POWER QUALITY IN THE COMPETITIVE MARKET: THE CUSTOMER PERSPECTIVE ON MONITORING, REPORTING AND BENCHMARKING OF SERVICE QUALITY

Joseph NJOROGE
Kenya Power and Lighting Company Limited (KPLC) - Kenya
jnioroge@kplc.co.ke

INTRODUCTION

Electricity utilities measure, monitor, benchmark and evaluate their power quality using quantifiable data like, frequency of supply interruptions, number if incidences of anomalies/failures, duration of interruptions, etc. This data can reveal: the power quality from the utilities' perspective, losses in sales, financial losses and can aid in benchmarking other utilities. The data is, therefore, vital for the drawing up of system and service quality improvement programs. However, there is need and this paper's purpose is to investigate whether the utilities' measurements are sufficient from the customers' needs and perspective. The investigation is based on general studies done on service quality across markets and specifically on a study done by the author on the Kenya Power and Lighting company limited, a Transmission and Distribution electricity utility in Kenya, East Africa.

With the onset of global liberalization regime in the early 90's, most of the electricity utilities have had to unbundle the generation, transmission and distribution functions. Some utilities, thus, are no longer involved in the multiple tasks of generating, transmitting and distributing electrical energy but are either generating, transmitting or distributing OR undertaking the latter two tasks. The utilities which purchase electricity from generators and then transmit and distribute to the wholesale or retail customers, are in the business of "Marketing of Services" and must, therefore, place in their agenda the task of gauging or seeking to know the customers' perspective in the service delivery of the electricity utility. The earlier researches carried out on service quality will also be used to supplement the contents of this paper.

This paper is intent on highlighting the customer's perspective in the service delivery of the electricity utility industry. Some of the information will be referenced from an MBA research Project titled “Customers' perception of Service Quality in a decentralized system in the public utility sector in Kenya: A case of the Kenya Power and Lighting Company Limited” which was successfully prepared and submitted by the author for the award of a degree in Masters of Business Administration (MBA), University of Nairobi, 2003. The earlier researches carried out on service quality will also be used to supplement the contents of this paper.

The Literature review on the subject of service quality is covered in the section below followed by the measurement of service quality, the results of the measurements and then the conclusions and recommendations, in that order.

SERVICE QUALITY

Marketing developed as a discipline of selling physical products initially but with growth of complexity of the economies, marketing has broadened to the “Marketing of services” (Rust et al; 1996). Today service industries dominate the economy in the service sector and account for more than 85% of the jobs and the number continue to grow. Quality improvement, therefore looms large in the ongoing services of this sector of our economy1. Also, service quality has been used as a viable strategy for marketers endeavoring to differentiate service offerings, establish customer value and ultimately satisfy customer needs.

Reasons for developing and delivering a quality service to customers include:
- Organization with a reputation for consistently high quality can sustain an enviable competitive advantage in the service market place.
- Quality is “free” that is, getting it right first time costs for less than providing remedies when services fail to meet the customers’ required standard.
- Better quality services can attract premium prices and consumers are ready to pay higher prices for service that fulfill all their expectation criteria.

Each of the above reasons for putting quality first can have a direct impact on profitability, image and customer or user satisfaction.

Research in Service Quality was at its peak in 1970’s through 1980’s. The most significant pioneer in this field was Gronroos (1995) who established a research agenda for service quality by introducing the first comprehensive model of service quality. Parasuraman et al (1985) in developing the service quality model defined service quality as the gap between expected service and the perceived service/performance. This service quality is denoted “Perceived quality” which can be defined as the customer’s perception of the overall quality or superiority of a product or service with respect to its intended purpose relative to alternative (Zeithaml, 1988).

Service quality is the ability of the organisation to meet or exceed the customers’ expectations. In this context, customers’ expectations may be defined as the desires or wants of customers, that is, what they feel a service provider should offer rather than would offer. (Christopher et al, 1999). Thus, service quality is measured in terms of the extent to which performance as perceived by the customer meets or exceeds the levels of expected services. Palmer (1992) identified five gaps where there may be shortfall between expectation of service level and perception of actual service delivered. He posited that for companies to understand the expectations and perceptions

Reliability, responsiveness, assurance, empathy and service quality as follows:—

Kotler (1997), summarised the generic determinants of Services Marketing, 3rd Edition, Prentice Hall International, pp 469. Lovelock (1996), conceptual model of service quality and its implications for future research'', Journal of Marketing, Fall 1985, p.44; Lovelock (1996), conceptual model of service quality and its implications for future research. Research by Parasuraman et al (1985) has indicated that consumers’ quality perceptions are influenced by a series of four distinct gaps occurring in organizations and whose summative effect lead to the fifth gap (the Gap between expected service and perceived service). This SERVQUAL model is shown in Figure 1 below.

Figure 1: SERVQUAL - THE CONCEPTUAL MODEL OF SERVICE QUALITY

METHODS OF MEASUREMENT

Electricity utilities in the transmission, distribution & supply sector sell a service to their customers; thus, they are involved in delivering the power supply from the generator to their customers. Customer service is therefore a critical function of the electricity utilities and provision of quality service involves understanding what the customers buy and determining how additional value can be added to the product or services being offered. Quality service is known to have a link to market growth and profitability resulting from loyal customer base (research done by strategic planning institute of Cambridge at Massachusetts). In order to deliver quality customer service there is need to understand service quality from both the customers and service provider’s perspective and means of measuring, recording and monitoring the quality need to be understood also.

As a service industry, the measurement of quality (from customers’ perspective) in the electricity utilities is as complex as in any other service sector. The unique characteristics of services from tangible goods that is, intangibility, variability (or heterogeneity), perishability and inseparability must be acknowledged for full understanding of service quality.

The research which was carried out to measure customers perceptions of service quality endeavoured to establish the discrepancy between customers’ expectations and customers perceptions of the delivered service which is a measure of Gap 5 in the SERVQUAL model. Further, the research was carried out within the context of a restructuring program by KPLC with emphasis of decentralizing the services. Some service quality monitoring data were defined at onset of this restructuring program, which were to be measured and evaluated on continuos basis. The research, therefore, attempted to measure Gap 1 (which is the Management’s perception of consumer expectations against the expected service).
In order to operationalise the service quality determinants, the properties of each were expounded and the questions relevant to them were formulated and arranged in a questionnaire, which was administered to the respondents. In order to carry out the measurement of perceived service quality, the basic determinants of service quality which are general across markets were used. The questionnaire used the convenient likert scale to measure expectations and perceptions of the customers. The perceived service quality as measured from the expected service and perceived service with service quality determinants, as the inputs is illustrated in the Figure 2 below.

Figure 2 : Perceived Service Quality as the Gap of Expected service and Perceived service with the service quality determinants’ input

In the Management Research project, titled “Customers’ perception of Service Quality in a decentralized system in the public utility sector in Kenya: A case of the Kenya Power and Lighting Company Limited (KPLC)” the author conducted a study on the KPLC utility whose results collaborated the earlier research findings. In the study, based on the ten determinants of service quality, the expected service and perceived service of KPLC customers were measured by administering a structured questionnaire on 306 customers, randomly selected. Customers’ response data was analysed by use of frequency tables, statistical means, standard deviation and coefficient of variation. Here-below, are the results of the measurements.

RESULTS OF THE MEASUREMENTS

Analysis of data indicated that the expected service quality on all the above ten determinants of service quality is high with a generally high level of agreement on their importance amongst all the respondents. The perceived service quality is generally lower than the expected service resulting in an overall service quality gap of about 17.5%. KPLC management’s defined performance targets’ data relating to service quality were found to have only covered a scope of about 40% within the wide arena of all the ten service quality determinants as shown in the table 1, below:-

Table 1: Measured Expected service, Perceived service, Quality Gap and KPLC coverage of the Service Quality Dimensions (Summarised)

<table>
<thead>
<tr>
<th>Service Quality Determinants</th>
<th>Expected service</th>
<th>Perceived service</th>
<th>Service Quality Gap</th>
<th>KPLC coverage of service quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability, Responsiveness</td>
<td>Statistical means of 4.096 to 4.467 (out of a maximum of 5.00)</td>
<td>Statistical means of 3.364 to 3.800 (out of a maximum of 5.00)</td>
<td>Statistical means of 0.504 to 0.939 and an average overall gap of 17.5%</td>
<td>Only considered Reliability, Responsiveness, Competence, and Access (overall coverage of only about 41%)</td>
</tr>
</tbody>
</table>

The above results of the perceived quality, the service quality gaps are vital lessons for the utilities and pertinent to the under-listed conclusions and recommendations.

CONCLUSIONS AND RECOMMENDATIONS

The findings of the earlier researches and the one of KPLC study reveal a significant gap between the conventional measurements used by electricity utilities and the “Customers perception of service quality”. Service quality is being used as a strategic tool to cut a competitive edge in the larger market place. In the electricity industry, deregulation in form of radical reforms has increasingly dominated the marketing environment, thus, accelerating competition and service quality is, therefore, a necessary evil. In order to build loyal customer base and deliver responsive service to customers, utilities need to devise ways and means of measuring, monitoring and evaluating the power quality based on a more holistic approach covering all the service quality determinants. Further, utilities need to adopt sustainable practices which ensures that all service quality determinants, and which have been found to be relevant to the electricity utilities, are measured, monitored and evaluated at intervals, even if longer than currently done with the prevailing use of quantitative data.

In the specific case of KPLC study, Management’s perspective of the customers’ expectations of service only included the determinants of reliability, responsiveness, competence and access which accounts for only about 41% of the entire scope of service quality determinants. It is evident that the Management’s service quality determinants
which are being monitored regularly are the ones which can be measured quantitatively – and this is expected to be prevalent in other utilities which use the same benchmark measures of the power quality. However, due to the large gap of the omitted service quality determinants (about 60%), they need to be addressed as their importance is clearly demonstrated by the results of the study. Questionnaires and simple researches at appropriate intervals would suffice.

“Perceptions in service quality is a reality” and there is every need to evaluate the expectations and then devise customer service enhancement programs on the basis of requirements and expectations of customers. Issues of Security, Courtesy, Credibility, Good communication, Understanding the customer and Tangibles should not take back seat in the monitoring and evaluation of service quality, if utilities adopt the challenge of ‘seeing the total/whole picture’ of the customer perspective and needs. The above are useful lessons for all utilities which are likely to be only monitoring the Power quality by use of the conventional data/benchmarks. Suffice to say that, these benchmarks are quantitative, relevant to financial inputs, are engineering friendly and are easily measurable. However, the human satisfaction and the voice of the customer dictates the imperative need of assessing the other service quality determinants so as to comprehensively and satisfactorily monitor the ‘customer perspective and needs’ of power (supply service) quality.

REFERENCES


