A facility manager's role to provide quality service through reflecting user needs

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Abstract
The uniqueness of role of facility manager is also based on its integral and multidisciplinary work ability. Among the various expectations of a facility manager, one of the important issues is to produce a quality service defined by the customer (Cotts, 1999). This paper raises and discusses the following questions, 1) how quality can be defined in facility management and why it should be defined by the customer, 2) how facility managers can find out customer (user) needs, 3) what are the difficulties in finding out user needs and in delivering quality service, and 4) whether improving quality always means requiring higher cost. Based on the classic perspectives of quality management by Juran and Crosby, cost and quality issues in facility management are further discussed in terms of the impact on bottom line, and in terms of effectiveness and efficiency. Some plausible directions to meet the customer needs are suggested.

Keywords: facility management, service quality, customer expectations, user satisfaction and needs

Introduction

Facility management activities are more than the operations and maintenance of facilities. From creating a new space to fulfilling organizational business needs and individual needs, to maintaining the quality of space within the life span of a building, and to final disposal, the roles of a facility manager are very various. According to IFMA, facility management is the practice of coordinating the physical workplace with the people and work of the organization. Major responsibilities into several major functional areas are 1) long-range and annual facility planning; 2) facility financial forecasting; 3) real estate acquisition and/or disposal; 4) work specifications, installation and space management; 5) architectural and engineering planning and design; 6) new construction and/or renovation; 7) maintenance and operations management;8) telecommunications integration, security and general administrative services.

As most of the vital activities and responsibilities of facility management are associated with various customers and facility quality, customer satisfaction is an important issue in facility management field. Especially, in an organization where facilities service is a key part of the business such as hospitals, education facilities, hospitality facilities and public facilities, providing a facility to support customer needs is crucial for the success and effectiveness of the business. With the growth of service sector and its increasing role in the world economy (Javalgi and Moberg 1997; Ramcharran 1999), it is natural of more facility management activities to be involved in quality issues. In addition, as technology develops, human labor can be replaced by other technologies. Facilities and equipment may become a more important asset to provide high quality service. In this context, many of works of FM

can be considered as practices that provide tangibles (physical environment) and intangible service.

Quality by Customer

The term quality can be considered as abstract, elusive and indistinct one. Crosby (1979) defines quality as “conformance to requirements,” and the requirements must be clearly stated so that they cannot be misunderstood. Juran defined quality as “fitness to use,” i.e., the users of a product or service should be able to count on its performance (March 1986; Costin, 1998). Quality issues cannot be considered without customer-oriented perspective. Parasuraman et al. (1985) mentioned that service quality involves a comparison of expectation with performance. “Service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis (Lewis and Brooms, 1983)”

Friday (2001) emphasized the importance of customer defined quality in FM the profession. According to her, customer service becomes a goal that most facility management organizations strive to achieve. Building a solid FM organizational structure that will meet customer requirements, perceptions, and expectations necessities an institutional commitment to the concept of customer-defined quality.

To understand service quality fully, the three characteristics of service quality - intangibility, heterogeneity and inseparability- should be acknowledged (Parasuraman et al., 1985). First, most services are intangible (Lovelock 1981). However this aspect might be controversial in FM because most FM services are delivered through tangible physical aspects. Second, service performance often varies due to the behavior of service personnel (Carmen and Langeard, 1980). A well-developed job specification and training help to improve the consistency of services of facility management. Third, production and consumption of many services are inseparable. Usually interactions between the client and the contact person from the service provider take place (Lehtinen and Lehtinen, 1982). The service provider may have less managerial control over quality because the customer affects the process (Parasuraman et al., 1985). Flexible response and communication strategy need to be considered.

Quality criteria

Due to the characteristics above mentioned, service quality is considered as hard to evaluate. However, many researchers in marketing and other service industries have developed quality dimensions and criteria that are applicable to FM. According to Lehtinen and Lehtinen (1982), quality dimensions are “physical quality” which includes the physical aspects of the services, “corporate quality” which involves the company’s image and “interactive quality” which derives from the interaction between contact personnel and customers. There are several criteria to measure service quality.

Parasuraman et al. (1985) developed determinants of service quality through intensive executive interviews and focus group of customers in four service areas

(see table 1). From the 10 dimensions, Parasuraman et al. (1988) further developed the dimensions and proposed “Servqual,” a multiple-item scale for measuring consumer perception of service quality. Specifically they measure the differences between expectation and perception in 5 dimensions which are 1) tangibles: the appearance of the physical facilities, equipment, personnel and communication materials, 2) reliability: the ability to perform the promised service dependably and accurately, 3) responsiveness: the willingness to help customers and provide prompt service, 4) assurance: the competence of the system in its credibility in providing a courteous and secure service, and 5) empathy: the approachability, ease of access and effort taken to understand customers’ needs.

Reliability	Consistency of performance and dependability -keeping the records correctly -performing the service at the designated time
Responsiveness	The willingness or readiness of the employees to provide services. It involves timelines of service -calling the customer back quickly -giving prompt services
Competence	Possession of the required skills and knowledge to perform service -knowledge and skill of the contact personnel -knowledge and skill of operational support personnel -research capability of the organization
Access	Approachability and ease of contact -service is easily accessible -convenient hours of operation -convenient location of service facility
Courtesy	Politeness, respect, consideration and friendliness of contact personnel -consideration for the consumer’s property -clean and neat appearance
Communication	Keeping customers informed in language they can understand and listening to them -explaining how much the service will cost -assuring the consumer that a problem will be handled
Credibility	Trustworthiness, believability, honesty -company name and reputation -personal characteristics of the contact personnel
Security	Freedom from danger, risk or doubt -physical safety -financial security -confidentiality
Understanding	Making effort to understand the customer’s needs -learning the customer’s specific requirements -providing individual attention -recognizing the regular customer
Tangibles	Physical evidence of the service -Physical facilities -tools or equipment used to provide the service

Table 1: Determinants of service quality

Source: Parasuraman, A. Zeithaml, V.A. & Berry, I.L (1985). A conceptual model of service quality and its implication for future research. *Journal of Marketing*, vol 49, p 47

Servqual became one of the methodologies to measure service quality in various service areas such as health care facilities (McAtarsney 1999; O’connor et al. 2000; Duffy et al. 2001) and the hospitality industry (Heung et al. 2000). By using Servqual,

Dalrymple et al. (1995) analyzed service quality in order to investigate which dimension customers see as the most highly values and what customer expects in each dimension from any service provider. They investigated the gap between the expectation and perception of customer in five dimensions. As a result, in the dimensions of tangibles and reliability, the perceptions of customer were lower than their expectation. Duffy et al. (2001) examined the service quality expectation of residents, family and administrators within a long-term-care context.

Being different from a customer satisfaction survey, Servqual can show the gap between the expectation and perception in 5 specific dimensions and provide more managerial direction. However, for the FM practices, the items of the scale need to be further developed and elaborated.

Barriers and Process

To find out customer's expectations and needs, a facility manager should be aware of who are the customers, including both potential and apparent customers and then should search and figure out appropriate way among multiple choices that might suit their organization and business.

However, because there are a variety of groups of customers with various expectations a facility manager is supposed to fulfill, there are some barriers to understanding customer needs and expectations.

First of all, a facility manager faces and deals with a wide range of customers. Customers can be categorized as internal and external sources. Internal users or customers can be from senior executives to department or division managers to individual employees. External customer can be external visitors or users out of the organization who visit and use facilities. Friday (2001) enumerated various customer groups including organizational units, building units, the FM organization, senior management, external clients, vendors, tenants and even facilities. In this paper, customer groups can be different from the various stakeholder groups of FM and can be defined as user group who mainly stay in or use facilities and/or equipment in a certain period of time.

It is hard to fulfill the different needs of various groups of users at the same time. Donnely et al. (1995) pointed out that the interest of different group of customers might be in conflict. It is not only because people seek different things but because with limited resources, distribution of the resources can cause conflict. For instance, tow departments complained lack of their workspace and asked to update technical systems. Facility manager should find out the degree of urgency of the requests and prioritize them and work with two departments. Ability in negotiating, compromising, prioritizing and communication are important to solve this kind of problem.

Second, the gaps between the groups exist and play a role in managerial and planning decisions. In environment behavior studies, the term, "gap" commonly refers to discontinuity between designers and those who will eventually live and work in their buildings (Zeisel, 1981). In service quality areas, this brings out different requirements and specifications according to eye holder's view. Quality tends to be

judged in terms of the expectation of professional, managerial, or interested third parties rather than service recipients (Duffy et al., 2001). The gap between the service provider and consumer expectations has been significantly linked to consumer dissatisfaction (Klose & Finkle,1995). Increasing communication between the groups may seem to be an unremarkable but necessary suggestion (Bell et al., 2001). Using a proper language is also important to reduce the gaps.

Third, customers may often play a passive role in addressing their needs and expectations. Indeed, researchers have found that clients of professional services in general tend not to acknowledge their dissatisfaction until they are extremely dissatisfied (Duffy et al., 2001).

Fourth, customer satisfaction surveys often lack tangible ideas that are related to specific customer needs. In addition, customers may be not clearly aware of what they really want to do or receive prior to using a space or service. Planning a new facility requires a facility manger or a planning group to put intensive efforts to find out various customer needs including latent needs.

Finally, to find out customer needs and expectation, there is no universally accepted instrument or measurement. Dalrymple et al. (1995) surmised that the main weakness of customer satisfaction surveys is ignoring customer's expectation in favor of Servqual. However, there were issues about the validity of Servqual and how it can be most effectively operationalised (Kiernan, 1996). POE (post occupancy evaluation) is recognized as an integrated approach to measure performance of built environment in perspectives of occupants. However, Presier (1999) mentioned "to date, there is little or no standardization of measurement technology and methods used on POE ". Krueger (1994) proposed the problems under basic assumption of mail and telephone surveys that individuals really do know how they feel and individuals form opinions in isolation in addressing necessity of focus group method to get opinion of customers.

As physical conditions of facilities, organizational structure and culture vary even within the same kind of business, a facility manager or planner should carefully adopt a certain method and be aware of what can be acquired thorough the method adopted. In addition, although it is hard to have a generalized measurement, more cases, practices and more reliable tool to measure customer' needs, expectation and satisfaction toward FM service should be developed.

In order to understand and meet customer needs and expectations, a facility manager can use several kinds of methods such as customer satisfaction surveys, Servqual, interviews, focus group interview, observation, casual talks, and management and technical audits. It is difficult to argue that one is superior to any other. More often, facility managers can use multiple methods together according to the task and scope of a project. However, recognizing the significance of customers and their inputs will be a key to secure good quality and success. Becker (1990) emphasized the importance of customer or user participation. For a new and better office quality, Becker suggested that more efforts should go into the preliminary processes for planning and designing buildings with more user involvement. This should include systematic post-occupancy evaluations, employee's reviews and feedback about not only the physical designs but also the management policies and

procedures. User participation becomes one way to reflect user's view in planning and managing facilities.

Cost of Quality

As quality improvement efforts often require an integrated approach within an organization, the cost of quality is addressed in terms of investment and its return in value. How far should a manager go in finding out customer needs, meeting requirements and improving the quality of service? Does improving quality always mean requiring higher cost? The cost of quality has been more often mentioned in manufacturing goods. The "1-10-100 rule" is a common term in the cost of defects in manufacturing. For the cost of quality, two leading quality 'gurus', Crosby and Juran have taken different approaches. Though their approaches mainly focus on the manufacturing industry, their fundamental perspectives provide better understanding of cost of quality in the provision of services.

Cost of quality can be divided in three categories. Prevention costs are the cost of all activities undertaken to prevent defects in design, development, purchasing, and labor in developing products or service. Appraisal costs are used for conducting inspection and evaluation. Failure cost are disposition, customer affairs and credibility, labor, etc. (Crosby,1979). In order to improve quality, prevention cost and appraisal cost are required however, as results, improved qualities reduce failure cost and customer complaints and result in business profit.

Juran explained that there is an optimal level in the balance between the failure costs and the cost of appraisal and prevention. To reach zero defects (100% quality), the cost of appraisal and prevention and other efforts are too high. If an organization spends too small amount of effort and a small cost of appraisal and prevention, the defects rate is too high and the loss is huge. Therefore optimal level is a point in which cost of quality is minimized. "Zero defects was not a practical goal, for to reach the level, prevention and appraisal costs would have to rise so substantially that total costs of quality would not be minimized (March, 1998)"

Crosby was an advocator of zero defects. Crosby states that the cost of quality is the cost of conformance and non-conformance while Juran advocates measuring internal failure, external failure, appraisal and prevention costs (Chang, 1998). In summary, if quality is improved, eventually profitability will increase. "If management established a higher standard of performance and communicated it thoroughly to all levels of the company, zero defects was possible (March, 1998)"

Setting optimal level is a goal of quality programs (March, 1988). Optimal range is related to setting the bottom line level. Bottom line tends to be set based on the past experience of a manager. With minimum cost, time, and human labor, securing a certain level of quality believed as acceptable by management may appear as efficient; however, its effectiveness may be questionable. Differences between the optimal level and bottom line should be recognized. Juran's approach might be more practical and prevalent in most of FM activities. For instance, in fulfilling and supporting psychological and behavioral aspects of customer needs. Decisions for repair, remodeling or renovation need be based on an optimal point to ensure the quality of operation or performance of the facility. However, for technical and primarily

functional aspects, Crosby's approach can be more appealing. For instance, in a construction project, waterproofing at an early stage is vital for successful use and completeness of the facility. If it is defective, after people moved in, it requires huge cost to correct the errors. The "1-10-100 rule" can be applied to his situation.

Developing specifications, continuously seeking information and attitudes from the customers, and the audit of facilities helps facility mangers to be effective and efficient in the cost of quality. For instance, like Servqual, measurements that fit the organizations and the facilities need to be developed. FM service request procedures and reports to the customer about the results should be prepared and updated, Most of all, management inputs and control related to customer issues are vital to lead those efforts to successful outcomes.

Discussion

Facility managers may easily overlook customer inputs or put them aside due to daily management pressures. Quality aspects are hardly discussed without taking a long-term view. Especially in service business organization, facility managers should involve external as well as internal customers. A facility manager should provide not only intangible services but also physical environments that are user friendly and sustainable over time. During the life span of a building, a facility should be properly managed to support organizational business and user expectations.

Research results in service quality show that there are pros and cons in adopting any methodology to find out customer needs. If facility managers are aware of the barriers and difficulties in understanding customer expectations, it helps to select the appropriate method for any particular circumstance.

Even with the variation in physical aspects of work settings, the quality of facility management is quite different from other services. Servqual measures the gaps between expectations and perception in 5 dimensions. The five dimensions are generally applicable but not well covered in FM service areas. The gaps from different groups may reveal different expectation toward FM service quality and show the different group expectations. By developing these dimensions, the structure of gaps will provide better understanding of FM profession. For future research, a more elaborated service measurement that has different dimensions and determinants in FM activities needs to be developed so that facility managers can transfer and utilize them in their practices.

In addition, two perspectives by Juran and Crosby are useful to understand the cost of quality in FM. It provides a general approach that is useful in FM. However the lack of empirical research and case studies hampers the implementation of these approaches. Empirical research and cases in this area will help facility mangers to make better decisions.

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