

**FACTORS INFLUENCING UTILIZATION OF PUBLIC TOILET PROJECTS IN  
NAKURU TOWN, NAKURU COUNTY, KENYA**

**BY**

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE AWARD OF THE MASTER OF ARTS  
DEGREE IN PROJECT PLANNING AND MANAGEMENT OF THE  
UNIVERSITY OF NAIROBI**

**2013**

**DECLARATION**

I declare that the contents of this project report is my original work and that the contents have not been presented in any other university

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**APPROVAL**

This research project has been submitted for examination with my approval as university supervisor.

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## **DEDICATION**

I dedicate this study to my daughters Judy Wanjiru and Ruth Nyambura who are an inspiration to my life and to my friend Bwibo Adieri.

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## **ABBREVIATIONS AND ACRONYMS**

CBD	.....	Central Business District
UNDP	.....	United Nations Development Programmes
JMP	.....	Joint Monitoring Programme
MCN	.....	Municipal Council of Nakuru
PM	.....	Utilization Measurement

## **ACKNOWLEDGEMENTS**

I am grateful and indebted to my supervisor Dr. Maina Waiganjo all the support I received from him in his wise counsel and guidance. My supervisor gave an in-depth critique of my work that helped to shape my ideas in the formulation of the topic that culminated to this project report. The input I got from him helped me to structure this project.

I acknowledge group members Maina, Dan and Ronoh for their encouragement and critique they offered to me in the course of the preparation of this proposal through the discussions and input into the report.

To my family members who gave the spiritual support that motivated me to continue with the study I warmly thank you.

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## **ABSTRACT**

The purpose of the study was to investigate the factors influencing utilization of the public toilets in Nakuru town as way of contributing knowledge to current and prospective investors on viewing public toilets as a profitable business. The objectives of the study were to determine to what extent location and design of the public toilet project influence utilization of the public toilet; to assess how marketing strategies influence the utilization of the public toilet project; to evaluate how socio-cultural factors influence utilization of public toilets and to assess how environment factors affect the utilization of public toilets. The study was conducted within the Nakuru Town and a sample of 180 respondents represented the population of the users of the public toilets in the town. The study adopted a descriptive survey design and a questionnaire was used to collect data. Data was analysed through descriptive statistics especially the central tendencies measures. The findings of the study were that: location is not a key element in influencing; most toilets have a design not friendly to all; most toilets mainly relied on the sign posts outside the toilets to advertise; society approves on the important role of the public toilets; gender issue is a key aspect to be considered in the hiring of staff to work in these toilets and observance of proper environmental measures especially health measures and standards in the toilet usage were prioritized. The study concluded that the quality of the toilet service is essential despite the location of the toilet; there is need to incorporate more strategies to market the toilets; the toilet providers have a strong societal recognition of the toilets as a business thus need improve their vision of the toilets and there is a need to have health regulations displayed inside the toilets to enlighten the users of the toilets. It is recommended that future researchers should study on factors attracting investors to offer public toilet services in Nakuru town.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

Sanitation subject is not only a environment issue but also an entrepreneurial or business matter. Investments are being done in this area in the establishment of public toilets in major towns and cities to take care of an increasing need for sanitation. The study of human waste management as an investment opportunity has been on the periphery despite the essence of the need of having good facilities that would make the user comfortable and decent.

The availability of such toilet facilities to society is a necessity as good sanitation raises the dignity of the society. The demand for the toilets has been on the rise given the sharp rise in population since toilets are basic social infrastructures needing (Kelvin ,2013).

The Millennium Development Goals (MDG) adopted during the Millennium Summit 2000, set a focus on ensuring a good environment as sign of good lifestyle and an indicator of poverty alleviation. In the MDG's goal 7 the United Nations spelt out the role of the environment in the sustainability of development in the countries that included the desire for better sanitation.

#### **Historical information on public toilets**

The ancient world had various types of toilets of which the road side was the most popular as many could not afford the construction of decent toilets. Most of the toilets were used by travelers in the Roman Empire that built public urinals that assisted them in their needs. After the collapse of the Roman Empire the public urinals collapsed too and the public toilet users began to use the streets to as the toilets. The result was heaps of filth in the city causing the environment to decay (Gibson, 2007).

In the city of London the first public toilet was established next to an exhibition to serve the men and later a facility for women was opened in 1952 .The proprietors charged the users of the toilets and went ahead to advertise in the media but the number of users were few, eventually they were abandoned. In 1955 the first municipal public toilets was setup in London where a charge of 7d was fixed for the users, this has been the fee up to

1970. Notably most of the toilets were for men as the urinals were cheaper to construct and most users of the toilet were men since they (men) worked away from home (Sunday News, 2006).

In the 20<sup>th</sup> century the need for public toilets was appreciated by many Municipal Councils, who were seen to bear the onus of providing the service. The facilities were constructed to decency since they were located in towns. This was to make them give the cities a good image.

In his writing Bindeswar (1995), the history of toilet, he anchors the essence of toilets as an indicator of human civilization, part of human hygiene, a link between order and disorder, and between good and bad environment.

The development roadmap in Kenya dubbed “vision 2030” stipulates that the environment shall be a priority. This is contained in the social pillar of the vision. In addition, the vision envisages building a just and cohesive society with social equity in a clean and secure environment. The vision 2030 the policy is anchored on adoption of among others innovation where water, sanitation and the environment are given emphasis. The toilet necessity in Kenya has been prioritized in the development roadmap of Kenya dubbed “vision 2030” that stipulates that the environment shall be a priority as contained in the social pillar of the vision (National economic and social council 2008).

In Kenya the scenario was similar to other cities of the world where the urban councils provided the public toilets but their efficiency and cleanliness deteriorated and many people faulted their existence. A DANIDA report on Kenya, showed that many urban dwellers do not have access to decent sanitation, with an estimated population of 45% not accessing decent toilets facilities (Flemmings, Jens, and Barbara 2010). In a related report from UNDP research has shown that in a population of an estimated 40.8 million only 48% of these have access to basic sanitation in the form of proper toilets. The report further exemplified the inability of the local council of Nairobi of not investing in the public sanitation of proper toilet facilities (Winifred 2009) which left the demand for toilet facilities unsatisfied. The IKO toilet was born out of such a necessity to serve the city dwellers that needed a dignified toilet facility (Winifred ,2009).

The inability of local councils to provide decent toilet services has been replicated in Nakuru Town. The population of Nakuru is currently estimated at above 0.5 million, of

whom many operate from the CBD to earn their daily bread and get essential services. The Municipal Council of Nakuru (MCN) was the sole provider of public toilets up to the year 2000. The maintenance of the toilets was deplorable as they were usually dirty and many used them with disgust. The toilets mostly served the area around the bus stops and could only be used during the day for using them at night was very insecure (Wikipedia). The poor services led to the town environment being abused as some spots were turned into toilets and the terrible smell made those businesses located nearby have a poor operating environment and public decency in some areas was compromised by those who relieved themselves in the alleys or on the roadsides (Winifred, 2009).

The increase in population in the MCN as a result of the growth of investors that made the few MCN facilities present not seem to service the populace let alone meet the demand. Many people who needed to use toilet facilities were compelled to use those provided by restaurants and bar spots that limited the users with strict terms of using their toilets. This made a number of people to suffer resulting to some using the alleys or trees as a toilet which the MCN enacted laws that banned the such usage. Other people needed decent toilet facilities that were unavailable and this coupled with inadequate toilets available created an opportunity for investors to provide decent toilets. To date the MCN operates one toilet at the main bus park and have eight toilets operated as business enterprises.

It was expected these enterprises would continue to grow and expand but this is not the case as some of this toilet enterprises have stagnated, their services not widely felt, and others have provided services unattractive to the customers.

The purpose of the study was to determine the utilization of these ventures which has not been successful despite the existence of a rich and able market coupled with a high demand for the services that would have made the ventures very successful which is not the case.

## **1.2 Statement of research problem**

The Town of Nakuru has an estimated 15 public toilet providers some of whom only serve their clients e.g. The Nakumatt stores on the west of the town, as the facilities are located at their own premises as such not accessible to the general public. Nakuru town

being a connecting town gets many travelers passing it through on their way to other destinations as such public toilet facilities come in handy for them access toilet facilities of dignity. In addition many people come to Nakuru from other smaller towns to trade or get government services. As such the need for many public toilets within the town is a necessity creating a good investment opportunity.

Some of the people who work or trade in the town come from the suburbs of the town and as in the residential areas where they live have poor toilet facilities. Such people rely on the public toilets for their defecation needs and to a large extent use the washrooms for bathing (Winifred 2009).

From a business point of view, toilet as a venture could be a good source of employment; a profitable business as evidenced by the Kibera slum projects (Clar, 2012); give comfort to the users like the availability of clean water; a supportive industry to other businesses as evidenced by the elimination of foul smell in the city (Ecotact 2011), and as a vehicle towards the attainment of both The Millennium Development Goals on environment conservation, and The Vision 2030 in Kenya.

Despite all the possibilities and opportunities for growth and expansion of such ventures the utilization of the public toilets in Nakuru town has not been as evidenced with high number of users as expected and the study sought to investigate how location and design, marketing strategies, socio cultural factors and environment factors could have contributed to the current state where some of the toilets experience low numbers of customers.

### **1.3 Purpose of the Study**

The study sought to investigate the factors influencing the utilization of public toilet projects in Nakuru town ,Nakuru county, Kenya.

### **1.4 Objectives of the Study**

The general objective of the study was to investigate the factors influencing the utilization of public toilets in Nakuru town. The following specific objectives guided the study:

- i. To determine to what extent location and design of the public toilet project influences utilization of public Toilets.
- ii. To assess how marketing strategies influence the utilization of the public toilet project
- iii. To evaluate how socio-cultural factors influence the utilization of public toilets
- iv. To assess how Environment factors influence the utilization of public toilets

### **1.5 Research Questions**

The research will endeavor to answer the following questions that will help the researcher to remain on course and carry out a comprehensive study. The questions are as follows:

- i. To what extent does the location and design of the project (public toilets) influence the utilization of the entities?
- ii. How does the marketing strategy used by the proprietors influence the utilization of the toilet business?
- iii. To what extent do the socio cultural factors influence the utilization of the public toilet businesses?
- iv. To what extent do the environment factors affect the public toilet utilization?

### **1.6 Significance of the study**

The study intended to assist future investors in this area of business and other related ventures with empirical information on how the location of the business may be useful in turning round a business to success. Through the findings of the study, financiers can advice potential investors on how to make their ventures more profitable and grow in size and scale for example through the use of right marketing strategy. The local authorities can use the research findings to enact by laws and policies that will aid public toilet providers to make sound decisions on the growth of their capital through understanding of the cultural factors, such policies will be more business friendly and even establish departments that will oversee how the service providers in this sector will impact on their role of making the town clean and encouraging the Nakuru resident use the facilities.

The study shall also offers information that will be an eye opener to investors available opportunities for group investments around the town and in Kenya.

The people who are keen on environmental issues in the MCN can use the findings to advocate proactively for better use of the resources such as land be set aside for the construction of the toilets and in the use of water.

The residents of Nakuru may use the information to demystify the usage of public toilets and be more accommodative to their presence.

### **1.7 Delimitation of the study**

The role of the public toilet providers is of great help to the sustenance of good environment of the Nakuru town that can also be disseminated to other regions of the country. The study was based within Nakuru town where research was carried out on the toilets in the former Nakuru municipality.

The study dwelled on the consumers as they are the best system of assessing the utilization of the entities and their input will help the investors in this sector to improve on their products.

The study dwelled on four variables influencing the utilization of the business namely the location of the enterprise; marketing strategies of creating awareness of the service offered; the socio cultural factors, an external business environment factor, and the environmental factors. These were the independent variables that were studied to see how they affect the toilet utilization which in the study was the dependent variable.

The supportive utilities were considered as an intervening factor that may affect the utilization of the toilets were on an assumption level as the study focused on the four independent variables.

### **1.8 Limitations of the Study**

In the research the toilets were located in diverse areas, which was a challenge to visit all at prime times of usage. The data collection process was also a challenge as the data was collected from travelers on transit who had very limited time to respond to the questionnaire.

In most businesses the element of secrecy is paramount and most of them were reluctant to divulge information and these limited me in getting secondary data from their records.

### **1.9 Definitions of Significant Terms used in the study**

In research each term has the conventional understanding and a researcher has to give the term an operational definition that suits the need for the study. In this study the following terms were used

#### **Entrepreneurship**

The term refers to the capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make profits (Drucker, 1970). The element of the spirit of innovation shall be incorporated in this definition since businesses operate in an ever changing and increasing competition environment.

#### **Utilization**

The result of activities of an organization or an investment over a given period of time (Neely, 2002). In this study utilization is referred to as the accomplishment of a task that is measured against the level of investment into the public toilet.

#### **Innovation**

Innovation is the change that creates a new dimension of utilization (Drucker, 1970) while it can also be viewed as the use of new ideas that result in a new product (Schumpeter, 1934). Due to the diversity of the application of the term I will dwell on it as the process of translating an idea into a product that creates a unique product with a value for which customers will pay as that product satisfies the need and expectations of the customers. This implies that the customers' views are essential to any business.

#### **Socio cultural**

These are the set of beliefs, practices and behavior existing within a population. The beliefs develop over a period of time and do dictate the behaviour of the community or group (Garro, 2000). In the study socio cultural included the aspect of ability of the community to use a product as an aspect of a practice of a group.

#### **Marketing strategy**

Is defined as the process that can allow an organization to concentrate its resources on the optimal opportunities with the goal of increasing sales and achieve a sustainable competitive advantage (Aaker, 2008). For the purposes of this study the methods and modes used to create awareness or popularize the services of the business was the working definition of marketing style

Nakuru town

Nakuru town is the geographical area previously under the municipal council of Nakuru, currently in the Nakuru county region in Kenya. The bias was on the town area with a radius of 4km from the town centre.

Environmental issues

This entails how a process has negative effects on the sustainability of the environmental quality. In the study the concept will dwell on the sanitation issues that is defined by UNEP as the hygienic means of preventing human contact from the hazards of wastes to promote health (UNEP-JMP, 2008).

Public toilets

These are facilities that are used by the general public that includes flush toilets connected to a sewer system (JMP, 2012). In the study a public toilet is a facility that provides services to users for pay.

### **1.10 Organization of the Study**

Research work requires an in depth study of concepts in a logical way that can derive very useful data from a sample study and can be applied to a population. Research can be looked as a systematic effort to gain new knowledge ,that builds on the existing body of knowledge (Redman and Mary,1923).Research has also been defined as the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge (Slesinger and Stephenson,1930).

Chapter one comprised of the introduction of the study that defined the objectives, the research questions, purpose of the research, significance of the study and the definitions

of the terms used in the study. The limitations of the study and the delimitations will be highlighted.

In Chapter Two a review of other scholarly works that was used as supportive information on how the variables of location, marketing strategy, socio cultural factors and legal factors influence the utilization of the business services gave insight in the study. The research work was based on the model of social entrepreneurship theories with a major focus on business innovations and growth, and on human psychology theories.

In Chapter Three, research methodology is discussed. IT discusses more specifically on how the data was collected analysed and interpreted, the instruments used and how they were validated .The research design for the study and the type of data collected was also discussed. The ethical issues of the research are also highlighted. The Operationalization table of the variables is also provided.

In chapter four, a report on the major findings presented in tabular form is provided.

Chapter Five summarizes the major findings, provides the conclusions of the study, recommendations of the study and shows how the study has contributed to knowledge.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The utilization indicators of a successful entity are inherent in its output and the meeting of the desired quality of service and this is a major driving force of many entrepreneurs in the world (Drucker, 1985). Most of the investors strive towards seeing their capital grow in size and returns but they encounter various handles that call upon them to evaluate their propensity to invest further. The risk element alone does not determine utilization for other factors come into play.

Research has shown that the entity's growth is mostly influenced by external environment factors that are not under the control of the entity but it has to see how it can control that impact to the benefit of the entity (Mohd, 2005). Operating a business requires that a proprietor understands those external factors that slow down the activities of the business that eventually culminates in the success of the enterprise.

There arises an argument on whether toilet service provision can be essentially be categorized as a business or a social enterprise since its aim is to render service and not aim at profit generation. Peter Drucker (1986) poses a philosophical question on what constitutes a business and inquires in depth on the principles and concepts that constitute a business activity. Drucker argued that entrepreneurship extends to all organizations while other writers saw that any organization has the potential to become entrepreneurial (Shapiro and Sokol 1982). The lack of common understanding on what is a business activity makes some view the toilet activity as one that should not be paid for as it constitutes a basic need service. This notion has made the venture unattractive as many perceive it not as business as society deems not to be. This has partially contributed to the poor services offered by the existing enterprises.

#### **2.2 Significance of Utilization Measurement to a Business**

Business organizations are established to accomplish certain goals with some having the goal of profit generation. Profit making enterprises use utilization measurement to assess whether the business is succeeding or not based on their goals or objectives.

Other businesses measure their utilization to monitor and control the business, to drive improvement in the business, to assess how the achievements are measuring against the goals of the organization among others (Bititci, Carie, and Turner, 2002). Simmons (2000) looked at business utilization measurement as a tool that balances the major tensions in the business, namely profit growth and control, short term results versus long term opportunities, opportunities and attention and that of balancing human behavior.

PM plays a vital role in the translation of business strategy into results and aid to identify the short comings in the business (Lingle and Scheimann, 1996). This concept will favour that organization that utilizes the measure collected to enhance the business as it is able to identify key indicators that relate the firm to the vision (Kaplan and Norton 2001).

In every organization the impact on their customers, from the services they offer is an essential and integral part of managing the business (Bourne, Neely, Mills, and Platts 2003) making it essential for a business to assess the satisfaction of their customers and other stakeholders. Many models that can be used to measure the utilization have been developed such as the balanced score cards by Kaplan and Norton (2001); Utilization prism (Neely 2002); Cambridge utilization measurement process (Neely 1996). Most of these models were developed with a bias towards the measure financial utilization as such many businesses neglect them to assess their impact to the customers and where they measure the data remains redundant as they don't know what to do with the findings as reported by the Business utilization improvement resource blog.

An organization that undertakes utilization measure equips the management and the employees with techniques that boost their output and aids an organization to develop a strategic plan and remain on course (Kaplan, Norton 1996, Butler, 1997, Simmons, 2000).

The gap does exist on the relevance of these models of measurement as the orientation is on financial related issues and little has been done to assist in literature on the role of utilization in analysis of external environment factors of the business.

## **2.3 Factors Determining Business Success**

### **2.3.1 Locality and design of the business**

Most literature on the business utilization stress on the role of the entrepreneur in the success of the organization and little is said of how the location of the business could be a determinant. Mohd (2005), Colin et al (2005), Lawal (2005) state that the role of entrepreneur is vital in the success of the business as the key determinant however in other future writing they with other authors such as Lin (2006) ,Dean et al (2000) argue that other aspects do affect utilization. Rebecca and Benjamin (2009) argue that there other factors that do influence the utilization and they highlight on the external factors such as location being one of such factors. Mohd (2011), states that studies have been inconsistent on the subject of location despite the realization that other relationships influence. Arowomolo (2000) stated that external factors can assign a limit to utilization, a position supported by Mohd (2011) further argues that we need further studies on the locational factors to enhance the utilization and growth of the business.

The strategic role of the location is essential in understanding business utilization in relation to other aspects. Location may imply the choice made when one is entering into business ( Ilian and Yasso 2005), it could also mean the choice of location in relation to the type of product one is offering( Esteban, Yancy, and Christian 2010) ,and need consider the population density of the customers and how accessible the service is to them (Orloff 2002).In light of this there exists a gap of the location element in entrepreneurial studies yet literature has sufficient evidence that it plays a role in the sustainability of a business ( Kala et al 2010) . There is a need to align with others aspects to survive in the market.

Theories on location of a business such as the central theory of location as developed by Christaller W stress the location of the people as attracting the services yet in his assumptions Christaller advocates that consumers visit the nearest central place where the service is being provided for the function they need. Another theory of location was founded by Thunen that addressed the area of what economic activities are located where and why. Thunen proposed that firms choose locations to maximize their profits and individuals choose locations that maximize their utility. These theories depict the

diversity of the location of the business theories yet their sole aim is to create a satisfied customer irrespective of the location.

### **2.3.2 Marketing strategy**

Kotler and Quinn (1981) drew a parallel between the business and warfare where they saw the operations of the in the competitive world as a parallel of warring states, they drew several warfare strategies and applied them into the business scenarios. Marketing Strategy was thus looked at as the understanding of the competition styles and techniques to use to overpower the competitor. Ries and Jackin (1986) in their book 'marketing warfare' concur with this thought as they see how the organizations compete to remain relevant in the market.

Kotler and Amstrong (2001) saw marketing as a social process that aids to obtain what is needed through creating and exchanging products and value with others. The key element in this view is the active role of the business operator to be assertive in their actions that is a continuous given the use of the term creating. Thus the process needs one to have technique, and motivation for a purpose to enhance marketing.

Several theories have been put forward to elaborate on the power of marketing some of which include perception theory, exposure theory and social theory (Gail,2011).She argues that marketing strategy need to create a perception to the customers that is impressive to them thus they develop a relationship to the product. Likewise the more options of a product are shown to the customers the more the choices they have to make to utilize the product. In the social status theory the emphasis is on the user attaching status to the use of a product and derives satisfaction for being seen as a person in usage of the products. The theories thus are useful to show that every business cannot ignore the marketing arm as production of the service needs to be boosted.

The case of Iko toilets in Kenya shows how if well utilized marketing can change behavior of the public and attract them to use these facilities by convincing them that they are safe and hygienic to use through posters. The methods used included the advertisements for other businesses to come and occupy the premises that have now grown to competitive bidding (Karugu , 2009)

Other strategies have been put forward to show how the strategies can be applied. Kotler and Quinn (1981) put such strategies which they referred to as the warfare strategies.

They include offensive marketing warfare strategy, flanking warfare strategy, alliance warfare marketing strategy and the cumulative marketing warfare strategy among others. The purpose of each strategy was expounded to fit different areas and thus opens the field even more making the business to have more difficult to adopt to the diverse methods. A look at the strategies will show how different the approaches are to other models for example the offensive strategy is used to secure competitive advantage whereas flanking is useful in operations in areas of little importance to the competitor.

In all these strategies what strikes the mind is the management yet the business needs to meet a criteria for their products .I strongly agree with Kotler and Quinn (1981) in their proposal on the alliance strategy that aims at the use of partnerships to build on strength and stabilize situations this is what businesses need as they can be competitive in a strengthening way. Through such a strategy its possible for use of the bench marking theory that will help the organizations to identify best practices in relation to other similar products (Gail, 2011). When the organizations are alliances they can then promote their products as brands (Handlin, 2011), who sees effectiveness of the strategy to build emotional connections to the customers reinforcing their buying behavior.

Thus the utilization of the business can be influenced from many angles by the lack of a marketing strategy or in the use of the wrong strategy.

### **2.3.3 Socio cultural factors**

In every society there exists behavior patterns that govern that society and the business operates in there. Culture has a diversity as people constantly engage or interact resulting in multiplicity of culture, such diversity then requires business managers to prepare to learn the value of multi cultural differences among the customers and employees (Mazur 2010).The proponents of this view advocate that if unmanaged the diversity can result in unproductivity and impede the attainment of the organizational goals.

The diversity concept has been used to show why a business ought to be vibrant and know their customers' behavior as it gives the group of people an identity. It's such force of the group seeing themselves as similar or different that affects their shapes consumption patterns (Oreilly ,Williams and Barsade, 1998).Loden and Rosener 1991 categorized the diversity into primary and secondary components that determine the cultural value and identity. Loden and Rosener view the primary components include

elements such as gender, ethnicity, age while the secondary include education, work style among others. The primary lines shape the self image and impact heavily in the work place while secondary enrich the image. Such views then affect the effectiveness of a business since the customers may desire the products as a result of many perceptions.

In the work place there is a tendency for people to share information based on culture and attachments and therefore there is a need to develop cultural homogeneity to minimize conflicts (Early and Mosakowski ,2000; Blau 1977 ). Early and Mosakowski observed that groups that interact moderately have tend to have conflicts and from this perception see the business has to interact with their customers.

Lord and Maher (1991) observed that interactions do break barriers and reinforce behavior .They also observed that societal cultural values affect the organizational culture and practices. Therefore a business is shaped from the outside by the environment it operates from. The society perceives the role of the business is to give back to society what society pays for and thus the business must meet these needs which are dynamic.

Psychologists look at the behavior of people from a conditioning point where Pavlov (1927) advocated that can condition a human being to act in a certain way as contained in the classical conditioning theory. The role of the stimulus in the behavior of the people can make them associate the enterprise as a good service provider. The entrepreneur can be of key role in ensuring that the demand of a service grows through their own personal contribution to an entity that shall arouse the interest of the consumers by making an effort to provide the best of the service and make it available to the people that may eventually enrich the market with the service.

#### **2.3.4 Environmental factors**

Sewage refers to wastewater from sources including domestic, municipal, or industrial liquid waste products disposed of, usually via a pipe or sewer system. JMP defines Sanitation as the hygienic means of preventing human contact from the hazards of wastes to promote health and avoid waste that can cause health problems from contact with feces, solid wastes, and domestic wastewater or from industrial wastes. Hygienic means of prevention includes the usage of septic tanks sewage systems .The Joint Monitoring Program (JMP) for water and sanitation of WHO and UNICEF also described improved

sanitation as a waste disposal connected to a public sewer or a septic system; a pour-flush latrine ,a simple pit latrine or a ventilated improved pit latrine.

Environmental awareness campaigns are most successful when targeted to specific groups or populations. Many people don't pay much attention to environmental problems because they don't understand how the problem would affect them or their lifestyle (UNEP).

Public toilets have become an important feature in urban life since the toilets serve the interest of public health. Without them, people will be compelled to defecate in the open and this is likely to aggravate environmental health hazards Public toilets are an essential facility provided within busy metropolitan cities. A key factor in promoting a positive image of a city is providing clean, safe, convenient and environmentally sustainable public toilets. The provision of public toilets is important for several reasons: people need to be able to access toilets when away from home; their closure, lack of availability or generally poor standards can be a cause for concern among would-be users. As well as contributing to people feeling a lack of dignity and poor hygiene as they may have to resort to street fouling and the potential for the spread of infection (Journal of environmental health research vol 12 issue 1) .

To improve on the services provided by the public toilets in Bankstown City sign boards were erected at a number of public toilets providing an emergency contact number to report damage, hygiene and maintenance issues. The low number of emergency callout received by Council since the signs were erected at public toilets, indicated that a toilets were rarely unclean. Additional signage was displayed inside public toilets to remind people to be considerate about leaving the facility toilet clean for the next user. (Bankstown City Council 2012)

Advocacy has been instrumental in environment issues representing many who may lack the voice for change an example of such organization is PHLUSH (Public Hygiene Keeps Us Human) 2001,of the Oregon state in US.The organization purposed to draw attention to the severe lack of public toilets in Portland's Central City. PHLUSH advocates were pushing for the provision of public toilets as a basic human right for being able to access a toilet is a fundamental aspect of community development because it ensures that all

people can move freely in their city and relieve themselves with dignity. The success of their mission underscores greatly the role of advocacy in environmental matters as the city has increased the number of public toilets.

#### **2.4 The Theoretical frame work**

The study of the utilization was based on the theory of innovations and borrowed heavily on the works of J. Schumpeter on entrepreneurship. The study also studied the implication of 'the theory of the business by Peter Drucker whose contribution to existence of businesses in the society fall well into place with the existence of public toilets services provision. The case of IKO Toilet project in Kenya was also applied (Ecotact, 2011) to further enrich the study and evaluate the Nakuru projects and show how they can be improved to better successful projects.

The theory of the business was used by Drucker (1994) to describe the assumptions used to build an organization. These are the assumptions that shape an organization's behavior, dictate its decisions about what to and what not to do, and define what the organization considers meaningful results. The Harvard Business review (1994) stipulated the thoughts of Drucker who saw the theory as the pinnacle of the existence of the business now and the future and gives the organization an identity in the society through what they provide. In the eyes of Drucker the assumptions on; the environment which defines what the organization gets paid for, the specific mission of the organization and the core competences needed define operations of the business.

In Drucker's mind the success or failure of a business was purely based on how the business reviewed and interpreted the assumptions to check on whether the entity was on track with its anticipated operations.

Another interesting concept that expounds further the need to evaluate the utilization is the hedge hog concept by Collins (2001) that stresses the interest of the entrepreneur in the business that may help any potential investor to see any site can be an added advantage to that desire of the investor. Jim Collins argues that the best companies in each industry stand at the intersection of three crucial questions. They are: What can we be the best in the world at?, What drives our economic engine? and What are we deeply passionate about?. This does agree with ideas of Drucker who emphasized that an

organization the role of the mission of an organization as a driving force from which any divergence lowers utilization.

The most successful companies are aligned on each of these three dimensions. This is the Hedgehog Concept. Collins speculated that if companies were more like the hedgehog — that is, *focusing on one thing and doing it well* — all the cunning and brilliance out there would not be a threat to success.

Collins (2005) in his writing says that it occurred to him, that many people spend too much time trying to be interesting, instead of investing more time being interested in what they are doing. This propounds more that to perform the owners of the businesses must themselves be of great investment to the business as they contribute the capital.

Gray and Prahalad (1989) submitted that a firm needs to establish a strategic intent in their operations and avoid being copy cats as this does not guarantee their survival in business. In their article 'strategic intent' (Gray and Prahalad 1989), the pair advance the argument that too many companies are expending enormous energy simply to reproduce the cost and quality advantages their global competitors already enjoy. Imitation may be the sincerest form of flattery, but it will not lead to competitive revitalization. Strategies based on imitation are transparent to competitors who have already mastered them. Moreover, successful competitors rarely stand still.

To enrich the study based on the thoughts of Drucker's 'theory of business' a Three Sigma Model was developed whose main concern was the decline and failure of the utilization of the businesses and identified assumptions that became invalid. The model derived emphasises the role of periodic examining of the fundamental assumptions of the business to aid an organization to identify and examine these assumptions act on them to raise the utilization levels through strategic decisions. The Three Sigma Model lays focus organization's mission purpose and belief; Society and its structure through elements such as government regulations and lifestyles that influence sales; markets and assess how products are advertised; and customer behavior that influence consumption of products.

A hybrid approach will incorporate the Business Reengineering Process theory whose fundamental basis is rethinking and redesigning the business to better the support its mission limiting the assumptions level (Hammer 1990).

## 2.5 The Conceptual Framework

The conceptual frame indicates the relationship between the variables of the study and gives a coherence connection to the aspects of the study. The figure below shows how the variables relate in the study with independent variables being location and layout of the facility; Marketing Strategy; Socio Cultural factors and Environmental factors. The intervening variable were the supportive utilities that aid the operations of the business. These variables were used to assess how they influence the utilization of public toilets in Nakuru town.

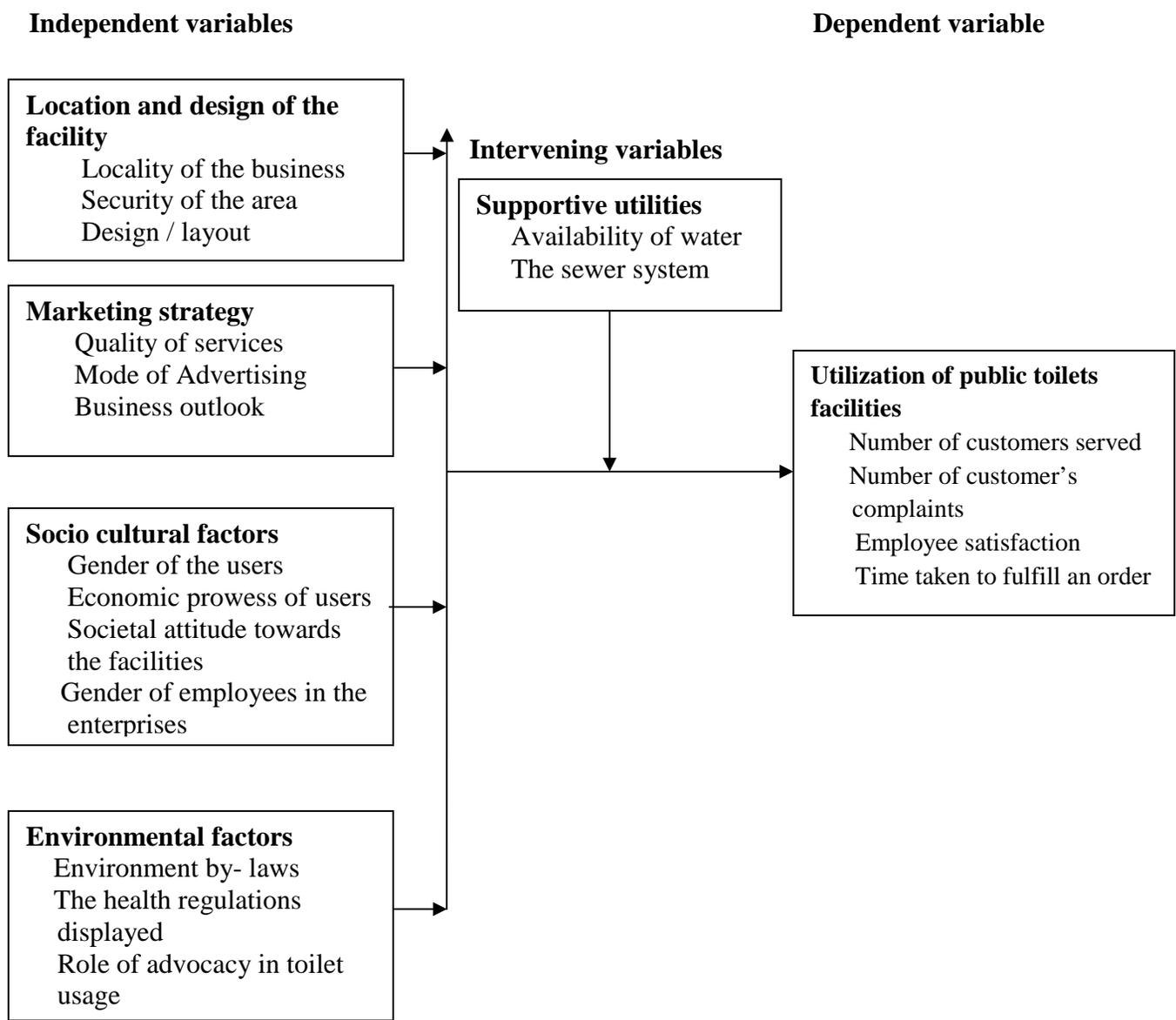


Figure 1: Relationship of variables of the study

## **2.6 Relevance of the toilet business in Nakuru**

Based on all the above literature published by authentic scholars the existence of the public toilets in Nakuru society has a great significance economically, socially, and on environment factors. It's the operations of these entities that need to be enhanced with the operators or providers being given the appropriate information that will aid them to foster the operations to the benefit of their clients and their own intrinsic value of seeing their projects succeed.

The IKO toilet project in Kenya is an innovative idea that resulted from a personal experience of the project initiator whose objective was to provide affordable sanitation services and in a way contribute towards poverty alleviation in the slums of Nairobi (Karugu, 2009). The growth of the idea has even attracted donor financiers who bought the noble idea that have eventually spread to other urban areas of the country Kenya.

The UNDP (2011) *Ecotact: Affordable sanitation services in pleasant surroundings* the report highlighted that Kenya had 138 public toilets in urban centers and in other related that were offering poor hygienic services and poor lit. This made many people not to use them for security and health reasons as the operators did not bother to improve on the toilets. Most of the users were desperate and thus used them despite their poor conditions and this gave birth to the idea of Ecotact .The proprietors' desire to see the lives of slum dwellers on sanitation and livelihood improved gave rise to the IKO toilet innovation.

This notion can be applied in Nakuru as the same conditions do exist here and thus the need for such services that are affordable and of high hygiene standards. It's in light of this that the study of the existing facilities will aid in improvement of the services and contribute to achievement of desired lifestyles.

## **2.9 Summary of the Literature Review**

In light of above information studied from the review I see that despite the existence of the facilities there has been very little application of necessary entrepreneurial knowledge to advance their operations. There exists a gap between the knowledge available and the application of that knowledge to manage the businesses yet from the literature available if used it can enrich the businesses in their operations.

The review has provided great insight on how the independent variables were assessed to see how they have influenced the utilization and achieve the study's objectives.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter contains how the research was conducted indicating the method of sampling, how the sample size was established and how the data collection was carried out and how data analysis was carried out. In each of the aspects of the methodology I justify why each method was appropriate.

#### **3.2 Research design of the study**

A research design is a detailed outline of how an investigation will take place. It typically includes how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected.

A descriptive survey design was used in the study. A survey design is a research method used to obtain information that describes an existing phenomena that will assess the respondents perceptions, attitudes, behavior and values (Mugenda & Mugenda 2003 ).

This design was appropriate since the study entailed the observation and analysis of opinions of the consumers and assessing how they value the public toilet services available. The design was appropriate since the data was collected from many different sources; consumers, providers who are located in different areas and only a survey can effectively collect such data quickly.

#### **3.3 Target Population**

The targeted population was the people who reside or pass through Nakuru town and who use public toilets situated in the town. On average a total of 335 people use public toilets in Nakuru. This constitutes the target population for this study.

The table 3.1 shows the details of toilets that were studied

Table 3.1 Toilets in Nakuru Town

Name of the business	Area of location	Year of establishment	Number of customers /hour	Female customers /hour	Male customers	Purposive sample
Lnyesa	Town centre	2009	20	10	10	10
Mashambani group	Lions garden	2009	100	40	60	65
Suguton washrooms	Seguton	2012	80	30	50	45
Afraha toilets	Afraha stadium	2010	30	10	20	15
Iko toilet	Shabab	2010	25	10	15	15
Clean toilet sokoni plaza	Sokoni plaza	2011	40	20	20	15
Viwanda public toilet	Industrial area	2010	40	20	20	15
TOTAL			335	140	195	180

Source: The study

### 3.4 Sample size and sampling techniques

The task involved in research does require that the population under study may not all be used to analyse the data thus calling for a tool that will enable the researcher to synthesis the data without losing meaningful cues. A sample is thus selected as a representative of the population.

A sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given population. A sample is a segment or a portion of the population taken to represent the whole population (Kothari 1985).In the study the researcher adopted non probability methods and purposive sampling to select the sample. The study sample constituted 180 respondents based on the sampling table of Krejice and Morgan (1970), picked purposively based on whether they were literate and had time to answer the questionnaire, among the traders, students, travelers and others .

### **3.5 Research Instruments**

In research one has to employ several tools that will assist to come up with a solution to the research questions that are under scrutiny. An instrument is a device used to measure the concept of interest in a research (Kimberly and Winterstein 2008). The tools that were used were questionnaires, interviews sparingly, survey and observations by the researcher on the operations of the entities at identified times of the day or week

#### **3.5.1 Piloting the research instruments**

Piloting is the process of conducting a preliminary test of data collecting tools and procedures to identify and eliminate problems before the actual collection of data from the target population (Baker,1994).The purpose was to aid revision to instrument and data collection procedures to ensure the appropriate questions were asked, remove the element of ambiguity and assess whether the questions were fair to the respondents plus the length taken to answer such questions.

The questionnaire was given to a few users of the public toilets in Nairobi Town to assess its appropriateness and it was revised based on their recommendations. Other experts, with experience on the drafting of a questionnaire were requested to give their recommendations which aided to come up with the final tool. Piloting helped in the data collection as the right data was collected and assisted me to employ the right method of data collection.

#### **3.5.2 Validity of the Instruments**

Validity refers to the degree to which the components of research reflect the theory, concept or variables under study (Steiner and Norman 1996).It can also be viewed as the extent to which the instrument measures what it's supposed to measure and perform as its supposed to perform. A few experts were tested to view their responses on the questionnaire in assessing its appropriateness while some users were given the questionnaire to assess its appropriateness and these users were not used among the sample.

#### **3.5.3 Reliability of the Instruments**

Reliability assesses the stability and consistency of the measuring instruments to consistently measure what is intended to measure (Kimberly and Winterstein 2008).The

score obtained from the instrument is the same derived from repeated trials. The reliability was assessed through the help of a pre –test and a test on the instruments

### **3.6 Data collection procedure**

The respondents were the users of public toilets located in Nakuru town. The questionnaire was administered to the selected sample.

### **3.7 Data analysis technique**

Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. According to Shamoo and Resnik (2003) various analytic procedures provide a way of drawing inductive inferences from data and distinguishing the signal of the phenomenon of interest from the statistical fluctuations present in the data.

The raw data collected were ordered and organized, to derive useful information that was highlighted. The processing and working on data with the aid of the Statistical Package for Social Sciences (SPSS).

The data was analysed using descriptive statistics where the mean and modes were applied..

### **3.8 Ethical Issues**

The researcher was conscious of the reservation of the people involved in the study, so as not infringe on their rights.

The topic of study was on an issue that touched on an area culturally not discussed in public and therefore the issue was treated with concern to aid those who participated in the study to be as open as possible.

Legal matters touching on research were observed and clearance was obtained to avoid collision with the authorities and authenticate the study.

The pressure on the respondents to give accurate information was catered for as some questions needed honesty.

In the selection of the sample the researcher avoided the bias by using sampling methods that gave all people an equal opportunity.

### 3.9 Operationalization table of definitions of variables

VARIABLE	TYPE OF VARIABLE	INDICATORS	MEASUREMENT	MEASURING SCALE	DATA COLLECTION INSTRUMENT	DATA ANALYSIS
Business utilization	Dependent	-Number of customers served	-changes in number of customers served	Interval	Questionnaire	Frequencies
		-Number of customer complaints	-frequency of complaints	interval	Questionnaire	Percentages
		-Employee satisfaction		Interval	Questionnaire	Percentages
Business utilization	Dependent	-Time taken to fulfill an order	Length a customer waits for the service	Interval	Questionnaire	Percentages
Location of the business	Independent	Locality of the business -Security of the area	Area of operation	Ordinal	Questionnaire	Frequencies
Marketing strategies	independent	Quality of services - Advertising -Business outlook	Types of services offered - Mode of advertising in use -Physical features of the business	Ordinal	Questionnaire	Frequencies and percentages
Socio cultural factors	Independent	Gender of users	-Number of users by gender	Ordinal	Questionnaire	Frequencies
		-Societal attitude	-Acceptability by society	Interval		Percentages

		-Type of employees	-Qualifications of the employees			Percentages
Environment issues	Independent	- Environment laws -Health act	-The acts in operation	Ordinal  Ordinal	Questionnaire	Frequencies  Frequencies

## CHAPTER FOUR

### DATA ANALYSIS PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter presents the data analysis, presentation and interpretation of the findings on the data collected from the toilet projects in Nakuru town, Nakuru County, Kenya on the factors influencing the utilization of the public toilets. The study sampled 180 users of public toilets in Nakuru town. The data was interpreted based on the research questions. The analysis was done through descriptive and inferential statistics and the findings presented in the form of frequency tables and percentages.

#### 4.2 Response rate

Out of the 180 questionnaires issued respondents, 172 were returned giving a 95.5% response rate.

#### 4.3 Demographic characteristics

The researcher wanted to find the gender of the respondents whose results are given in table 4.1.

*Table 4.1 Analysis of respondents based on Gender*

	Frequency	Percentage
Male	91	52.9
Female	81	47.1
Total	172	100.0

The table 4.1 shows the composition of the respondents based on their gender where results showed that 52.9% were male and 47.1% were female. The respondents were selected randomly to ensure there was no bias on gender and their age brackets sought for as seen in table 4.2.

#### 4.3.1 Analysis of respondents by Age

The researcher sought to know the age brackets of the users that assisted in identifying what age mostly uses the toilets. The findings are as indicated in table 4.2.

Table 4.2 Analysis of respondents by Age

	Frequency	Percentage
20 - 30 years	102	59.3
31 - 40 years	49	28.5
41 - 50 years	17	9.9
51 - 60 years	3	1.7
61 years and above	1	.6
Total	172	100.0

In table 4.2 most of the Respondents were between 20 –30 age bracket and this accounted for 59.3% of the total respondents who use the public toilet frequently. At higher age brackets the users are few.

#### 4.3.2 Educational background of the users

The respondents were asked to provide their level of education. This information aided in seeing the connection between the level of education attained and study whether it influences the usage of the public toilets.

Table 4.3 Highest Education Level Attained

	Frequency	Percentage
University	97	56.4
College	49	28.5
Secondary	22	12.8
Primary	4	2.3
Total	172	100.0

In table 4.3, 56.4% of respondents were persons who have attained University education while 2.3% attained primary level of education. This could be attributed to the fact that most urban areas are inhabited by persons who have acquired good education. The researcher further enquired on why the respondents were in Nakuru to understand their level of utilization whose outcome is shown in table 4.4.

### 4.3.3 Relationship of respondents with Nakuru town

The respondents were asked to state the reason for being in Nakuru. The study incorporated this element as a way of finding out what composition of the users are residents of Nakuru town and to further acquire insight from diverse types of users.

*Table 4.4 Relationship with Nakuru Town*

	Frequency	Percentage
Resident	112	65.1
On Transit	13	7.6
Visitor	42	24.4
Other	5	2.9
Total	172	100.0

The table 4.4 indicates that public toilets are frequently used more by the residents, represented by 65.1% of the respondents while the visitors comprised of 24.4%. The study also investigated on those that were in Nakuru, what purpose they had in the town to get their frequency to the toilets based on the type of user. Table 4.5 shows that 27.9% of the respondents who use the public toilets are persons studying in Nakuru town, while those who are in Nakuru for administrative services account the least number of users 7.6%.

*Table 4.5 Reason of staying in Nakuru*

	Engage in		Administrative			Total	
	Business	Studies	Working	Home	services		Others
Frequency	24	48	36	34	13	17	172
Percentage	14.0	27.9	20.9	19.8	7.6	9.9	100.0

### 4.3.4 The frequency rate of public toilet usage

The respondents were asked to rate how often they use Public Toilets. This information assisted to enquire deeper on the reasons that may have influenced their utilization of public toilets.

Table 4.6 Frequency of Public Toilet usage

	Very frequently	Frequently	Rarely	Very Rarely	Total
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Frequency	11	48	69	42	170
Percentage	6.4	27.9	40.1	24.4	98.8

A majority of the respondents accounting for 64.5% rarely or very rarely use the public toilets. This had an indicator that the utilization of toilets has been low yet the town has a big population.

#### **4.4 The influence of Location and Layout on the utilization of Public Toilets**

Location and layout of the toilet was investigated to see how this variable much it influences the level of public toilets utilization. The researcher sought to find out how location suits the needs of the consumers as seen in the responses of table 4.7.

##### **4.4.1 Suitability of the toilet location vis a vis the needs of the users.**

The table was generated from the respondent's opinion on the extent of their agreement with regard to suitability of location. The findings are shown in table 4.7.

Table 4.7 location of public toilets and Needs of users

	Frequency	Percentage
Strongly Agree	51	29.7
Agree	56	32.6
Neutral	30	17.4
Disagree	26	15.1
Strongly Disagree	9	5.2
Total	172	100.0

The table 4.7 shows that 62.2% of the respondents endorse the dispersion of toilet location in the town and only 20.3% disagree with this notion. The appropriateness of the location of the toilets shows that the needs of the users are conveniently catered for as a basic facility necessary in town therefore not necessary for the facility to be localized. Based on the dispersion of the toilets the researcher sought to know on how the users make the choice of the toilet to use.

#### 4.4.2 Choice of a toilet vis a vis of its condition

The respondents were asked to provide their opinion on if they select a public toilet to use based on proximity irrespective of the cleanliness of the level of cleanliness. They were also asked to evaluate whether the level of cleanliness of the toilet does attract a user to use it.

Table 4.8 Priority of selecting a toilet use

	Frequency	Percentage
Strongly Agree	18	10.5
Agree	46	26.7
Neutral	22	12.8
Disagree	51	29.7
Strongly Disagree	35	20.3
Total	172	100.0

In table 4.8, 50% of the respondents were selective of the toilet they use based on the condition of the service provided by the toilet and a low of 10.5% use the toilet on as is basis. Another element of selection was how the level of cleanliness influences a person to use a toilet whose findings are shown in table 4.9.

Table 4.9 Attraction to usage of a public toilet based on level of toilet cleanliness

	Frequency	Percentage
Strongly Agree	40	23.3
Agree	49	28.5
Neutral	37	21.5
Disagree	29	16.9
Strongly Disagree	17	9.9
Total	172	100.0

As seen in the responses of table 4.9 on attraction to use a toilet, 51.7% are concerned on the toilet to use basing on how clean a toilet is with 26.5% disagreeing implying that this is a strong consideration to the users. The research also sought the to find out how the

design affects the level of utilization as seen in table 4.10. and if that design took care of the users needs effectively results of which are shown in table 4.11.

#### 4.4.3 Space and design of the toilet

The respondents were asked to give their opinion on the suitability of the space in the toilets to a user and how that space may make the users comfortable. They also were to respond on how suitable the design is to the users.

Table 4.10 Adequacy of the current toilet space for users

	Frequency	Percentage
Strongly Agree	19	11.0
Agree	48	27.9
Neutral	52	30.2
Disagree	36	20.9
Strongly Disagree	17	9.9
Total	172	100.0

Table 4.11 Design of Toilet and the client intended to use the toilet

	Frequency	Percentage
Strongly Agree	20	11.6
Agree	52	30.2
Neutral	54	31.4
Disagree	31	18.0
Strongly Disagree	15	8.7
Total	172	100.0

Most of the respondents did not approve of the space as adequate nor on the design. In table 4.10, 39% agreed that the space is adequate while in table 4.11, 41.9% agreed that the design is appropriate, that shows that majority have an issue with the current status. This is an indicator of bad effect on the users that may be contributing to the low utilization level. The customer may not have been included in the thoughts of the

designers of the facilities. The researcher sought to find out on how the density of population in an area may attract the public toilet investment as shown in table 4.12.

#### 4.4.4 Toilets location visa vis population density

An assessment was done on the respondent's opinion on whether the location of a public toilet need consider the estimated population in the area.

Table 4.12 location and number of users

	Frequency	Percentage
Strongly Agree	29	16.9
Agree	41	23.8
Neutral	32	18.6
Disagree	42	24.4
Strongly Disagree	28	16.3
Total	172	100.0

From table 4.12 the study found that 40.7% of the respondents did agree, while 40.7% disagreed that indicates that location of a toilet is not based on area population but on accessibility and the service it offers. The research also sought to understand how the location of the toilet affects the type of the user table 4.13

#### 4.4.5 Location of the toilet determine the customer they serve

The study undertook to see how the location may impact on the customer served by the toilet as the respondents were asked for their opinion on whether the location of a toilet determines the customers they serve. The results of the respondents are shown in table 4.13

Table 4.13 influence of location on type of customer served

	Frequency	Percentage
Strongly Agree	52	30.2
Agree	68	39.5
Neutral	26	15.1
Disagree	17	9.9
Strongly Disagree	9	5.2
Total	172	100.0

In comparison from table 4.13 there is a strong case for the location on the customers it will serve since 69.8% agree that where the toilet is that determines the customers they serve. 15.1% disagree on the idea of location having effect on type of customer served. This is important to an investor in determination of locality as it gives an indicator of who their customers will be thus the quality of service to offer. The research studied on if the design is all inclusive to different users whose results are shown in table 4.14.

#### **4.4.6 Suitability of the Design of toilets for all types of users**

Study was done to get information on how the current toilets design are appropriate to even persons with disabilities

Table 4.14 The appropriateness of design to different users

	Frequency	Percentage
Strongly Agree	20	11.6
Agree	42	24.4
Neutral	33	19.2
Disagree	28	16.3
Strongly Disagree	49	28.5
Total	172	100.0

From table 4.14 there is a strong case that most of the toilets do not favor persons with diverse conditions as 44.8% disagree with toilets being favorable to all users thus the toilets may have not put into consideration the persons with disabilities as their customers

#### **4.5 The influence of the Marketing Strategies used by the Toilet providers on the utilization of Public Toilets**

Marketing is a key component of how the business sales level will reflect and eventually the profit level. The research investigated on how effective the marketing strategies have been to attract users into the toilets. The research undertook the study on how the users knew of the toilet's availability and on the different modes of marketing used by the toilet providers the results are shown in table 4.15.

#### 4.5.1 Source of Knowledge on the existence of the public toilet

In the study an inquiry form the respondents was done on how they knew of the services of the public toilets ,the results are shown in table 4.15.

Table 4.15 Ways through which people know of the existence of the public toilets

	Frequency	Percentage
Through Newspaper	2	1.2
Through the radio	2	1.2
Through posters	19	11.0
Sign post near the Toilet	72	41.9
Asked somebody	42	24.4
By Chance	35	20.3
Total	172	100.0

The table 4.15 shows that the mode of advertising in most of the facilities is at the site through the sign post near the toilets as 41.9% knew of the toilet availability through the sign posts while 20.3% knew of the toilet availability by chance or on need showing that the mode of advertising used is ineffective. This is collaborated by findings of table 4.16 where the research delved on how clear the adverts are in attracting the users.

#### 4.5.2 Clarity of the Advertisement of the Public Toilets

The views of the respondents on the clarity of adverts used by the public toilets were collected.

Table 4.16 Respondents views on the clarity of adverts used by the toilet providers

	Frequency	Percentage
Strongly Agree	17	9.9
Agree	41	23.8
Neutral	32	18.6
Disagree	50	29.1
Strongly Disagree	32	18.6
Total	172	100.0

Table 4.16 shows that only 33.7% were of the opinion that the toilets are clearly advertised implication is that that 66.3% feel the adverts are not clear, with 47.7%

disagreeing on the methods used. This is a strong indicator of poor marketing strategies adopted by public toilet providers. Another component of the marketing assessed was on the front appearance of the toilet that in this research was seen as an essential feature of marketing strategy whose results are shown in table 4.17.

#### **4.5.3 Assessment of the front view of a public toilet in attracting customers to use the toilet**

The responses on whether the physical features of the front of a toilet can captivate a user to have services of the toilet were sought from the respondents.

Table 4.17 Views of users on the front features of the toilets

	Frequency	Percentage
Strongly Agree	27	15.7
Agree	74	43.0
Neutral	35	20.3
Disagree	22	12.8
Strongly Disagree	14	8.1
Total	172	100.0

From table 4.17 the physical features on the front of the toilet is an essential element of attracting customers to use them as seen in the 58.7% who agreed with this proponent while 12.8% felt its not a very essential element. The research too sought to study how the outside environment can influence the users, the results are shown in table 4.18.

#### 4.5.4 Influence of toilet externalities on the marketing of the toilet

The opinions of the respondents were sought on whether the outside environment of the toilet would market better the toilet.

Table 4.18 Outside features of a public toilet and marketing

	Frequency	Percentage
Strongly Agree	61	35.5
Agree	64	37.2
Neutral	32	18.6
Disagree	13	7.6
Strongly Disagree	2	1.2
Total	172	100.0

The table 4.18 indicates on the importance of the outside of the toilet as 72.7% supported that this would assist to market better the toilets. The findings do strongly suggest that an investor in public toilet must put in a lot of consideration on how the outside features of the toilet are since they mean much to the customers. The effect of the quality of the service was assessed to study the influence it has on public toilet utilization as shown in table 4.19

#### 4.5.5 Influence of quality as a marketing strategy

The respondents were required to give their views on quality of services and how that can assist in advertising. The results of their views are given in table 4.19.

Table 4.19 Role of quality in advertisement of public toilets

	Frequency	Percentage
Strongly Agree	39	22.7
Agree	58	33.7
Neutral	35	20.3
Disagree	27	15.7
Strongly Disagree	13	7.6
Total	172	100.0

Table 4.19 indicates that 56.4% agreed on the element of quality being an integral part of advertising the toilets and only a low 7.6% strongly felt this is a weak way of advertising. Table 4.57 supports this position with 62.2% indicating they are attracted to the toilet due to the quality service they get there. This does suggest that the quality of service offered is a strong advert of the toilet that can boost the utilization.

#### **4.5.6 Attraction to the toilet based on the quality service**

The results of responses on how the quality of the services offered can be a form of advertising

Table 4.20 Attraction of customers by the Quality of services

	Frequency	Percentage
Strongly Agree	40	23.3
Agree	67	39.0
Neutral	29	16.9
Disagree	21	12.2
Strongly Disagree	15	8.7
Total	172	100.0

Table 4.20 shows that 62.2% did agree that quality is a strong form of advertising and thus the providers need enhance on it to improve on their utilization.

#### **4.5.7 Influence of wall branding of the toilet on utilization**

The influence of wall branding was assessed as a marketing strategy that would have an effect on the utilization of the toilets

Table 4.21 Toilet branding and utilization

	Frequency	Percentage
Strongly Agree	39	22.7
Agree	65	37.8
Neutral	43	25.0
Disagree	20	11.6
Strongly Disagree	5	2.9
Total	172	100.0

Table 4.21 shows that 60.5% felt that branding of the toilets can improve the utilization of the toilets a strong indicator that if well used the toilets would do better. Only 14.5% disagreed on this proposal implying that though rarely used it creates a good name for the toilets. The research studied how decorations can influence the users to make use of public toilet facilities whose results are seen in table 4.22 and 4.23.

#### 4.5.8 Customers view on Interior features and decoration of the toilets

The influence of interior features and decorations of the toilets was studied as a tool that can aid utilization to gauge how effective it would be to attract more customers to the public toilet. The respondents results are seen in table 4.22.

Table 4.22 Interior features of a toilet

	Frequency	Percentage
Strongly Agree	15	8.7
Agree	44	25.6
Neutral	47	27.3
Disagree	44	25.6
Strongly Disagree	22	12.8
Total	172	100.0

Table 4.22 shows that 48.4% showed displeasure with the current interior design of the toilets and in table 4.23, 51.8% agreed with the notion of more interior decorations of the toilets that would boost their utilization through attracting more customers; only 8.8% strongly objected it. The influence of complaints of consumer handling was studied as a marketing strategy in addition to the quality as seen in table 4.24.

Table 4.23 Toilet decorations and attraction of customers

	Frequency	Percentage
Strongly Agree	40	23.3
Agree	50	29.0
Neutral	38	22.1
Disagree	29	16.9
Strongly Disagree	15	8.7
Total	172	100.0

#### 4.5.9 Handling of consumer complaints in public toilets as a marketing strategy

The users were asked to respond on how their complaints are addressed since it influences how often they utilize the public toilets. Their responses are shown in table 4.24.

Table 4.24 Responses on how complaints are dealt with in public toilets

	Frequency	Percentage
Strongly Agree	17	9.9
Agree	32	18.6
Neutral	48	27.9
Disagree	45	26.2
Strongly Disagree	30	17.4
Total	172	100.0

Table 4.24, 28.5% of the respondents agreed on the adequacy of customer complaints being handled effectively, this is a strong indicator of the lack of mutual understanding of the providers and the customers as 43.6% indicate disapproval.

#### 4.6 The influence of Socio Cultural factors on the utilization of public toilets

Businesses operate in a society and their operations are dictated by the socio cultural aspects that may determine the perception of the society to a product offered by the business. The research undertook to investigate how the socio cultural aspects influence utilization of the toilets

##### 4.6.1 Society approval of Public toilet as an essential facility

An analysis was carried out in the study on how the users view the role of public toilets since it forms part of social investments value of a business. The respondents were asked for their opinion on whether spending money to use a public toilet was an unwise decision. The responses were as shown in table 4.25 and 4.26.

Table 4.25 Respondents approval of Public toilets

	Frequency	Percentage
Strongly Agree	70	40.7
Agree	80	46.5
Neutral	16	9.3
Disagree	6	3.5

#### 4.6.1 Society approval of Public toilet as an essential facility

An analysis was carried out in the study on how the users view the role of public toilets since it forms part of social investments value of a business. The respondents were asked for their opinion on whether spending money to use a public toilet was an unwise decision. The responses were as shown in table 4.25 and 4.26.

Table 4.25 Respondents approval of Public toilets

	Frequency	Percentage
Strongly Agree	70	40.7
Agree	80	46.5
Neutral	16	9.3
Disagree	6	3.5
Total	172	100.0

Table 4.25 shows that 87.2% of the respondents embraces the essentiality of the public toilets in Nakuru town and a low of 3.5% disagreed. In the table 4.26, respondents averaging 63.4% approved that those who spend money to use the toilets are wise spenders and 16.3% viewing such spenders as unwise people.

Table 4.26 Users view on people spending to use public toilets

	Frequency	Percentage
Strongly Agree	14	8.1
Agree	14	8.1
Neutral	35	20.3
Disagree	55	32.0
Strongly Disagree	54	31.4
Total	172	100.0

#### 4.6.2 Respondents View of public toilet enterprise as a favorable business

The study delved into the way users perceives public toilets in the business circles as the respondents were asked on whether society views public toilet as a form of business. The responses are shown in the table 4.27.

Table 4.27 Consumers view on toilet as a business

	Frequency	Percentage
Strongly Agree	24	14.0
Agree	55	32.0
Neutral	55	32.0
Disagree	23	13.4
Strongly Disagree	15	8.7
Total	172	100.0

Table 4.27 shows that ,45.9% of the respondents view the toilets as a favorable business, that is twice the proportion of those who disagree that was 22.1% which is a booster to those offering such services as persons in business.

#### 4.6.3 Gender issues on toilet attendants

Gender issues influence on toilet business operations was inquired from the respondents to know how it may influence the users of public toilets based on whether they agree that a female attendant should be in-charge of a public toilet that serves ladies. Table 4.28 shows their responses.

Table 4.28 Gender issues of the attendants

	Frequency	Percentage
Strongly Agree	72	41.8
Agree	58	33.7
Neutral	18	10.5
Disagree	16	9.3
Strongly Disagree	8	4.7
Total	172	100.0

In Table 4.28 majority of the respondents 75% did agree that female attendants are suitable for female toilets as shown in table 4.28 while 14% disagreed on the proposal, an

indicator of gender awareness on the roles. The research further sought to know from the users on if the society accepts the use of the public toilet bathrooms as a noble idea and the findings are shown in table 4.29.

#### **4.6.4 Acceptance of Bathing in washroom in a public toilet as a normal behavior**

The respondents were asked of their opinion on the use of bathrooms in a public toilet as a normal behavior in a society.

Table 4.29 Use of bathroom facility in Public toilets

	Frequency	Percentage
Strongly Agree	19	11.0
Agree	36	20.9
Neutral	50	29.1
Disagree	41	23.9
Strongly Disagree	26	15.1
Total	172	100.0

Table 4.29 is the responses on the use of bathrooms, 31.9% did approve of it with 39.0% disagreeing on the use of these facilities, an indicator that these facilities are underutilized yet if well advertised can promote these businesses.

#### **4.6.5 Influences of a persons' level of Education on acceptance of using public toilets**

The education background of the users was assessed to evaluate whether it may influence acceptability of the toilets by an individual.

Table 4.30 Influence of education on Usage of public toilets

	Frequency	Percentage
Strongly Agree	39	22.6
Agree	53	30.8
Neutral	36	20.9
Disagree	26	15.1
Strongly Disagree	18	10.5
Total	172	100.0

Table 4.30 the respondents averaging to 52.9% did indicate on the strength of educational backing in acceptance of the public toilets usage and only 10.6% disagreed this could have been as a result of many of the dwellers in towns are educated, the toilet utilization has strength in this.

#### **4.6.6 Influence of Previous experience in the use of public toilet on the liking of a person to revisit the toilets**

The users of public toilets were asked to evaluate their opinion on whether a past experiences in public toilets affects their present day usage of these toilets.

Table 4.31 Past experience and usage of toilets

	Frequency	Percentage
Strongly Agree	59	34.3
Agree	67	39.0
Neutral	26	15.1
Disagree	14	8.1
Strongly Disagree	6	3.5
Total	172	100.0

In table 4.31 respondents of 73.3% agreed on the concept of previous experience determining a customers use of toilet again and 11.6% disagreed as seen in the table above .the providers of such facilities need create confidence of the customers in these facilities as being different from previous ones to boost their utilization

#### **4.6.7 Influences of Age on the type of users of the public toilets**

The age component of users was used in the study to evaluate its influence on the usage of the public toilets as shown in table 4.32

Table 4.32 influence of age on usage of public toilets

	Frequency	Percentage
Strongly Agree	26	15.1
Agree	52	30.2
Neutral	40	23.3
Disagree	30	17.4
Strongly Disagree	24	14.0
Total	172	100.0

Of the respondents ,44.8% did agree that the age of a person may have a bearing on the decision of one to use the toilets as seen in the responses in table 4.32 while 20% showed displeasure with the idea.This element can be used by the providers to formulate how they can diversify their products to cater for different ages.

#### **4.7 Environmental factors influence on the utilization of Public toilets**

The role of the toilets in environmental sustenance and improvement were incorporated in the study to investigate how various aspects of the toilet operations affect the environment and its implication on the level of utilization as shown in table 4.33 and 4.34.

##### **4.7.1 Influence of Consumer enlightenment on the environment relevance of the public toilet**

The users were asked to respond on their opinion on whether if the consumers are enlightened on public toilet usage would aid in better environment.

Table 4.33 Consumer awareness of environment issues

	Frequency	Percentage
Strongly Agree	36	20.9
Agree	48	27.9
Neutral	37	21.5
Disagree	37	21.5
Strongly Disagree	14	8.1
Total	172	100.0

Table 4.33 indicates that48.8% of the respondents s agree or strongly agree that the consumer enlightenment on the public toilet usage is an environment factor .This proponent is a good challenge to the providers to ensure that they conserve the environment and provide suitable services.

#### 4.7.2 Health standards in Public toilets

The study undertook to measure how well the facilities meet good health standards to the convenience of the users.

Table 4.34 Health standards of public toilets

	Frequency	Percentage
Strongly Agree	19	11.0
Agree	53	30.8
Neutral	35	20.3
Disagree	45	26.2
Strongly Disagree	20	11.6
Total	172	100.0

In table 4.34 ,41.9% of the respondents either strongly agree or agree that public toilets in Nakuru meet the health standards and this attracts many users of the toilets.In light of this then the facilities can easily loose on their customers if the health standards decline as seen in table 4.35 where the research sought to find out on whether the toilets do produce bad smell and its influence on the surrounding.

#### 4.7.3 Influence of Smell and sewerage system of the toilet facilities on their utilization

The respondents were asked of their opinion on the influence of the toilets to the environment in terms of foul smell and on the effect on the land adjacent to the toilets form their sewerage system.

Table 4.35 assessment of bad smell from public toilet locality

	Frequency	Percentage
Strongly Agree	28	16.3
Agree	41	23.3
Neutral	42	24.4
Disagree	39	22.7
Strongly Disagree	22	12.8
Total	172	100.0

Table 4.36 shows that 39.8% of the respondents were in agreement that there is a bad smell emanating from the toilets whereas 35.7% disagreed on this proposal. The conclusion is that some of the facilities take good care of the environment as others are

negligent. This calls for the owners to be more concerned with the issue. In table 4.36 48.8% do agree with the sufficiency of the available sewer system showing that spill over to the ground is rare.

Table 4.36 Proper sewerage systems availability in the Public toilets

	Frequency	Percentage
Strongly Agree	25	14.5
Agree	59	34.3
Neutral	40	23.3
Disagree	35	20.3
Strongly Disagree	13	7.6
Total	172	100.0

#### 4.7.4 Enhancement by the Public toilet on the standard of hygiene in Nakuru town

Respondents were asked on the level of cleanliness of the toilets and whether they agree on their effectiveness to sustenance of good environment and public decency. Their responses are shown in table 4.37

Table 4.37 Public toilets hygiene levels

	Frequency	Percentage
Strongly Agree	40	23.3
Agree	80	46.5
Neutral	29	16.9
Disagree	16	9.3
Strongly Disagree	7	4.1
Total	172	100.0

From table 4.37, 69% of the respondents agree or strongly agree that Public toilet has enhanced the standard of hygiene in Nakuru town while in table 4.38 72.7% of the respondents did agree that public toilets have greatly improved the environment and decency.

Table 4.38 Public toilets contribution to better environment and public decency

	Frequency	Percentage
Strongly Agree	51	29.7
Agree	74	43.0
Neutral	21	12.2
Disagree	21	12.2
Strongly Disagree	5	2.9
Total	172	100.0

Table 4.38 shows result of 72.7% of the respondents believe that the public toilets have brought about a decrease in people relieving themselves in the open. The contribution has resulted in a better environment and in some areas businesses adjacent to spots that used to be urinals now enjoy clean environs.

#### **4.7.5 Influence of Advocacy in public toilet usage in enhancing a sustainable environment**

Respondents were asked to give their opinion on, if advocacy can influence the utilization of the toilets as a tool for environmental conservation. Their responses are summarized in table 4.39.

Table 4.39 Advocacy as tool for better environment

	Frequency	Percentage
Strongly Agree	59	34.3
Agree	80	46.5
Neutral	20	11.6
Disagree	7	4.1
Strongly Disagree	6	3.5
Total	172	100.0

In table 4.39 the response was 80.8% endorsed on the advocacy that shows that it can boost the level of utilization and is a strong tool that if well utilised can lead to a better environment as it would create awareness to many on the importance of the public toilets. This method eventually will improve the utilization of the toilets and the owners need incorporate it in their businesses. This can further be enhanced by the display of suitable rules on users of the facility displayed in the toilets as shown by the findings of the research in table 4.40

#### 4.7.6 Display of Health regulations in Public toilets

Respondents were asked whether the health regulations are displayed in the toilets and if it is important to have the regulations displayed in the toilets as a method of educating the users.

Table 4.40 Need for the display of health regulations

	Frequency	Percentage
Strongly Agree	22	12.8
Agree	28	16.3
Neutral	40	23.3
Disagree	49	28.5
Strongly Disagree	33	19.2
Total	172	100.0

As seen in table 4.40 ,there was 29.1% of the respondents were in agreement that such regulations are clearly displayed in such toilets but 47.7% of the users disagreed on it implying that in most of these toilets such regulations are not there, this could be a contributing factor to a low utilization.

#### 4.8 Summary

65.1% of the residents are frequent users of the toilets of whom 59.3% are in the age bracket of 30-40 years.51.7% agree that the cleanliness level of a toilet attracts users to that toilet.54.7% of the users agree that Public toilet usage is determined by the cost of usage,while 60.5% are dissatisfied with the hygiene levels of the toilets.62.8% of the users are keen on the condition of the toilet they use as such they will not use by convenience of locality

## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents a summary of the findings, discussion, conclusions recommendations and suggestions for further reading following the objectives of the study. Public Toilets have been in existence mainly provided by the urban councils but in recent times entrepreneurs have ventured into them and now do exist as a form of business. This study set out to examine the factors that influence the utilization of Public Toilets projects in relation to the influence of location, marketing strategies, socio cultural factors and environment issues all of which have a bearing on the utilization.

#### 5.2 Summary of findings

Based on the responses of the respondents the researcher drew up findings which were used to derive conclusions and give recommendations. The main findings are based on the analysis in chapter four as shown in the table below.

Table 5.1 Summary of findings

Objectives	Findings
1.To determine to what extent location of the public toilet project influences utilization of public toilets	<ul style="list-style-type: none"><li>• The location of the toilets is appropriate in different areas of the town(62.2% agree)</li><li>• Users of toilets are more concerned of the toilet condition not proximity (62.3%)</li><li>• Design of the toilets are not suitable to many of the users 58.1% and not suitable for all 36.0%</li></ul>
2.To assess how marketing strategies do	<ul style="list-style-type: none"><li>• Most users knew of the existence of</li></ul>

<p>influence the utilization of the public toilet projects</p>	<p>the toilets through sign posts near the toilets 55.2% a limited method of advertising</p> <ul style="list-style-type: none"> <li>• Quality of service offered (56.4%), front physical outlook (72.7%) are key marketing strategies</li> <li>• Good interior features (62%) and branding of toilet (60.5%) are booster factors of utilization</li> <li>• Handling of complaints has not been well organized affecting utilization (71.5%)</li> </ul>
<p>3.To evaluate how socio cultural factors influence the utilization of public toilets</p>	<ul style="list-style-type: none"> <li>• 87.2% concurred that society recognizes toilets as a business and 83.7% approve of paying for use of public toilets</li> <li>• The society has a negative attitude towards use of washrooms in the public toilets (67.8%)</li> <li>• Past experience (73.3%) ,level of education 52.9% and age of a person influence acceptability of public toilets</li> </ul>
<p>4.To assess how environment issues do influence the utilization of public toilets</p>	<ul style="list-style-type: none"> <li>• The health standards of the toilets are low 58.1% disapprove of the current standards</li> <li>• The sewer system of the toilets is adequate 48.8% though needs</li> </ul>

	<p>improvement</p> <ul style="list-style-type: none"> <li>• The existence of public toilets in Nakuru has greatly contributed to better standards of hygiene in town 69.8% and improved on personal decency 72.7% thus more opportunity</li> <li>• Health regulations display need to be more emphasized 48%</li> </ul>
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### 5.3 Discussion

This section gives a detailed discussion of the findings of the study on the factors influencing the utilization of public toilet projects in Nakuru town Nakuru county Kenya.

#### 5.3.1 Location and design influence on utilization of public toilets

The location of a business is seen as a strong force for a business to prosper (Kala et al 2010),and aids an entity to be sustainable .Orloff (2002) provides evidence on the effect of location on her utilization. In the Central Place Theory developed by Christaller W., the assumption was that consumers minimize the distance travelled to get a service by consuming that which is closest. This concept has been proved not through the study as 73.3% will use a toilet that has good customer care, only 37.2% will choose a toilet closest irrespective of its hygiene status.62.2% felt that the dispersion of the toilets is essential as another 40.7% endorse the need to locate at a place with a high population. The findings enrich the diversity of location as a factor that affects utilization. The design and space of the toilets are crucial, 39.0% showed that the space is sufficient as 59.1% felt that a good location without adequate consideration of a design that suits consumers may not result in high utilization level.40.7% felt that consumers are attracted to a toilet by its services and not location parse.

#### 5.3.2 Marketing strategies influence on utilization of public toilets

Kotler and Quinn (1981) argued that marketing as a warfare that needs strategies to succeed while Gail (2011) propounds the need for a marketing strategy that creates a

perception to customers that is impressive for them to develop a relationship with the product. The user of the product stands at the centre of the activity's design. Kotler and Armstrong (2001), advocate for techniques, creativity and motivation to enhance marketing. Handlin (2011) advocates on the importance of branding as a marketing strategy that affects consumer behavior building emotional connections and reinforces buying behavior. 47.7% felt that the methods used are not effective, 58.7% of the respondents advocated for good physical features as a form of advertising in line with creativity in marketing. 60.5% of the respondents agreed with branding as tool that can improve on the utilization. The results on decorations of toilet interior was endorsed by 51.8% as a booster of utilization. On consumer complaints 28.5% poorly rated the way the operators of public toilets handle them.

### **5.3.3 Socio cultural factors influence on utilization of public toilets**

Behavior of the consumers stems from a belief system of the society. Lord and Maher (1991) stress that societal cultural values and practices also affect organizational culture and practices with the dominant culture ruling. In the study 87.2% of the respondents did approve toilet as a form of business thus acceptable. 16.3% agreed on the proposal that spending money to use a toilet is unwise implying that 83.7% think of it as a wise move. On gender 75.0% responded on the affirmative for female attendants in female toilets this indicates that society gender concerns must be considered if utilization needs to improve as per the society demands. The theory of conditioning (Pavlov, 1927) plays part in toilet usage given that 73.3% agreed to the notion of a past experience affecting the future use of the toilet.

### **5.3.4 Environment factors influence on utilization of public toilets**

Bindeswar (1995), views the availability of modern toilets in a community as an indicator of a link between a good and a bad environment. Poor services provided by the local council toilets did result in poor environmental surroundings where people openly relieved themselves in public (Winifred, 2009) and this erodes human dignity. 69.8% agreed on the improvement of hygiene standards in Nakuru due to the availability of public toilets, 72.7% of the respondents show that most of the public that the public toilets have enhanced human decency. On advocacy 80.8% believe in the role of advocacy to create more awareness in the use of the toilets as a way of sustaining a better

environment. The use of signboards to pass over the message of better health standards and on better toilet usage was rated low as 29.1% did vote for their current existence in the toilets. This is contrary to other studies (Oregon State, 2001) that has seen the advocacy role turn around the role of public toilets in that state.

#### **5.4 Conclusion**

The following conclusions were made from the findings of this study.

The location of a toilet should be seen as a site that can attract customers from far distance due to the service it offers as the quality of the service is a dominant element of the utilization. In most of the toilets the proprietors construct the toilets with little regard of the users yet the consumer should dictate the layout or the design of the toilet. It is evident that the population of the town has grown so the toilets need be dispersed to the convenience of the users and the cost be maintained at affordable levels. The study further revealed on how the interior of the toilets has been neglected yet it is a business premises that need have a business outlook attractive to the customers.

The marketing strategies used by the toilet providers are inadequate and they have been shy to openly advertise their businesses. The acceptability of these businesses by society and their recognition as an important facility of the town is not well known by the providers. The toilets need refurbishing as most of them are unattractive from the outside to the users. The providers of the toilets have a low attitude of their businesses yet they own facilities that are very essential to society. The public toilet operators have mainly relied on sign posts to advertise their businesses some of which are poorly written and their set up ineffective in communication. The element of quality service need be a prime concern of the toilet services as it would attract more users beyond areas of their location.

The society appreciates the contribution of the toilets and has a positive view of their services yet the providers of the services have not reciprocated with a forceful desire to offer high standards of services. A high proportion of the public appreciate the payment system for use of the toilets yet the findings on utilization of the toilets denoted that the providers inadequately reciprocate them with the worth of their money with low quality services; this is a concern to the users. Toilet business is appreciated by society as such

and it would be prudent for the providers to adequately provide high level services to attract a user to revisit the toilet and eventually be a client to the business. The study reinforces this as the findings indicate that past experience of a user dictates future relations.

Environmental issues are key to any activity and where they are neglected they heavily weigh on the utilization of a business. The existence of public toilets in Nakuru has greatly aided in the sustenance of good business environments in spots where previously people used them as a toilet. Despite this contribution the hygiene standards of the toilets have been wanting to an extent forcing the users to utilize the services on as is basis due to lack of alternative. This to an extent contributes to poor utilization in that when one can avoid to use them they evade them, denying revenue to the providers. The lack of health regulation notices in the toilets contributes to lack of consumer education to users that would facilitate to offering of better services by the providers since they would get feedback from the users. Another aspect that is lacking is the incorporation of advocacy in popularizing the role of public toilets that would assist in creating awareness among the people and demystify public toilets as a nuisance but as an essential component of the environment.

### **5.5 Recommendations**

Based on the findings of the study, the researcher made came up with several recommendations that would enhance the utilization of the public toilets. The owners of the public toilets should use diverse modes of advertising such as open days where they offer services to users and educate them on their roles. On such days feedback on the services they offer can be obtained to the benefit of the toilet provider.

The facilities of the toilets need be modified to cater for all users. Its recommended that locker facilities be provided similar to those offered by supermarkets where one can temporarily store their luggage as they utilize the toilet/washrooms services. The toilets can be decorated in the inside to make them attractive and comfortable to the users.

The health regulations of the toilets need be displayed clearly on the walls of the toilets and contact addresses of the management be provided to aid in interaction with the

customers and create awareness on the obligations of each party .Such method if used can greatly improve on the conditions of the toilets.

The owners and the management of the public toilets should have a platform where they can interact learn from each other as a way of improving their services. The employees need also further training on customer relations practices and also on sustenance of a good business environment to assist them improve on their productivity.

In the planning of the shopping complexes the authorities should insist on the buildings to house a public toilet well designated open to all users and not just for the occupants of the building.This will create an open door policy for the provision of public toilets eventually the level of competition will rise and influence the quality of the services

#### **5.6 Suggestion for further research**

The study proposes the following areas for further studies:

- 1.The Environmental contribution of public toilets to the life of Nakuru residents
- 2.The influence of a policy framework on the operations of public toilets in Nakuru Town
- 3.The factors that have attracted investors to offer public toilet facilities in Nakuru Town

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On transit	
Visitor	
Any other (specify)	

5. Tick against the reason why you stay in Nakuru town

Engage in business	
Studies	
Working	
Home	
For administrative services	
Others (specify)	

6. How often do you use public toilets?

Very frequently	
Frequently	
Rarely	
Very rarely	

**Part 2: Utilization of the toilets**

7. What is your view on the following use a rate of 1-5 with?

Strongly Agree = 1    Agree = 2    Neutral = 3    Disagree = 4    Strongly  
Disagree = 5

	1	2	3	4	5
--	---	---	---	---	---

The level of cleanliness of the toilets attracts me to use the toilet					
A toilet that has good care of their customers has more customers in their businesses					
I feel safe while using the toilet					
I choose the toilet to use based on how friendly the staff working there are					
The cost of using the toilets influences the number of users					
Most of the public toilets have running water to the convenience of users					
Complaints by customers are well addressed by the attendants					
The location of the toilet determines the customers they serve					
The state of hygiene of the existing public toilets in town is favorable					

**Part 3 Location and Layout**

8. What is your view on the following use a rate of 1-5 with?

Strongly Agree = 1   Agree = 2   Neutral = 3   Disagree = 4   strongly

Disagree = 5 (Tick against your response)

	1	2	3	4	5
The location of toilets in the town suits the needs of users in different areas					

I select to use the toilet closest to me irrespective of its condition					
The space available to the customers in the toilets is adequate					
The design of construction of the toilets used had a certain type of client in mind					
The toilets have lockers where one can store their belongings safely as they go to the washrooms					
The toilets need be located only in areas with large number of people who visit there					
The location of the toilet determines the customers they serve					
The design of the toilets are favorable to all types of users even those with disabilities					

**Part 4: Marketing strategies**

9. How did you get to know of the existence of the public toilets? (Tick the most appropriate)

Through newspapers
Through radio
Through posters
Through sign posts near the toilets
Asked somebody
By chance

10. What is your view on view on the following use a rate of 1-5 with?

Strongly agree =1

Agree = 2

Neutral = 3

Disagree = 4

Strongly disagree =5

	1	2	3	4	5
Most of the public toilets are clearly advertised					
The physical front of the toilets attract customers to use them					
The quality of services offered by the toilets is a self advertising method					
Am attracted to use the toilets again by the quality of their services					
The branding of the public toilet will improve their utilization					
The interior features of the toilets are pleasant to the customers					
For the toilets to be more attractive the interior of the toilets need more decorations					
The public toilets need better tending of their outside environment that will assist to market them better					
Most of the public toilets deal adequately with consumer complaints					

**Part 5: socio cultural factors**

11.using a scale of 1-5 rate how each of the following socio cultural factors influence the utilization of the public toilets with 1= Strongly agree 2 = Agree 3= Neutral 4= Disagree 5= Strongly disagree

	1	2	3	4	5
The society approves of the existence of public toilets as an essential facility in town					
The users of such facilities spend their money unwisely					
A female toilet should have a female attendant					
Taking a bath in the washrooms of such toilets is viewed as a normal behavior					
The education level of a person influences the acceptance of using the public toilets					
Previous experience of a person in the use a public toilet affects their likeness of the toilets					
Age of a person influences the type of users of public toilets					
Society views public toilets enterprises as a favorable business					

**Part 6: Environmental issues**

12. What is your view on the following issue as relates to public toilet operations using a scale of 1-5 with 1= strongly agree 2 = Agree 3= Neutral 4=Disagree 5= strongly disagree

	1	2	3	4	5
There exists consumer enlightenment on the usage of the public toilets as an environment issue					
The current public toilets do meet the good health standards for the users					

The area where the public toilets are located has bad smell coming from the toilets					
The public toilets do have proper sewer systems that do not spill onto the ground					
The operations of public toilets in Nakuru have greatly contributed to enhance the standards hygiene in the town					
The existence of public toilets has aided in decline in indecent public behavior of people relieving themselves in the open					
The advocacy role on usage of public toilets can help in sustenance a better environment					
Health regulations are displayed in the toilets					

## **APPENDIX 2: MAP OF NAKURU TOWN**

**APPENDIX 3: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION**

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size

"S" is sample size.

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