## 5. OBJECTIVE

The aim of this paper is to propose a conceptual framework for assessing service quality in property management of purpose built office buildings in Malaysia.

## 6. THE CONCEPTUAL FRAMEWORK OF SERVICE QUALITY FOR PROPERTY MANAGEMENT SERVICES

The conceptual framework will provide the researcher with a guide on how to develop the service quality instrument that will be implemented in this study. The development of framework has to start from an initial idea and concept. In the case of implementing service quality, one can start by trying to analyse the range of options available such as the development of service quality dimensions as well as the existing models of service quality. In addition, the researcher has also looked at the service quality dimensions from various studies. These are the important elements that describe service quality for a particular industry. Service quality is multidimensional (Parasuraman et al, 1985) and a very complex phenomenon (Gronroos, 1998). Thus the purpose here is to identify the most suitable construct and dimensions of service quality to describe the construct for property management services.

The service quality framework for property management services is illustrated in figure 1 below.



**Figure 1:** Service Quality Framework for Property Management Services

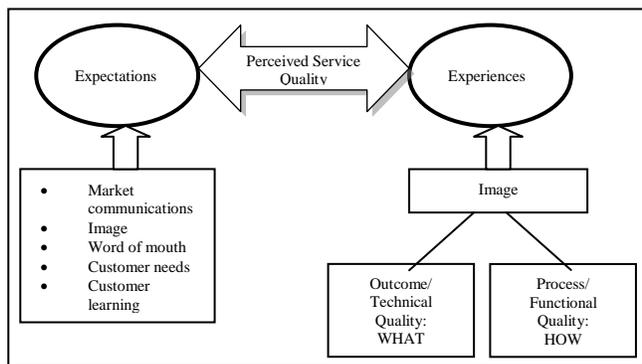
There are three stages in the framework development which are explained in the following sections.

### 6.1 The First Stage

The first stage explains the constructs of property management service. There are three constructs that explain property management service quality; (i) functional which represents element/service judged before (five dimensions), (ii) technical represents element/services judged during (five dimensions), and (iii) image represents the additional elements which is the building aesthetics (one dimension).

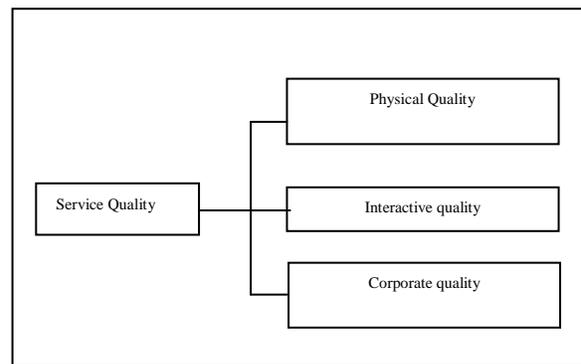
Models help us understand the complexity of service quality. There have been many models presented by researchers in other industries, however, due to different circumstances, type of industries, etc. understanding and dimensions are very specific and they vary from one industry to another. There has been no evidence of a conceptual framework used in the study of service quality in property management services to date. Therefore, it is the contribution of this study to develop a conceptual framework and instrument of service quality for property management services.

There are five distinct models concerning the nature of service quality. First, an early foundational model: The Perceived Service Quality Model developed by Christian Gronroos in 1982. Secondly, Lehtinen's service quality model. Thirdly, an evolutionary form of the Gronroos model, the Gap Analysis Model developed by V. A. Zeithaml, A. Parasuraman, and L. Berry in 1988, and the resulting SERVQUAL instrument which is widely used across industry to understand and improve the quality of service industry. Gronroos (1988) and the work on SERVQUAL (Parasuraman et al, 1988) support the notion that quality evaluations as perceived by customers stem from a comparison of what the customers feel that the organisation should offer (i.e. expectation) and their perceptions of the performance of the organisation providing the service. Fourthly, Rust and Oliver's three dimensional model (1993), and lastly, multilevel models by Brady and Cronin (2001).



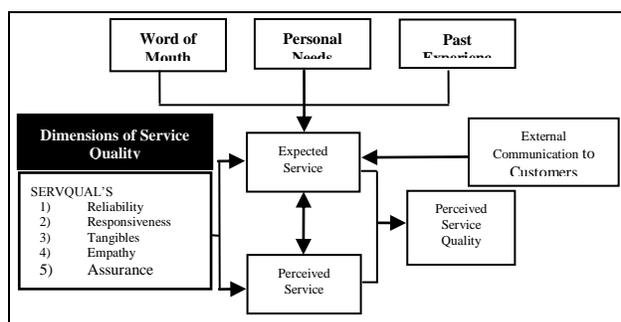
(Source: Gronroos, 1998)

Figure 2: Gronroos' Perceived Service Quality model



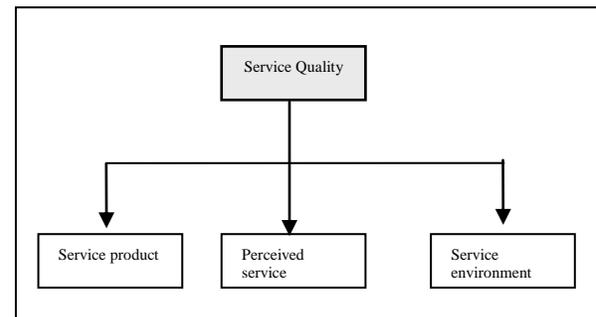
(Source: Lehtinen & Lehtinen, 1991)

Figure 3: Lehtinen's service quality model



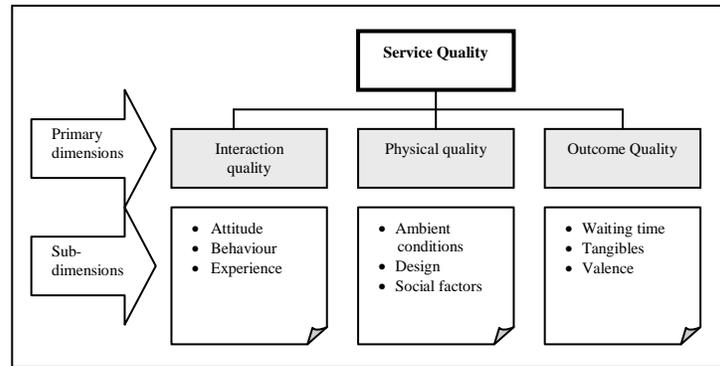
(Source: Parasuraman et al, 1985)

Figure 4: The Gap Model



(Source: Rust and Oliver, 1994)

Figure 5: The three-dimensions of service quality model.



(Source: Brady & Cronin, 2001)

**Figure 6:** A Hierarchical model of perceived service quality

For the purpose of this study the researcher has tabulated a comparison of the various studies aimed at examining the constructs or patterns used from previous studies (Table 2). As shown out by Asubunteng et al (1996), it is important to measure customer perceptions of quality *before* and *after* the quality action was taken to see if the goal had been achieved. Lehtinen and Lehtinen (1991) also reported that in examining the determinants of service quality it is necessary to differentiate between the quality associated with the *process* of service quality and the quality associated with the *outcome* of the service. What Asubunteng et al (1996) mean by *quality before* is that the quality associated with the process of the service by Lehtinen and Lehtinen (1991), and *quality after* the service is the quality associated with the outcome of the service by Lehtinen and Lehtinen (1991).

**Table 2:** Summary of the Constructs from the Service Quality Model by various researchers

Studies	Construct	Quality before	Quality after the action	Additional
Lethinen & Lethinen (1983/1991)		Process quality	Output quality	Corporate quality
Gronroos (1988/1998)		Functional quality	Technical quality	Image
Parasuraman et al (1985)		Process quality	-	-
Rust & Oliver (1994)		Perceived service	Service product	Service Environment
Cronin & Brady (2001)		Interaction quality	Outcome quality	Physical quality

Thus, although the terminology used by Asubunteng (1996) and Lehtinen and Lehtinen (1991) was different the meaning is the same. Hence, for the purpose of this study, the researcher will use the terminology *before and after the quality action* to tabulate the constructs from other studies. The rationale behind this is services are very subjective in nature and the production and consumption activities take place simultaneously. This is where the interaction occurs between the service provider and the customer. Critically, this interaction will have an impact on the perceived service.

Gronroos (1990) suggested that the quality of a service as it is perceived by customers has two dimensions; technical or outcome/what dimension and a functional or process/how-related dimension. For example, in the property management services, the tenants will be provided a space for their business, facilities and amenities in the buildings, a café, mini-market, etc. All of these *outcomes* of service processes are obviously part of the quality experience. This dimension is also known as output quality (Lehtinen & Lehtinen), technical quality (Gronroos, 1988, 1998), service product quality (Rust and Oliver, 1994) and outcome quality (Cronin and Brady, 2001).

What tenants receive in their interactions with the property management company is clearly important to them and their evaluation of service quality. However, this will only cover one service quality dimension, called *technical quality of the outcome* of the service production process. Gronroos (1990) reported that it is what the customer is left with, when the service production process and its interactions

are over. This dimension can be measured relatively objectively by customers, because of its characteristics as a technical solution to a problem.

The tenants will also be influenced by the way, in which *the outcome/what* quality – the end result of the process – is transferred to him. In addition, the tenant's view of services is also influenced by the appearance and behaviour of the property management staff, repairmen, and service and maintenance technicians, how the tasks are performed, what they say, and how they do it. Thus the tenant is also influenced by how he receives the service and how he experiences the simultaneous production and consumption processes. This is another service quality dimension which is closely related to the way service is delivered or taken care of and how the service provider functions.

This is also known as *Functional Quality of the process or process/how* quality. The functional quality dimension cannot be evaluated as objectively as the technical dimension; frequently it is perceived very subjectively (Gronroos, 1990). This dimension is also known as process quality (Lehtinen and Lehtinen, 1983; 1991; Parasuraman et al, 1985), functional quality (Gronroos, 1988, 1998), perceived quality (Rust and Oliver, 1994) and interaction quality (Cronin and Brady, 2001).

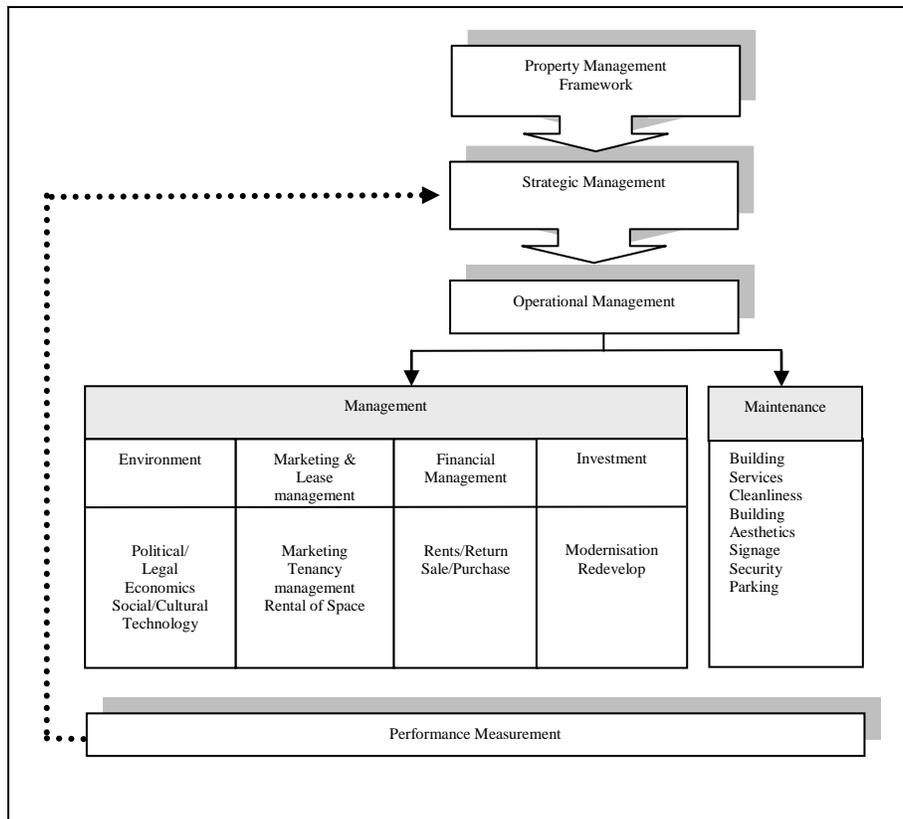
The synthesis in this research will adopt the above suggestions by the abovementioned authors which show that there are three contributing factors or constructs that are significant in any models namely, construct that is judged before the service, construct judged after the service, and other additional constructs (if any). Although different researchers will use different terminology to name their constructs they carry the same purpose. Moreover, the synthesis suggests that each of the models consists of at least one for each purpose before and after the service and additional construct to further explain the model in order to fit the industry understudy. Interestingly, the model by Parasuraman et al (1995) consisted only of one construct and this is in agreement with Kang and James (2004) but the advantage is that they have developed a well-accepted Gap Model together with the SERVQUAL instrument.

Kang and James (2004) argue that SERVQUAL measurement of service quality does not explicitly reflect both dimensions i.e. technical and functional but it only focuses on process or functional dimension. Their argument behind this depends on the timing of the evaluation. For functional quality, the evaluation occurs while the service is being performed. For technical quality, evaluation happens after service performance and focuses on 'what' service is delivered. This is also consistent with Gronroos (1990) and Mangold & Babakus (1991) that the dimensions of SERVQUAL are related to process or functional or what perceived service quality is. However, of all the service quality models developed, the one developed by Parasuraman et al (1985, 1988) is the favourite, the most adopted, cited, and most influential model across industries and nationwide. It has also been labeled as the best service quality measurement (Gronroos, 1998).

Generally, it is well accepted that service quality is an elusive, indistinctive, and a multidimensional, and therefore it gives rise to a complex phenomenon; and above all, multi-attribute constructs (Parasuraman et al, 1998, 1988; Gronroos, 1990; Cronin and Taylor, 1992; Ghobadian et al, 1994). Thus the purpose of this comparison is basically to identify the right construct that will fit the research understudy, in this case, the property management services.

In the property management services, property or building that is occupied by tenants represents the technical/outcome quality dimension. On the other hand, the property management company that provides the management and maintenance services of the buildings represents the functional or process dimension. This is consistent with the property management framework in Figure 3. Operational property management consists of two main tasks (1) the management, and (2) the maintenance. The management involves all the coordination work, supervision and other management tasks, also termed as process, whereas, maintenance involves the outcome of the physical product which is property or building.

Thus based on the above comparison and discussion, it can be concluded that a service quality model should at least consist of two constructs which are judged before the service or process quality and judged after the service or technical quality. Any additional constructs can be added according to their relevance to the industry understudy.



**Figure 7: The Framework of Property Management**

## 6.2 The Second Stage

The second stage is the dimension of service quality for the property management services. For the purpose of this study the dimension is divided into two groups, the SERVQUAL and the property dimensions. The SERVQUAL is used in this framework to demonstrate that this study is a modified SERVQUAL which had been developed by Parasuraman et al (1985, 1988). The purpose of this modification is to reflect the industry or service understudy or particularly the property management service.

All the service quality dimensions by various authors above have been tabulated and categorised according to their definitional information. Table 3 below shows the summary of the dimensions.

Scheider and White (2004) argued that many of these differences might be due in part to changes that the researchers make to a particular survey, for example, adding or rewording items, changing response scales or the way they analyse the data, for example, using different factor analysis methods. The dimensions proposed by Gronroos (1988) are similar to those represented in the SERVQUAL typology (Scheider and White, 2004). Both (i.e. Parasuraman and Gronroos) have the dimensions of (i) reliability, (ii) the themes of trusting in the organisation and (iii) the knowledge of its people to deliver quality service. These are represented in Gronroos's Reputation/credibility and Professionalism/skills dimensions and can be found in SERVQUAL dimension of Assurance. In addition, the Gronroos's Attitudes and Behaviour dimension reflects the same idea of caring for the customer that is seen in SERVQUAL's Empathy dimension. However, while SERVQUAL covers the issue of convenient operating hours (under the empathy dimension), it does not focus as much attention on it as Gronroos's dimension of Accessibility and Flexibility. Elements of Gronroos's fifth dimension of Recovery can be seen in the SERVQUAL dimension of Responsiveness, focusing on responding to customer's problems and complaints

**Table 3:** Service quality dimensions – a comparison between various researchers

Sasser (1978)	Parasuraman et al (1985)	Parasuraman et al (1988)	Gronroos (1988)	Johnston (1995)
Condition	Tangibles	Tangibles		Aesthetics Cleanliness/ tidiness Comfort
Consistency Completeness	Reliability	Reliability	Reliability and trustworthiness	Reliability  Commitment Functionality
Availability Timing	Responsiveness	Responsiveness	Recovery	Responsiveness Availability Attentiveness/ helpfulness
Security Attitude	Competence  Courtesy Credibility Security	Assurance	Reputation and credibility Professional and skills	Competence  Courtesy Integrity Security
	Access Communication  Understanding/ knowing the customer	Empathy	Attitudes and behaviour Accessibility and flexibility	Access Communication  Care  Friendliness Flexibility

Dimensions proposed by Sasser and Johnston also fit well to the ever favourite dimensions of Parasuraman et al (1985, 1988). Although Johnston’s service quality dimensions look comprehensive, the synthesis shows that it is actually an elaboration of what has been put forth by previous researchers especially Parasuraman et al (1995, 1998). Johnston’s study is meant to elaborate on the industry understudy so that it will be as comprehensive as possible. This is supported by Rosen and Karwan (1994) that the dimensions of service quality do vary by service setting.

According to Gronroos (1988), in order to make a list of determinants or factors of good quality useful for managerial purposes, it has to be short enough, but still provides a comprehensive list of aspects of good quality. Therefore, for the purpose of this study the researcher has chosen Parasuraman’s et al (1988) i.e. the five service quality dimensions as the most relevant for this study because they fit with the suggestion made by Gronroos (1988), that the quality dimensions have been developed specifically for services, and the dimensions are derived from empirical studies and statistical analysis. Furthermore, the five dimensions are comprehensive to measure the one aspect of service quality which is the **functional or process** in the property management services. Another advantage is that the dimensions come with the SERVQUAL instruments.

*Physical evidence and property management services*

Physical evidence is important in property management services. This is due to the fact that tenants not only interact with the management but at the same time they have to stay in a building for hours due to the working hours imposed on them. Thus tenants will usually find other elements that can be seen or experienced (physical environment) that influence their perception of service quality in the property management services. These elements somehow or rather have connection with the service delivered to them. It is no doubt in the property management services, these elements are related to property maintenance which includes cleanliness of the building, building services, security, signage, etc. Hence, the task now is to identify the property dimensions or the technical construct for the framework.

Service quality research in property management services is very limited. However, there are studies that have looked at tenant satisfaction of purpose built office buildings such as, Birkeland and Bettini (1995), Leifer (1998), BOMA (1999), NRESC (2000), Kingsley (2002), and RICS (2005). The purpose of this section is to look at various studies in property management that have the similarity to the researcher’s study.

Birkland and Bettini (1995) and Kingsley (2002) focused on detailing the impact of property management service on tenant retention. Leifer (1998) on the other hand, studied the office user satisfaction, however, his study is too individualised rather than looking at the overall satisfaction and service quality of office tenants. BOMA (1999) research aimed at understanding the desires vs. the actual needs of tenants. NRESC (2000) and RICS (2005) measured tenants' satisfaction; and finally, RICS (2005) went one step further in developing Tenant Satisfaction Index. Appendix 3 tabulates the property dimensions used in various studies.

Kingsley (2002) revealed that tenants' satisfaction is highly correlated with property management variables. This is also consistent with BOMA (1999) and NRECS (2002) whereby factors that drive tenants' satisfaction depend on; (i) the quality of the building management, (ii) property management knows the tenant needs, (iii) property management is proactive, (iv) tenant space helps tenant to be profitable, (v) space meets business needs, (vi) space has up to date technology infrastructure, (vii) property management is trustworthy and (viii) floor plan layout works for tenants. Thus the property management variables is actually the maintenance of the building, which includes dimensions one to six mentioned in Appendix 3; i.e. cleanliness, building services, signage, security, parking and image.

The researcher is developing a conceptual service quality framework for property management services, hence, it is important to have a robust, comprehensive, and tailored to property management service. Therefore, the researcher adopts most of the dimensions related to the overall property management services; namely, cleanliness, building services, signage, security and parking to represent the technical dimensions.

### *Image*

Additional construct will be added to the framework as Image construct. This is because image is crucially important for any organisation, both goods and services, because it markedly influences customers' perceptions of the goods and services offered (Kandampully, 2002). In marketing, image is about positioning for competitive advantage. Product position is the way the product is defined by consumers on important attributes (Kotler and Armstrong, 2001). This involves implanting the brand's unique benefits and differentiation in customer's mind. Customers are overloaded with information about products and services. Thus, to simplify the buying process, consumers organise products into categories- they 'position' products, services, and companies in their minds.

Image can be an extraordinary powerful weapon due to several factors (Kandampully, 2002). Firstly, a positive corporate image often serves as an unwritten service 'guarantee' in the minds of first-time customers, providing comfort and reassurance even when there is no explicit written guarantee. Hence, this will create customer loyalty. Secondly, unattractive image will cause customers to defer themselves of the service. Even if a firm has superior technical and functional quality, this might be ineffective if customers are negatively disposed to a company before they even partake of the services on offer.

In property however, positioning bases that is normally adopted is using property pricing either for low end user, medium or high end user. This means that the price or value of a building will portray the quality of finishes/interior of the building. The function of image is to filter the perception of service quality (Gronross, 1998). However in regards to property, image is one of the constructs that contribute to the perception of service quality.

Image in this term means the overall view of the inside of the four walls but exclude the image of the outside which is the design of the building. This is because design is very subjective and furthermore tenants occupy the building only after it has been built. Thus our concern in this study is more towards the maintenance and management of the inside rather than the design of the building. Based on the literature review in the previous section (Property dimensions) and the tabulation of property dimension in Appendix 3, the research therefore will take the building aesthetic factors as a dimension for image. Building aesthetics include the quality of main lobby, restrooms, elevator cabs/lifts, the floor common area, and the office area.

### 6.3 The Third Stage

In the third stage, the focus is on the difference between expectations and perceptions. From a marketing perspective, gaps can represent strategic opportunities between the organisation's desired position and its actual position in such areas as corporate image, market segments, or product sales, the differences between attitudes toward one product and another from one person to another or from expectations to performance (Parasuraman et al, 1988).

Gap analysis is the study of the differences between two different systems or applications, often for the purpose of determining how to get from one state to a new state. Gap analysis is undertaken as a means of bridging that space. Parasuraman et al (1988) defined gap analysis as the examination of differences in an effort to draw conclusions based on their existence.

Gap analysis is the core of the model developed by Parasuraman, Zeithaml and Berry (1985, 1988) to measure service quality of services using an instrument called SERVQUAL. This model is based on the disconfirmation model that measures service quality by calculating the gap between what the customers expect and what they perceive. It is obvious that gap analysis has been used in various instances. This research also attempts to use the approach by asking both, the tenants and the property managers about their expectations and perceptions of their experiences. The respondents in this study will be consistent i.e. between the property managers and tenants unlike the SERVQUAL model whereby the respondents are not consistent throughout the gaps. However, by keeping the respondent group consistent in this study, a different approach to gap analysis has been developed. This study's gap analysis has built on SERVQUAL's technique of asking property managers to respond according to what they believe are their tenants perceptions and expectations. Figure 4 shows the Gap analysis model between tenants and property managers.

Parasuraman et al (1985) suggested that 'regardless of the types of service, customers used basically similar criteria in evaluating service quality'. Other studies, however, determined that for a gap analysis between managers and customers to have direct practical application, it must be industry specific, since different industries have different variables and dimensions in terms of how services are delivered and buyers' respective levels of satisfaction (Carman, 1990; Babakus and Boller, 1992; Cronin and Taylor, 1992). Therefore, the scope of this study will be limited to the property management of purpose built office buildings only, focusing on property managers and tenants.

It has been noted that service quality research has been empirically studied across industries and nationwide but not in the property management services. Thus, a study of service quality in the property management services is needed. Towards the end, the researcher will be able to establish a service quality instrument or PROPERTYQUAL based on the conceptual framework. The PROPERTYQUAL is a questionnaire developed through modifying and adapting those developed by previous researchers. The target groups for this study are the tenants as well as the property managers of purpose built office buildings.

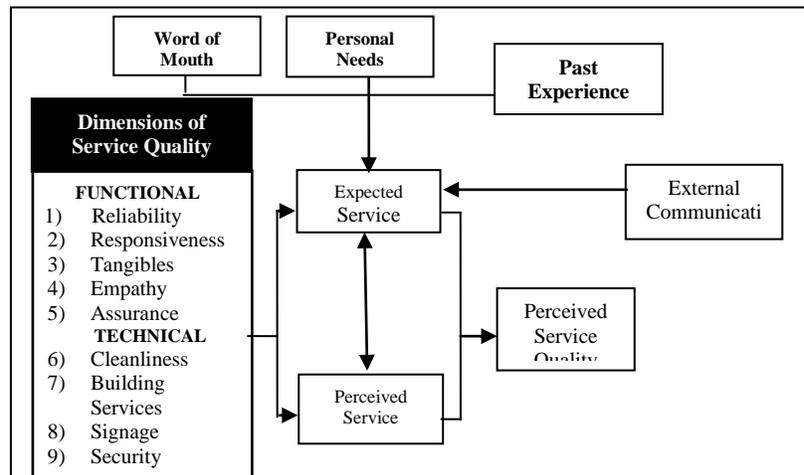


Figure 8: The Gap analysis model between tenants and property managers

## **7. SIGNIFICANCE OF THE STUDY**

### *(i) The development of PROPERTYQUAL*

The significance of the study is the development of an instrument, PROPERTYQUAL, to be used as an assessment tool in determining levels of tenants' perceptions of the service quality towards property management of purpose built office buildings. It is hoped that through the development and testing of PROPERTYQUAL, a more accurate and precise understanding of the evolution of quality in the property management services can be gained. The resulting survey provides an informational tool for determining what service provider (property management company) needs to do to develop action plans to improve the service quality offered to their tenants.

### *(ii) The importance of Tenants' Perception of service quality*

Tenant is the building most important asset. It is therefore, essential to identify what tenants want and how the products/services are meeting their needs (Kilton, 2000). Surveying tenants is the only way to see a company through the tenant's eyes. Tenant's perception is the reality, no matter what the companies think they are doing.

Successful property management company can no longer focuses inward on their own capabilities and processes; property managers must understand the complex relationship they have with the tenants and cooperate with them to deliver quality services and continuously improve according to changing demands (expectations) and technological potential. The perceived service quality measurement helps identify the strengths of the property management company, so that it can be capitalized on and any shortcomings can be improved upon. And by comparing these strengths and weaknesses to the competitors, the property management company may be able to establish an advantage and able to communicate it to potential tenants/customers (John G, 1992).

### *(iii) Contributions to Practice and Research*

This research will add to the base of knowledge regarding the assessment of service quality and tenants' satisfaction in property management industry in several ways. Firstly, this research intends to heighten awareness among the property managers of the importance of measuring service quality and the tenants' satisfaction. Malaysia lacks such empirical study. Therefore, while the proposed research represents the first attempt of its kind in the property management services, it would provide an incremental addition to the existing knowledge of service quality. Secondly, this study will enable property managers to select appropriate measures of tenant satisfaction for use in obtaining data to make strategic decisions. Thirdly, another important contribution from the present study is to add to an underdeveloped pedagogy related to defining and measuring Service Quality and Tenants' Satisfaction in the property management services. An in-depth review of theoretical and methodological underpinnings the Service Quality and Tenants' Satisfaction research is an initial step towards this contribution.

## **8. CONCLUSION**

In order to develop a service quality instrument or PROPERTYQUAL, a conceptual framework needs to be established. The process of developing a conceptual framework involves two stages. Firstly is the identification of constructs to be included in the framework and secondly is the identification of dimensions. This study has looked at the service quality models from various studies, namely Gronroos (1982), Parasuraman et al (1985, 1988), Rust and Oliver (1993) and Brady and Cronin (2001). The comparison from various studies can be concluded that there are at least two constructs namely construct before and after the quality action is needed in a service quality framework. Any additional construct can be added accordingly or can depend on the industry understudied. This study has identified Functional as the construct before quality action and Technical as the construct after quality action.

The identification of the dimensions involves dimensions for the Functional construct and dimensions for Technical construct. The researcher has adopted Parasuraman et al (1988) the five service quality dimensions to reflect the Functional construct namely, reliability, assurance, tangibles, empathy and responsiveness. The justification for this is because (i) the five dimensions are short and comprehensive to measure the Functional construct, (ii) this is based on empirical and statistical analysis, and (iii) it has the SERVQUAL instrument. Technical dimensions are solely based on literature review. Five dimensions have been chosen namely cleanliness, building services, signage, security and parking as robust and comprehensive dimensions to cover the property management services. Additional dimension to be included in this framework is Image construct to reflect the importance of branding and competitive advantage of image in property industry. The focus of image in this study is on what is inside the four walls and not the design of a building. This is due to the fact that design is very subjective and the tenants occupy the building only after it has been built.

It is important to look at the development of service quality models and dimensions from previous studies. A synthesis of the service quality model will give rise to important elements or constructs that should be included in a model. In addition, a synthesis of dimensions from previous studies will give rise to dimensions that are appropriate to a particular study i.e. property management services. The analysis is meant to look at the holistic view of the previous studies and comprehend the elements and dimensions used in the studies. Services are unique in nature and no two services are the same, thus each of the studies has been tailored to a particular services or industry understudy.

In summary, the development of a conceptual framework for service quality in the property management services is important in order to measure the gap between tenants' and property managers' expectations and perceptions. This is due to the fact that there is little evidence that a service quality framework for property management services does exist. This conceptual model to a certain extent, has identified the dimensions and constructs for property management services.

## **REFERENCES**

- Adrienne C., E. S. (2002) Assessing the quality of physiotherapy services using Servqual, *International Journal of Health Care Quality Assurance*. Volume 15(4): 197-198.
- Ahmad N & Haron S (2002) Perceptions of Malaysian corporate customers towards Islamic banking products and services, *International Journal of Islamic Financial services*, Volume 3, Number 4, January-March 2002
- Arunasalam R (2003) *Applicability of the Gap Analysis Methodology in Measuring Service Quality in Workers Compensation Managed Care Health programs*, Unpublished Doctor of Philosophy, Rensselaer Polytechnic Institute, Troy, New York.
- Ashroff (2005), The impact of facilities management services towards the satisfactions of electrical and electronic factory supervisors in Malaysia, Unpublished dissertation PhD, Universiti Sains Malaysia
- Asubonteng, Partrick; McClearly, Karl J; Swan, John E. (1996) SERVQUAL revisited: a critical review of service quality. *The Journal of Services Marketing*, 10/6 (1996), 62-74.
- Babakus and Boller, (1992) An empirical assessment of the SERVQUAL scale *Journal of Business research*, Volume 24, 253-68,
- Bolton R. and Drew J., (1991) A Multistage Model of Customers' Assessments of Service Quality and Value, *Journal of Consumer Research*, Volume 17(4): 375-384.
- Brady & Cronin (2001) Some new thoughts on conceptualizing perceived service quality: a hierarchical approach, *Journal of Marketing*, Vol. 65, pp34-49
- Building Owner Management Association (1998) Are your tenants happy from <http://www.boma.org>
- Building Owner Management Association (1999) State of the Industry Address from <http://www.boma.org>
- Buttle F. (1996) SERVQUAL: review, critique, research agenda, *European Journal of Marketing*, Volume 30(1): 8-32.
- Camilleri D, M. O. C. (1998) Comparing Public and Private Hospital Care Service Quality *Journal of Health Care Quality Assurance* Volume 11(4): 172,11

- Carman J. (1990) Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions. *Journal of Retailing*, Volume 66(1): 33, 23 pgs.
- CEL & Associates, Inc.,(1996) The Search for Quality Service. *Strategic Advantage* Issue K7696: 13-14.
- Chaston I. (1994). Internal customer management and service gaps within the UK manufacturing sector *International Journal of Operations & Production Management* Volume 14(9): 45-57
- Che Rose R, Jegak Uli, Abdul M and Kim Looi Ng (2004), Hospital service quality: a managerial challenge, *International Journal of Health Care Quality Assurance*, Volume 17, Number 3, pp 146-159
- Chin (1986), Towards Professionalism in Managing High Rise Commercial Office Complexes and Shopping Centers, *The Surveyors*
- Chin and Poh (1999) Implementing quality in property management- the case of Singapore *Journal of Property Management*, Volume 17 Issue 4, pp310-320
- Cronin J and Taylor S., (1992) Measuring Service Quality: A Reexamination and Extension, *Journal of Marketing*, Volume 56(3): 55-68.
- Cuthbert F., (1996) Managing service quality in HE: is SERVQUAL the answer? Part1. *Managing Service Quality* Volume 6(2):
- Dean D and Lee C (1998) Winning applause *Journal of Property Management*, 63/2 (Mar/Apr), 42-45.
- Ding Hooi Ting (2004), Service quality and satisfaction perceptions: curvilinear and interaction effect, *The International Journal of Bank Marketing*, Volume 22, Number 6, pp407-420
- Donnelly, M.; Wisniewski, Mik, Dalrymple, John F, Curry, Adrienne C (1995) Measuring service quality in local government: The SERVQUAL approach *The International Journal of Public Sector Management* Volume 8(7): 15-21
- Dyke, T. P. V. (1999) Caution on the Use of the SERVQUAL Measure to Assess the Quality of Information System Services *Decision Science* Volume 30(3): 15.
- Fadzly M N and Ahmad Z (2004), Audit expectation gap: the case of Malaysia, *Managerial Auditing Journal*, volume 19 Number 7, pp 897-915
- Fareena Sultan, M. C., Simpson Jr (2000) International service variants: airline passenger expectations and perceptions of service quality, *The Journal of Services Marketing* Volume 14(3): 188-207.
- Ghobadian et al (1994), Service quality: Concepts and Models, *International Journal of Quality & Reliability Management* Vol.11, No.9, pp43-66
- Gonroos C. (2001) The perceived service quality concept – a mistake? *Managing Service Quality*, Volume 11(3): 150-152.
- Gronroos C (1988).Service quality: the six criteria of good perceived service. *Review of Business*. Vol. 9(3): 10-14.
- Gronroos C (1990) *Service Management and Marketing: managing moment of truth in service competition*. Lexington MA: Lexington Books.
- Gronroos C. (1998) Marketing services: the case of a missing product, *Journal of Business & Industrial Marketing*, Volume 13(4/5): 322-338.
- Ismail H and Khatibi A(2002) What drives customer loyalty: an analysis from the telecommunications industry, *Journal of Targeting, measurement and analysis for marketing*, Volume 11 Number 1, pp 34-44
- Jayasuria, R. (1998) Measuring Service Quality in IT Services: Using Service Encounters to Elicit Quality Dimensions, *Journal of Professional Services Marketing*, Volume 18(1): 11-24.
- John G. (1992) How satisfied are your tenants? *Journal of Property Management*, 57/6 (Nov/Dec), 48.
- Johnson, Linda L.; Dotson, Michael J.; Dunlap, B.J. (1988) Service Quality Determinants and Effectiveness in The Real Estate Brokerage. *Journal of Real Estate Research*, Summer88, Vol. 3 Issue 2, p21, 16p
- Johnston R (1995) The determinants of service quality: satisfiers and dissatisfiers. *International Journal of Service Industry management* 6(5): 53-71.
- Kamdampully J (2002) *Services Management, the new paradigm in hospitality* Pearson Education Australia Pty Limited
- Kang G. and James J. (2004) Service quality dimensions: an examination of Gronroos's service quality model. *Managing Service Quality*, Volume 14(4): 266-277.

- Kilton R (2000) *Customer surveys that get results*.
- Kotler P and Armstrong G (9<sup>th</sup> Edition) (2001) *Principles of Marketing* Prentice Hall
- Kyle et al (1999)
- Lee C.; Dean D. (1998) Winning applause *Journal of Property Management*, Volume 63(2): 42-45
- Lehtinen and Lehtinen (1991), Two Approaches to Service Quality, *The Services Industries Journal*, Vol.11 No.3, pp287-303
- Levesque, T., McDougall, Gordon H.G. (1996) Determination of Customer Satisfaction in Retail Banking *The International Journal of Bank Marketing* Volume 14(7):12
- Low Yoke Kiew, L. K. C. (1997) Quality Measurement of the Malaysian Rail Services Using the SERVQUAL *Malaysian Management Review* Volume 12.
- Mangold G and Babakus E (1991) Monitoring Service Quality, *Review of Business*, 11/4, 21-70.
- Marit G. Dundersen, M. H., Ulf H. Olsen (1996) Hotel Guest Satisfaction among Business Travelers *Cornell Hotel and Restaurant Administration Quarterly* Volume 37(2): 72-81.
- Mc Daniel, J., Lourgand, Marc A (1994) Real estate brokerage service quality: An examination. *The Journal of Real Estate Research* 9(3): 339, 12 pgs.
- Min, H., Min, Hyseung (1996) Competitive Benchmarking of Korean Luxury Hotel Using the Analytic Hierarchy Process and Competitive Gap Analysis, *The Journal of Services Marketing* Volume 10(3): 58.
- Miriam Javitch Allan H. Church, W. Warner Burke. (1995) Enhancing professional service quality: feedback is the way to go. *Managing service quality*, Volume 5(03): 29-33.
- Mohd Kasim and Bojei (2002) Service Quality: gaps in the Malaysian telemarketing industry *Journal of Business Research* Volume 55(10): 845-852.
- Muhlebach R F (1998). Tenant surveys benchmark success for management firms. *National Real Estate Investor*, 40/2 (Feb), 159-60.
- Nelson, Susan Logan; Nelson, Theron R. (1995) RESERV: An Instrument for Measuring Real Estate Brokerage Service Quality. *Journal of Real Estate Research*, 1995, Vol. 10 Issue 1, p99, 15p;
- Nicholas Theodorakis, C. K., Athanasios Laios and Athanasios Koustelios (2001) Relationship between measures of service quality and satisfaction of spectators on professional sport *Managing Service Quality* Volume 11(6): 431-7.
- Oliver R. (1980) A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions, *Journal of Marketing Research*, Volume 17(4): 460-469
- Parasuraman A (1998) Customer service in business-to-business markets: an agenda for research, *Journal of Business & Industrial Marketing*, Volume 13(4/5): 309-321.
- Parasuraman A, Zeithaml V A, Berry L.L (1995) Problems and Strategies in Services Marketing *Journal of Marketing*, 49 (Spring), 33-46.
- Parasuraman A., Berry L., and Zeithaml V. A. (1988) Servqual: A Multiple-Item Scale for Measuring Customer Perceptions *Journal of Retailing* Volume 64(1): 12, 29 pgs.
- Parasuraman A., Zeithaml A and Berry L. (1985) A Conceptual Model of Service Quality and Its Implications for Future Research, *Journal of Marketing* Volume 49: 41-50.
- Parasuraman A., Zeithaml A and Berry L. (1991) Perceived service quality as a customer based performance measure: an empirical examination of organizational barriers using an extended service quality model. *Human resource management*, Volume 30(3): 335-364.
- Parasuraman A., Zeithaml A and Berry L. (1991), Understanding Customer Expectations of Service. *Sloan Management Review*, Volume 39.
- Patrick; McCleary Asubonteng, Karl J.; Swan, John E. (1996) SERVQUAL revisited: a critical review of service quality. *The Journal of Services Marketing*, Volume 10(6): 62-7
- Paula M. Saundres, D. R. F. S., Dr. Herbert E. Brown (1995) Delighting Customers by Managing Expectation for Service Quality: An Example from the Optical Industry. *Journal of Applied Business Research* Volume 11(2): 101-109.
- Pei Mey Lau, Khatibi A and David Yong Guan Fie (2005) Service quality: a study of the luxury hotels in Malaysia, *The Journal of American Academy of Business*, Cambridge, Volume 7 No 2, September 2005

- Pratibha A. Dabholkar, Jeffrey W. Overby (2005) Linking process and outcome to service quality and customer satisfaction evaluations: An investigation of real estate agent service *International Journal of Service Industry Management*; Volume: 16 Issue: 1; 2005 Research paper
- Puay Cheng Lim, N. K. H. t. (2000) A Study of Patients Expectations and Satisfaction in Singapore Hospitals. *International Journal of Health Care Quality Assurance* Volume 13(7): pg 290.
- R. Eric Reidenbach, B. S.-S. (1990) Exploring Perception of Hospital Operation by a Modified SERVQUAL Approach *Journal of Health Care Marketing* Volume 10(4): 47-55.
- RICS (2005) *Tenant Satisfaction Index: Tune into tenants*
- Rust and Oliver (1994) Service quality: Insights and managerial implications from the frontier, in Rust and Oliver (eds) *Service quality: New directions in theory and practice*, Sage Publications, Thousand Oaks, California
- Sasser Jr W E, Olsen R P, and Wyckoff D(1978). *Management of Service Operations: Text and Cases*. Boston, Allyn & Bacon.
- Schneider B and White S (2004) *Service Quality: Research Perspectives*, SAGE Publications.
- Schwenker, L. (1999). Measure twice, cut once. *Journal of Property Management, Vol 64 Issue 2*, p 78-83.
- Seiler, Vicky L.; Webb, James R.; Whipple, Thomas W. (2000) Assessment of Real Estate Brokerage Service Quality with a Practicing Professional's Instrument. *Journal of Real Estate Research*, Jul-Oct2000, Vol. 20 Issue 1/2, p105, 13p,
- Selz M (1997) *Toward a model of a gap analysis between leaders, investors and intermediaries in the mutual fund industry*, Unpublished Doctor of Philosophy, Claremont, California.
- Sharifuddin Z (1997) *An analysis of perceived service quality in the Road Transport Department in Malaysia*, Unpublished dissertation, PhD, University of Pittsburgh
- Sohail S (2003) Service quality in hospitals: more favourable than you might think, *Managing service Quality*, Volume 13, Number 3, pp 197-206
- Sridhar Balasubramaniam, P. K., Nirup M Menon (2003) Customer Satisfaction in Virtual Environments: A Study of Online Investing *Management Science* Volume 49(7): 871.
- Swartz T and Brown S. (1989) A Gap analysis of professional service quality. *Journal of Marketing*, Volume 53(2): 92-98.
- Teoh Poh Huat (2004) Measuring Service Quality Using SERVQUAL: Findings and Insights from an Exploratory Study in the Malaysian real estate Agency Business. *Unpublished dissertation DBA*
- Thomas F. Stafford Marla Royne Stafford, Brenda P. Wells. (1998) Determinants of service Quality and Satisfaction in the Auto Casualty Claims Process, *The Journal of Services Marketing*, 12(6): 426.
- Tyas, N. J. a. P. (1996) Use of Service Quality Gap Theory to Differentiate Between Foodservice Outlets, *The Service Industries Journal* Volume 16(3): 321-346.
- Vincent C.S. Heung et al (2000) Airport-restaurant Service Quality in Hong Kong *Cornell Hotel and Restaurant Administration Quarterly* Volume 41(3): 86-96.
- Wai-Ching Poon and Kevin Lock-Teng Low (2005), Are travelers satisfied with Malaysian Hotels, *International Journal Contemporary Hospitality management*, Volume 17, Number 3, pp217-227
- Walfried M. Lassar, C. M., Robert D. Winsor (2000) Service quality perspectives and satisfaction in private banking *The Journal of Services Marketing* Volume 14(3): 244-264.
- Yi-Shung Wang, T.-I. T. (2003) Assessing Customer Perception of Websites Service Quality in Digital Marketing Enviroments, *Journal of End User Computing* Volume 15(13): 14.
- Zarita A.B, et al (2004) *A Status of Property Management Practice in Malaysia*, Conference on scientific & social research 2005, Kuala Terengganu.

**Appendix 1: Service Quality Research across industries**

	<b>Industry</b>	<b>Year</b>	<b>Author</b>	<b>Title</b>
1	Sports Science	2001	Theodoriks N, and Kambitsis C	Relationship between measures of service quality and satisfaction of spectators in professional sports
2	Information Technology	1998	Jayasiriya R	Measuring service quality in IT services: using service encounters to Elicit quality dimensions
3		1999	Van Dyke, R.Prybutok and Kappelman	Cautions on the use of the SERVQUAL measure to assess the quality of information systems services
4		2002	Faye X. Zhu, Walter Wymer Jr and Injazz Chen	IT based services and service quality in customer banking
5		2002	Myerscough M	Information Systems quality assessment: replicating Kettinger and Lee's USISF/SERVQUAL combination
6	Hotel	1996	Gundersen M, Heide M and Ulf H Olsson	Hotel Guest satisfaction among business travellers
7		1996	Min, Hokey, Min, and Hyesung	Competitive benchmarking of Korean luxury hotels using the analytic hierarchy process and competitive gap analysis
8		1996	Gabbie, Olive, O'niell, and Martin A	SERVQUAL and the Northern Ireland hotel sector : a comparative analysis – part 1
9		2002	Ndhlovu J and Senguder T	Gender and Perception of service quality in the Hotel Industry
10		2002	Keating M and Harrington D	The challenges of implementing quality in the Irish hotel industry: a review
11		Physiotherapy	2004	CurryA and Sinclair E
12	Web sites	2002	Iwaarden J V and Ton van der Wiele	A study on the applicability of SERVQUAL dimensions for web site
13		2003	Iwaarden J A, Ton van der Wiele, Leslie Ball, and Robert Millen	Applying SERVQUAL to web sites: an exploratory study
14		2003	Yi-Shun Wang and Tzung I Tang	Assessing customer perceptions of website service quality in digital marketing environments
15		2004	Byounggu Choi, Choon Seok Lee, Heeseok Lee and Mani Subramani	Effects of Web retail service quality and product categories on consumer behaviour: A research model and empirical exploration
16		2004	Long M, Mcmellon C	Exploring the determinants of retail service quality on the internet
17	Educational Institution	1998	Carl A Ruby	Assessing satisfaction with selected student services using SERVQUAL, a market driven model of service quality
18		1999	Richardson W	The curriculum requirements of employers: an application of the SERVQUAL modal
19		2003	Sahney, Davinder Banwet and Karunes	Enhancing quality in education: application of quality function deployment_ an industry perspective
20		2003	Ham, Johnson, Weinstein, Plank and Johnson	Gaining Competitive advantages: Analysing the gap between expectations and perceptions of service quality

**Appendix 1 (cont)**

21	Educational Institution	2004	Sahney, Banwet and Karunes	A SERVQUAL and QFD approach to total quality education: a student perspective
22		1998	Krehbiel McClure and Pratsini	Assessing academic major using a service quality model
23	Tourism	2000	O’niell, Williams, MacCarthy, and Groves	Diving into service quality-the dive tour operator perspective
24		2003	Atilgan, Akinci and Aksoy	Mapping service quality in the tourism industry
25		2003	Pawitra and Tan	Tourism satisfaction in Singapore- a perspective from Indonesian tourists
26		2004	Sandman, Walraven, Wegweiser and Wenz	Service Quality: A Case Study on Canadian Mountain Holidays and SERVQUAL
27	Strategic Planning	1994	Hemmasi, Strong and Taylor	Measuring service quality for strategic planning and analysis in service firms
28	Airline		Khan A	The components of perceived service quality
29		2003	Natalisa and Subroto	Effects of Management Commitment on service quality to increase customer satisfaction of domestic airlines in Indonesia
30	Public Sector		Zainuddin S	Public sector service quality: An empirical study in the road transport department of Malaysia
31			Low Yoke Kiew and Lee Kum Chee	Quality measurement of the Malaysian rail services using SERVQUAL scale
32		2001	Mik Winsniewski	Using SERVQUAL to assess customer satisfaction with public sector services
33	Health Care	1990	Reidenbach and Sandifer-Smallwood	Exploring perceptions of hospital operations by a modified SERVQUAL approach
34		1993	E.Headley and J.Miller	Measuring service quality and its relationship to future consumer behavior
35		1994	Taylor S A	Distinguishing service quality from patient satisfaction in developing health care marketing strategies
36		1998	Camilleri and O’Callaghan	Comparing public and private hospital care service quality
37		1999	Pizam and Taylor	Customer satisfaction and its measurement in hospitality enterprises
38		2000	Winsted K F	Patient satisfaction with medical encounters – a cross cultural perspective
39		2000	Lim and Tang	A study of patients’ expectations and satisfaction in Singapore hospitals
40	Financial Institution	1996	Newman, Karin, Cowling, and Alan	Service quality in retail banking: the experience of two British clearing banks
41		1996	Levesque, Terrence, McDougall, and Gordon H G	Determinants of customer satisfaction in retail banking
42		2001	Karin Newman	Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank
43		2002	Naceur Jabnoun and Al-Tamimi	Measuring perceived service quality at UAE commercial banks

**Appendix 1 (cont)**

44	Service Industries	1997	Philip and Hazlett	The measurement of service quality: a new P-C-P attributes model
45		1997	Albert and Leyland	INTQUAL- an internal measure of service quality and the link between service quality and business performance
46		2000	Vincent C S Heung, M Y Wong and Hailin Qu	Airport-restaurant service quality in Hong Kong- an application of SERVQUAL
47		2002	Tan and Xie	Managing service quality: applying utility theory in the prioritization of service attributes
48		2003	Wong and Sohal	Assessing customer-salesperson interactions in a retail chain: differences between city and country retail districts
49		2003	Grant D	Customer service, satisfaction and service quality in UK food processing logistics
50	Libraries	2000	Cullen R	Perspectives on user satisfaction surveys
51	Optical Industry	1995	Saunders, Sherer and Brown	Delighting customers by managing expectations for service quality: An example from the optical industry
52	Professional Service	1996	Weekes, Scott and Tidwell	Measuring quality and client satisfaction in professional business services
53		1999	Singh and Deshmukh	Quality initiatives in the service sector: A casestudy
54	Food service	1996	Johns and Tyas	Use of service quality gap theory to differentiate between foodservice outlets
55	Dental services	1997	Kaldenberg, Becker, Browne and Browne	Identifying service quality strengths and weaknesses using SERVQUAL: A study of dental services
56	Wholesaler	1997	Mcneil and Wilson	Satisfaction in the wholesaler-retailer relationship: the experience of red meat retailers in western Australia
57		1999	Garland, Tweed and Davis	Service quality in the New Zealand market for construction hardware
58	Voluntary Sector	2001	Vaughan and Shiu	ARCHSECRET: A multiple item scale to measure service quality within the voluntary sector
59	Telecommunication	2002	Johnson and Sirikit	Service quality in the Thai telecommunication industry: a tool for achieving a sustainable competitive advantage
60		2004	Ismail and Khatibi	Study of the relationship between perception of value and price and customer satisfaction: the case of Malaysian tele-communications industry
61	Insurance	1998	Stafford, Stafford, and Wells	Determinants of service quality and satisfaction in the auto casualty claims process
62	Shipping	1999	Durvasula, Lysonski, and Mehta	Testing the SERVQUAL scale in the business-to-business sector: The case of ocean freight shipping service
63	Investment	1999	Fuentes C M	Quality assurance in investment services

**Appendix 2: Summary of studies in service quality and gap analysis in Malaysia**

	<b>Studies</b>	<b>Year</b>	<b>Industry</b>	<b>Topic</b>	<b>Journal</b>	<b>Study design</b>	<b>Instrument</b>
1	Vijayan and Shanmugam		Internet banking	Service quality evaluation of internet banking in Malaysia	<a href="http://www.arraydev.com">www.arraydev.com</a> (downloaded 2006)	Quantitative	Questionnaire
2	Sharifuddin Z	1997	Public service	An analysis of perceived service quality in the Road Transport Department in Malaysia	Unpublished dissertation, PhD, University of Pittsburgh	Quantitative	SERVQUAL
3	Ahmad and Haron	2002	Islamic banking	Perceptions of Malaysian corporate customers towards Islamic banking products and services	International Journal of Islamic Financial services, Volume 3, Number 4, January-March 2002	Quantitative	Questionnaire
4	Ismail and Khatibi	2002	Telecommunication	What drives customer loyalty: an analysis from the telecommunications industry	Journal of Targeting, measurement and analysis for marketing, Volume 11 Number 1, pp 34-44	Quantitative	Questionnaire: SERVQUAL
5	Mohd Kassim and Bojei	2002	Telemarketing	Service quality: Gaps in the Malaysian telemarketing industry	Journal of Business Research, Volume 55, Issue 10, pp 845	Quantitative	Questionnaire: SERVQUAL
6	Sohail	2003	Hospital	Service quality in hospitals: more favourable than you might think	Managing service Quality, Volume 13, Number 3, pp 197-206	Quantitative	Questionnaire: SERVQUAL
7	Teoh Poh Huat	2004	Estate Agency	Service quality and estate agency in Malaysia	Unpublished dissertation DBA	Quantitative	Questionnaire: SERVQUAL
8	Ismail and Khatibi	2004	Telecommunication	Study of the relationship between perception of value and price and customer satisfaction: the case of Malaysian telecommunications industry	The Journal of American Academy of Business, Cambridge, March 2004	Quantitative	Questionnaire: SERVQUAL And added dimensions
9	Fadzly and Ahmad	2004	Accountancy	Audit expectation gap: the case of Malaysia	Managerial Auditing Journal, volume 19 Number 7, pp 897-915	Quantitative	Questionnaire

**Appendix 2 (cont)**

10	Che Rose, Jegak Uli, Abdul and Ng	2004	Hospital	Hospital service quality: a managerial challenge	International Journal of Health Care Quality Assurance, Volume 17, Number 3, pp 146-159	Quantitative and Qualitative	Questionnaire: SERVQUAL with added dimensions And Interviews
11	Ding Hooi Ting	2004	Banking	Service quality and satisfaction perceptions: curvilinear and interaction effect	The International Journal of Bank Marketing, Volume 22, Number 6, pp407-420	Quantitative	Questionnaire: SERVQUAL
12	Ashroff	2005	Facilities management	The impact of facilities management services towards the satisfactions of electrical and electronic factory supervisors in Malaysia.	Unpublished dissertation PhD, Universiti Sains Malaysia	Quantitative	Questionnaire: SERVQUAL
13	Wai-Ching Poon and Kevin Lock-Teng Low	2005	Hospitality	Satisfied of travellers with Malaysian Hotels	International Journal Contemporary Hospitality management, Volume 17, Number 3, pp217-227	Quantitative	Questionnaire
14	Pei Mey Lau, Khatibi and David Yong Guan Fie	2005	Hospitality	Service quality: a study of the luxury hotels in Malaysia	The Journal of American Academy of Business, Cambridge, Volume 7 No 2, September 2005	Quantitative	Questionnaire: SERVQUAL

**Appendix 3: Property dimensions from various studies**

	DIMENSION	YEAR	1995	1998	1999	2000	2002	2005	ADOPTED IN THIS STUDY
		STUDIES	Birkeland & Bettini	D Leifer	BOMA	NRESC	Kingsley	RICS	
1	Building Services	Visual appeal			√	√		√	√
		Overall condition		√	√				√
		Comfort of office space				√			√
		Elevators Operation			√	√			√
		Landscaping			√	√		√	√
		Emergency/Fire Safety			√	√	√		√
		HVAC	√		√				√
		Technological amenities			√				√
		Interior Lighting				√		√	√
		Interior Décor Maintenance				√			√
		Quality & selection of building amenities (restaurant/café, sundry shop, public phone, surau etc)	√			√			√
		Mail boxes/area							√
		Engineering services							√
2	Signage	Exterior Signage							√
		Building Directory							√
		Suite Signage							√
3	Cleanliness	Office Space				√	√		√
		Restrooms				√			√
		Common areas (corridors, main lobby)				√			√
		Cleaning & maintenance	√				√		√
		Cleanliness of building exterior							√
		Cleanliness of parking area							√
		Window cleanliness							√
		Janitorial service - Night							√
		Janitorial service - Day							√
4	Building Aesthetics	Main lobby				√	√	√	√
		Restrooms				√			√

*Service Quality And Property Management Service: A Conceptual Framework*

		Elevator Cabs				√			√
		Common Floor area				√	√		√
		Office space				√		√	√
5	Parking	Employee parking							√
		Visitor Parking							√
		Overall parking	√		√	√			√
6	Security	Office hours				√	√		√
		After-hours access							√
7	Office noise control	Noise distractions		√					
		Background office noise level		√					
		Specific office noises		√					
8	Building noise control	Noise from air system		√					
		Noise from office lighting		√					
		Noise from outside the building		√					
9	Thermal comfort	Temperature comfort		√					
		How cold it gets		√					
		Temperature shifts		√					
10	Air quality	Freshness		√					
		Movement		√					
		Ventilation comfort		√					
11	Privacy	Visual privacy at your desk		√					
		Voice privacy at your desk		√					
		Telephone privacy at your desk		√					
12	Lighting	Electrical lighting		√					
		How bright the lights are		√					
		Glare from lights		√					
13	Spatial comfort	Furniture arrangement		√					
		Amount of space in workspace		√					
		Work storage		√					
		Personal Storage		√					