# PERCEPTION OF QUALITY OF SERVICES OFFERED BY NAIROBI CITY WATER AND SEWERAGE COMPANY

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A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER IN BUSINESS ADMINISTRATION (MBA), SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.

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September, 2006

#### **DECLARATION**

This Management Research Project is my original work and has not been submitted for another degree qualification of this or any other University or Institution of Learning.

Signed Date: 27th October 2006

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This Management Research Project has been submitted for examination with my approval as the University Supervisor.

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### DEDICATION

For my lovely daughter Aimée Suki Amoni. You are my inspiration each day.

#### **ACKNOWLEDGEMENT**

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### **ABBREVIATIONS**

AWSB - Athi Water Services Board

GoK - Government of Kenya

GTZ - German Technical Co-operation

IDA - International Development Association

N.C.W.S.C - Nairobi City Water & Sewerage Company

NWSIRP - Nairobi Water and Sewerage Institutional Restructuring Project

#### **ABSTRACT**

The objective of this research was to establish the perception of consumers towards the quality of services offered by Nairobi City Water and Sewerage Company. This was a descriptive survey, which targeted all the individual consumers of tapped water in Nairobi. Two hundred consumers were randomly selected from water payment points. The data was collected by research assistants using a structured questionnaire.

A response rate of 100% was achieved out the targeted 200 respondents, the data was analyzed with the help of descriptive statistics i.e. frequencies, percentages, mean scores and standard deviations. The company always delivered the services as promised, the water flow was consistent and available most of the time, the water bills were delivered in good time, accurate and free from errors, the staff were competent on what they do and honest, the water was of good quality and well treated, the customers always managed to reach an appropriate staff member whenever they had a problem and water bill payment points were conveniently located. On the other hand, the respondents felt that problems were not solved in the shortest time possible, the staff threatened the customers with disconnections, the customers did not feel free to confide in management in case of a confidential and personal issue and the customers were not advised about interruptions or disconnections in good time.

The company should therefore solve problems in the shortest time possible, give a specific time to resolve issues that arise like water shortages, the staff should not threaten the customers with disconnection and advice the customers about interruptions or disconnections in good time.

A similar research should be carried out over a period covering when water is available and when it is not available in order to get a more representative view of the customers on the quality of the services.

### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background

Organizations depend on the environment for their survival and they scan the environment in an effort of budding trends and conditions that could eventually affect the industry and adapt to them (Thompson and Striclland, 1993). The past decade has witnessed emergence of major forces that have challenged traditional premises and practices of marketing (Mbau, 2000). The marketing environment has changed posing serious challenges to the survival and profitability of firms in Kenya and the world over. The quick pace of developing technologies and increasing competition make it difficult to gain strategic competitive advantage through physical products alone. Customers are more demanding, expecting high levels of service. According to Charles and Gareth (1988), in today's global environment, change rather than stability is the order of the day; rapid changes in technology, competition and customer's demands have increased the rate at which companies need to alter their strategies and structures to survive in the market. Organizations have therefore, due to the dynamic nature of the environment, had to strengthen their competencies and build new ones in order to compete more effectively (Njoroge, 2003). Firms have taken different approaches to managing any one or a combination of strategies.

The public service sector in Kenya has not been spared in the global forces driving restructuring activities and have hence been forced to comply. Customers are more educated thus pressure for better value of products and services, there is donor pressure for improved financial performance and drastic reduction in levels of corruption. Public institutions have therefore had to restructure in order to reduce costs and enhance levels of customer service. Lovelock (1996) asserts that in this increasingly competitive environment, quality service is critical to corporate success. Service quality is a viable strategy for marketers endeavoring to establish customer value and satisfaction.

### 1.1.1 Perception

According to Kibera and Waruingi (1988), perception is a process by which we attribute meaning to incoming stimuli received through our five senses. They reiterate that perception is the result of the interaction of stimulus factors and individual factors. Perception is the process by which an individual selects, organizes and interprets information inputs to create a meaningful picture of the world (Kotler, 2003). The key point is that perceptions can vary widely among individuals exposed to the same stimuli.

Perception has strategic implications for marketers because consumers make decisions based on what they perceive rather than on the basis of objective reality. It is more difficult for consumers to evaluate the quality of services than the quality of products. This is true because of certain distinctive characteristics of services; intangibility, inseparability, heterogeneity and perishability (Shiffman and Kanuk, 2004). For each individual, reality is a totally personal phenomenon, based on the person's needs, wants, values and personal experiences. Therefore to a marketer, consumers' perceptions are much more important than their knowledge of objective reality because individuals make decisions and take actions based on what they perceive to be reality. However, Rust et al (1996) posit that when viewed in the long term, perceived quality does tend to converge on objective quality when objective aspects are important and if they become known. It is therefore important to actually provide excellent quality of service than to rely on the positive perception of consumers that will only be short-lived.

### 1.1.2 Service Quality

Quality is a difficult concept to define yet in marketing, the quality of service is central to the success and growth of the business (Rust et al., 1996). Services are deeds, processes and performances (Zeithaml and Bitner, 1996). Services include all economic activities whose output is not a physical product or construction, are generally consumed at the time they are produced and provide added value in forms that are essentially intangible. Services marketing concepts and strategies have developed in response to the tremendous growth of service industries, resulting in their increased importance to the world economies (Zeithaml and Bitner, 1996). In most industries, providing quality service is no longer simply an option. There are a number of different definitions as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994). Service quality can thus be defined as the difference between customer expectations of service and perceived service.

Organizations today are well aware that they must satisfy customers and offer quality services in order to be competitively viable. For years now, service firms have been measuring customer satisfaction and service quality to gauge how well they are meeting customer needs. It is interesting that these measures of customer satisfaction and service quality are often used interchangeably, indicating that practitioners may not see much difference between the two constructs. Consequently, there has been little research on the causal link between the constructs. Researchers have however suggested that the direction of the relationship between customer satisfaction and service quality be explored in order to increase our understanding of service evaluation processes used by customers (Bolton and Drew, 1991; Cronin and Taylor, 1992). Zeithaml and Bitner (2003) argue that customers perceive services in terms of the quality of the service and how satisfied they are overall with their experiences. It is important for companies to distinguish themselves with respect to service quality and improved customer satisfaction.

If a service provider knows how the consumer will evaluate the service, then it is possible to suggest ways on how to influence these evaluations in a desired direction (Gronroos, 1984). Even when guidelines exist for performing services well and treating customers correctly, high-quality service performance is not a certainty. Standards must be backed by appropriate resources (people, systems and technology) and must also be supported to be effective (Zeithaml and Bitner, 1996). Employees must be measured and compensated on the basis of performance along those standards. When the level of service delivery performance falls short of standards, it falls short of what customers expect as well. Ensuring that all the resources needed to achieve the standards are in place ensures proper service delivery. However, there are challenges associated with delivering service through intermediaries such as retailers, franchises, agents and brokers. Most service companies face the difficult task of attaining service excellence and consistency in the presence of intermediaries who represent them, interact with their customers yet are not under their direct control.

# 1.1.3 Nairobi City Water and Sewerage Company

Access to adequate and reliable supply of clean water and sanitation is key to public health. In 1999, a study by the Government of Kenya in its National Poverty Eradication Plan 1999-

2015, indicated that 67% of the urban population had access to safe drinking water, while 50% of the rural population had access to potable water from various schemes.

Athi WSB is responsible for contracting current and potential water service providers in Nairobi and has contracted Nairobi City Water and Sewerage Company (NCWSC), an autonomous entity wholly owned by Nairobi City Council (the Local Authority) to undertake water service provision in the city. This responsibility was taken over from the Water and Sewerage Department of the City Council. NCWSC was launched in August 2004 and commenced operation the same month.

In 2003, the Government of Kenya (GoK) and the World Bank, through the International Development Association (IDA), signed a US\$16.8 million grant agreement for the implementation of the Nairobi Water and Sewerage Institutional Restructuring Project (NWSIRP) over a period of three years. The project is an initiative that is supporting the Athi Water Services Board (AWSB) and the Nairobi Water and Sewerage Company to develop and strengthen service delivery frameworks that will enable the efficient and sustainable delivery of water and sewerage services to the populations of Nairobi. The project is coordinated by the Ministry of Water and Irrigation under the ongoing water sector reforms. The NCWSC has divided Nairobi into five regions for ease of administrative issues. These regions are: Northern, Southern, Eastern, Western and Gatundu with the client base of 142,323.

# 1.2 Statement of the Problem

Adequate and reliable supply of clean water and sanitation is key to public health and to the well being of all human kind. Water is both a social as well as economic good, which must be safeguarded for sustenance of life and prosperity. There have been complaints in the past about service provision in the public sector, in general and hence in the Water Sector (Kiprotich, 2004; Tuei, 2002). It has indicated that urban water supplies in Kenya were plagued by a series of problems. Unaccounted for water was high, standing at 40 to 70 percent of the water produced as compared to 10 to 20 percent in well managed systems in developed countries. Consumption metering was limited or did not exist at all. In Nairobi, only 25% of the consumers were properly metered. The unmetered systems create distortions in consumer charges and loss of revenue. The tariff policies did not adequately reflect the true economic cost of future water supplies. Only about 60% of revenue due on the 50% of the water that reached the consumer on average was actually collected. This was as a result of poor consumer records, combined with inefficient billing and collection practices. Excess staff was also a problem that explained the low productivity of public water companies. Ratios of 25-50 employees per 1,000 water connections were common. There was also lack of a clear delineation of regulatory responsibility. The Ministry of Water, which was supposed to be the regulator, also managed water utilities of its own, which created role conflict. In order to improve service quality, the Government of Kenya implemented reforms in the water sector to restructure and improve sector performance and address the problems associated with the management of the resources and delivery of water and sewerage services. These reforms are finalized under the Water Act 2002.

The new system has been operational since 2003. Since then, it has not been established if the services have improved and the consumers are better placed to judge if service quality has changed. Marketing academics generally agree that service quality is externally defined by the customer and that the customer should always be first for any organization to be successful (Gower, 1990; Kotler, 2003; Zeithaml and Bitner, 1996; Fornell 1992; Parasuraman, Zeithaml and Berry 1985; Gronroos 1984).

Studies have been done in the water sector (Kiprotich, 2004; Wainaina, 2006) that have been focused on the technical and economical part of the sector. Some researchers have carried out studies on consumer perception in other sectors (Njoroge, 2003; Maina, 2001; Moyoncho 2004). None has however been done on consumer perception of service quality in the public water sector. A study of the customers' perception of service quality and levels of satisfaction after the reforms is therefore important since it will enable decision makers to come up with strategies with a view to improving the services and implement them accordingly. This study therefore seeks to close the gap by responding to the following question:

What is the perception of consumers towards the quality of services offered by Nairobi City Water and Sewerage Company?

## 1.3 Objective of the Study

The objective of this study was to establish the perception of consumers towards the quality of services offered by Nairobi City Water and Sewerage Company.

### 1.4 Importance of the Study

The results of this study will be of benefit to: -

- The Government, which may use the study to assess how successful the water sector reforms are so that they can retain and improve on the service quality or come up with better reforms if they are not as successful as they intended them to be.
- Nairobi City Water and Sewerage Company in making decisions concerning the most effective strategies to enhance and maintain high standards of service quality.
- iii. Other Water and Sewerage Companies in understanding the important aspects in evaluating service quality.
- iv. Scholars and researchers, by providing important information about consumer perception of service quality in the water sector. This will act as an eye opener to the future researchers who would like to carry out a similar research in a different industry.

# CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

As the service sector continues to expand improved customer service is critical. With the increasing empowerment of the consumer and increased economic levels of certain groups within the economy, expectations for customer service are rising. Product proliferation has exacerbated this issue by giving consumers more choices with different criteria for evaluating companies, and by increasing competition among companies. Business is being forced to respond by addressing the issues of customer satisfaction and customer perception of quality of service.

Hanna (1989) states that one mechanism adopted by some corporations to promote profits and/or consumer satisfaction is the corporate consumer affairs office. It is assumed that enhancing customer satisfaction will have the dual effect of improving customer loyalty and thereby company profits. In the public sector, good customer service improves trust and information exchange. It generates satisfied or delighted customers. Satisfied customers lead to increased compliance, improved information exchange, improved relationships, increased trust and reduced costs. Good customer service saves money and increases profit in the private sector, leads to satisfied or delighted customers, which generates customer loyalty, which produces increased revenues and reduced costs.

The public and private sector customer service concur on the process for delivering great customer service, even if outcomes differ. In the private sector, profit and growth are the outcomes, not goals. Profit and growth are generated by customer loyalty, which is a result of customer satisfaction. Customer satisfaction is the goal that companies seek and focus on, because high customer satisfaction as a matter of course, produces customer loyalty and subsequently profit and growth.

# 2.2 Meaning and Role of Perception

Kibera and Waruingi (1988) have defined perception as a process by which we attribute meaning to incoming stimuli received through our five senses. They reiterate that perception is the result of the interaction of stimulus factors and individual factors. Perception is the

process by which an individual selects, organizes and interprets information inputs to create a meaningful picture of the world (Kotler, 2003). The key point is that perceptions can vary widely among individuals exposed to the same stimuli. Schiffman and Kanuk (2004) agree that how each person recognizes, selects, organizes and interprets stimuli is a highly individual process based on each person's own needs, values and expectations. Individuals are very selective and thus consumers subconsciously exercise a great deal of selectivity as to which aspects of the environment they perceive. Consumer's previous experiences affect their expectations.

Perception not only depends on the physical stimuli but also on the stimuli's relation to the surrounding field and on conditions within the individual. According to Kotler (2003), people emerge with different perceptions of the same object because of three perceptual processes; selective attention, selective distortion and selective retention. People are exposed to a lot of stimuli daily, and since the person cannot possibly pay attention to all of these, he tends to screen out most of them. Marketers therefore need to work hard to attract consumers' attention by attempting to promote their services intrusively to bypass selective attention filters. Selective distortion is the tendency to twist information into personal meanings and interpret information in a way that will fit our preconception. People will also forget much that they learn but will tend to retain information that supports their attitudes and beliefs. It is therefore likely that the consumer will remember the bad aspects of a service if they generally perceive the service to be of low quality and vice versa. It is therefore important to repeat messages that you intend to send forth to your target audience.

The absolute threshold is the lowest level at which an individual can detect a difference between 'something' and 'nothing'. In the field of perception, the term *adaptation* refers to 'getting used to' certain sensations; that is becoming accommodated to a certain level of stimulation. The differential threshold is the minimal difference that can be detected between two similar stimuli. It is also known as the just noticeable difference (j.n.d). A nineteenth century German scientist Ernst Weber discovered that the j.n.d between two stimuli was not an absolute amount, but an amount relative to the intensity of the first stimulus. Weber's law states that the stronger the initial stimulus, the greater the additional intensity needed for the second stimulus to be perceived as different.

It has long been felt that consumers perceive stimuli in a selective way (accepting, rejecting, and interpreting) because individual minds simply don't accept, process, and interpret the stimuli in the same way (Engel, 1964). Individuals see what is personally significant to them, with significance being defined in terms of the emotional relationships between the individual and the stimuli (Cantril, 1957). Thus when it comes to service improvements, marketers should meet or exceed the consumer's differential threshold. The consumer must be able to perceive any improvements made to the original service.

In order to influence customer perceptions of services directly, Zeithaml and Bitner (1996) suggest the following ways; Measure and manage customer satisfaction and service quality. Such measurements are needed to track trends, to diagnose problems and to link to other customer-focused strategies. Manage the evidence of service (people, process, physical evidence) to reinforce perceptions. Aim for customer quality and satisfaction in every service encounter because every encounter is potentially critical to customer retention. Firms should aim for 'zero defects'. To do this there should be a development of understanding customer expectations so that strategies can be built around meeting them i.e. plan for effective recovery, facilitate adaptability and flexibility, help employees cope with problematic customers, encourage spontaneity and manage the dimensions of quality at the encounter.

According to Schultz et al. (1987), the most basic measure of the value of a product or service is often at the concept stage. Concept statements are used to help the consumer visualize what the product or service might do. The creative strategy stage is where the basic message or idea is given. It is the summation of what benefit the service is to the consumer. It should therefore be believable and persuasive to the consumer. These stages are tested by a custom developed plan or through the services of a formal organization. It is important to measure perception with target market, conduct personal interviews or have focus groups using internal checklists, rating scales and consumer panels.

# 2.3 Nature and Characteristics of Services

Research has shown that one of the mega trends of recent years has been the phenomenal growth of services. Kotler (2003) comments that service industries are quite varied. The government sector is in the service business, the private non-profit sector, a good part of the

business sector and many workers in the manufacturing sector such as accountants and legal staff are really service providers. Kotler goes ahead to define a service as any act or performance that a party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product.

Services have four major characteristics (Kotler, 2003; Zeithaml and Bitner, 1996; Schiffman and Kanuk, 2004); intangibility, inseparability, heterogeneity and perishability. Intangibility is an important aspect that makes services unique. Unlike physical products, services can not be seen, felt, tasted, heard or smelled before they are bought. They are therefore more difficult to demonstrate in an exhibition thus their marketing requires imaginative personal selling. To reduce uncertainty, buyers will look for evidence of the service quality. They will draw inferences about quality from the place, people, equipment, communication material evidence to "tangibilize the intangible" (Kotler, 2003). Intangibility therefore presents several marketing challenges. Services cannot be patented therefore easily copied by competitors. Services cannot be easily displayed or communicated so quality may be difficult for consumers to assess.

In most instances, services cannot be separated from the person selling them. They are typically produced and consumed simultaneously. Since the client is also present as the service is produced, provider-client interaction is a special feature of services marketing. The presence of the customer may affect (positively or negatively) the outcome of the service transaction. For example a customer who is queuing to pay a water bill and is in a hurry may complain of inefficient service by the tellers thus negatively impacting the experiences of other customers. The quality of service and customer satisfaction will be highly dependent on what happens in 'real time' including actions of employees and the interactions between employees and customers (Zeithaml and Bitner, 1996).

Services are normally heterogeneous rather than homogeneous. This means that unlike manufactured products, it is difficult if not impossible to standardize the output of different sellers of presumably the same service (Kibera and Waruingi, 1988). Because services are performances, frequently produced by humans, no two services will be precisely alike. Therefore, organizations and people ensuring consistent service quality find it a very

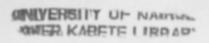
challenging task. Quality depends on many factors that cannot be fully controlled by the service supplier such as the level of demand for the service or the ability and willingness of personnel to satisfy consumers' articulate needs. Services are also highly perishable; they cannot be saved, stored, returned or resold. According to Kotler, the perishability of services is not a problem when demand is steady but when demand fluctuates, service firms have a big problem. Zeithaml and Bitner reiterate that demand forecasting and creative planning for capacity utilization are therefore important and challenging decision areas. The fact that services cannot typically be returned or resold also implies a need for strong recovery strategies when things do go wrong.

### 2.4 Service Quality

Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). There are a number of different "definitions" as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al., 1985; Lewis and Mitchell, 1990).

Whilst there is no general agreement on the nature of Perceived Service Quality, and whilst explanations are regularly changing and increasing, key researches and opinions on the topic can arguably be combined into the following guiding base definition: Perceived Service Quality is the result of a process. It is a customer's comparison, summarized in an attitude, of the believed goodness or badness of all dimensions of a particular service experience or service provider, in relation to expectations.

According to Oliver (1997), customer satisfaction is achieved by providing valued services and products where value is the positive difference between customers' actual experiences and their service delivery expectations. Productive employees also create value. Satisfaction is generated by high- quality support services and by being empowered to provide value and resolve customer complaints. Leadership that emphasizes the importance of each customer



and employee must support this customer service culture. These leaders must be creative and energetic (not lofty or conservative), participatory and caring (not removed or elitist) that is, one who can be a coach, teacher or listener (not just a supervisor or manager). Such a leader demonstrates company values (rather than simply institutionalizing policies) and motivates by mission (rather than by fear).

Fornell (1992) reiterates that customers whose complaints are satisfactorily resolved often become more company-loyal than customers who were never dissatisfied. Armstrong and Symonds (1991) said every complaint is a gift if handled well. They have found out that companies that encourage disappointed customers to complain — and also empower employees to remedy the situation on the spot — achieve higher revenues and greater profits than companies that do not have a systematic approach for addressing service failures. "Consumer satisfaction is the central element of the marketing concept" (Erevelles and Leavitt, 1992). Satisfaction is an "evaluation rendered that the experience was at least as good as it was supposed to be," in effect, an "evaluation of an emotion" (Hunt, 1977, pp. 459-460). Marquardt (1989) defined "quality" as "customer satisfaction with complete business relationship, including the product and all the related services". In other words, service quality is associated with customer satisfaction (Bolton and Drew, 1991).

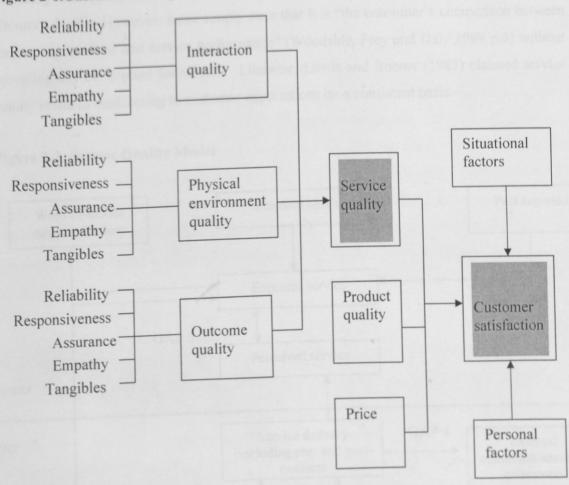
Most authors tend to use the terms satisfaction and quality interchangeably, but it is important to be precise about the meanings and measurement of the two concepts. Although they have certain things in common, satisfaction is generally viewed as a broader concept whereas service quality assessment focuses specifically on dimensions of service. Based on this view, Perceived Service Quality is a component of Customer Satisfaction (Zeithaml and Bitner, 1996).

Service quality is a focused evaluation that reflects the customer's perception of elements of service such as interaction quality, physical environment and outcome quality. These elements are in turn evaluated based on specific service quality dimensions. Satisfaction on the other hand is more inclusive; it is influenced by perceptions of service quality, product quality and price as well as situational and personal factors. For example, service quality of a water provider is judged on attributes such as how responsive staff are to customers, how

promptly bills are sent and how accurate they are, and how reliable the water supply is. Customer satisfaction will certainly be influenced by perceptions of service quality and other factors like consumer's emotional state and experiences while waiting in queues to pay bills.

The following figure illustrates the distinction between these two concepts:

Figure 2-1. Customer Perceptions of Quality and Customer Satisfaction

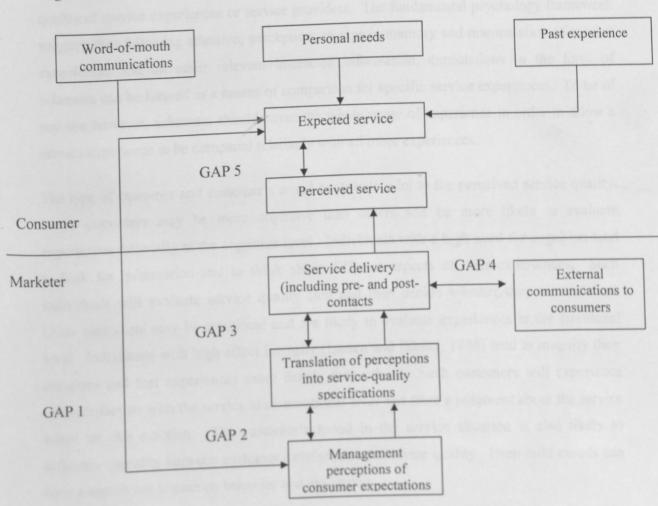


Source: Zeithaml, V. A. and Mary Jo Bitner (1996), "Services Marketing; Integrating Customer Focus Across the Firm" (3<sup>rd</sup> ed.), Tata McGraw – Hill, New York. Pp 85

Researchers have conducted studies to understand the quality of service from different perspectives. Parasuraman (1987) argued that process rather than outcome of service delivery should play an influential role in customers' evaluation of overall service quality because most of the time, customers have a hard time in identifying the service outcome. Service quality directly affects satisfaction with service (Marquardt, 1989; Nemeroff, 1989). Parasuraman, Zeithaml and Berry (1988) and Oliver (1997) defined perceived service quality

as a global judgment of the service, thus treating it as a cognitive construct. In contrast, customer satisfaction is usually considered to be a more affective concept. Oliver (1994) found that perceived service quality was influenced by performance alone, not by affective constructs, whereas customer satisfaction was affected by both cognitive (disconfirmation) and affective antecedents. Marketing academics generally agree that service quality is externally defined by the customer (Fornell 1992; Parasuraman, Zeithaml and Berry 1985; Gronroos 1984). However, some simply state that it is "the consumer's comparison between service expectations and service performance" (Woodside, Frey and Daly 1989 p.6) without providing any conceptual foundation. Likewise, Lewis and Booms (1983) claimed service quality refers to conforming to customer expectations on a consistent basis.

Figure 2-2. Service Quality Model



Source: Kotler Philip (2003), "Marketing Management", Prentice-Hall Inc., New Jersey. Pp 456

Parasuraman, Zeithaml and Berry (1984) formulated the above service-quality model that highlights the main requirements for delivering high service quality. The model identifies five gaps that cause unsuccessful delivery. There is no assumption that a customer necessarily evaluates the quality of a service experience or service provider after each service encounter. We know through simple observation, that customers often speak of how a service or service provider is better or worse than expected, better or worse than usual and relatively good or bad. Comments such as these suggest there are many reference points in memory which are used by customers, not just two reference points as suggested by the "Zone of Tolerance". Whilst this is not scientifically tested evidence, we know that every one of us have made and heard comments about particular services on numerous occasions. Such evidence therefore, provides us with a common sense hunch and sense of direction, concerning the nature of what is taking place in the minds of customers when evaluating the quality of service experiences or service providers. The fundamental psychology framework suggests that following attention, perception, storage in memory and manipulation of service experiences and all other relevant interacted information, expectations in the form of schemata can be formed as a means of comparison for specific service experiences. To be of any use however, schemata should cover the whole range of experience in order to allow a service experience to be compared relatively with all other experiences.

The type of customer and customer's mood contribute a lot to the perceived service quality. Some customers may be more cognitive than others and be more likely to evaluate experiences rationally at the cognitive level. Individuals with a high need for cognition tend to look for information and to think about different aspects of their experiences. Such individuals will evaluate service quality first and then decide whether they are satisfied. Other customers may be emotional and are likely to evaluate experiences at the emotional level. Individuals with high affect intensity (Larsen and Diener, 1986) tend to magnify their emotions and feel experiences more deeply than others. Such customers will experience (dis)satisfaction with the service at an emotional level and form a judgment about the service based on this emotion. The customer's mood in the service situation is also likely to influence causality between customer satisfaction and service quality. Even mild moods can have a significant impact on behavior and evaluation.

Waiting has also been known to cause bad moods in customers and those that encounter a delay will evaluate the service provided negatively. When paying for water bills, it is known that there are sometimes very long queues. Waiting can be time-consuming, annoying and frustrating thus a customer often reacts in an emotional way. The study of waiting and delays is a relevant topic, in particular, to services marketing. Although many delays are caused by inefficiencies in the service delivery process, waiting in some service situations seems to be almost unavoidable. For example, the deadline for paying water bills for neighboring estates is often concurrent and most customers prefer paying on the last day thus having very long queues. Maister (1985) has proposed several situational effects on consumer's' perception of waiting. Among others, he suggested the following four propositions: (1) Unoccupied time feels longer than occupied time; (2) preprocess waits feel longer than in-process waits; (3) uncertain waits are longer than known, finite waits; (4) unexplained waits are longer than explained waits. If service consumes waiting period, customers probably do not pay as much attention to the wait. Oliver (1997) comments, "Everyone knows what satisfaction is, until asked to give a definition. Then it seems, nobody knows". Satisfaction is the most basic of customer concepts and building from various definitions, it is the customer's evaluation of a product or service in terms of whether it met their needs and expectations.

# 2.4.1 Determinants of Service Quality

Researchers have suggested that service quality is a multidimensional concept. Customers consistently use a set of perceptual dimensions to predict and evaluate the process and outcomes of a service. The major premise for perceived quality of service was derived from the conceptual framework set forth by Zeithaml et al. (1990). Their definition of perception of quality of service included ten dimensions: tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communications, and understanding the customer. These were narrowed empirically to include tangibles, reliability, responsiveness, assurance and empathy in the development of the SERVQUAL instrument. Widdows, Feinberg and Lai (1991) reported six service dimensions, namely: reliability, assurance, responsiveness, tangibles, empathy and billing process. These authors suggested that the relative importance of these factors might vary in response to different product lines. In order to test the dimensions of service quality, Lehtinen and Lehtinen (1982) conducted a study to assess service quality associated with service process and service quality associated with

service outcome by using a longitudinal study method. They described quality of service process and service output as follows: "Process quality is the customer's qualitative evaluation of his participation in the service production process. Process quality is the customer's personal and subjective judgment. It is based on how the customer sees the production process and how well he feels himself fitting into the process" (p. 6). Parasuraman, Zeithaml and Berry (1985) in the initial qualitative work which led to the development of their service quality measuring instrument, SERVQUAL, intimated that service quality might represent a consumer's global judgments across multiple service encounters. In their later paper describing the development of SERVQUAL (Parasuraman, Zeithaml and Berry, 1988), state "perceived quality is the consumers' judgment about an entity's overall excellence or superiority. It is a form of attitude, related but not equivalent to satisfaction" (p.15). This definition begins to tie service quality to attitude formation and as such has at least a conceptual foundation.

Table 2-1.SERVQUAL Dimensions for Measuring Services Quality

	SERVQUAL Dimensions for Measuring Service Quality
Reliability	Providing the service as promised, at the promised time and doing it right the first time; handling customer problems in a dependable manner and keeping customers informed.
Responsiveness	Prompt service, willingness to help customers and readiness to respond to customer requests
Assurance	Instilling confidence in customers and making them feel safe in their transactions; consistently courteous employees with the knowledge to answer customers' questions.
Empathy	Employees who deal with customers in a caring fashion and understand their needs; giving customers individual attention and having their best interests at heart.
Tangibility	Modern equipment, visually appealing facilities and materials related to the service, employees with professional appearance, and convenient operating hours.

Source: Schiffman L.G. and Leslie L. Kanuk (2004), "Consumer Behavior" (8<sup>th</sup> ed.), Prentice-Hall of India, New Delhi. Page 192

SERVQUAL however, relates to the evaluation of a service provider rather than a service experience. SERVQUAL is arguably incomplete since the theory of the nature of expectations has since been expanded to include two dynamic rather than just one post-purchase type of expectation. Boulding, Kalra, Staelin and Zeithaml (1993) argued and tested the view that individuals' perceptions of the service quality of a firm just after a service contact are a blend of their prior expectations of what will and what should transpire during the contact, and the actual delivered service during the service encounter. The Boulding et al. (1993) theory suggests there are two types of expectation. The first is a predictive expectation, 'will' expectations and the second is a 'should' expectation, which acts as a standard for comparison of the perceived service.

The nature of comparison standards are arguably far more diverse than allowed for within SERVQUAL or the theory behind it. Theories and suggestions by other researchers such as Liljander (1995), Cadotte, Woodruff and Jenkins (1987) and Swan (1988) suggest many possible comparison standards including predicted service, ideal service, excellent service, desired service, deserved service, needs and values, cultural norms, promises, adequate service, best brand norm, brand norm, product type norm, favorite brand model, comparative expectations, equity and fairness. However, SERVQUAL only really incorporates a rough aggregated mixture of a selection of these. Liljander (1995) argues that there is not enough detail and preciseness in this use of expectations.

Therefore, if service providers are to be able to measure their customers perceived service quality precisely and informatively they must incorporate a precise understanding of the nature of comparison expectations being separate from prediction expectations. The other limitations of SERVQUAL such as reliability, discriminant validity and variance restriction (Brown, Churchill and Peter, 1993) should, ideally also be overcome. It is often not enough to just know if customers receive adequate service or exceed expectations because most service providers who are concerned with differentiating through service are neither providers of outstanding service, nor providers of inadequate service. For these companies this situation is unlikely to change. However, they want to be providers of service of a significantly higher level than provided by all or most of their competitors. As competition increases, the quality of service has become an important characteristic for winning customer loyalty, and has also been the greatest differentiator among market competitors (Berry,

Bennet and Brown, 1989; Martin, 1987). In order to restore a competitive advantage, service providers need to understand how quality is evaluated from the customers' perspective (Lefevre, 1989; Zeithaml, 1989) in order to ensure customers' satisfaction with the service.

The customer's service quality evaluation, for both a service experience and a service provider is derived by that customer using one or other of at least three comparison heuristics in order to benchmark services against each other. These heuristics are achieved by the customer comparing her or his generic attitude for a service experience, or service provider, with her or his generic comparison attitudes.

# 2.4.2 Measures of Service Quality

Top service companies spend much more time measuring customer satisfaction with service quality than do goods marketers in general (Rust et al., 1996). Most quality control methods were originally developed to monitor the extent to which manufactured goods meet the specifications that have been set for them. The nature of services changes the focus of standard quality control methods. Quality of service has been difficult to measure (Armstrong and Symonds, 1991; Kotler & Bloom, 1984), probably due to the intangible quality of the purchasing experience. In fact, consumers have reported general satisfaction when purchasing goods, but were much less satisfied when it came to services (Zemke and Schaaf, 1989). Generally, quality can be defined as "a comparison between expectations and performance" (Berry et al., 1989; Parasuraman, Zeithaml and Berry, 1985). Three unique characteristics: intangibility, heterogeneity and inseparability of production and consumption: make the measure of service quality less objective as the measure of product quality (Berry et al., 1989: Parasuraman, Zeithaml and Berry, 1988: Zeithaml, 1981). Moreover, service quality is an interaction between a customer and the elements in service provision. Customers will rate the quality of service as favorable or excellent when it meets or exceeds their expectation.

Several explanations are offered for poor service, including, a more sophisticated and demanding consumer, workers who consider service work beneath them, and a change in demographics resulting in fewer entry-level workers. Companies may bear the brunt of poor service through reduced sales and diminished customer loyalty (Zemke and Schaaf, 1989). According to Lewis and Booms (1983), service quality is a measure of how well the service

level delivered matches customer expectations. In the measure of performance, it is the measure of perceived performance that counts rather than the reality of performance. As far as service quality is concerned, perception is a reality. A number of researchers view quality to be an overall evaluation of a product or service, similar to attitude. (Holbrook & Corfman, 1985; Olshavsky, 1985; Parasuraman, Zeithaml, & Berry, 1985). The evaluation of service relies solely on the customer's level of satisfaction and is made more difficult since the sale, production and consumption of a service takes place simultaneously. Due to the tangible nature of services, consumers develop an attitude towards the service thus services are measured like attitudes by the use of the Likert Scale.

# 2.4.3 Service Quality in the Public Utility Sector

Strategic concepts are as important in the public sector as in commercial organizations. Many amenities run by local government face difficulty because they may not be allowed to strategize (Johnson and Scholes, 1984). This can lead to mediocrity of service where strategic decision mainly take the form of striving for more efficiency so as to retain or improve services on limited budgets. According to Njoroge (2003), public utilities are closely regulated by one or more government agencies. The government controls entry, tariffs, establishes quality standards and influence total profits that may be earned by those firms. In Kenya, the public utility sector includes water, electricity, part of transport sector (Railway), telecommunications and postal services. NCWSC which is fully owned by the City Council, is therefore a public utility institution.

In the water sector, some measures have been taken in the past but have not been effective due to the following reasons given in a report by GTZ in 1998; the politics of water - water has been regarded as a social good. It is therefore part of a political culture that water provision and sanitation is the obligation of the state. Moreover, water utilities are significant employers and instruments of political patronage. There was no performance standards for water utilities in Kenya. This meant that managers could not be sanctioned for poor performance and also extended to the fact that there was no effective sanctioning system for wayward and dishonest employees as well. Water services were also provided by centrally managed monopolistic public enterprises or government departments. Those charged with the responsibility for delivery were rarely given the managerial and financial autonomy they needed to do their job properly.

These constraints are applicable to other public institutions as well therefore making users of these services, both actual and potential not to be in a position to make their demands felt. The need to improve management systems and service quality in the public sector was therefore apparent and urgent. And as most researchers have concurred, (Alford, 2002; Heinrich, 2002; Kadir et al., 2000; Laszlo, 1997; Rowley, 1998; Wisniewski, 2001) recent trends in public administration emphasize quality management, citizen orientation and performance results and Kenya in not an exception and has made an effort in adapting privatization and/or restructuring as way of eradicating poverty and providing improved services in most of its sectors.

#### 2.5 Summary

A number of researchers view quality to be an overall evaluation of a product or service, similar to attitude. There have been many dimensions used in the evaluation of services. Rust et al. (1996) asserts that it is not possible to list a set of universal service quality dimensions since different services involve different wants and needs that do not fit into broad categories. The scenarios in water provision are; the perceived quality of individual transactions (i.e. when paying bills) and the perceived quality of the service provider overall, in handling all matters pertaining to service delivery.

This study will therefore use the ten determinants as expanding on the five dimensions of Reliability, Responsiveness, Assurance, Empathy and Tangibility as given by Gronroos (1984), in order to close the gap that exists in the water service sector about perception of consumers of tap water.

## CHAPTER THREE RESEARCH METHODOLOGY

#### 3.1 Research Design

The research is a descriptive survey. According to Rubin and Luck (1992), a study concerned with finding out who, what, which and how of a phenomenon is a descriptive design. This study seeks to describe how consumers perceive quality of services offered in the public water sector. Njoroge (2003) and Maina (2001) used the descriptive design in related studies.

### 3.2 Population

The population in this study consisted of all the individual consumers of tapped water in Nairobi. According to the records retrieved from Nairobi City Water & Sewerage Company (N.C.W.S.C) on 30th June 2006, the total consumer accounts from the four regions were 142,323; Western (18,123), Northern (66,005), Central (37,542) and Eastern (20,653).

# 3.3 Sample and Sampling Design

A target sample of 200 consumers was used. According to Cooper and Emory (1994), a sample of 100 drawn from a population of 5,000 has roughly the same estimating precision as 100 drawn from a population of 200 million. Sample units were selected randomly from the customers in the four regions (Western, Northern, Central and Eastern). Proportionate stratified sampling was used to determine the number of respondents as shown in the table 3-1 below, adapted from Njoroge (2003):

Table 3-1. Allocation of target sample units from population units within Nairobi

REGION	NO. OF ACCOUNTS	PERCENTAGE OF TOTAL POPN.	NO. OF CONSUMERS IN TARGET SAMPLE*
	18,123	12.7%	25
Western		46.4%	93
Northern	66,005	26.4%	53
Central	37,542		
	20,653	14.5%	29
Eastern	142,323	100%	200
TOTAL		at whole number	

<sup>\*</sup>Figures have been rounded off to the nearest whole number

The percentage of the target sample is equivalent to the percentage of the total population

### 3.4 Data Collection

Primary data was collected using a structured questionnaire. The questionnaires were distributed at paying points and respondents were the individual account owners. A prescreening question was used to ascertain ownership of the account. The respondents then filled the questionnaire with the help of research assistants in order to enhance response rate and assist respondents who are illiterate.

# 3.5 Operationalizing Service Quality Dimensions

As given by Parasuraman et al. (1988), the five dimensions of service quality were used and the conceptualization adapted from Njoroge (2003). These dimensions are shown in Appendix III. A likert scale was used to measure consumers' perceptions on the quality of service offered by NCWSC.

# 3.6 Data Analysis Techniques

The data was analyzed by use of descriptive statistics. Data in Section A of the questionnaire was analyzed using frequencies and percentages. Section B sought to establish perceptions of consumers and was assessed on a Likert Scale. Mean scores and standard deviations have been used to analyze the data in this section.

# CHAPTER FOUR DATA ANALYSIS AND FINDINGS

#### 4.1 Introduction

This chapter contains the summaries of data findings together with their possible interpretations by use of percentages, frequencies, mean scores and standard deviations. One hundred percent (100%) response rate was achieved out of the 200 questionnaires that were sent out to the respondents. The chapter has been divided into sections, the first section analyses the demographics of the respondents while the second section analyses the perception of consumers towards the quality of services offered by Nairobi City Water and Sewerage Company.

## 4.2 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents considered in this research included whether the respondent had an account with the company and the duration of holding the account.

## 4.2.1 Holding an account with Nairobi City Water and Sewerage Company.

The respondents were required to indicate whether they were holding an account with Nairobi City Water and Sewerage Company.

Table 4.2.1: Holding an account with Nairobi City Water and Sewerage Company

Holding an account	Frequency	Percentage
Yes	200	100%
Total	200	100%

Source: Research data

The findings show that all the respondents had an account with Nairobi City Water and Sewerage Company.

### 4.2.2 Duration of holding the account

The following table summarizes how long the respondents had held the accounts with NCWSC.

Table 4.2.2: Duration of holding the account

Period	Frequency	Percentage
Less than 3 years	48	24%
Between 3 - 5 years	78	39%
	74	37%
Over 5 years Total	200	100%

Source: Research data

From the table, 24% of the respondents had held the accounts for less than 3 years, 39% between 3-5 years and 37% for over 5 years.

# 4.3 Perception of consumers towards the quality of services offered by NCWSC

The respondents were to rate the extent to which the company has performed in relation to reliability, responsiveness, assurance (competence, courtesy, credibility, security), empathy (access, communication, understanding the customer) and tangibles of the services offered by the company. This was measured on a five point likert scale, where 5= very large extent, 4=large extent, 3=some extent, 2=little extent and 1=no extent. The scores of 'No Extent' and 'Little Extent' have been taken to present a small extent (S.E) (equivalent to mean score of 0 to 2.5 on the continuous likert scale; (0≤ S.E <2.5). The scores to 'To Some Extent' have been taken to represent a moderate extent (M.E.) (equivalent to a mean score of 2.5 to 3.5 on the continuous likert scale: (2.5≤M.E. <3.5). The score of both 'Large Extent' and 'Very Large Extent' have been taken to represent a large extent (L.E.) (equivalent to a mean score of 3.5 to 5.0 on a continuous likert scale; (3.5≤ L.E. <5.0). A standard deviation of >1 implies a significant difference in the use of the variables among respondents, while a standard deviation of < 1 implies similarity in the use of variables among respondents.

#### 4.3.1 Reliability

Reliability entails providing the service as and when promised. The consumer perceptions of this dimension are summarized in the table below:

Table 4.3.1: Reliability

NEW YARDI ITV	Mean Score	Std Dev
RELIABILITY  When the company promises to deliver a service, it does so	4.31	0.81
Water always flows consistently and is available most of the time	4.27	0.94
The water bills received are accurate and free from errors	3.92	1.07

Source: Research data

To a large extent, the respondents felt that when the company promises to deliver a service, it does so (4.31), water always flows consistently and is available most of the time (4.27) and the water bills received are accurate and free from errors (3.92). However, responses varied greatly in the aspect of water bills being accurate and free from errors, hence the standard deviation of 1.07.

### 4.3.2 Responsiveness

This measured how prompt the company was in delivering the service.

Table 4.3.2: Responsiveness

RESPONSIVENESS	Mean Score	Std Dev
The water bills are delivered in good time	3.77	1.09
- the shortest time possible	2.98	1.27
The company always gives a specific time to resolve issues that arise like water shortages	2.79	1.05

Source: Research data

According to the findings above, the water bills were delivered in good time to a large extent (3.77). However, to a moderate extent, problems are always solved in the shortest time possible (2.98) and the company always gave a specific time to resolve issues that arise like water shortages (2.79). The standard deviations of 1.09, 1.27 and 1.05 indicate that there were significant differences in opinion pertaining to the dimension of responsiveness.

#### 4.3.3 Assurance

The expanding dimensions measured were competence, courtesy, credibility and security. The aspect of competence measured the possession of required skill and knowledge to perform the service; courtesy involved being respectful, considerate and polite, credibility stands for being trustworthy, believable and honest while security sought to measure the extent to which the customer felt free from risk or doubt. The results are shown in the table below:

Table 4.3.3: Assurance

ASSURANCE	Mean Score	Std Dev
ASSURANCE		istenes
Competence	4.22	1 22
Staff appear to be competent in what they do	4.32	1.32
Staff always give the right solutions to problems	3.11	0.94
Courtesy	4.13	1.25
Staff are friendly		
Staff never act busy or rude when you seek assistance	4.11	0.83
Credibility	4.37	0.84
Staff are honest	-	
Staff never threaten me with disconnection	2.56	0.91
Security Security and well treated	4.63	0.78
I feel confident that the water is of good quality and well treated	7.03	0.76
If I had a confidential and personal issue, I would feel free to confide in management	2.72	1.10

Source: Research data

Competence: The staff appeared to be competent in what they did (4.32) to a large extent, though there were significant differences in opinion (1.32), while to a moderate extent they always gave the right solutions to problems (3.11).

Courtesy: The consumers significantly varied in opinion about staff being friendly (1.25) although on average, they agreed to a large extent (4.13). On the other hand, there was minimal variation in opinion (0.83) that they never acted busy or rude when the customer sought for assistance (4.11).

Credibility: There was general agreement (0.84 and 0.91) that staff were honest (4.37) to a large extent. However, to a moderate extent the staff never threatened the customers with disconnection (2.56).

Security: The customers to a large extent felt confident that the water was of good quality and well treated (4.63). On the other hand, to a moderate extent if the customers had a confidential and personal issue, they would feel free to confide in management (2.72) although this varied considerably (1.10)

## 4.3.4 Empathy

This dimension was defined by accessibility, which involved the staff being approachable and easy to get in touch with; communication which entails the staff being good listeners, keeping customers informed in a language they understand and understanding the customer by making the effort to know their needs.

Table 4.3.4 Empathy

TACCOMMUNICATION OF THE PROPERTY OF THE PROPER	Mean Score	Std Dev
EMPATHY	4-4-3	
Stall are always to proceed the state of the		03
Access to reach an appropriate		
Whenever I have a problem, I always manage to reach an appropriate staff member (by telephone, e-mail or in person)	4.72	0.87
The water bills payment points are conveniently located	4.61	0.63
a description to the second deviations of the	TE WES	
Customers are always advised about interruptions or disconnections in good time	3.21	0.73
XI I and and the customer		
When I have a problem, staff always demonstrate understanding and concern	3.62	0.91
Staff give customer individual attention	2.71	1.18

Source: Research data

Accessibility: To a large extent the customers always managed to reach an appropriate staff member (by telephone, e-mail or in person) whenever they had a problem (4.72) and the

water bill payment points were conveniently located (4.61). Responses did not significantly differ as indicated by the standard deviations (0.87 and 0.63).

Communication: To a moderate extent, the consumers were always advised about interruptions or disconnections in good time (3.21) and a standard deviation of 0.73 indicates a trivial variation of the responses.

Understanding the customer: To a large extent when customers had a problem, staff always demonstrated understanding and concern (3.62) and to a moderate extent the staff customers individual attention (2.71). The customers however gave extensively varied responses on this issue, hence the deviation of 1.18.

## 4.3.5 Tangibility

Tangibles include visually appealing faculties and materials related to the service.

Table 4.3.5: Tangibility

TANGER DE MOTOTE DE MOTES OURS	Mean Score	Std Dev
TANGIBLES  We dille are easy to understand	4.37	1.30
Water bills are easy to understand Staff are always neatly dressed	4.31	1.12
Water offices are attractive	4.11	0.93

Source: Research data

From the above table, consumers felt to a large extent that the water bills were easy to understand (4.37), the staff members were always neatly dressed (4.31) and water offices were attractive (4.11). However, with the standard deviations of >1, there were those who strongly felt that the bills were easy to understand and staff were always neatly dressed, while others strongly disagreed to that. There was little variation on the fact that offices are attractive (0.93).

# 4.3.6 Summary of the Service Quality Dimensions

A comparison of perceptions of consumers of Nairobi City Water and Sewerage Company based on the five dimensions of service quality has been summarized below:

# 4.3.7 Summary of the service quality dimensions

Dimension	Mean Score	Standard Deviation
Reliability	4.17	0.94
Responsiveness	3.18	1.14
Assurance	3.74	0.99
Empathy	3.77	0.86
Tangibility	4.26	1.12

Source: Research data

From the results above, it can be deduced that customers feel to a large extent that the aspects of reliability (4.17), tangibility (4.26), assurance (3.74) and empathy (3.77) have been adequately addressed. On the other hand, the issue of responsiveness (3.18) has satisfied the customers to a moderate extent. However, there are significant differences in the perception of the dimensions of responsiveness (1.14) and tangibility (1.12).

# 4.4 How to improve on service quality

The following table summarizes the areas which the respondents felt the company should improve on.

Table 4.4 How to improve on service quality

AREAS FOR IMPROVEMENT	Frequency	Percentage
Meter readings be done when the meter owners are available	66	33%
Meter readers should always be in official uniform	132	66%
Give more time for bill payments before disconnections	79	40%
Ensure consistent water flow and reduce rationing	93	47%
Ensure timely reconnections	116	58%

The respondents felt that the company should take the meter readings when they were present especially over the weekend, meter readers should always be in official uniforms, that the company should give them more time before disconnecting the water, ensure consistent water flow and ensure timely reconnections.

## CHAPTER FIVE

# DISCUSSION, CONCLUSION AND RECOMMENDATION

## 5.1 Introduction

This chapter summarizes the findings as well as the conclusions gathered from analysis of data. Findings have been summarized alongside the objectives of the study, conclusions have been drawn from the study and the recommendations are given.

## 5.2 Discussion

In most industries, providing quality service is no longer simply an option. There are a number of different definitions as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994). Service quality can thus be defined as the difference between customer expectations of service and perceived service. The objective of the study was to establish the perception of consumers towards the quality of services offered by Nairobi City Water and Sewerage Company.

To reduce uncertainty, buyers will look for evidence of the service quality. They will draw inferences about quality from the place, people, equipment, communication material evidence to "tangibilize the intangible" (Kotler, 2003). The consumers therefore tend to assess the neatness of the staff, general appearance of the offices and paying points and even the type of paper used for the bills. Intangibility therefore presents several marketing challenges. Services cannot be easily displayed or communicated so quality may be difficult for consumers to assess.

According to Oliver (1997), customer satisfaction is achieved by providing valued services and products where value is the positive difference between customers' actual experiences and their service delivery expectations. Productive employees also create value. Satisfaction is generated by high- quality support services and by being empowered to provide value and resolve customer complaints. To a large extent, the respondents felt that when the company promises to deliver a service, it does so, water always flowed consistently and was available

most of the time and the water bills received are accurate and free from errors, water bills were delivered in good time.

In most instances, services cannot be separated from the person selling them. They are typically produced and consumed simultaneously. Since the client is also present as the service is produced, provider-client interaction is a special feature of services marketing. The presence of the customer may affect (positively or negatively) the outcome of the service transaction. For example a customer who is queuing to pay a water bill and is in a hurry may complain of inefficient service by the tellers thus negatively impacting the experiences of other customers. The quality of service and customer satisfaction will be highly dependent on what happens in 'real time' including actions of employees and the interactions between employees and customers (Zeithaml and Bitner, 1996). As perceived by the consumers, the staff of NCWSC appeared to be competent in what they did and were friendly and never acted busy or rude when the customer sought for assistance, honest, while to a moderate extent they always gave the right solutions to problems and never threatened the customers with disconnection.

According to Oliver (1997), customer satisfaction is achieved by providing valued services and products where value is the positive difference between customers' actual experiences and their service delivery expectations, the customers to a large extent felt confident that the water was of good quality and well treated. On the other hand, to a moderate extent when the customers had a confidential and personal issue, they would feel free to confide in management.

Fornell (1992) reiterates that customers whose complaints are satisfactorily resolved often become more company-loyal than customers who were never dissatisfied. Armstrong and Symonds (1991) said every complaint is a gift if handled well. They have found out that companies that encourage disappointed customers to complain – and also empower employees to remedy the situation on the spot – achieve higher revenues and greater profits than companies that do not have a systematic approach for addressing service failures. "Consumer satisfaction is the central element of the marketing concept" (Erevelles and Leavitt, 1992). To a large extent when customers had a problem, staff always demonstrated

## LIMITATIONS OF THE STUDY

The response of respondents were more likely to be influenced by the prevailing water conditions at time when the research was being carried, this would have lead to the respondents being biased on their responses.

# SUGGESTIONS FOR FURTHER RESEARCH

A similar research should carried out over a period covering when water is available and when its not available in order to get a more representative view of the customers on the quality of the services.

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## APPENDIX I

## INTRODUCTION LETTER

Gaye J. N. Agesa
University of Nairobi
School of Business
P.O. Box 30197
NAIROBI

Dear Respondents,

Student

## REQUEST FOR RESEARCH DATA

I am a postgraduate student at the University of Nairobi studying for a Master in Business Administration (MBA). As part of my studies, I am undertaking a research project on perception of quality of services offered by the Nairobi City Water and Sewerage Company.

This is to kindly request you to complete the attached questionnaire. The information you provide will be used exclusively for academic purposes. My supervisor and I assure you that the information you give will be treated with strict confidence.

Your co-operation will be highly appreciated.	
Yours faithfully,	
GAYE AGESA	MARGARET OMBOK
	Lecturer/Supervisor

## APPENDIX II

## **OUESTIONNAIRE**

SECTION	Information)
	(optional)
2. Residential Estate	
(For the following questions, )	
3. Do you hold an account wi	h Nairobi City Water and Sewerage Company?
Yes ()	
No ()	
4. How long have you had th	s account?
Less than 3 years ()	
Between 3 – 5 years ()	
Over 5 years ()	
Suff pe flenul	
SECTION B	· · · · · · · · · · · · · · · · · · ·
5. Following the reform in	tiatives undertaken to improve delivery of services in the water
sector, Nairobi City W	ater and Sewerage Company took over operations of water in the Water and Sewerage department of the City Council. The in place measures to improve the quality of services offered.
On a scale of 1 to 5 where:	
5 -Very large extent	
4 -Large extent	

Please indicate the extent to which the company has performed in relation to the following:

3 - Some extent

2 -Little extent

1 - No extent

	Very large extent (5)	Large extent (4)	Some extent (3)	Little extent (2)	No extent (1)
When the company promises to deliver a service, it does so					
Water always flows consistently and is available most of the time				-	
The water bills received are accurate and free from errors					
. The water bills are delivered in good time					
<ul> <li>Problems are always solved in the shortest time possible</li> </ul>					
The company always gives a specific time to resolve issues that arise like water shortages					
g. Staff always give the right solutions to problems	tarthat the	o apon	has made	that are not	shows above.
h. Staff appear to be competent in what the do	У				
i. Staff are friendly					
<ul> <li>j. Staff never act busy or rude when you see assistance</li> </ul>					
k. Staff never threaten me with disconnection	n				
Staff are honest					
m. I feel confident that the water is of go quality and well treated	many to ch	ang P			
n. If I had a confidential and personal issumed would feel free to confide in management	nt				
o. Whenever I have a problem, I alver manage to reach an appropriate member (by telephone, e-mail or in personal contents).	staff son)				
p. The water bills payment points conveniently located	are				

DPER!	Very large extent (5)	Large extent (4)	Some extent (3)	Little extent (2)	No extent (1)
. Customers are always advised about interruptions or disconnections in good time	N/	LEVANT I	DES FOR	VATER	CERTON
<ul> <li>When I have a problem, staff always demonstrate understanding and concern</li> </ul>					
s. Staff give customers individual attention				en rochen	
t. Staff are always neatly dressed	e wice an i	A recognition of	to they from so	ro estatent	
u. Water bills are easy to understand		Arevaror br		g ou paus?	110,6,8
v. Water offices are attractive	dimens	muckly Wilsen there	is a problem, s	See the	

6.

Indicate any other achievements that the company has made that are not shown above
A ASSERANCE COMPONENT
The state of the s
7. What would you like the company to change?
/. What would you like the

THANK YOU FOR YOUR VALUABLE TIME

# APPENDIX III OPERATIONAL FRAMEWORK

DIMENSIONS FOR MEASURING SERVICE	THE TALL AND MAN	RELEVANT ISSUES FOR WATER CONSUMERS IN NAIROBI	RELEVANT QUESTION
QUALITY  1. RELIABILITY	Reliability: Providing service as and when promised.	-Does staff solve your problems when they promise to? -Is availability of tap water consistent? -Are water bills free from errors?	5(a,b,c)
2. RESPONSIVENESS	Responsiveness:  Prompt in delivering the service.	-Are water bills delivered in good time? -Does staff address your complaints quickly? -When there is a problem, does the organization give specific time for rectification?	5(d, e, f)
3. ASSURANCE	Competence:  Possession of required skill and knowledge to perform the service	1 let they ore	5(g, h)
	Courtesy: Respectful, considerate and polite	-Are staff friendly? -Does staff refrain from acting busy or being rude when clients seek assistance?	5(i, j)
	Credibility: Trustworthy, believable and hone:		5(k, l,)
	Security: Free from risk or doubt	-Do customers trust the quality of the water? -Do customers feel free to confide in management?	5(m, n)

4. EMIATIT	Access: Approachable and	-Is there a help desk for customers? -Is it easy to reach members of staff? -Are the water payment points conveniently located?	5 (o, p)
	Communication: Good listener, keeping customers informed in a language they	-Does staff advice customers on disconnections/interruption? -Are there effective feedback channels?	5 q
	Understanding the customer: Making the effort to know customers and	-Are staff flexible and accommodating? -Does staff give customers individual attention?	5(r, s)
5.TANGIBILITY	their needs.  Tangibles:  Visually appealing facilities and material related to the service.		5(t, u, v)