# INSTITUTIONAL FACTORS INFLUENCING IMPLEMENTATION OF STUDENTS' HOSTEL CONSTRUCTION PROJECTS IN PUBLIC UNIVERSITIES: A CASE OF UNIVERSITY OF NAIROBI, KENYA

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A Research Project Report Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Arts in Project Planning and Management of the University of Nairobi

# **DECLARATION**

This research project report is my original work and has not been presented in any University for

any award.	
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UNIVERSITY OF NAIROBI.

## **DEDICATION**

I dedicate this research project report to my beloved son, Lennyl Adams, my brothers Roy, Robin and my parents Mr. and Mrs. Edward Telewa for their patience throughout this period.

#### ACKNOWLEDGEMENTS

I acknowledge the importance and quality support accorded to me from all the relevant people who have ensured that I carry out this research project report successfully. First is my Supervisor Professor Charles M. Rambo who has been of great assistance in terms of guiding me to professionally investigate my research topic and academically present it. Professor P.G.O Weke for his support in acquisition of relevant information to use in my study. I also wish to extend my gratitude to the University of Nairobi's ODeL Campus lecturers and staff not forgetting Dr. Joash Migosi for his tireless effort to ensure successful completion of my programme. I wish to also appreciate the University of Nairobi for granting me an opportunity to pursue my studies in this institution without forgetting my colleagues and classmates for their overwhelming support.

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#### LIST OF ABBREVIATIONS AND ACRONYMS

**AfDB** - African Development Bank

**BOT -** Build -Operate -Transfer

**CBK** - Central Bank of Kenya

**CCPM** - Critical Chain Project Management

**CUE** - Commission for University Education

**DVC** - Deputy Vice Chancellor

**EU** - European Union

**GDP** - Gross Domestic Product

**GNP** - Gross National Product

**GoK** - Government of Kenya

**HELB** - Higher Education Loans Board

**HR** - Human Resource and Administration

**ICT-** Information Communication and Technology

**KCB -** Kenya Commercial Bank

**KDHS** - Kenya Demographic and Household Survey

**KNBS** - Kenya National Bureau of Statistics

**KNUST** - Kwame Nkrumah University of Science and Technology

**KPDA** - Kenya Property Development Association

**KTTC** - Kenya Technical Trainers College

NACOSTI - National Commission for Science, Technology and Innovation

**NCA** – National Construction Authority

**NCES -** National Center for Education Statistics

**NHC -** National Housing Corporation

**OHRP** - Office for Human Research Protection

**PKF** - Pannell Kerr Forster

**PMBOK -** Project Management Body of Knowledge

**PMI -** Project Management Institute

**PPP -** Public Private Partnership

**PSSP** - Privately Sponsored Students Programme

**RCC** - Reinforced Cement Concrete

**SAPs** - Structural Adjustment Programmes

**SEKU-** South Eastern Kenya University

**SONU-** Student Organization of Nairobi University

**SPSS** - Statistical Package for Social Sciences

**SSB** - Stabilized Soil Block

**SWOT -** Strengths Weaknesses Opportunities Threats

**TISA -** Tax Incentivized Savings Association

**TOC -** Total Organic Carbon

**UN -** United Nations

**UNDP** – United Nations Development Programme

**UNES -** University of Nairobi Enterprise Services

**UN-HABITAT -** United Nations Human Settlements Programme

**UoN** - University of Nairobi

UNSA - University of Nairobi Students Association

VC - Vice Chancellor

#### **ABSTRACT**

Provision of quality education is an important tool for empowering the weaker sections. Various socio-economic factors obstruct the access to higher education of students from needy families. Construction of students' hostels within or close to the higher learning institutions in Kenya has been considered one of the means to enable and encourage young Kenyans from all walks of life to strive towards achievement of quality education at reasonable costs to improve access to education. Since its establishment in 1954, the University of Nairobi has seen an increase in enrollment of students pursuing degrees courses, with the resultant accommodation difficulties pushing the existing spaces in the halls of residence to the extreme limit. The university has grown from a faculty-based university serving a student population of 2,768 in 1970, to a college focused university serving over 80,000 students by 2015. The meteoric rise in the number of students enrolled has seen various attempts to increase the number of hostels to accommodate students, though it still remains doubtful that the number of hostel rooms will ever meet the demand due to continued influx of students seeking accommodation within the university. It is on this premise that the study sought to establish institutional factors influencing implementation of students' hostel construction projects at the University of Nairobi. The study assessed the influence of availability of land, student enrollment, financial resources and organizational leadership on implementation of students' hostel construction projects at the University of Nairobi. The study was expected to enable the University of Nairobi council come up with ways of fast tracking construction of hostels to address the spiralling accommodation problem within the institution. Findings might also be used to draft policies that improve the general welfare of the students within the institution, while stakeholders may also draw useful insights on strategy implementation that is timely. The study adopted the descriptive research design on a target population of 80 respondents from the University of Nairobi. A sample size of 66 was obtained by using the Krejcie and Morgan formula, and the respondents selected using stratified simple random sampling. The study used a questionnaire instrument to collect data, with the obtained data being subjected to Statistical Package for Social Sciences (SPSS) tool to support analysis. The study used mean and standard deviation while the findings were presented in form of tables. The results were presented in tables, interpreted, discussed and inferences made from them. The study found that student enrollment influences implementation of students' hostel construction projects. The study established a moderate positive correlation (R = 0.493) between availability of land and Implementation of students' hostel construction projects, a weak positive correlation (R = 0.157) between organizational leadership and Implementation of students' hostel construction projects, a high positive correlation (R = 0.440) between financial resources and Implementation of Students' Hostel Construction Projects. The study concludes that the four (4) factors and variables: availability of land, financial resources, student enrollment and organizational leadership significantly contribute to the implementation students' hostel construction projects. The study recommends that to ensure improvement in the implementation of the students' hostel construction projects, there is need to ensure increased PPP and have financial resources with effective organizational leadership as student enrollment will always go up.

# CHAPTER ONE INTRODUCTION

#### 1.1 Background to the Study

A project is simply defined as a series of tasks arranged in a defined sequence or relationship that produces predefined output or effect, and always has a beginning and an end (Cleland and Gareis, 2006). Projects are essential in both economic and non-economic scenarios as away of planning an activity and scheduling duration of activities as per project objectives. According to (Meskendahl, 2010), a project is the central building block used in implementing strategies to deal with change. A project is not a permanent exercise and is perfomed by individuals who have similarity in ideas to create a unique or outstanding product or service. All these with clear set goals on resources and timeline to achieve their set objectives (Project Management Institute, 2000). A project consists of three main pillars namely; cost, quality and time. Project success have been defined by the criteria of time, budget and deliverables (Flaman and Gallagher, 2001). In addition, project success is considered if it meets the schedule, budget, quality expected, and the achievement of the deliverables that were originally intended and the acceptance by the target beneficiary or the project client.

(Sid, 2004) avers that nearly 80% of projects in the world run late or are over budgeted. In the previous years, massive projects such as transport, were over spent on or over budgeted- a trend that seems to not be going down soon. (Mobey and Parker, 2005) state that the success rate of projects can be increased when and if the implementing agencies understand the critical success factors and conduct thorough assessment. Projects differ from operations, because operations are continuous and repeating whereas projects are temporary. In addition, operations deliver the same or almost similar results over time whereas project results are in contrast unique phase (Standish group international, 2005). Implementation is the stage where all the planned activities are put into action (Lewis, 2006). Before the implementation of a project therefore, the implementers who are spearheaded by the project committee or the executive should establish their strength and weaknesses including internal forces, opportunities and threats which include external forces (SWOT). The strength and opportunities are positive forces that should be exploited to efficiently implement a project. The weaknesses and threats are hindrances that can hamper project implementation. Monitoring, according to (Barney, 2001) is an important aspect at this phase of a project to ensure that the project is implemented as per the schedule set in place. This continuous

process should be put in place before project implementation starts. As such, the monitoring activities should appear on the work plan and should involve all stakeholders. If activities are not going on well, arrangements should be made to identify the problem so that they can be corrected Barney, (2001). The constitution of Kenya envisages special protection for socially and economically deprived sections of the society by ensuring their rapid economic development and achieving equality with others (Wamati, 2011). That being the case, education cannot be left out or ignored. Provision of quality education is an important tool for empowering the weaker sections and the society as a whole (GoK, 2013). Various social-economic factors obstruct the access to higher education by students from needy or less fortunate families. Construction of hostels within or close to respective higher learning institutions in Kenya has been considered one of the means to enable and encourage young Kenyans from all walks of life to strive towards achievement of quality education at reasonable costs to improve access to education (Moige, 2014). The Kenyan government started the centrally Sponsored Scheme for construction of new hostels as well as expansion of existing hostels for public university students in 1968-78 so as to give impetus to university education among the Kenyan youth population (UNES, 2011). Overtime, there came new and improved changes whose objective was to better the sector by ensuring that there is collaboration between relevant stakeholders to aid in student hostel construction across public institutions of higher learning and at the same time ensure that the constructed hostels are friendly and do not hinder accessibility for the disabled group of students. (Kamau, 2013), avers that major changes came during the government Medium Term Plan (1985-1990) when the World Bank recommended Structural Adjustment Programs (SAPs) be implanted and implemented in all learning institutions, meaning that local Universities had to raise funds to enable them construct their own hostels and other structures. Universities therefore had to come up with their own income generating measures that would enable them raise funds for hostel construction.

#### 1.1.1 Implementation of Students' Hostel Construction Projects

The University of Nairobi was established in 1954 as the Royal College of East Africa- a constituent college of the University of London. The institution provided educational opportunities in the capacity of a constituent college of the University of London until 1966, when it began preparing students exclusively for degrees, with the exception of the Department of Domestic Science. It was later turned into the University of Nairobi and became a corporate body established under the Universities Act no 42 of 2012 of the Laws of Kenya and the University Charter (UoN Academic Calendar and Almanac, 2018-2019) With effect from 1 July 1970, the University of East Africa was dissolved and the three African Great Lakes countries set up their national universities. This development saw the birth of the University of Nairobi set up by an Act of Parliament.

According to illustrated (dictionary,1998), A hostel is a form of low-cost dormitory set –up environment and a shared sociable lodging where guests can rent space and a bed, usually a bunk bed or a double decker bed occupied by two or more people in a room. This establishment offers affordable food and meals to its guests. Hostels are a communal arrangement that involve use of shared spaces like a lounge and sometimes a kitchen, have private or shared bathrooms and a laundry area. Private rooms may also be available depending on the developer of that specific hostel, but the property must offer dormitories to be considered a hostel. Many hostels are locally owned and operated, and are often cheaper for both the operator and occupants than hotels.

In Kenya, university education has transformed tremendously from primarily focusing on preparation of learners for acquisition of jobs available on respective markets to ensuring provision of high level manpower for the social-economic development of the country. This realization, coupled with the implementation of the educational reform programmers has led to an increased admission percentage of students each day in respective tertiary institutions and this increase in population is not accompanied with creation of accommodation therefore causing a strain on the little available spaces and further creating hostel difficulties. The expected expansion of residential facilities has not materialized and hence, has created the existence of two categories of students: resident and non-resident (Girdwood, 1999).

Statistically, over 60 percent of students in post of the tertiary institutions are non-resident (Watwari, 2001). The average reasonable hostel room needs to host at most four students per room, this however is not the case and there are instances when a room hosts up to ten to twelve students.

The result of this scenario is overcrowding due to the increasing number of "perches" (student's who reside in the halls unofficially) and pressure on available resources which have been designed to be used by a specific number of students such as toilet and bathing facility. In some cases, students who have morning lectures have to queue to use the lavatory. The concept of "non-residence" as a category of students became a reality and was subsequently implemented when it became obvious that the halls of residence on campus could not accommodate the ever-increasing student population (KNUST).

Projects differ from operations, because operations are continuous and repeating whereas projects are temporary. In addition, operations deliver the same or almost similar results over time whereas project results are in contrast unique (Mobey and Parker, 2005). The institutional factors influencing student hostel construction projects include: Availability of land; student enrolment; financial resources and Organizational Leadership.

#### 1.1.2 Availability of Land

(Whites, 2013) posits that most construction involve land or site that may already be available, or it may be in the hands of the authority, and unavailable for use. In most cases where land is not available and has to be acquired, the government normally comes in either as the owner in case of public land, or as the mediator in case of private land. This can be quite complex especially in linear infrastructure, such as roads and rails where there may be multiple owners (Baines, 2014). The land could be the exact location where the construction project is to be implemented or perhaps have a correlation with the transport (for example, stations in a rail project, depots in a light rail one). Alternatively, it may be a "right of way", that is, the corridor where a new road or highway, or rail line, is to be located (Abraham, 2013). There could be this or a number of related or different scenarios. Usually, the title of ownership of the particular land remains in the hands of the authority who later transfer to the private developer, through an agreement or contract, offer the legal right to use the land to build and manage the infrastructure asset (for example, by a lease or concession). The authority is usually the only party with powers to expropriate the land from the existing landholders, although in some countries this power can be delegated to the private partner (giving it the title of "expropriation beneficiary").

If the land is not available at the time of the commercial close, which is common in linear infrastructural projects, there is a risk both in terms of costs and time, since the project can only

be rolled out if there is no dispute and therefore the land is free for use (Baines, 2014). Getting the exact approximation of the cost of acquiring the land which has numerous owners can be quite a hurdle and a challenge. There is bound to be an area of disapproval or misunderstanding which in turn would result to increase in costs. Therefore, the obvious step ideal would be to take a legal action by seeking the interpretation of the court so as to resolve the dispute in a rightful manner, this is a step taken by many countries. (Abraham, 2013).

In some cases, however, where construction land is unavailable, Public Private Partnership (PPP) arrangement is normally encouraged for the party entering into the deal as a buyer to take charge of all the risks that might arise in the process as long as these costs have to do with the acquisition process i.e. the availability of the land and ensuring that the current occupants are relocated to another area comfortably and procedurally (legal and illegal) (Booker, 2009). This is for the simple fact that each project needs to cover for contingency, a percentage of financial resources that can be used in case there are other additional costs related to the project during its implementation, risks of higher costs or uncertainty over the time it might take before the land is availed for construction. In this sense, it is good practice for the authority to directly manage the land acquisition, but in some countries the private partner may do it under delegation (Whites, 2013). In such cases therefore, it is only reasonable that the authority agrees to retain the risk (and reward), that is, directly assuming the final cost of the acquisition and consequences of potential delays.

#### 1.1.3 Student Enrollment

Education gives an individual the opportunity to work anywhere and have a good career in their life and even in many instances, the more and highly educated an individual is, the better and more chances and opportunities are at their disposal. Education has the power to make someone brilliant by polishing their thoughts and mind, character and even behavior besides equipping them with information. An educated individual is considered an asset in the community and looked onto as a role model to offer insight and guidance, this is according to (Al-Shuaibi, 2014). Student enrollment is affected by factors such as the quality of the programme the student looks forward to undertake, the flexibility of the programme and the cost of the programme as stated by (Murithi, 2012) in her study. The number of students pursuing courses at public universities and colleges has grown and the universities and tertiary colleges have become more vibrant and more people can pursue University Education. The demand for higher education has been so high that

universities cannot accommodate all students who want higher education through regular program (HELB, 2006). Since 1970, there has been massive growth experienced within UoN in terms of admission of new student and population from 2,768 in faculty to a college focused university serving over 68,000 students (UoN, 2013). Through module II and III programmes, the university has opened opportunity to thousands of Kenyans and foreigners to pursue higher education. Individuals who meet the university admission requirements, but who have not been able to access university education due to restricted regular programmes end up joining the university as self-sponsored commonly referred to as PSSP (Privately Sponsored Students Programme) students through the module II programme (UoN, 2011). In addition to the regular and module II and evening programmes, classes are conducted at the University's extra Mural Centers located at the country's county headquarters.

#### 1.1.4 Financial Resources

On the issue of provision of financing for housing and its infrastructure, the mortgage industry in Kenya is still significantly under-developed and handicapped despite being a natural leader within the Eastern Africa region in the 1970s. For instance, the leading service providers for finance in the housing sector; Kenya commercial bank (KCB) boasts of commanding 15% control of the mortgage sector in Kenya (total mortgage coverage in Kenya is 22%), meaning that the mortgage industry is just on the verge of real take-off (CBK, 2010). Still, the country requires a well-developed financial service industry and systems for savings and loans, especially for products that serve both the rural and urban poor.

As (Kahn and Njuguna,2015) observes, Kenya has kicked off a multi-million-dollar push to develop student hostels in five public universities by tapping into private funds, with the ultimate goal being to drive up enrollments. The project is expected to provide more than 50,000 new student beds. (Mwangi, 2016) in their weekly report published in the Daily Nation newspaper dated 23rd May 2016, stated that the government had announced contraction of a consortium of infrastructural advisory firms; Genesis and Crisil as well as PKF consulting firm as transaction advisers for the project to be implemented in Moi University, Egerton University, Embu University College, Kenya Technical Trainers College (KTTC) and South Eastern Kenya University (SEKU). The project was part of a larger government plan to draw on private capital to plug a growing infrastructure financing deficit in the education sector, with an eye on opening up similar

opportunities for more than 20 universities in the near future. Various reports indicate that the project will be run as Public-Private Partnership (PPP) with universities in conjunction with the government as it will be providing partial financing (Wang'ombe, 2017).

It is understood that the government wants universities to engage investors under the Build-Operate-Transfer (BOT) scheme, where universities provide land for construction while investors develop the hostels, run them for 20 years to recoup their investment, and then hand them back to the institutions (Nyaga, 2015). Proposed consortiums are expected to host stakeholders in Nairobi to gather comments on the planned projects while assessing the potential environmental and social impacts of the construction projects, as well as carrying out feasibility studies. From the listed local universities, it is noted that Moi and Egerton are established universities, while the other three are relatively newer and 'baby' institutions, having been recently upgraded from college to university status. Reports indicate that newly upgraded universities are grappling with growing numbers of students and serious accommodation shortages due to lack of sufficient infrastructure (Mwai, 2014). This as the financing landscape for higher education keeps changing radically with each passing year, has led to Vice-Chancellors of public universities to unanimously resolve to adopt a new, differentiated unit cost system for charging tuition fees under which students will pay based on the cost of courses they undertake (UoN Council, 2015).

#### 1.1.5 Organizational Leadership

Successful project performance is highly dependent on an organization's divisions and its team. This therefore calls for great organizational leadership, that which is tailored to a company's team, goals, divisions, and one that help employees comprehend how they fit into the larger picture (Chan and Chan, 2004). As a result, a proper structure should be put in place to guarantee efficient functionality of project processes. This is in line with the assertions of (Belassi and Tukel,1996) that poor organizational design and leadership results in a bewildering morass of contradictions: confusions within roles, failure to share ideas, lack of coordination among functions, and with slow decision-making that accord managers unnecessary stress, complexity and conflict (Asare,2010), all of which work against the successful execution of a project.

Every organization has different strengths and weaknesses that bear on successful implementation of their projects. This calls for organizational self-awareness that enables them to recognize their strengths and weaknesses. The chances of successful implementation are increased if senior

management is able to recognize their own organization's strengths and weaknesses (Wanna, 2007). By its basic definition, a project comprises a defined time frame to completion, a limited budget, and a specified set of performance characteristics. Additionally, the project is usually targeted for use by some client, either internal or external to the organization and its project team. It would therefore be reasonable that any assessment of project implementation success should include these four measures.

#### 1.1.6 Project Implementation

Project implementation is a phase in project management where visions and plans are transformed into reality (Smith et. al., 2014). The implementation phase of any project consists of planning, execution and monitoring. (EU, 2015). This is the logical conclusion, after evaluating, deciding, visioning, planning, applying for funds and finding the financial resources of a project. Technical implementation is one part of executing a project. Once a project has been planned and financial support secured, the implementation process can start (Carias, 2007). The agreed resources are used to achieve the purpose of the project and contribute to the wider and key objectives. Progress is assessed to enable adjustment to changing circumstances.

The implementation phase involves putting the project plan into action. It's here that the project manager will coordinate and direct project resources to meet the objectives of the project plan (Arriens and Alejandro, 2003). The project manager is responsible for the regular monitoring of the project, but the partner organizations should also contribute actively to the effective monitoring of the project. As the project unfolds, it's the project manager's job to direct and manage each activity, every step of the way. That is what happens in the implementation phase of the project life cicle: the manager follows the plan put together as well as handling any problems that come up. The implementation phase is where the project team does the project work to produce the deliverables (Larson, 2002). The word "deliverable" means anything the project actualizes. The deliverables for the water project include all the products and services that the project team is supposed to do for the client, customer or sponsor, including all the project management documents that are put together (Mansouri and Rao, 2011).

Steps undertaken to build each deliverable will vary depending on the type of project being undertaken (Cheema and Rondinelli, 2007). For instance, engineering and telecommunications projects will focus on using equipment, resources, and materials to construct each project

deliverable, whereas computer software projects may require the development and implementation of software code routines to produce each project deliverable. The activities required to build each deliverable should be clearly specified within the project requirements document and project plan (Olsen, 2016). Most often, changes are identified by looking at the performance and quality control data. Routine performance and quality control measurements should be evaluated on a regular basis throughout the implementation phase (World Bank, 2005). Gathering reports on the measurements help one to determine where the problem is and recommend changes to fix them. The implementation phase uses the post project time and resources, and as a result, costs are usually the highest during this phase. Project managers also experience the greatest conflicts over schedules in this phase. Monitoring the project sometimes may reveal that the actual time it is taking to do the scheduled work is longer than the amount of time planned. After the deliverables have been physically constructed and accepted by the customer. In this case, a phase review is carried out to determine whether the project is complete and ready for closure.

#### 1.2 Statement of the Problem

Students hostel play a major role in the life of a student since it determines where the student will eat, sleep and study; activities that cover 95% of a student's academic life. According to (Cyton, 2019)the US market registered an admission total of 19.8 million students in 2019, out of this number 1.5 million students were foreign students from all over across the globe. All this number was competing against a student hostel supply of about 2.7 million. This left behind a whooping 17.1 million students without designated hostel accommodation. The US, UK and the Australian markets accounted for the biggest percentage of international students' admissions in 2019 with 26%, 12% and 8% respectively in that order (Cyton, 2019).

According to (Cyton) 2019, the factors that influence the growth of hostel invesments include high rental yields compared to other investments, the stability encountered in this specific sub sector, expanding middle class among others. On the other hand, (Zotorvie,2017) states that the critical factors that influence the student's choice of accommodation include proximity to lecture halls, conducive environment for study, accommodation fee, availability of amenities such as water and electricity and quality bedroom and bathroom facilities. (Nimako and Bondinuba, 2013) however found that while accommodation fee and bedroom and bathroom facilities are a priority in the selection and preference of hostel accommodation, they are not the most important. The student

accommodation sector has proved to be one of the most resilient during the economic downturn, despite the continued difficulty in obtaining private finance; however, changes to higher education funding will mean most higher education institutions will need to review the ownership and maintenance requirements of their student halls, including campus-based universities (UNES, 2011). With limited financial resources at their disposal, many universities are now considering various outsourcing options for their student residences including selling their accommodation to the private sector and renting it back on long-term lease. According to the (KNBS, 2011), there were only five public institutions of higher learning in Kenya in 2005, with a total enrollment of 49,272. By 2008, total enrollment in all tertiary (public) institutions increased to 59,297. The total enrollment during 2010/2011 academic year showed further increase of about 71.38% over the 2005 figure to 84,446. (Acorn Holdings, student accommodation, 2020) agrees that there has been an increase in enrollment of students in universities across the country from 27,000 in 1990 to 550,000 in 2019 while there are less than 40,000 hostel beds available within these universities. This massive increase in student enrolment has naturally brought in its wake increased financial burdens and other problem for the government of which residential accommodation is included as the increase in enrolment does not match with increase in the halls of residence (KNBS, 2011).

Since its establishment in the early 1960's, the University of Nairobi has experienced meteoric rise in the number of students. Whilst there have been various attempts to increase the number of hostels in all its campuses, it still remains doubtful that the number of hostel rooms will ever meet the demand due to continued influx of students seeking accommodation within the university (UNES, 2015).

The students' hostels have a great impact on the life of a student both behavioural and personality according to (Iftikhar and Ajmal,2015), Behaviourally, the hostel inculcates a number of virtues into the student such as boosting confidence, punctuality, ensures emotional strenghth and maturity and improvement of management ability. Further more (Iftikhar and Ajmal, 2015) asserts that the personality of the student living in the hostel changes and they become mature, goal oriented, improve their sense of dressing and become realistic. (Agron, 1997) avers too that students in halls of residences have better grade points and have many hours and are able to connect with faculty members on campus and they also have a higher chance of taking up student leadership within the University (Thompson, Samiratedu and Rafter, 1993) agrees that the on-campus hostel

accommodation is of greater significance to any university student. According to their study, a freshman student who resided in the hostel had a higher retention rate, greater academic performance and progress. (Nabaseruka, 1997) also indicates that there is a correlation between academic performance and hostel accommodation, and infact the better the accommodation facilities, the better the students' performance. Several other studies found evidences of better performance and grades from students who lived in campus hostels than their counterparts in offcampus hostel or housing like (Olowabi, 2015) and (Araujo and Murray, 2010) noting that students in campus hostels are more likely to benefit from the University resources and facilities such as the library, computer and information technology, curricular and co-curricular activities such as conferences, music, sports, university clubs and health and fitness facilities among others. A study carried out by (Suki and Chowdhury, 2015) concluded that retaining students' satisfaction and attitude living in campus hostels that are sustainable is crucial for student housing administrators and university management. The research identified factors that affect students housing satisfaction and the results pointed out that the on-campus hostel quality affect students' satisfaction. (Magomere, 2018) reported that students at UoN were sleeping in shifts by what is famously referred to as 'pirating' as the entrant of freshmen had caused a further strain on the hostel facilities therefore forcing the third and forth year students from Main and Chiromo campuses to have no alternative. The University management however refuted this claim but agreed that the number of admissions had indeed increased to 85,000 against a bed capacity of 10,000. On the question of quality of accommodation, the UoN closed down its wooden hostels in mid 2018, the hostels which were located in the main campus and were reffered to as Prefabs, had been built in the early 1990s and were deemed not fit for residency by the Commission for University Education (CUE) (Magomere, 2018). In 2016, a UoN officer was suspended for selling hostels to female students. As reported by (Wanzala, 2016) the ICT officer was accused of selling the hostels to the highest bidder at Chiromo Campus, however the University indicated that there are plans to construct a multi billion hostel facility that will house upto 4,000 student in their 3.7 Acre piece of land located along Harry Thuku road near the Norfolk Towers and the Boulevard hotel through Public Private Partnership (PPP) and by Build- Operate- Transfer (BOT) contract.

#### 1.3 Purpose of the Study

The purpose of this study was to establish Institutional factors influencing implementation of students' hostel construction projects at the University of Nairobi, Kenya.

#### 1.4 Objectives of the Study

The study was guided by the following objectives:

- i. To establish the influence of land availability on implementation of students' hostel construction projects at the University of Nairobi.
- ii. To determine the influence of enrollment of students on implementation of students' hostel construction projects at the University of Nairobi.
- iii. To examine the influence of financial resources on implementation of students' hostel construction projects at the University of Nairobi.
- iv. To assess the influence of organizational leadership on implementation of students' hostel construction projects at the University of Nairobi.

#### 1.5 Research Questions

The study sought to answer the following research questions;

- i. How does availability of land influence implementation of students' hostel construction projects at the University of Nairobi?
- ii. To what extent does student enrollment influence implementation of students' hostel construction projects at the University of Nairobi?
- iii. How does financial resources influence implementation of students' hostel construction projects at the University of Nairobi?
- iv. To what extent does the organizational leadership influence implementation of students' hostel construction projects at the University of Nairobi?

#### 1.6 Significance of the Study

The significance of the study cannot be understated since it anticipates to help establish the determinants of project implementation in the construction of university hostels. The study was expected to enable the University of Nairobi (UoN) Management and Council to come up with ways of fast tracking construction of hostels to address the spiraling accommodation problem within the institution. Findings might also be used to draft policies that improve the general welfare of the students being accommodated in the university hostels. Stakeholders might also draw useful insights on strategy implementation that is timely and responsive to the market shift thereby the gap between the students and institution will be filled.

#### 1.7 Delimitations of the Study

The study focuses on the Institutional Factors Influencing Implementation of Students' Hostel Construction Projects at the University of Nairobi. University of Nairobi is the highest and most prestigious higher learning institution in Kenya and is ranked top in both Eastern and Central Africa and as such, majority of individuals' harbor dreams of one day being enrolled to undertake their courses at this institution of higher learning in the country. This institution also offers many courses and attracts a large number of students from different nationalities not just local. This therefore implies that the quest to create more room for accommodation of new students is not a venture to be wished away any time soon.

The study seeks to unearth the institutional factors deemed critical influencers of implementation of students 'hostel construction projects within the University of Nairobi. These include availability of land, student enrollment, financial resources, as well as the university's organizational leadership.

#### 1.8 Limitations of the Study

This study's main limitation was the reluctance of respondents. Some of the respondents targeted are likely to decline to give information with the fear that the particular information they give may or might be used as leverage against item. The researcher will deal with this problem by obtaining a letter of introduction from the university and assure the respondents that the information obtained from them will be treated with utmost confidentiality and will be solely used for academic purposes. The study also faced time constraint, with very few months that were allocated for the study yet the project entailed collecting data from all the university of Nairobi campuses spread several counties within the country. There were respondents who had not completed filling the questionnaires even after two months of waiting despite the fact that the researcher mitigated xthe time constraint by employing the services of research assistant to assist in data collection. There was still time wasting encountered in the field.

Another limitation is that some respondents did not fill or complete the questionnaires at the first go especially the last section which entailed information for organizational leadership. This was bridged by making sure that all questionnaires were checked for completeness at the end of each session. Lastly, Covid-19 effect was felt too during the collection of data season, most of the employees and student leaders who were the researchers' target population were working in shifts or were only available on specific days due to social distancing. There was need to liase with each individual on their presence and availability and some were reached through phone calls and the use of security officers to help in tracking those who might have reported within the University.

#### 1.9 Assumptions of the Study

One of the assumptions of the study was that all the respondents will give honest information related to the study without any bias or prejudice. The study also assumed that the University of Nairobi Management which comprises of the Vice chancellor (VC), four Deputy Vice Chancellor (DVCs), College principals, Deputy Principals, Directors and Deputy Directors as well as the University Council whose membership comprise of nine members including the Chairperson, the Student Affairs Management Board which consists of Deputy Vice Chancellor (Student Affairs), Director, Student Welfare Authority, Dean of Students, Director, Sports and Games, Finance officer, Chief accountant, Chief medical officer, Estates manager, Director-Security and Safety Services, Student special advisor, Four Senate representatives, One student representative from each College and the Registrar, student affairs-Secretary, The University of Nairobi Building Committee which comprise of eight members including the Resident Architect, Manager-Construction and Maintainance and the Finance officer and the Student Organization of Nairobi University (SONU) currently the University of Nairobi Students Association (UNSA) Executive officials will constitute a target population from which a sample will be drawn and will give correct and reliable information without withholding crucial information, this assumption was met.

#### 1.10 Definition of Significant Terms Used in the Study

#### **Availability of Land**

This means the presence of a construction site for student hostels at the University of Nairobi. It refers to the parcel of land available for development and the market prices of land in the real estate sector. This takes into account factors such as land zoning and planning policies put in place by the government, urbanization and urban sprawl which occurs as a result of population increase, and the goodwill of the management and council of the University of Nairobi.

#### **Student Enrollment**

This is the total number of students properly registered and/or attending classes at a school. Student enrollment can be assessed by knowing what is the population of the students in every faculty or school within a particular duration of in-take, number of regular students, number of full- time student admissions, how many students are accommodated in the school hostel. how many students are lacking accommodation, how many students are full -time or parttime, projected number of new students and student-hostel bed ratio. The student enrollment figure can be arrived at by merging the student database from all schools.

#### Financial Resources.

Refer to the assets of the university and the capacity to acquire funds or availability of funds to ensure that it can afford to procure construction and building materials, availability of labor and wages so as to ensure completion of the construction of hostel project successfully. This takes into account the inflation in the market especially if funds have been sourced from credit facilities and also the interest rate percentage for repayment.

# Organizational Leadership.

Is the way in which activities such as task allocation, coordination and supervision are directed towards the achievement of organizational goals. It is a two way focused management approach that works for the benefit of the employees and the organization as a whole. Employees, regardless of their roles and position need the right work ethic and attitude to feel empowered within the organization. Organizational leadership comprises of indicators such as the UoN organizational structure and Organizational ethics, UoN organizational communication, organizational Plan and political legitimacy.

# Implementation of Students' Hostel Construction Projects

This is the phase in the project life cycle where the planned, designed and appraised student hostel construction project is landed and executed in order to achieve the intended goal and objectives. Factors such as the funds allocated for the hostels and number of resident students to be accommodated, and number of hostels available are quite crucial.

#### 1.11 Organization of the Study.

The first chapter in this study focused on the Background to the Study, the Implementation of Students' Hostel Construction Projects, highlighting the Factors as the Availability of Land, Student Enrollment, Financial Resources and Organizational Leadership. This was followed by the Statement of the Problem, Purpose of the Study, Objectives of the Study, the Research Questions the study sought to answer, the Significance of the Study, Delimitations of the Study, Limitations of the Study, Assumptions of the Study, Definition of the Significant Terms used in the Study and finally the Organization of the Study.

The remainder of the study was structured as follows: Chapter Two which entailed the literature Review, comprised of implementation of students' hostel construction projects, Availability of land and implementation of students' hostel construction projects, Student enrollment and the implementation of students' Hostel construction Projects, Financial resources and the implementation of students' hostel construction projects, Organizational leadership and the implementation of students' hostel construction projects and the Theoretical framework. The Structural organization theory came in as the first theory to be reviewed, the theory of Project constraints and finally the Stewardship theory after which the Conceptual Framework came in followed by the Summary of the literature Review and lastly the Knowledge gap. Chapter Three described Research methodology by highlighting the Research design used, Target Population, Sample size and Sampling Procedure, Research instruments, Pilot testing of the research Instruments, Validity of the Instruments and their reliability, Data collection procedure, Data analysis techniques, Ethical Issues and lastly, the Operationalization of Variables. Chapter four focused on Data Analysis, Presentation, Interpretation and Discussion and lastly the final chapter of the study, Chapter five, gave a Summary of Findings, Conclusions, Recommendations and Areas of further research.

# CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

This chapter presented and reviewed the related literature on Institutional Factors influencing implementation of students' hostel construction projects. The literature discussed was a thematic review of other studies carried out in construction and planning industry, so as to provide a theoretical foundation underpinning the study variables. The literature reviewed was classified in sub-headings as follows: Implementation of Students' Hostel Construction Projects, Availability of Land and Implementation of Students' Hostel Construction Projects, Student Enrollment and Implementation of Students' Hostel Construction Projects, Financial Resources and Implementation of Students' Hostel Construction Projects, and lastly Organizational Leadership and implementation of Students' Hostel Construction Projects. The researcher then anchored the study on three theories; structural organizational theory, theory of project constraints and the Stewardship Theory. To demonstrate the relation and empirical understanding of independent, dependent and moderating variables, a conceptual framework was developed. The study then went ahead to critically examine gaps in knowledge from the reviewed literature.

#### 2.2 Implementation of Students' Hostel Construction Projects

A project is defined as a complex, non-routine activity, with clear set objectives and goals. It has a scheduled running time and budgeted resources to ensure its successful completion. (Chen, 2005). All projects evolve through a similar life cycle sequence during which there should be recognized start and finish points. In addition, the project objectives may be defined in a number of ways, e.g. Financial, social and economic, the important point being that the goals are defined and the project is finite. (PMI, 2004). Projects are unique one-time endeavors with specific objectives which are to be accomplished within stipulated time, cost and with resource constrains (Battani, 1989) needless to say projects are as varied as need be and as the environment dictates. Success project implementation criteria is defined by (Muller and Turner, 2007) to include variables that measure project success. Since project success might be perceived differently by stakeholders, there is a need for comprehensive criteria that reflect their interests and views (Dvir et al., 1998). Westerveld (2003) emphasizes the importance of stakeholder satisfaction as a main

success criterion, complementary to the golden triangle of time, budget and quality, and adds that different time lags should be considered. Establishing a set of criteria applicable to implementing any type of project is unrealistic (Mir and Pinnington, 2014). Although certain criteria might be relevant in measuring the success of most projects, they should be adapted to size, complexity, duration, type and stakeholder requirements during the implementation process

Project implementation is perhaps the most vital stage of the project cycle involving the procurement of equipment and resources, recruitment of personnel and allocation of tasks and resources within the project organization (Chandra, 2006). Under the project implementation plan, resources are mobilized, activities determined and control mechanism established so that the project inputs can produce project outputs in order to achieve the project purpose, and hence the structure of organizations involvement in project implementation cannot be ignored. (Chan and Kumaraswamy, 1997) posit that an implementation phase involves putting the project plan into action. It's here that the project manager coordinates and directs project resources to meet the objectives of the project plan. As the project grows, the project manager is tasked to give direction and manage activities as well as supervise and advise all along the project. That according to (Eriksson, 2008) is what happens in the implementation phase of the project life cycle; followed by the project plan of handling any problems and risks that might arise along the way. According to (TISA, 2009) structure of organizations is important in the way tasks and management decisions are distributed and might perhaps have an implication on project implementation. It is evident that the success of any project has to emanate from proper and effective management. Proper utilization of all resources and resulting capabilities are perhaps the last sustainable sources of competitive advantage well managed organizations can have.

#### 2.3 Availability of Land and Implementation of Students' Hostel Construction Projects

Burn (2013) posits that whereas supply of land is not very problematic, getting the requisite land at a price that will allow for affordable development is a challenge. According to (Burn, 2013), developers who want to develop affordable housing are normally outbid by those who want to maximize profits. This he noted as the greatest challenge to construction of affordable housing. Most government planning systems have also favored capitalistic development than socialist or low cost housing. This according to (Saul, 2014) is mainly seen by the fact that there is lack of clear policies that are fine grained to favor a social housing over private housing. Large scale construction projects like roads, dams, hospitals and learning institutions normally require large tracts of land (Rondinelli, 2006). In such cases, land is more often than not owned by several and diverse people with whom it would be impossible for the developer to reach a common understanding. In such cases if the project is meant for public benefit, the government may be called upon to acquire the land within constitutional and statutory provisions.

Characters and behavious of land owners also influence the availability of land. Satsangi et al., (2006) posits that the indivuals who own land for development purposes in real estate sector have divided interests. They are limited too by various factors such as planning and zoning policies at 41% insufficient financing at 25%, unavailability of quality service delivery and provision at 18% and the remaining entire percentage comprising of a conglomeration of many other smaller factors here and there. In Scotland for example, three in five indivials who own land believe that those areas they own experienced challenges to bring forth opportunities for really affordable accommodation (Barry, 2011).

According to the Kenyan constitution, compulsory acquisition of land is a statutory measure provided for by the Land Acquisition Act cap 295 of the laws of Kenya. This Act is designed within the framework of section 75 of the constitution of the republic of Kenya (Kenya constitution, 2010). It enables the government to acquire private land compulsorily provided prompt and adequate compensation is paid to the owners. Private land here refers to land which has been alienated or adjudicated and registered in the name of private owner i.e. individual tenure. Land which has not been registered in the name of a private owner (where the land is not under public ownership) falls under "communal" tenure. This land is referred to in Kenya as trust land. The constitution also provides for the acquisition of trust islands under section 118 and the acquisition process is governed by trust lands act cap 288 of the laws of Kenya. Where land is

under public ownership, it would be very easy to arrange with the Government for it to be availed for specified purpose. Here compulsory acquisition is not called for, however, public lands are continually dwindling and may not be found at the proposed site of the project (Muoka, 2004). Compulsory acquisition therefore remains a major source of land for the implementation of large scale projects.

#### 2.4 Student Enrollment and Implementation of Students' Hostel Construction Projects

University education is more than the next level in the learning process; it is a critical component of human development and provides high-level skills necessary for every labor market. Knowledge accumulation and application have become major factors in economic development, hence, students' choice and decision making in higher education has gained greater importance because higher education has become competitive and market-oriented. Higher education enables individuals to expand their knowledge and skills, express their thoughts clearly, grasp abstract concepts and theories, and increase their understanding of the world and their community at large (Danilovic and Browning, 2007). University education is thereafore a significant tool that ensures that a countrys' economy is upscale and the growth with its citizenry is tremendous hence it has the potential of enhancing the productivity of any particular nation. Universities are the pivotal centers of engendering and disseminating of knowledge and the vital resources of social improvements (Tian et al., 2009). The importance of higher education can be judged from the manner it benefits a person financially, emotionally, socially, and intellectually.

The decision to enroll on the courses of a certain higher education institution is extremely important in an individual's life because during this university years', one's future career is being built (Danilovic and Browning, 2007). The factors influencing this process differ from one individual to another, but there are also several factors common for many individuals. According to (Domino, et al., 2006) parents have a great influence on their sons' enrollment at university. (Sia-Kee, 2010) refers to the factors of institutional nature that influence the student's decision making process and has identified various independent variables such as: the location of the university, the study programs, the reputation of the specific higher education institution, the existence of different educational facilities, the level or amount of the tuition fees, the employment opportunities, the employed proportion, the promotion by university representatives, the possibility to visit the campus and the possibility to obtain scholarships.

In the United States every year, thousands of high school seniors graduate and enter colleges and universities in the fall. This is a complicated and difficult choice because there are over 4,000 institutions from which to choose from. According to the National Center for Education Statistics (NCES, 2000), higher education enrollment increased by 16% between 1985 and 1995, including a 23% increase in enrollment by females. Choosing a college or university to attend is one of the most important decisions people make (Doylei and Gaeth, 1990). Admissions personnel have attempted to determine how to attract students to their colleges and what factors impact students' decisions to remain at one college for their entire degree matriculation (Martin and Dixon, 1991).

In Spain, factors influencing secondary school students' choice of higher education options was analyzed by (Sanchez, 2012) and explored the implications and benefits of establishing provider-client relationships between universities and students. A quantitative approach helped to demonstrate the hypothesis and achieve objectives. A questionnaire via telemetric Lime Survey application was prepared consisting of twenty-four closed questions. Results depicted that the leading criteria for Spanish students interested in pursuing studies in communication sciences was because of the university reputation, excellence and quality of its educational programs. In terms of sources of information related to universities and their degree programs, Spanish Communication Science students' placed the highest value on direct and experiential sources. Spanish students interested in pursuing degrees in communication sciences, preferred public universities to private universities.

## 2.5 Financial Resources and Implementation of Students' Hostel Construction Projects.

(World Bank, 2015) indicated that the real estate industry in Kenya was going through a tumulus period due to lack of financial facilities to cover the ever rising costs of construction in the country. These observations could not be any further from the truth as (Ngugi, 2016), noted that universities could no longer afford to finance the infrastructural projects needed to meet students' demand. According to (Ngugi, 2016), the next logical thing is to seek private capital to build the facilities. This will ensure that universities make use of untapped billions of dollars in the private sector. Various university heads have come out to laud this move, commending the government for opening up these avenues that were once deemed unreachable by public universities. The move is seen by many as a game changer in the higher education sector.

In May 2016, Kenya's cabinet approved the PPP blueprint with the hope of attracting over KES 2.5 trillion (US\$25 billion) in private funds to be invested over the coming decade in key sectors of the economy such as transport, health and education. As a matter of fact, Kenyatta University, the most populous public university in the country signed an agreement with New York-based private equity firm; Integras, to build hostels with a total of 10,000 beds under a US\$11 million PPP initiative (Miguel, 2017). The project was designed to provide accommodation to 9,350 undergraduate students, 500 postgraduate students and 150 married students. The PPP model in the education sector comes amid massive shortages in funding for projects as government subsidies lag behind needs for surging numbers of students. Treasury reports indicate that the coming fiscal years will see public universities receive a 3.5% raise in state subsidies, even though that would not be enough to cushion them from a projected 9-11% inflation rate (Kubo, 2017). Public universities received US\$646 million in state funding for the year 2016-17, up from the previous US\$624 million. During that period, enrollment rose by more than 10%, exacerbating the mismatch in financing (Mugo, 2018).

(Zhu, 2006) points out that the provision of housing services is depended on a well-functioning housing finance system. Access to mortgage finance is a key constraint. Across Africa, the ratio of outstanding mortgages to GDP remains very low: for the entire continent, it stands at 10%, compared to over 50% for Europe and 70% for the United States (Beck et al.,2011) this is further corroborated by (Owino, 2011) and (Waley, 2011) who identify housing finance loan penetration as low. The supply of formal housing finance institutions is primarily geared towards upper-

income households, and has been shrinking over time, leaving fewer options for poor urban dwellers (Ayani, 2013).

(Emilia, 2009) avers that the providers of housing loans encounter three types of risks namely, production, management and income risks. Another type of risk is credit risk which is a risk faced by financial intermediaries (Broll, Pausch and Welzel, 2002). Since this risk carries the potential of wiping out enough of a financier's capital to force it into bankruptcy, managing this kind of risk has always been one of the predominant challenges in running financial intermediaries (Broll, et al., 2002). Banks play a crucial role in the financing of real estate through mortgage financing. In lending for the purchase of land for development and existing buildings; banks finance construction projects; lend to non-bank and finance companies that may finance real estate; banks also lend to non-financial firms based on real estate collateral (David and Zhu, 2004). This is similar in the world of academia.

Nairobi as a city has many commercial developments with internationally acceptable design and construction standards; Reinforced Cement Concrete (RCC) frame and Stabilized Soil Block (SSB) technology (Ripin and Roger, 2012). However, behind this impressive façade also lies an enormous industry that has a vast potential to improve across all its constituent components: design, engineering, construction, day-to-day usage and maintenance (Ripin and Roger, 2012). (Ruitha, 2011) notes slow delivery technologies for housing as a factor affecting real estate investment. The social acceptability of alternative materials centers on their suitability for house walling, openings and overall boundary security. Security and a robust aesthetic has significance in urban housing since they embody several established social values such as modernity, social status and need for security against intruders (Ripin and Roger, 2012). The average Kenyan remains extremely conservative when selecting materials from which to build a home, in addition to this there is no evidence of mainstream architects using or promoting any form of alternative or 'green' walling materials (Roger, 2012).

The NHC report (2011) found out that the demand for housing, particularly in urban areas, has continued to rise without requisite movement on the supply side. The study is corroborated by (Mwathi,2013) who estimates that by 2030, over 80% of Kenyan population will have migrated from rural areas, meaning that that shelter is one of their basic needs. This deficit pushed prices up making the houses affordable to a few. In the process, various developers have pursued the redevelopment option. There is heightened activity in the development of apartments, to meet the

ever increasing demand. (Kalenga et al., 2010) argued that inflation rates, interest rates, and GDP affect the demand for housing in Kenya which is at per with the hostel market demand in Kenya. A study by (Liu and London, 2011), the output level of new housing is correlated to residential construction costs. Costs of residential constructions include costs of icemen, roofing materials, tiles and other building materials. Some of the challenges facing the housing construction sector in Kenya include high cost of building materials and availability of affordable housing loans. The cost of residential construction is high relative to household incomes due to high building material costs, expensive permits and many building regulations. AfDB estimated that building costs in Kenya are roughly 60% of the total cost of building a formal housing structure; 10% is in land; 10% in infrastructure; and 20% in professional fees and finance charges (AfDB, 2012).

According to (Gwinner and Cira, 2016), who are World Bank urban specialists, construction costs are 30 to 40 percent higher in Kenya than in many other African countries and this is partly because builders target the high-end market, work on small volumes, and hence they are unable to take advantage of economies of scale in building methods and material procurement. According to the Kenya Property Development Association (KPDA, 2015) report, the cost of construction permits has also risen from as low as 0.006% of construction cost in 2013 to 1.25% of the construction cost in 2015. The report pointed out that Nairobi's building permit fees is highest across the continent. The increased costs are slowing down the supply of new student hostels in Nairobi amid the growing demand (Thuita, 2014).

# 2.6 Organizational Leadership and Implementation of Students' Hostel Construction Projects

Organizational Leadership defines how individuals and groups are organized or how their tasks are divided and coordinated (Mintzberg, 1983). In this changing world, companies have had to learn how to formulate and implement their strategies through projects and organizational leadership in order to successfully face threats and opportunities. However, the management of multiple projects is not easy due to their complexity.

In a study on the organization leadership in six enterprises, (Lawrence and Lorsch,1967) summarized the features of the organization leadership to be the span of control, number of levels to a shared superior, time span of review of departmental performance, specificity of review of departmental performance and importance of formal rules. (Drazin and Van de Ven, 1985) defined

the organizational leadership in terms of specification, standardization, discretion and personnel expertise. They agreed with (Lawrence and Lorsh, 1967) on the feature of specialization. (Mintzberg, 2009) did a study on Organizational Leadership in seven types of organizations namely entrepreneurial, machine, professional, diversified, innovative, missionary and political. It was found that strong linkages exist among different organizational models and their methods of conflict resolution and problem solving. (Mukalula, 2006) studied three aspects of an organization firm's leadership structure: namely, organizational complexity, formalization, centralization and decentralization of authority. (Sunkuk,1997) adopted five among the seven types of organizations presented by (Mintzberg,1989) to examine which managerial environment will best reflect that of the organization. Applied research extended the study of organizations beyond organizational features to relationships with the operating environment.

According to (Dumais, 2011), traditional sources of competitive advantage, such as products, technology, markets and production processes, are obsolete. For any organization, whether public or private, the issue of how it should be utilises its available resources towards the realization of its goals and objective, an aspect which is of paramount importance. Organizational Leadership allows the expressed allocation of all resources whether monetary or human responsible for different functions and processes to different entities such as the branch, department, workgroup and individual. The framework of an Organizational Leadership forms the framework within which an organization arranges its lines of authority, communications among its stakeholders and allocation of its resources, rights and duties (Brigham and Daves, 2001).

#### 2.7 Theoretical Framework

This section sought to review established theories, models, and frameworks in the field of project management and implementation, as well as giving highlight to corporate governance theoretical frameworks. As (Kerlinger ,1986) opined, a theory is a set of interrelated principles and definitions that outline a chronological set of ideas through which a description of related phenomena is described by specifying relationships among variables with the purpose of explaining natural phenomena. Theoretical frameworks are explanations about the phenomena. In effect, a theory includes a set of basic assumptions and axioms as the foundation and the body of the theory is composed of logically interrelated, empirically verifiable prepositions. The study was founded on the following theories: structural organizational theory, theory of project constraints and stewardship theory.

#### 2.7.1 Structural Organizational Theory

The theory of structuring organizations was brought forth first in 1979 by Henry Mintzberg (Mintzberg, 1979). In this model, Henry noted that there are fundamental ways in which organizations coordinate or should coordinate their work. These coordinating mechanisms are five in number and as such, they include: mutual adjustment, direct supervision, standardization of work processes, standardization of work outputs, and standardization of worker skills. These are considered as the most basic elements of structure, the glue that holds organizations together as a unit. The model added that from these, all else follows, including the structuring of organizations. He never the less adds that these coordinating mechanisms intend to fall in a rough order. This means that as organizational work develops to becoming more complicated, the favored means of coordination tends to shift from mutual adjustment to direct supervision to standardization, preferably of work processes, else of productions, or else of skills, finally returning back to mutual adjustment. It is a fact that a person working single-handedly has no much need for any of the coordination mechanisms, as this intakes place in one brain. When you add one or more brains, the situation changes significantly as coordination must be attained across brains. People working side by side in small groups acclimatize to one another nonchalantly: mutual adjustment becomes the favored means of coordination. As the group grows, it becomes less able to coordinate casually.

# **2.7.2** Theory of Project Constraints

According to (Goldratt, 1984), organizational performance is dictated by constraints. These are restrictions that prevent an organization from maximizing its performance and reaching its goals. Constraints can involve people, supplies, information, equipment, or even policies, and can be internal or external to an organization. Types of (internal) constraints include equipment; the way equipment is currently used limits the inability of the system to produce more salable goods/services, people: lack of skilled people limits the system. Mental models held by people can cause behavior that becomes a constraint, policy: a written or unwritten policy prevents the system from making more. The theory says that every system, no matter how well it performs, has at least one constraint that limits its performance this is the system's weakest link. The theory also says that a system can have only one constraint at a time, and that other areas of weakness are in onconstraints until they become the weakest link. The theory is used by identifying the constraint and changing the way of working so as to overcome it.

Introduced in 1984 by an Israeli Physicist Doctor. Moshe Eliyahu Goldratt, Theory of Constraints focuses on system improvement which is widened as a series of independent processes (Trojanowska et al., 2011). One of the three principles of Theory of Constraints (TOC) is concentration (Simsita, 2014), which simply implies focusing on the most important issues. It means that all processes and positions should be supervised, although the non-critical may enjoy a certain level of autonomy. Most attention should be given to tasks that are crucial from the point of view of the system as a whole. The main aim of every company is to increase the import. According to this point of view, constraints are the main obstacles in achieving the objectives of the company. In other words, anything that gets in the way of gaining more import is considered a constraint to the organization's (Goldratt, 1997). Identification of the constraint is the basis for improving the production system.

A method of project management called Critical Chain Project Management (CCPM) was developed on the foundations of TOC by (Leach, 2005). Critical Chain means that all the codependent it asks must take the longest path to complete, taking into account the constraints of system elements (Cyplik and Adamezak, 2012). CCPM consists of planning, scheduling and maintaining the critical chain during the project in order to maximize the working time of the bottleneck, and to efficiently determine inventories for the fundamental steps of the project (Goldratt, 2008). CCPM takes into account the ambitious task performance times and eliminates

individual safety margins, saving on time at the end of the project, which allows for smooth management and evaluation of project progress. The main goal of using CCPM method is to reduce the duration or guarantee hitting the due date. The critical chain is defined as the longest chain of activities which determines overall project duration, considering both precedence and resource dependencies (Goldratt, 1997). (Watson et al., 2007), posits that in project environment activity, duration varies depending on the availability of materials, workers, tools and in some cases the weather. (Steynand Nicholas, 2008) acknowledges that in a project some activities will be completed earlier than expected, others later. When activities are combined in a network, in general, it is only the late activities that impact the project completion, which is one reason why projects tend to take longer than estimated. Due to such type of nature of project environment, completion time of activities cannot be estimated with precision (Ravalji and Deshpande, 2014). That is why CCPM uses time buffer in project management and provides a simple tool.

#### 2.7.3 Stewardship Theory

A steward is defined by (Davis et al., 1997) as one who protects and maximizes shareholders' wealth through firm performance, because by so doing, the steward's utility functions are maximized. In this perspective, stewards are company executives and managers working for the shareholders, they protect and make profits for the shareholders. The stewardship theory invokes the notion of a company and its governance based on the applicable company law (Tricker, 1994). This theoretical underpinning is a normative one based on the belief that the directors to whom authority is delegated will exercise stewardship. The theory is predicated on the belief in the just and honest man who acts for the good of others. Stewardship theory stresses on the top leadership as a servant to the organization and not as an individual therefore adhereing to collective inclusivity while integrating their goals as part of the organization. Stewardship theory appears to be appropriate for explaining corporate governance within the communitarian paradigm (Tricker, 1994). Stewardship theory offers an alternative to agency theory by suggesting that when a convergence of values exist between principals and agents or when organizations promote unselfish values, responsible behavior results by internal means (De Bruijn and Dicke, 2006). Lack of trust referred to by the agency theory regarding authority and ethical behavior is what is replaced by this theory which is one of the key distinguishing features of it. To ensure the success of a project in an organization, it is imperative that the directors trust the project manager to deliver on the project objectives set down, and will afford him/her all the required resources to do so.

# 2.8 Conceptual Framework

The various variables affecting the factors are identified in the previous section. Variables within each group are interrelated. A variable in one group can influence a variable in the other group, and vice versa. To study how these institutional factors inflence project implementation separately and collectively, it was hypothesized that implementation of students' hostel construction project was a function of Availability of Land, Student Enrollment, Financial Resources, as well as the Organizational Leadership of the University of Nairobi.

In relation to the literature review, the conceptual framework underlined a number of institutional factors that determine the implementation of students' hostel construction projects. The conceptual framework is shown in Figure 1

#### **Independent Variables**

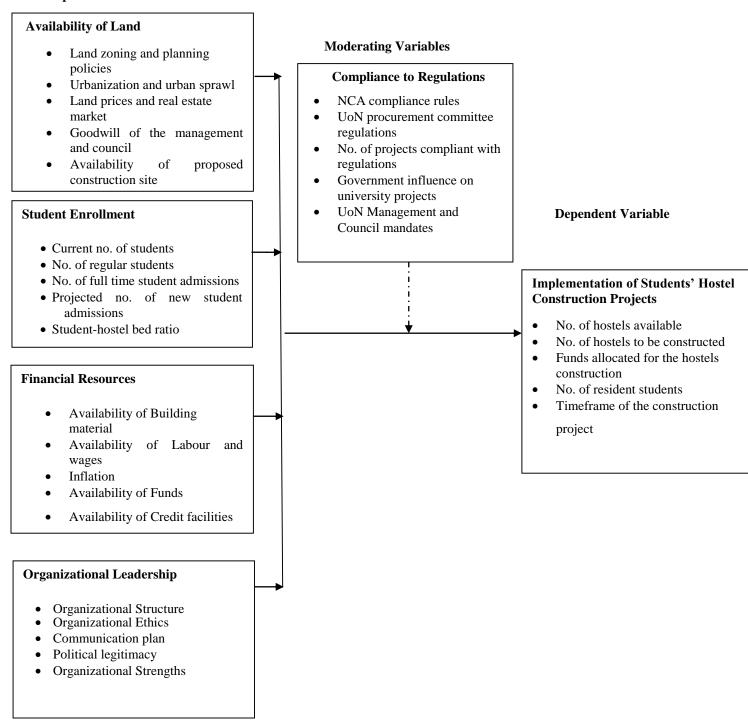


Figure 2.1: Conceptual Framework for institutional factors influencing implementation of students' hostel construction projects in public universities.

On the far right are the dependent variable that were manipulated and changed as the independent variables interacted. The dependent variable in this case was the delay of students' hostel project implementation in the construction industry.

Factors that interacted to bring this influence on the dependent variable are called independent variables and they include: Availability of land, Student Enrollment, Financial Resources as well as Organizational Leadership of the University of Nairobi. The four institutional factors have indicators that determine whether the projects delays were caused by their interaction or not. The framework also had a moderating variable; compliance to construction regulations. These are institutional factors deemed to have a direct impact on the implementation of students' hostel construction projects.

# 2.9 Knowledge Gap

This section presented a summary of the Empirical Literature

Table 2.1: Tabulation of literature reviewed and the knowledge gap.

Variable	Author (Year)	Title of the Study	Findings	Knowledge gap
Availability of Land	Burn (2013)	Efficient land use and affordable housing strategy in growing African cities	The study findings showed that developers who want to develop affordable housing are informally outbid by those who want to maximize profits. The study recommended that government planners should favor socialists or low cost housing developers as opposed to capitalistic development.	The study used a qualitative approach involving the desk top review of government documents. Primary data would have added weight to the findings due to its objectivity.
Student Enrollment	Danilovic and Browning (2007)	Managing complex product development projects with design structure matrices and domain mapping matrices.	The study suggested that a well-considered project implementation strategy is the one that bases on efficient contract execution principles. This is made possible by ensuring early contractor involvement, truly cooperative work and setbased thinking. This improves the efficiency of the production system design.	The study does not explain how the variables identified affect organizations, and how these can be utilized to improve project implementation.
Financial Resources	Ngugi (2016)	Influence of Public Private Partnerships (PPP) on project management and implementation of construction projects in public universities in Kenya.	The study found that most public universities were grappling with lack of capacity to accommodate the ever soaring number of students. The study concluded that universities can no longer afford to finance the infrastructure projects	Methodology used not clear. Used quantitative data only. No comparative analysis effect of knowledge sharing factors was carried out

			needed to meet student demand, and therefore the only logical thing is to seek private capital to build the facilities	which is very significant.
Organizational Leadership	Mukalula (2006)	Influence of centralization and decentralization on the firm's Organizational Leadership and decision making.	The study findings showed that centralization and decentralization played key roles in the functionality of an organization. It was concluded that decentralization of decision making units in a firm normally affect the Organizational Leadership, and thereby slow down the implementation process of construction projects.	Despite the findings, the study relied mostly on secondary sources of data namely project documents, and evaluation reports.

#### 2.10 Summary of Literature Review

The reviewed literature revealed various studies in different parts of the world that had largely touched on factors relating to project implementation. The most notable ones included(Chan and Kumaraswamy,1997) on Significant Factors causing delays in construction project implementation in Hong Kong; Chan (1992) identified Characteristics of the project manager in construction management in India; still in India, (Kar, Basak and Bhattacharya, 2007) looked into the implementation of construction projects on schedule- A challenge to the developing world whilst (Kamau,2014) examined Factors influencing implementation of community based projects: A case of food security projects in Kiambu County in Kenya.

(Musyoki, 2018) Institutional Factors Influencing Implementation of Infrastructural Projects by County Governments in Kenya: A case of Embu County, Kenya. (Mungai, 2017) highlighted Influence of Institutional Factors on Project Implementation by UNHabitat in Somalia. Factors in her study included institutional policies, procurement procedures, technical competence of the project manager, organizational resources and organizational structures, Institutional policies, procurement procedures, technical competence of the project manager, organizational resources and organizational structures. (Kavuta and Nyamanga, 2018) on Factors affecting the implementation of students' records management system to higher learning institutions in Tanzania: A case of Institute of Accountancy in Arusha, (Jebitok and Nzulwa, 2019) assessed the Critical Factors influencing Implementation of road projects in Kenya as (Odhiambo, 2014) identified Factors affecting implementation of Community Development Action Plans: A case study of Plan International in Kombewa West Division, Kisumu West Sub-County (Muthaura and Omwenga, 2017) on Factors influencing implementation of projects in community based organizations in Kenya: A case of child regional education support services (Iyer and Tha, 2006) about commitment of participants and the owners' competence as the two most critical success factors of project implementation in India; Burn (2013) assessed critical success factors in large scale construction projects in Thailand; Factors influencing implementation of PPP in Kenya was carried out by (Adongo, 2012). (Kinanu and Simiyu, 2017) identified Factors influencing implementation of Constituency Development Funded projects in Kenya and examined the case of Juja Constituency. Determinants of Project Implementation Perfomance in Building Construction Projects in selected parastatals in Kenya a study done by (Raymond, Kyallo and Kisimbii 2019) who highlighted factors such as cash flow and leadership. (Adenikinju, 2005)

survey on graded construction project productivity in Nigeria; (Amaka, 2011) study on influence of student enrollment in public schools in Nigeria; (Fugar and Agyankwah, 2010), in a study for overruns on high-rise projects in Ghana established that price inflation and high labour wages influenced completion of construction projects in Accra.

More relevant regional and local studies reviewed include: (Ngugi, 2016) which analyzed the influence of PPP agreements in construction projects within public universities in Kenya, concluded that universities can no longer afford to finance the infrastructural projects needed to meet student demand, and therefore the only logical thing is to seek private capital to build the facilities; whilst (Miguel, 2017) carried out a study on the accommodation and bed capacity of students in Kenyan public universities and concluded that the only way to improve student-bed ratio in public universities is by formation of development partnerships with multinationals and foreign organizations to help fund the projects.

Therefore, in relation to the above, the chapter highlighted the existing literature in relation to the implementation of projects in the construction industry. The chapter then reviewed the literature in relation to the four objectives and the factors had been looked at from the global perspective down to the study scope area. Among the highlighted institutional factors included: Availability of Land, Student Enrollment, Financial Resources, and Organizational Leadership, which formed the independent variables while implementation of students' hostel construction projects was the dependent variable. The chapter also highlighted the conceptual framework, relationship between variables and research gaps.

# CHAPTER THREE RESEARCH METHODOLGY

#### 3.1 Introduction

This chapter described the methodology to be used in conducting the study. This included research design, the target population, sample size and sampling procedure, research instruments which entailed the pilot testing of the research instruments, validity of research instruments and lastly the reliability of the instruments. The chapter proceeded to highlight in detail the data collection procedure, the ethical considerations and finally the operationalization of the variables.

#### 3.2 Research Design

The study adopted a descriptive research design. It was used to establish the relationship between institutional factors influencing project implementation, and the implementation of students' hostel construction projects at the University of Nairobi. (OHRP, 2013) defines a descriptive study as one in which information is collected without changing the environment and conducted to demonstrate relationships between things. A descriptive study can involve a one-time interaction with groups of items also known as a cross sectional study or a study that might follow individuals over time (OHRP, 2013). Descriptive research studies are those concerned with describing the characteristics of a particular individual or a group, whereas diagnostic research studies determine the frequency with which something occurs or its association with something else (Settilez, et.al., 2004). A descriptive cross-sectional research design was adopted in this particular study because the study was concerned with specific predictions, with narration of facts through use of questionnaires to persons of interest to the research (Borg, 1987) and characteristics concerning individual, group or situation bearing in mind that the data could be used in measuring the relationship between variables at the same time their influence on the successful implementation of the project.

#### 3.3 Target Population

Target population is defined as the entire aggregation of respondents that meet the designated set of criteria (Singleton and Straits, 2010). It is a set of all members of a real or hypothetical set of people, events or subjects to which a researcher wishes to generalize his/her results (Ngechu, 2004). The target population of the study was 80 respondents which included University of Nairobi Management and the Council, the Student Affairs Management Board, The University of Nairobi Building Committee and UNSA Executive Officials who were to provide accurate and reliable information on the implementation of construction of students'hostel projects undertaken by the University of Nairobi.

The University of Nairobi Management and Council comprised of thirty-three officials who are VC, four DVCs, six college principals, eight deputy principals, two directors and three deputy directors totaling to twenty-four as well as the University Council which is appointed by the GoK whose membership comprise of the chairperson, two principal secretaries (Ministry of Education and Treasury), five members and the vice-chancellor as an ex-officio member (Almanac, 2019). The Student Affairs Management Board consists of twenty-one members who include: DVC (Student Affairs), Director, Student Welfare Authority, Dean of Students, Director, Sports and Games, Finance officer, Chief accountant, Chief medical officer, Estates manager, Director-Security and Safety Services, Special Student Advisor, Four Senate representatives, One student representative from each College (six colleges) and the Registrar, student Affairs-Secretary. The UoN Building Committee which comprise of eight members: the VC, Registrar Planning who serves as the Secretary, DVC- (HR &A), the Resident Architect, Estates Manager, Manager, construction and maintainance, Finance Officer and the Student Welfare Authority Representative (UoN Almanac, 2019). UNSA Executive eighteen officials; Chairperson, two deputies (Administration and finance, academic affairs), Secretary General, Treasurer, Organizing Secretary, four Secretaries (Legal Affairs, Health, Catering and Accomodation, Gender Affairs, Sports and Entertainment), two representatives from module II, one representative from each campus: Parklands, Lower Kabete, Upper Kabete, Medical School, Chiromo, Kikuyu, Main Campus College of Architecture and Engineering and Main Campus College of Humanities and Social Sciences (SONU Const., 2010)

The target population of the study was therefore 80 respondents as shown in Table 3.1.

**Table 3.1: Target Population** 

Cluster/Category	<b>Target Population</b>	Percentage (%)
UoN Management and Council	33	41.3
Student Affairs Management Board	21	26.3
UoN Building Committee	8	10
UNSA Executive Officials	18	22.5
Total	80	100

(Sources: UoN Academic Calendar and Almanac 2018-2019, SONU Const. 2010)

### 3.4 Sample Size and Sampling Procedure

This section described the sample size and the sampling procedure that was used in the study. Sample size together with sampling procedure and sample frame describes what is commonly referred to as a sample design. (Kothari, 2004) describes a sample design as the definite plan for finding a sample from a specific population. These two were further discussed in the following subsequent sub-themes.

### 3.4.1 Sample Size

(Saunders et al., 2012) defines a sample as a subset of the population. A sample refers to a further subset of the target population which the researcher wants to include in their study i.e. it is a portion or a segment which represents the whole population (Kadam and Bhalerao, 2010). (Ngechu, 2010) explains that the main purpose of calculating a sample size is to determine the number of participants needed to obtain required data for a survey. (Kothari, 2004) argues that a sample size is the number of items to be selected from the universe to make up a sample. The sample size for the study was 66, with respondents drawn from a target population of 80 using Krejcie and Morgan formula 3.1 below and as shown in table 3.2

$$s=X^2 NP(1-P) \pm d^2 (N-) + X^2 P (1-P)$$
 (3.1)

Where,

s = required sample size.

 $X^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (0.05 = 3.841).

N= the population size.

P= the population proportion (assumed to be 0.50 since this would provide the maximum sample size.

d =the degree of accuracy expressed as proportion (0.05).

Table 3.2: Krejcie and Morgan's sample size determination table

Population (N)	Sample Size (s)
10	10
15	14
20	19
25	24
30	28
35	32
40	36
45	40
50	44
55	48
60	52
65	56
70	59
75	63
80	66
85	70
90	73
95	76

Source: Adapted from (Krejcie and Morgan, 1970)

# 3.4.2 Sampling Procedure

Sampling procedure is a technique of choosing a sub-group from a population to participate in the study; it is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected (Ogula, 2005).

The study used both stratified sampling and Krejcie and Morgan table of sampling procedures to identify 66 respondents to be interviewed. The target population was divided into four strata i.e. The UoN Management and Council, UoN Student Affairs Management Board, UoN Building Committee and UNSA Executive Officials who were the elected representatives to act on behalf of the students and champion for their needs and rights.

The sample size for any research will depend on the acceptable level of significance, power of the study, expected effect size, underlying event rate in the population, and the standard deviation in the population (Kadam and Bhalerao,2010). The choice of the sample size was influenced by the sample size formular used. It is on this premise therefore that the study used the formular derived from Krejcie and Morgan and their sample size determination table to arrive at the sample size since it simplifies the process of determining the sample size and it can be applied to a finite population (Krejcie and Morgan, 1970).

**Table 3.3: Sampling Procedure** 

Cluster/Category	Target Population	Sample Size	Sampling Method
UoN Management and Council	33	28	Krejcie and Morgan
UoN Student Affairs Management Board	21	19	Krejcie and Morgan
UoN Building Committee	8	5	Krejcie and Morgan
UNSA Executive Officials	18	14	Krejcie and Morgan
Total	80	66	Krejcie and Morgan

#### 3.5 Research Instruments

Primary data was collected by means of a questionnaire. The questionnaire was administered through drop and pick later method to the selected UoN Management and Council, UoN Student Affairs Management Board, UoN Building Committee and the UNSA Executive Officials. The questionnaire as designed allowed greater uniformity in the way questions were asked, ensuring greater compatibility in the responses. The use of a Likert scale and close ended questions gave the respondent easier time to respond to all the available questions without much pressure to provide a narration. The questionnaire with closed ended questions sought for the respondents' views on the Institutional factors influencing implementation of students' hostel construction projects at the University of Nairobi. The questionnaire was organized as follows; an introduction by the researcher and consent information form for the respondent and finally clear instructions on how to answer the questions. Section A area which consisted of general background information about the respondent and Section B-F with a Likert-type scale of 1-5, where 1 = Strongly disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. Section B consisted of information on Availability of Land, Section C consisted of information on Student Enrollment, Section D consisted of information on Financial Resources, Section E consisted of information on Organizational Leadership, while finally Section F consisted of information on Implementation of students' hostel construction projects.

### 3.5.1 Pilot Testing of the Research Instruments

The questionnaire was reviewed and tested on a small pilot sample of respondents with similar characteristics as the study respondents. The pilot sample consisted of seven (7) respondents who were randomly selected from the target population. (Mugenda and Mugenda, 2003) suggests that the piloting sample should represent 10% of study sample depending on the study sample size. Pilot testing helps in revealing questions that could be vague which allows for their review until they convey the same meaning to all the subjects (Mugenda and Mugenda, 2003). This piloting of research instruments is meant to establish whether respondents understand the questions and instructions in the same way intended by the researcher. This will enable the researcher to check for clarity, correctness, unclear wording, double-ended and ambiguous questions and eliminate any unclear questions or instructions in the research instrument. The respondents participating in

the pilot test will be exempted from being respondents in the main study to eliminate biasness in the research based on prior knowledge of the contents in the research instrument. The respondends in this pilot were therefore drawn from Kenyatta University.

#### 3.5.2 Validity of the Research Instruments

Validity is the quality of the data gathering instrument that enables it to measure what it is supposed to measure. (Creswell, 2005) notes that validity is about whether one can draw meaningful and useful inferences from scores on the instrument. Validity is therefore about the usefulness of the data and not the instrument. To ensure you 'measure' validity, the instruments will be reviewed by the research supervisor and research engineers who will check on the content validity. Content validity ensures that all respondents understand the items on the questionnaire similarly to avoid misunderstanding. Response options was provided for most of the questions to ensure that the answers given are in line with the research questions they were meant to answer. Construct validity on the other hand will be achieved by ensuring that the questions listed on the questionnaire are clear and devoid from vagueness. There will be instructions guiding respondents on how to fill the questionnaire and this can also be validated by experts and supervisors to ensure that the instructions given to respondents are clear and the questions are not vague.

#### 3.5.3 Reliability of Research Instruments

Reliability is concerned with the question of whether the results of a study are consistent. This can be obtained by use of 'Split Half method' whereby the questions on the questionnaire are divided into two: even and odd numbers (Cresswell, 2005). Data is then collected with the two sets of questionnaires, after that, data from each set of the questionnaire is analyzed using SPSS and the results from both the even numbers and odd numbers correlated using (Cronbach alpha) coefficient. When the result obtained is 0.7 and above, it implies that the research instruments are reliable and therefore able to solicit the required data for analysis. Any results from 0.6 and below are questionable and not acceptable. The utilised the Split Half method in measuring the reliability of the research instrument using the Cronbach Alpha ( $\alpha$ ) reliability coefficient

#### 3.6 Data Collection Procedure

The researcher obtained an introduction letter from the graduate school at the University of Nairobi for authorization and a research permit from National Commission for Science, Technology and Innovation (NACOSTI) before undertaking this study so as to ensure the legal basis for the study is established. Permission was also sought from the University of Nairobi Management to collect data while consent was also obtained from the respondents before the study tool (questionnaire) was administered. The researcher adhered to ethical standards. In this regard, the respondents were informed of the purpose of the study before their participation.

After getting consent from the respondents, the researcher went ahead and administered the questionnaires by dropping them while some respondents were by either interviewing them in a one-on-one interview or telephone interview. The purpose of dropping the questionnaires was so thatbthe respondents can go through the questions and fill at their on time and convenience before handing it over to the researcher at a later date for analysis.

# 3.7 Data Analysis Technique

Descriptive statistics was used for data analysis. The researcher used a Likert scale of 1-5 that will helped calculate the measures of tendency like the mean, standard deviation, composite mean and standard deviation used to analyse the responses in the questionnaire. The data was keyed into the computer using SPSS. This descriptive statistics tool helped the researcher to correctly categorise and describe the data and the features of interest. The data was finally presented using tables.

#### 3.8 Ethical Considerations

According to (Sullivan and Beech, 2004) ethical considerations prevent against the fabrication or falsifying of data and therefore, promote the pursuit of knowledge and truth which is the primary goal of research. Ethical behavior is also critical for collaborative work because it encourages an environment of trust, accountability, and mutual respect among researchers.

The researcher proceeded to obtain a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) before undertaking the study. Voluntary participation was obtained through informed consent. Consent was also sought from the University of Nairobi management and the study participants before administering the questionnaires to ensure autonomy. The researcher ensured those research participants were not harmed, either physically or emotionally, through involvement in research. This also included emotional distress faced by the participants. It is the responsibility of the researcher to plan and carry out research so that any form of harm is avoided. All participants were treated with respect and were given the freedom to drop out of the study if they so wished to. The study also ensured anonymity when it came to responses to the study questionnaire, the study ensured that the information obtained was solely used for academic research purposes.

# 3.9 Operationalization of Variables

**Table 3.4: Operationalization of Variables** 

Objective	Variable	Indicator(s)	Tools of analysis	Measurement Scale	DataAnalysis Technique
To establish the influence of land availability on implementation of students' hostel construction projects at the University of Nairobi	Availability of Land	Land zoning and planning policies Urbanization and urban sprawl Land prices and real estate market Availability of proposed construction site. Goodwill of UoN management and council	Frequencies Percentages Mean and Standard Deviation	Interval/ Ordinal	Descriptive and inferential statistics
To determine the influence of enrollment of students on implementation of students' hostel construction projects at the University of Nairobi.	Student Enrollment	Current total number of students Number of regular students Number of full time student admissions Projected number. of new student admissions Student-hostel bed ratio	Frequencies Percentages Mean and Standard Deviation	Interval/Ordinal	Descriptive and inferential statistics

To examine the influence of Financial Resources on implementation of students'hostel construction projects at the University of Nairobi	Financial resources	Availability Building material Availability of Labour and wages Inflation Availability of Funds Availability of Credit facilities	Frequencies Percentages Mean and Standard Deviation	Interval/ Ordinal	Descriptive and inferential statistics
To assess the influence of Organizational Leadership on implementation of students' hostel construction projects at the University of Nairobi	Organizational Leadership	Organizational Structure Organizational Ethic Communication Plan Political legitimacy Organizational Strengths.	Frequencies Percentages Mean and Standard Deviation	Interval/ Ordinal	Descriptive and inferential statistics
	Implementatio n of students'hostel construction projects	Number of hostels available Number of hostels to be constructed Funds allocated for hostel construction  Number of resident students Timeframe of the hostel construction project	Frequencies Percentages Mean and Standard Deviation	Interval/ Ordinal	Descriptive and inferential statistics

#### **CHAPTER FOUR**

## DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter presented the study findings based on the research objectives as derived from the research data. The return rate was presented followed by the demographic information. The findings on the study objectives were presented through the descriptive findings, inferential statistics in terms of correlation and regression as well as the qualitative findings from the interviews with the key informants.

# 4.2 Questionnaire Return Rate

The study sampled 66 respondents from a total of 80 potential participants categorized into group members and key informants. 66 group members were issued with self-administered questionnaires and 61 dully filled questionnaires were returned denoting a 92.5% response rate. (Mugenda and Mugenda, 2003) acknowledges that a response rate of at least 70% is sufficient for social science research analysis. Hence the response rate was found to be adequate for the study. The high response rate was attained because the researcher made follow ups with the selected respondents and allowed them adequate time to fill in the questionnaires. Moreover, the interviews were arranged at the convenience of the key informants and call backs made in cases where the respondents were not available at the first attempt. Table 4.1 below indicates questionnaire return rate

**Table 4.1: Response Return Rate** 

Questionnaire	Frequency	Percent (%)
Number of Questionnaires Duly Filled and Returned	61	92.5%
Number of Questionnaires Not Returned	5	7.6%
Total	66	100%

# **4.3 Background Demographic Information**

The researcher captured the background and demographic information of the study respondents in a bid to understand their profile in relation to the study objectives. This included duration and length of service at the UoN, gender and designation at the university. The results were presented in the subsequent sub-sections.

**Tables 4.2: Background and Demographic Information** 

<b>Duration/ Length of service</b>	Frequency	Percentage %		
Less than 5 years	6	9.8		
5-15 years	26	42.6		
16-27 years	18	29.5		
28-39 years	11	18.03		
Total	61	100.0		

Gender	Frequency	Percentage %		
Male	40	60.6%		
Female	26	39.4%		
Total		100.0		
	61			

Designation within UoN	Frequency	Percentage %	
UoN Management and Council	33	41.3	
UoN Student Affairs Management Board	21	26.5	
UoN Building Committee UNSA Executive Officials	8 18	10 22.5	
Total	66	100.0	

The researcher sought information on duration/ length of service of the participants within the University of Nairobi so as to ensure distribution and representation across the four major stratas within the study area. From the findings in Table 4.2 (iii) the group members who participated in the study were representatives of all the four major categories. The participants were not as evenly distributed i.e for from 5-15 years (42.6%), 16-27 years (29.5%) and 28-39 years (18.03%). Thus, the participants were well distributed to adequately represent the views of the hostel construction projects within the University of Nairobi.

The researcher sought to ensure gender representation as well. The respondents were therefore asked to indicate their gender. The results in Table 4.2 (ii) show that male and females were adequately represented and were almost even as there were 60.6% male participants to the 39.4% of female participants. Thus, the distribution was even giving room to capture views of both male and female members of the University of Nairobi regarding the implementation of students' hostel construction projects.

#### 4.4 Implementation of Students' Hostel Construction Projects

In this study, the dependent variable was implementation of students' hostel construction projects at the University of Nairobi. The aspect of implementation of students' hostel construction projects was measured using five indicators: of number of hostels available at the university, number of hostels to be constructed within the university, funds allocated for hostel construction, number of resident students and timeframe for students' hostel construction

The indicators were developed into five Likert items measured on a 5-point Likert scale as 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Undecided (U), 4 = Agree (A) and 5 = Strongly Agree (SA).

The participants provided their opinion based on their level of agreement with each item. The results were analysed and presented using frequencies, percentages, mean and standard deviation as shown in Table 4.3.

TABLE 4.3: IMPLEMENTATION OF STUDENTS' HOSTEL CONSTRUCTION PROJECTS

IMPLEMENTATION	SD	D	U	A	SA	MEAN	STDev
No. of hostels' is sufficient for the current students' population	69.2	19.2	3.9	3.9	3.9	1.9508	1.17511
The University plans to construct a number of student hostels in the next five years	7.7	7.7	61.5	19.23	3.9	2.6557	1.0937
The university management and council has set aside sufficient amount of money to construct a new student hostel	19.23	19.23	53.9	3.9	3.9	2.2459	1.05918
The number of resident students in the hostels increased as a result of scrapping the parallel degree programme in public universities	11.5	26.7	26.7	26.7	7.7	2.3607	1.14065
It takes a short period of time to construct a new hostel at the University of Nairobi	38.5	38.5	15.4	3.9	3.9	2.1639	1.12813

The results in Table 4.3 indicate that the implementation of student hostel construction projects at the University of Nairobi were a general average. Indicating a neutral response where the participants neither agreed nor disagreed. In this case, although majority of the group members

who participated (37.6%) in the study agreed that students' hostel construction projects are implemented in a timely manner, 28.5% disagreed. Further, 14.2% were neutral while 6.4% strongly disagreed despite 13.5% strongly agreeing. Thus cumulatively, 51.1% of the participants agreed that student's hostel construction Projects are implemented in a timely manner which is approximately one half of the projects.

Similarly, from the findings concerning the implementation of students' hostel construction projects and the number of students' hostels being sufficient for student population the specific percentages were represented as follows: cumulatively, 88.4% disagreed with the statement that "the number of students hostels is sufficient for the current student population" from this figure, 19.2% disagreed while 69.2 % strongly disagreed, on the other hand, there was a cumulative of 7.7% respondents who agreed with that statement out of which 3.9% strongly agreed while 3.9% agreed. The undecided percentage was 3.9% as well.

The findings also suggest that the number of resident students in the hostels increased with the implementation of Students' Hostel Construction projects. Regarding the statement that the number of resident students in the hostels increased as a result of attempted scrapping off of the parallel degree programme in public universities indicated a neutral view. However, specifically majority of the participants (30.8%) agreed that the number of resident students in the hostels increased as a result of attempted scrapping off of parallel degree programme with the implementation of Students' Hostel Construction Projects, 7.69% strongly agreed to this while 15.4% strongly disagreed and 23.08% disagreed for a cumulative total of 38.5% who agreed. On the other hand, 23.08% of the participants disagreed while 15.4% strongly disagreed that the number of resident students in the hostels increased as a result of the attempted scrapping off of the parallel degree programme in public universities with the implementation of Students' Hostel Construction projects. This shows that the implementation of Students' Hostel Construction projects was generally satisfactory to the university and students. This was the case as it was reported by one of the committee member who said that:

"Even in as much as the government had wanted to scrap off that module two thing, and we rejected and even the MPs refused it is because that programme brings in some money for the university, something that the regular student intake does not have. The population in the hostels

is always high and it is not just the parallel students, most of these are regular students who might

not have got a chance and are friends to these others who have been allocated accommodation.

They want to benefit from those resources" (Building Committee member)

Similarly, regarding construction time, the view of the participants was generally average

regarding the statement that hostel construction projects implemented take a short period of time

to construct. In this case, 38.5% of the participants disagreed with the statement while 34.6%

strongly disagreed. This accumulated to a total of 73% of participants. On the other hand, 3.85%

agreed while 7.7% strongly agreed that it takes a short period of time to construct a new hostel at

the University of Nairobi. This shows that there are 73% of members within the group who believe

that the implemented projects within the university take a much longer time compared to a

cumulative total of 11.5% who believe out rightly that the projects take a short period of time.

Thus, the overall construction period of new hostels is generally high low. The Key Informants

noted that:

"Most student hostels take forever to be completed, most of these were done long ago

before I was in this university and I am told it took a long time just like the construction

of roads"

[Interview: UNSA Official]

4.5 Availability of Land and Implementation of Students' Hostel Construction Projects at

the University of Nairobi

The first study objective assessed the influence of availability of land on implementation of student

hostel construction Projects at the University of Nairobi. To achieve this, the researcher sought

opinion of various members of groups participating in the student hostel construction projects on

the level of land availability for construction of students' hostel.

4.5.1 Availability of Land

Availability of land for construction of students' hostel projects was measured using five indicators

of land zoning and palnning policies, urbanization and urban sprawl, land prices in the real estate

market, availability of proposed construction site. The indicators were developed into four Likert

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items measured on a 5-point Likert scale as 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Undecided (U), 4 = Agree (A) and 5 = Strongly Agree (SA). The participants provided their opinion based on their level of agreement with each item. The results were analysed and presented using frequencies, percentages, mean and standard deviation as shown in Table 4.4 below:

**TABLE 4.4: AVAILABILITY OF LAND** 

LAND AVAILABILITY	SD	D	U	A	SA	MEAN	STDev
Land zoning and planning policies ensure there is space for expansion of student hostels	3.8	27.9	7.7	42.4	19.3	3.05	1.1992
Urbanization and urban sprawl reduce the sites suitable for hostel construction.	23.07	15.4	11.5	26.7	23.07	2.4	1.3174
Land prices and the current real estate market prices inflate the costs of constructing student hostels at the University	11.5	23.07	7.7	23.07	34.6	2.55	1.3553
The University of Nairobi Management and council puts the students' accommodation needs at the core of its operations	19.23	11.5	15.4	30.8	23.07	2.55	1.3074
The university has availed the proposed construction site meant to host the student hostels at the University.	19.23	15.4	23.07	26.7	15.4	2.32	1.2142

The results in Table 4.4 show that availability of land influences Implementation of students' hostel construction Projects as the participants generally agreed with the statement. Specifically, majority of the participants (42.34%) agreed while another 19.23% strongly agreed that land zoning and planning policies influences Implementation of students' hostel construction projects for a cumulative total of 61.6% of participants who agree. Whereas more than three quarters of the participants agree, about 31.7% cumulatively disagreed while 7.7% remained undecided. The findings were corroborated by the key informants during the interview where one of them said that:

"When land zoning is done there is a likelihood that the land issues will not be experienced since there will be no loopholes" Phone Interview (One of the management member)

Overally, the findings indicate that Availability of land influences implementation of students' hostel construction projects. This shows that the participants overally agree with the views that land availability influences Implementation of students' hostel construction Projects.

# 4.6 Student enrollment and Implementation of students' hostel construction Projects at the University of Nairobi

The second study objective sought to establish the influence of student enrollment on implementation of student hostel construction Projects at the University of Nairobi. To achieve this, the researcher sought opinion of various members of groups directly involved in student hostel affairs within the study area.

#### 4.6.1 Student Enrollment

Student enrollment in hostel construction projects was measured using five indicators which included: current total number of students, number of regular students, number of full time student admissions, projected number of new student admissions and student—hostel bed ratio. The indicators were developed into five Likert items measured on a 5-point Likert scale as 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Undecided (U), 4 = Agree (A) and 5 = Strongly Agree (SA). The participants provided their opinion based on their level of agreement with each item. The

results were analysed and presented using frequencies, percentages, mean and standard deviation as shown in Table 4.5.

TABLE 4.5: STUDENT ENROLLMENT

ENROLLMENT	SD	D	U	A	SA	MEAN	STDev
The total number of students enrolled is able to be accommodated in the	42.3	34.6	15.4	0.0	7.7	2.0833	1.13931
The number of regular students is able to sufficiently be	30.8	38.5	11.5	11.5	7.7	2.25	1.17351
accommodated by the university hostels available							
The number of full-time student admissions has been constant for the past 10 years	42.3	19.23	23.07	15.4	0.0	2	1.0251
Projections show the number of new student admissions will decline	30.8	19.2	7.7	34.6	7.7	2.55	1.34574
The university student hostel bed ratio is manageable within the existing Facilities	26.7	34.6	11.5	23.07	3.8	2.35	1.21885

The results in Table 4.5 show that the study participants agree that student enrollment influences Implementation of students' hostel construction projects. This view was put forward by majority of the participants (42.3%) who strongly disagreed with the statement that "the total number of students enrolled is able to be accommodated in the existing hostels" Student enrollment was therefore considered a factor influencing Implementation of students' hostel construction projects. Still from the disagreed lot was 34.6% while 7.7% of the participants strongly agreed. 0.0% agreed and the undecided percentage was 15.4%. Thus cumulatively, 76.9% disagreed with the statement that the number of students enrolled is able to be accommodated in the existing hostels while only 7.7% agreed. This shows that student enrollment is an important aspect in the effective implementation of students' hostel construction projects.

The Key informants also corroborated the findings where one of the respondents said that:

"every year the number of students enrolled is usually higher than the spaces available in the hostels for accommodation" [Interview: Member of the Student Affairs Management Board in the study area]"

Similarly, the number of regular students was also found to strongly influence students' hostel construction Projects. Specifically, majority of the participants (38.5%) disagreed with the statement that "the number of \regular students is able to sufficiently be accommodated by the university hostels available" thus terming that as a major factor that influences Implementation of students' hostel construction projects while another 30.8% strongly disagreed resulting to a cumulative of 69.3%. This was in contrast to 11.5% who agreed with that statement and another 7.7% who strongly agreed that the number of students is able to sufficiently be accommodated by the university hostels available. The cumulative figure that agreed to that statement was 19.23% with only 11.54% undecided thereby making that a factor that influences Implementation of students' hostel construction Projects.

Student admission was also found to have a considerable influence on implementation of students' hostel construction Projects. Considering the statement that the number of full time admissions has been constant for the past 10 years. Student admission influences Implementation of student hostel construction projects, majority of the participants (42.3%) strongly disagreed with the statement

the number of full time student admissions has been constant for the past 10 years while a further 19.23% disagreed. Thus, 61.5% of respondents cumulatively disagreed with that statement with only 15.38% agreeing. However, 23.07% of the participants were undecided on whether or not the number of full-time student admissions has been constant for the past 10 years.

Similar findings were arrived at on whether projections show the number of student admissions will decline.

Student admission projections was considered a factor to influence implementation of student hostel construction projects. Specifically, majority of the participants disagreed with the statement: projections show the number of new student admissions will decline". Cumulatively, 50% disagreed with this statement while cumulatively 42.3% agreed while 7.7% was undecided. Out of this percentage, 30.8% strongly agreed while 19.23% disagreed with the statement, on the other end, 34.6% agreed while 7.7% strongly agreed. Increase in student admission influences implementation of student hostel construction projects.

Student hostel bed ratio was found to be among the factors influencing implementation of students' hostel construction projects under student enrollment. Majority of the respondents disagreed on the statement: "the university student hostel bed ratio is manageable within existing facilities" accounting to a cumulative percentage of (61.3%) also cumulatively 26.9% of respondents agreed on this statement leaving a total of 11.5% undecided with the statement that the university student hostel bed ratio is manageable within the existing facilities thereby making student-bed ratio a factor that influences implementation student hostel construction Projects. This shows that student bed-ratio influences the Implementation of student hostel construction Projects.

### 4.7 Financial Resources and Implementation of students' Hostel Construction Projects at the University of Nairobi

The third study objective sought to establish the influence of financial resources on implementation of students' hostel construction projects at the University of Nairobi. To achieve this, the researcher sought opinion of various members of the groups participating in the University of Nairobi student construction projects on the level of financial resources on students' hostel construction projects.

#### **4.7.1 Financial Resources**

Financial resources on implementation of students' hostel construction projects was measured using five indicators which included: Availability of building materials, availability of labor and wages, inflation, availability of funds and access to credit facilities.

The indicators were developed into four Likert items measured on a 5-point Likert scale as 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Undecided (U), 4 = Agree (A) and 5 = Strongly Agree (SA). The participants provided their opinion based on their level of agreement with each item. The results were analysed and presented using frequencies, percentages, mean and standard deviation as shown in Table 4.6 below.

**TABLE 4.6: FINANCIAL RESOURCES** 

RESOURCES	SD	D	U	A	SA	MEAN	STDev
Hostel construction materials are readily available within the university	34.6	42.3	7.7	11.5	3.8	2.0167	1.0495
Financing of student hostel construction projects is done jointly by the University and private partners to ensure availability of labour.	26.7	26.7	23.07	19.23	3.9	2.3115	1.1037
Inflation of the Kenyan currency negatively affects the cost of hostel construction materials	7.7	15.4	11.5	46.2	19.23	2.8	1.302
The University has set aside funds for the construction of student hostels at the University	38.7	19.23	26.7	15.4	0.0	2.2131	1.0184
The University utilises the government credit facilities to finance the construction of student hostels	34.6	15.4	23.07	27.9	7.7	2.1803	1.1620

The results in Table 4.6 show that choosing indicators based on financial resources influences Implementation of students' hostel construction Projects. The mean shows an overall level of disagreement with the statement: Hostel construction materials are readily available within the university where specifically, majority of the participants (42.34%) disagreed while 34.6%

strongly disagreed with the statement giving an indicator that financial resources influences implementation of students' hostel construction Projects. However, 11.5% of the participants agreed with another 3.8% strongly agreeing as 7.7% were undecided. Thus, 77% of the participants cumulatively disagreed while 15.34% cumulatively agreed that choosing indicators based on financial resources Influence the Implementation of student hostel construction Projects. This shows that there is need to choose indicators based on financial resources.

From the key informants, it was found that financial resources help identify the situation for later comparisons with results.

'When there is no money from procurement, everything will remain stuck and nothing will be done, infact materials cannot get to the construction site, leave alone money for labour. (Member of the UoN Management and Council)

Similarly, the statement hostel construction materials are readily available within the university was cumulatively disagreed on with a majority of the population. In this case, majority of the participants (42.34%) disagreed that the materials for construction of hostels are readily available therefore influencing implementation of students' hostel construction projects while 34.6% strongly disagreed. Thus, 77% of the participants cumulatively disagreed that setting targets indicators based on financial resources influences implementation of students' hostel construction Projects with only11.5% agreeing, while 3.8% strongly agreed with that statement. The rest of the population comprised of 7.7% which remained undecided on that statement. This shows the value of setting targets based on financial resources.

Joint financing based on financial resources was also found to influence implementation of students' hostel construction projects to a high extent. The view is attributable to majority of the participants (53.4%) who cumulatively disagreed and 23.03% who cumulatively agreed with the statement that financing of students' hostel construction projects is done jointly by the university and private partners to ensure availability of labour.

26.7% strongly disagreed, while the other 26.7% disagreed, 23.07% were undecided with that statement while 19.23% agreed with the statement that financing of hostel construction projects is done jointly by the university and the private partners and the rest 3.8% strongly agreed. This

result underlines the importance of joint financing and or public private partnerships to suit the project based on findings of financial resources. Specifically, one of the Management and Council member said that:

"Financial resources are a key area of priorities and need to be prioritized before the project is started otherwise it will remain a fallacy"

Inflation of the Kenyan currency based on financial resources was also found to be a factor influencing implementation of students' hostel construction projects. On this indicator, a majority of participants agreed with the statement that inflation of the Kenyan currency negatively affects the cost of hostel construction materials and the project of construction as a whole. This majority was cumulatively represented as 65.38% and from this percentage, 46.15% agreed while 19.23% strongly agreed. Infaltion was not considered a factor from the remainder of the participants who indicated a cumulative percentage of 23.08% with a 15.38% of the participants disagreeing and the other 7.7% strongly disagreeing that inflation of the Kenyan currency negatively affected the construction of the hostels. The rest of the percentage was for the undecided participants who constituted 11.5% of the entire population.

Setting aside funds for construction based on financial resources was also found to be a factor influencing implementation of students' hostel construction projects. The statement: 'The University has set aside funds for the construction of student hostels' was disagreed upon cumulatively by 57.9% which separately indicated that 38.7% strongly disagreed while 19.23% disagreed. On the other hand, there was accumulative percentage of 15.38% of participants who agreed on this statement indicating that 15.38% while 0.0% strongly agreed. The rest of the figure represented the undecided population while comprised of 26.7%.

Finally, utilization of the government credit facilities on financial resources was also found to be a factor influencing implementation of students' hostel construction projects. The statement as read: The university utilizes the government credit facilities to finance the construction of the students' hostels was disagreed cumulatively by 50% of the participants. Out of this, 34.6% strongly disagreed while 15.4% disagreed. On the other hand, the cumulative representation of the agreed percentage was 35.6% with a 7.7% strongly agreeing and 27.92% agreeing. Only 23.07%

was undecided on the statement that UoN utilizes the government credit facilities to finance the construction of students' hostels.

## 4.8 Organizational Leadership and Implementation of Students' Hostel Construction Projects at the University of Nairobi

The fourth study objective assessed the influence of Organizational Leadership on implementation of Students' Hostel Construction Projects at the University of Nairobi. To achieve this, the researcher sought opinion of various members of groups participating in the study and within the research environment which is the University of Nairobi's hostel construction projects on the level and effectiveness of organizational leadership.

#### 4.8.1 Organizational Leadership

Organizational Leadership in the Implementation of students' hostel construction Projects was measured using five indicators: Organizational structure, organizational ethic, communication plan, political legitimacy and organizational strengths.

The indicators were developed into five Likert items measured on a 5-point Likert scale as 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Undecided (U), 4 = Agree (A) and 5 = Strongly Agree (SA). The participants provided their opinion based on their level of agreement with each item. The results were analysed and presented using frequencies, percentages, mean and standard deviation as shown in Table 4.7

TABLE 4.7: ORGANIZATIONAL LEADERSHIP

ORGANIZATIONAL	SD	D	U	A	SA	MEAN	STDev
The organizational structure of the University needs to restructure and loosen bureaucray to allow for effective and efficient decision making towards successful implementation of construction of student hostels.	3.8	0.0	7.7	34.6	53.9	3	1.4958
The UoN project management ethical decisions on hostel implementation have improved the institution's image and reputation for the past 20 years.	11.5	26.7	42.3	19.23	0.0	2.55	1.2272
Proper project communication plan will minimize misappropriation of funds and ensure successful completion of stalled projects thereby improving student accommodation shortage.	3.8	3.8	11.38	46.15	30.8	2.933	1.4126
The UoN Management and Council needs to seek political legitimacy for the University to be able to attract and retain more resources for the successful development of the hostel construction projects in the future.	15.4	11.5	15.4	30.8	26.7	2.75	1.3855
University of Nairobi is capitalizing on its strengths of large market share to woo potential donors for faster construction of sustainable permanent structures to accommodate the ever increasing student population.	7.7	15.4	19.23	38.7	19.23	2.733	1.3002

The study from the above table found that restructuring and loosening bureaucracy to allow for effective and efficient decision making leads to successful implementation of students' hostel construction projects. Organizational leadership influences implementation of students' hostel construction Projects. In this case, majority of the participants agree to the statement that the organizational structure of the university needs to restructure and loosen bureaucracy to allow for effective and efficient decision making towards succesfull implementation of students' hostel construction projects. This is represented by a cumulative percentage of 88.5% with those who agreed at 34.6% and those that strongly agreed at 53.9%.

However, 3.8% of the participants strongly disagreed while 0.0% disadgreed culminating to a cumulative total of 3.8% of participants who disagree that restructuring and loosening of bureaucracy within the organizational structure influences implementation of students' hostel construction projects.

The results from the statement 'the UoN project management ethical decisions on hostel implementation have improved the institution's image and reputation for the past 20 years' indicate that the respondents were undecided as they held the majority percentage of 42.3%. The next biggest percentage was the participants who disagreed with this statement and compounded of 26.7% while 11.54% strongly disagreed that the UoN project management ethical decisions on hostel implementation have improved the institutions' image and reputation for the last 20 years. Cumulatively, 38.24% of the population disagreed while 19.23% agreed with the statement making the institutions' project management ethical decision to be a factor influencing implementation of students' hostel construction projects at the University of Nairobi. Through interviews, one of the Building Committee member said that:

"The University is constantly attracting bad image since media keeps reporting on the actual state of accommodation within the University, this happens every year when freshers' jet in. Perhaps it is time this situation is improved "[Interview: A member of the Building Committee]

Similarly, the results show that proper project communication plan influences implementation of students' hostel construction projects as indicated by majority of the participants. In this case, 76.95% of the participants cumulatively agreed that proper project communication plan influences

implementation of students' hostel construction projects as it minimizes misappropriation of funds and therefore ensures successful completion of stalled projects where 46.15% agreed while 30.8% strongly agreed. However, only 3.8% of the participants disputed this view as they disagreed while the rest 3.8% strongly disagreed, the remainder of the population, 15.38% disagreed.

Political legitimacy was also considered a factor influencing implementation of students' hostel construction projects. From the statement that "the UoN Management and Council needs to seek political legitimacy for the University to be able to attract and retain more resources for successful development of the hostel construction projects in the future', there was an indication that majority of the respondents agreed to this statement. 30.8% agreed while 26.7% strongly agreed giving a total of 57.47% of the agreed respondents.

15.4% strongly disagreed while 11.5% disagreed the percentage that was undecided was 15.38%. This was an indication that political legitimacy in organizational structure influences implementation of students' hostel construction.

The university capitalizing on its strengths of large market share was a factor influencing implementation of students' hostel construction projects as seen under the organizational leadership of the institution. The results indicate that the respondents generally agreed with the statement "the University of Nairobi is capitalizing on its strengths of large market share to woo potential donors for faster construction of sustainable permanent structures to accommodate the ever increasing student population". Specifically, majority of the respondents 38.7% agreed that capitalizing on large market share influences implementation of students' hostel construction projects while 19.23% strongly agreed for a cumulative total of 57.9% of the respondents who agreed. However, only (15.4%) of participants disagreed as was the case with another (7.7%) of participants who strongly disagreed that capitalizing on large market share influences implementation of students' hostel construction projects. This showed that nearly 60% of the participants in the Implementation of students' hostel construction projects agree that University of Nairobi was capitalizing on its large market share to woo potential donors and therefore that factor influences implementation of students' hostel construction projects.

#### **CHAPTER FIVE**

#### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents a summary of the main study findings, the conclusions made and recommendations for policy and practice. The summary is presented based on the study objectives which were: to establish the influence of land availability on implementation of students' hostel construction projects: to determine the influence of enrollment of students on implementation of students' hostel construction projects: to examine the influence of financial resources on implementation of students' hostel construction projects: to assess the influence of organizational leadership on implementation of students' hostel construction projects at the University of Nairobi. The chapter also provides suggestions for further studies.

#### **5.2 Summary of Findings**

The summary of findings is presented based on the study themes as derived from the dependent variable and the independent variables.

#### 5.2.1 Implementation of Students' Hostel Construction Projects

Implementation of students' hostel construction projects at the University of Nairobi were general average as 61.1% of the participants, 45.4% of the participants agreed that the students' hostel construction Projects are implemented within the project cost and budgetary allocation. Further, implementation of students' hostel construction Projects meets quality standards and technical specification as per design to an average extent (36.9%) while beneficiary satisfaction with the implementation of community peace projects was generally low. The view of the participants was generally average as to whether Community Peace Projects Implemented is sustainable.

## 5.2.2 Availability of Land and Implementation of Student Hostel Construction Projects at the University of Nairobi

In terms of availability of land, the study found that land zoning and planning influences Implementation of students' hostel construction projects since the policies ensure there is space for expansion to create room for construction of the hostels because majority of the participants generally agreed with the statement. Similarly, land prices and the current real estate market prices inflate the costs of constructing student hostels at the University. Urbanization and urban sprawl influences implementation of students' hostel construction projects. The University of Nairobi management puts the students' accommodation needs at the core of its operations as was seen to be agreed by a majority of the respondents. Overall, the findings indicate that availability of land influences implementation of students' hostel construction projects. The study established that there is a moderate positive correlation (R = 0.493) between availability of land and Implementation of students' hostel construction projects which is statistically significant.

## **5.2.3** Student Enrollment and Implementation of Students' Hostel Construction Projects at the University of Nairobi

The study found that student enrollment highly influences implementation of students' hostel construction projects Projects (Mean = 4.08) as indicated by 82.2% of the participants cumulatively agree. Similarly, the total number of students enrolled is not able to be accommodated in the existing students hostels available and this influenced the implementation of the construction projects (Mean = 4.01). The University student hostel bed ratio is not manageable within the existing facilities as seen from the statistics hence that factor was also found to strongly influence the implementation of students' hostel construction projects as well as the number of regular students (Mean = 3.87). Similar findings were arrived at on whether projections show the number of new student admissions will decline on the influence of implementation students hostel construction projects (Mean = 3.89). However, the number of full time student admissions being constant moderately influenced Implementation of students' hostel construction projects (Mean = 3.79). The study established that there is a more than average positive correlation (R = 0.157) between student enrollment and implementation of students' hostel construction projects which is statistically significant (p = 0.004, p < 0.05)

## **5.2.4** Financial Resources and Implementation of Students' Hostel Construction Projects at the University of Nairobi

The study found that choosing indicators based on financial resources influenced implementation of students' hostel construction projects. Setting target indicators based on availability of construction materials (Mean = 4.26) and public private partnerships based on financial resources (Mean = 4.11) influences implementation of students' hostel construction projects to a greater extent. However, inflation on the Kenyan currency based on financial resources influences implementation of students' hostel construction projects to a relatively high extent compared to other indicators (Mean = 3.77). Overall, financial resources influence implementation of student hostel construction projects. This shows that the participants generally agree that financial resources influence implementation of students' hostel construction projects. The study found that there is a more than average positive correlation between financial resources and implementation of students' hostel construction projects.

## 5.2.5 Organizational Leadership and Implementation of Students' Hostel Construction Projects at the University of Nairobi

On organizational leadership, the study found that restructuring and loosening bureaucracy on organizational leadership (Mean = 3.89), institutions image and reputation improvement in organizational leadership (Mean = 3.94), proper project communication plan in organizational leadership (Mean = 3.94) and political legitimacy in organizational leadership (Mean = 3.90) influence implementation of students' hostel construction projects at the University of Nairobi. However, the university capitalizing on its strengths influences implementation of students' hostel construction projects only moderately (Mean = 3.72). Overall, organizational leadership was found to influence implementation of students' hostel construction projects. The study established that there is a moderate positive correlation (R = 0.439) between organizational leadership and implementation of students' hostel construction projects and that organizational leadership accounts for 19.3% of implementation of students' hostel construction projects.

The study found that the combined organizational leadership accounts for 32.0% of implementation of students' hostel construction projects.

#### **5.3 Conclusions**

Based on the findings of the study, the following conclusions were made:

On Implementation of Students' Hostel Construction Projects, the study concluded that there are cases of deficiency in implementation of the students' hostel construction projects, while some of the projects in the University were never finished and stalled for years therefore do not meet the quality standards. The implementation of students' hostel construction projects is generally not satisfactory to the beneficiaries while their sustainability is generally low and in other instances no value for money can be seen.

On availability of land, the study concluded that having land zoning and planning policies in place ensures that there is sufficient space of land for expansion and therefore facilitates effective implementation of students' hostel construction projects. Urbanization and urban sprawl reduce the sites suitable for hostel construction as well from the concluded study since the population explosion ensures that land becomes a scarce commodity. Further, although the University of Nairobi Managerment and Council puts the students' accommodation needs at the core of its business operations, planning is still necessary in the effective implementation of students' hostel construction projects at the University of Nairobi and therefore it is not very important. Overall, availability of land Influences Implementation of students' hostel construction projects and that as unavailability of land increases so does the implementation of students' hostel construction projects, whilst increase in availability of land also ensures increased implementation of the students' hostel construction projects within the University of Nairobi

On student enrollment, the study concluded that student enrollment is an important aspect in the effective implementation of students' hostel construction projects since it highly affects the implementation. The total number of students enrolled each semester or academic year influences the Implementation of Students' Hostel Construction Projects. Projections show that the number of new student admissions will keep increasing therefore affecting the Implementation of Students' Hostel Construction Projects. These are statistically highly and positively correlated such that as enrollment of students increases, implementation of students' hostel construction projects also worsens. Therefore, an increase in enrollment equates to a decrease in available students' hostel accommodation.

On financial resources, the study concluded that there is need to choose indicators based on financial resources and that setting of targets based on PPP is of high value as well as setting aside funds for the construction of students' hostel construction projects to suit the project based on findings on financial resources. Financial resources are important in establishing the present status of development and projects which are either new or stalled and provides an insight into areas to target with the interventions leading to effective implementation of students' hostel construction projects. Furthermore, financial resources reveal information on the pre-existing project and plans before the actual implementation. Financial resources and Implementation of students' hostel construction projects are statistically highly and positively correlated such that as financial resources increases and improves, implementation of students' hostel construction projects also improves to a moderate extent.

On organizational leadership, the study concluded that loosening bureaucracy and restructuring within the organization highly influences implementation of students' hostel construction projects as was shown by the majority of the respondents However, there were significant cases where data collection process was not done or were not applicable in the Implementation of students' hostel construction projects. Proper project communication plan highly affects implementation of students' hostel construction projects. Further, political legitimacy as was concluded from the study since it influences implementation of students' hostel construction projects The study also concluded that the UoN project management ethical decision was a key and necessary aspect in the Implementation of Students' Hostel Construction Projects. Overall, with robust and improved organizational leadership, the implementers and beneficiaries of these construction projects are able to get their value when effective implementation of the projects is carried out by respective teams. Organizational leadership and Implementation of students' hostel construction projects are statistically significantly moderately correlated such that as organizational leadership improves in effectiveness; Implementation of students' hostel construction projects also improves to a moderate extent.

Thus, the study concluded that the four variables: student enrollment, financial resources, organizational leadership and availability of land in that order significantly contribute to the implementation of students' hostel construction projects.

#### **5.4 Recommendations**

The following recommendations were made for implementation of students' hostel construction projects:

The study found that variables  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  have a positive influence on implementation of student hostel construction projects. This was found to significantly improve or affect the implementation of students' hostel construction projects simultaneously when the practices are implemented simultaneously.

#### **5.5 Suggestions for Further Studies**

This study articulated the Institutional Factors Influencing Implementation of Students' Hostel Construction Projects at the University of Nairobi. The researcher recommends that scholars in the future should conduct research using other institutional factors not covered within the four variables to assess their influence on implementation of hostel construction projects.

To ensure improvement in the implementation of students' hostel construction projects in the future, the researcher should also consider a broader environment and increase the number of respondents from where to collect the data from, also broaden the indicators. Other Institutions within the country should also be factored in so as to get different perspectives, for example, the private universities or other public universities.

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**APPENDICES** 

APPENDIX I: AUTHORITY TO COLLECT DATA

Persil Telewa,

P.O Box 50303-00100,

Nairobi.

Date:

To the University of Nairobi Management,

P.O Box 30197, GPO, Nairobi.

Dear Sir/ Madam.

I would like to seek your permission to please allow me conduct a research within the University of Nairobi. This is in view of my research project titled 'Institutional factors influencing implementation of students' hostel construction projects in public universities- A case of the University of Nairobi', a course requirement for the award of degree of Master of Arts in Project Planning and Management (PPM) of the University of Nairobi.

The activity would last for about 10-20 minutes and would be arranged at a time convenient to each participants' schedule (e.g. during break). Participation in the study by these respondents is entirely voluntary and there are no known or anticipated risks in this study. All information gathered will be kept and treated with utmost confidentiality and would be used only for academic purposes.

I look forward for your support and positive response on this matter.

Yours sincerely,

Persil Telewa

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APPENDIX II: LETTER TO RESPONDENT

Persil Telewa,

P.O Box 50303-00100,

Nairobi-Kenya.

Dear Respondent,

I am a final year student pursuing a degree of Master of Arts in Project Planning and Management

at the University of Nairobi. This questionnaire is aimed at assessing the institutional factors

influencing implementation of student hostel construction projects at the University of Nairobi. In

this regard, I request that you kindly spare some time to complete this questionnaire. Your accurate

and truthful responses will be highly appreciated.

I have enclosed a consent form for your review, please read the form as well and feel free to contact

me if you have any questions about the study. If you choose to participate, please sign initial and

date on the consent information form and hand it over along with the completed questionnaire.

Please note that as a respondent, you are not entitled to write your name on the questionnaire. All

information will be treated with utmost confidentiality as the findings of this study will be used

only for academic research purposes. Your participation will be highly appreciated.

Yours faithfully,

Persil Telewa.

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#### APPENDIX III: CONSENT FORM FOR RESPONDENTS

You are invited to participate in a research study titled Institutional Factors Influencing Implementation of Students' Hostel Construction Projects in Public Universities: A case of the University of Nairobi. You were selected as a possible participant because you are either in the category of the University Management, Project management team, contractor or a student of the University of Nairobi. I ask that you read this form and ask any questions you may have before agreeing to take part in the study.

#### **Background Information**

The purpose of this study is to establish institutional factors influencing implementation of students' hostel construction projects at the University of Nairobi, Kenya.

If you agree to be in this study, we will ask you to be truthful and take about 10-20 minutes to participate in filling up the questionnaire. This will take place once. All participant's will be treated with respect and will be given the freedom to drop out of the study if they so wish. The study will also ensure anonymity when it comes to responses to the study questionnaire.

#### **Risks for Participation in the Study**

We do not anticipate any risks for your participating in this study, other than those encountered in day-to-day life.

#### **Nature of Participation**

Your decision whether or not to participate is voluntary and therefore will not affect your current or future relations with the University of Nairobi or with other cooperating entities. As a respondent, participation in this exercise is voluntary, you may skip any questions you don't feel comfortable answering. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

#### **Confidentiality**

Research records will be kept in a locked file and in soft copy with a password-protected computer file within a secure location; only the researcher will have access to the records, as they are confidential and strictly for academic purposes. Research records will be kept for at least 3 years after completion of this project.

#### **Contacts and Questions**

The researcher conducting this study is Persil Telewa. Please ask any questions you have now. If have questions later, channel them through +254712767553, you may telewapersil@gmail.com through the supervisor Professor Rambo Charles on or rambocharls@gmail.com. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the University of Nairobi management at their offices located within the University of Nairobi's main campus.

#### **Statement of Consent**

I have read the above information, and have received answers to any questions asked. I am at least 18 years old and I consent to participate in the study.

Signature of Participant:	Date
Signature of Principal Researcher:	Date

This consent form will be kept by the researcher for at least three years beyond the end of the study.

#### APPENDIX IV: QUESTIONNAIRE TO RESPONDENTS.

INSTRUCTIONS:
This questionnaire has six sections and you are kindly requested to respond to all questions.
Please tick $\sqrt{(\Box)}$ in the appropriate box.
Where explanation is requested, kindly be brief and to the point.
All information will be treated with utmost confidentiality.
SECTION A: General Information about the Respondents.
Please select your gender. Male
What is your designation within the University of Nairobi?
UoN Management and Council 🔲 UoN Student Affairs Management Board 🗀 UoN Building
Committee UNSA Executive Official
How many years have you been at the university?
SECTION B: Availability of Land
The first aspect of this study is to determine how Availability of Land influences implementation
of students' hostel construction projects at the University of Nairobi. The following statements

relate to Availability of Land as a factor influencing students' hostel construction project implementation. To what extent do you agree with the following statements? (Kindly Tick as **appropriate, the scale is based on your opinion**) where 1= Strongly Disagree 2= Disagree 3= Undecided 4= Agree 5= Strongly Agree?

No.	Statements	5	4	3	2	1
a.	Land zoning and planning policies ensure there is space for expansion of student hostels					
b.	Urbanization and urban sprawl reduce the sites suitable for hostel construction					
c.	Land prices and the current real estate market prices inflate the costs of constructing student hostels at the University					
d.	The University of Nairobi Management and council puts the students' accommodation needs at the core of its operations					
e.	The university has availed the proposed construction site meant to host the student hostels at the University.					

#### **SECTION C: Student Enrollment**

The second aspect of this study is to determine how Student Enrollment influences implementation of students' hostel construction projects at the University of Nairobi. The following statements relate to Student Enrollment as a factor influencing students' hostel construction project implementation. To what extent do you agree with the following statements? (**Kindly Tick as appropriate, the scale is based on your opinion**) where 1= Strongly Disagree 2= Disagree 3=Undecided 4= Agree 5= Strongly Agree?

No.	Statements	5	4	3	2	1
	The total number of students enrolled is able to be accommodated in the					
a.	existing hostels					ı
b.	The number of regular students is able to sufficiently be accommodated					
	by the university hostels available					
c.	The number of full-time student admissions has been constant for the past					
	10 years					ı
d.	Projections show the number of new student admissions will decline					
e.	The university student hostel bed ratio is manageable within the existing					
	facilities					ı

#### **SECTION D: Financial Resources**

The third aspect of this study is to determine how Financial Resources influence implementation of students' hostel construction projects at the University of Nairobi. The following statements relate to Financial Resources as a factor influencing students' hostel construction project implementation. To what extent do you agree with the following statements? (**Kindly Tick as appropriate, the scale is based on your opinion**) where 1= Strongly Disagree 2= Disagree 3= Undecided 4= Agree 5= Strongly Agree?

No.	Statements	5	4	3	2	1
a.	Hostel construction materials are readily available within the university					
b.	Financing of student hostel construction projects is done jointly by the University and private partners to ensure availability of labour.					
c.	Inflation of the Kenyan currency negatively affects the cost of hostel construction materials					
d.	The University has set aside funds for the construction of student hostels at the University					
e.	The university utilizes the government credit facilities to finance the construction of student hostels.					

#### **SECTION E: Organizational Leadership**

The fourth aspect of this study is to determine how Organizational Leadership influences implementation of students' hostel construction projects at the University of Nairobi. The following statements relate to Organizational Leadership as a factor influencing students' hostel construction project implementation. To what extent do you agree with the following statements? (**Kindly Tick as appropriate, the scale is based on your opinion**) where 1= Strongly Disagree 2= Disagree 3= Undecided 4= Agree 5= Strongly Agree?

No.	Statements	5	4	3	2	1
a.	The organizational structure of the University needs to restructure and					
	loosen bureaucray to allow for effective and efficient decision making					
	towards successful implementation of construction of student hostels.					
b.	The UoN project management ethical decisions on hostel					
	implementation have improved the institution's image and reputation					
	for the past 20 years.					
	Proper project communication plan will minimize misappropriation of					
c.	funds and ensure successful completion of stalled projects thereby					
	improving student accommodation shortage.					
d.	The UoN Management and Council needs to seek political legitimacy					
	for the University to be able to attract and retain more resources for					
	the successful development of the hostel construction projects in the					
	future.					
	University of Nairobi is capitalizing on its strengths of large market					
e.	share to woo potential donors for faster construction of sustainable					
	permanent structures to accommodate the ever increasing student					
	population.					

#### **SECTION F: Implementation of Students' Hostel Construction Projects**

The last aspect of this study is to assess the Implementation of Students' Hostel Construction Projects at the University of Nairobi. The following statements relate to Implementation of Students' Hostel Construction Projects at the University of Nairobi. To what extent do you agree with the following statements? (**Kindly Tick as appropriate, the scale is based on your opinion**) where 1= Strongly Disagree 2= Disagree 3= Undecided 4= Agree 5= Strongly Agree?

No.	Statements	5	4	3	2	1
	The number of students' hostels is sufficient for the current student					
a.	population					
b.	The University plans to construct a number of student hostels in the					
	next five years					
c.	The university management and council has set aside sufficient					
	amount of money to construct a new student hostel (s)					
	The number of resident students in the hostels increased as a result of					
d.	scrapping the parallel degree programme in public universities					
e.	It takes a short period of time to construct a new hostel at the					
	University of Nairobi					

#### THE END

Thank you for taking time to participate in the study.

#### APPENDIX V: INTERVIEW GUIDE

# INSTITUTIONAL FACTORS INFLUENCING IMPLEMENTATION OF STUDENTS' HOSTEL CONSTRUCTION PROJECTS IN PUBLIC UNIVERSITIES: A CASE OF THE UNIVERSITY OF NAIROBI, KENYA

- What is the influence of availability of land on implementation of students' Hostel Construction Projects at the University of Nairobi? Probe for: Land zoning and planning policies, Urbanization and urban sprawl, Land prices and real estate markets and Available construction site.
- 2. What is the influence of student enrollment on implementation of students' hostel construction Projects at the University of Nairobi? Probe for; Current total number of students, Number of regular students, Number of full time student admissions, Projected number of new student admissions and Student-hostel bed ratio
- 3. What is the influence of financial resources on implementation of students' hostel construction projects at the University of Nairobi? Probe for; Availability of building materials, availability of labour and wages, Inflation, availability of funds and availability of credit facilities.
- 4. What is the influence of organizational leadership on implementation of students' hostel construction projects at the University of Nairobi? Probe for; Organizational strengths, Organizational ethic, organizational structure, communication plan and political legitimacy Probe for;
- 5. How are students' hostel construction projects implemented at the University of Nairobi? Probe for; Number of hostels available, number of hostels to be constructed, timeframe of the hostel construction, funds allocated for hostel construction and number of resident students.

#### APPENDIX VI: UON RESEARCH AUTHORIZATION LETTER



#### **UNIVERSITY OF NAIROBI**

OPEN, DISTANCE AND e-LEARNING CAMPUS SCHOOL OF OPEN AND DISTANCE LEARNING DEPARTMENT OF OPEN LEARNING NAIROBI LEARNING CAMPUS

Your Ref:

Our Ref:

Telephone: 318262 Ext. 120

REF: UON/ODeL/NLC/30/003

Main Campus Gandhi Wing, Ground Floor P.O. Box 30197 N A I R O B I

31st August, 2020

#### TO WHOM IT MAY CONCERN

### RE: PERSIL ROSE TELEWA - REG NO: L50/76103/2014

This is to confirm that the above named is a student at the University of Nairobi, Open Distance and e-Learning Campus, School of Open and Distance Learning , Department of Open Learning pursuing Masters of Art in Project Planning and Management.

She is proceeding for research entitled "Institutional factors influencing implementation of students' hostel construction projects in public Universities: A case of University of Nairobi, Kenya."

LEARNING CE

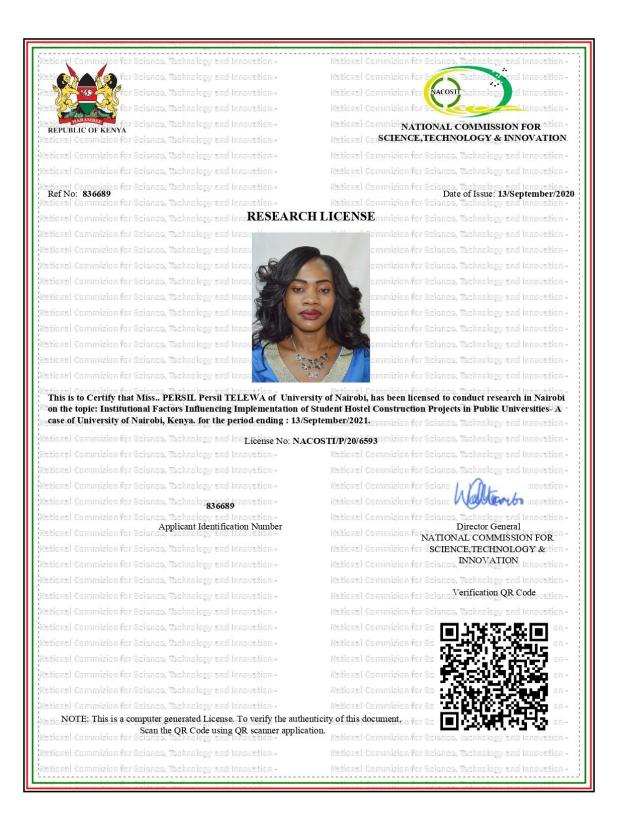
Any assistance given to her will be highly appreciated.

CAREN AWILLY
CENTRE ORGANIZER

NAIROBI LEARNING CENTRE

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#### APPENDIX VII: NACOSTI RESEARCH LICENSE



#### THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

#### CONDITIONS

- 1. The License is valid for the proposed research, location and specified period
- 2. The License any rights thereunder are non-transferable
- 3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
- 4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
- 5. The License does not give authority to tranfer research materials
- 6. NACOSTI may monitor and evaluate the licensed research project
- 7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one of completion of the research
- 8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
Expail: do@nagosti go ke / peristry@nagosti go ke

E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke Website: www.nacosti.go.ke

#### APPENDIX X: STANDARD NEWSPAPER ARTICLE

# Students sleep in shifts as room shortage hits varsity

By Donald Magomere | Updated Nov 08, 2018 at 08:37 EAT



A hostel in UoN SUMMARY

The University of Nairobi can only accommodate 10,000 students on an on-campus basis against its student enrollment of 85,000 across the country. This is a shortfall of 75,000 students who seek alternative accommodation in private rentals or live with parents, relatives and

Not long ago, a video purportedly showing University of Nairobi (UoN) students sleeping on cold verandahs went viral on social media. The students had just reported back to campus for a new semester, but could not find accommodation.

The university's administration has since denied that the students captured on the video were indeed from the institution. John Orindi, the university's director of corporate affairs, disputed the

claims, saying the video was made and circulated by a student who wanted to contest a leadership position at the university and and wanted to be seen to be championing the welfare of students.

He denied that the university was experiencing an accommodation crisis.

Just before the start of the current semester, UoN closed down its wooden hostels of residence, popularly known as prefabs, partly to comply with Commission for University Education (CUE) accommodation guideline. The prefabs used to accommodate about 1,000 students.

Prof Jackson Maalu, the director of Student Welfare Association, says abiding by CUE regulations is for the benefit of students.

With the entrance of freshmen, some continuing students - mostly second and third years from main and Chiromo campuses - have been forced to sleep in shifts in what is famously known among students as 'pirating'.

Orindi says the UoN enrols a total of 85,000 students in all its campuses across the country against 10,000 bed spaces. That huge accommodation deficit has been compounded by the closing down of prefabs, which had a capacity to accommodate more than 957 students.

"It is for the safety of our students that the prefabs are going to be demolished and replaced with a new building under a public-private partnership arrangement," says Prof Maalu.

Charles Kibiwot, a third year meteorology student, was captured in the video that went viral pleading with the Ministry of Education to come their rescue and address the accommodation problems."It's very hard here... We are suffering: we don't have rooms, we sleep outside, and the university has turned a deaf ear. Many students are suffering in silence and sleep in the TV rooms," says Kibiwot.

Kibiwot says he struggled to find a place to sleep at the beginning of the Semester. He opted to carry his bedding to the Central Catering Unit where he met other students who had also failed to get rooms. He is joined by his friend Kangu Faraji, a third-year Meteorological student whom he shares his bedding with.

"Some students here opt to enjoy the free Wi-Fi services... During the day, they go sleep in their comrades' rooms. Such students sometimes miss lectures," he says.

Orindi says that admission in universities is not linked to bed capacity. "We admit the number that qualifies, not the number we can accommodate," he says.

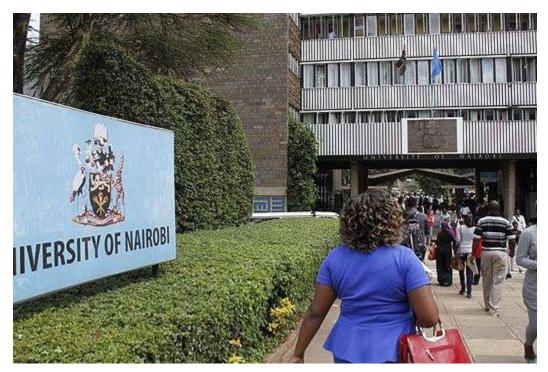
But Kweyu Isaac, a third-year bachelor's of arts student, says the administration should have accommodated students in prefabs for a semester before a lasting solution can be found.

"We want a place we can sit and relax after classes. That has to be a hostel," says Kweyu.

Orindi says it's long since the institution built on-campus hostels: "Most of the hostels, especially prefabs, were built at the start of double intakes in the early 1990s. Universities were asked to build temporary structures to accommodate more students and that is how the prefabs came into existence."

## APPENDIX XI: DAILY NATION ARTICLE

UoN suspends officer caught selling hostels to female students By OUMA WANZALA, owanzala@ke.nationmedia.comOctober 3rd, 2016



The University of Nairobi (UoN) has suspended an ICT officer accused of selling female hostels to the highest bidder at its Chiromo Campus. Director of corporate affairs at UoN John Orindi said the officer was suspended after two cases were reported to the management. "We got the reports and acted on it, for now everything is fine," said Mr Orindi, adding that application for hostels is done online and the system has ranking systems.

## **DENIED ROOMS**

Students at the campus had complained that the hostels were going at a fee and those who do not pay are denied rooms. "Congress ladies have been compromised by the halls officers to sell girls hostels to second years at Sh15, 000 per bed and Sh 20,000 for single rooms per semester. These racket affects mostly the girls maybe because they are considered to be 'soft targets' (sic)," read a concern.

Universities have been grappling with accommodation crisis due to limited hostels vis-à-vis a rapidly growing student population. The University of Nairobi has already announced plans to

construct a multi-billion-shilling hostel complex to accommodate 4,000 students on its main campus.

The complex will sit on a 3.7-acre piece of land along Harry Thuku road between Norfolk Towers and Hotel Boulevard and is set to ease pressure on the existing facilities that have not kept pace with student numbers.

Construction will be through a public-private partnership (PPP) in which private investors will finance construction, operate for some time to recoup their investments and profit before transferring ownership to the university, according to Treasury's PPP unit.

## STUDENTS DOUBLED

Official data shows that the university's student population has nearly doubled in the past three years to 98,713 last year from 69, 946 in 2014 and 50,895 in 2012. This has piled pressure on the facilities with some government-sponsored students missing accommodation.

### APPENDIX XVII: BUSINESS DAILY ARTICLE

# University of Nairobi plans hostel for 4,000 in deal with investors

# BUSINESS DAILY SUNDAY, SEPTEMBER 25, 2016 18:13



Prof

Peter Mbithi, University of Nairobi vice-chancellor.PHOTO/FILE

The University of Nairobi is set to construct a multi-billion shilling hostel complex to accommodate 4,000 students on its main campus amid rising student population.

The complex will sit on a 3.7-acre piece of land along Harry Thuku road between Norfolk Towers and Hotel Boulevard and is set to ease pressure on the existing facilities that have not kept pace with student numbers.

Construction will be through a public-private partnership (PPP) in which private investors will finance construction, operate for some time to recoup their investments and profit before transferring ownership to the university, according to Treasury's PPP unit.

Ficial data shows that the university's student population has nearly doubled in the past three years to 98,713 last year from 69, 946 in 2014 and 50,895 in 2012.

This has piled pressure on the facilities with some government-sponsored students missing accommodation.

The proposed hostel will also have facilities to accommodate 50 visiting foreign scholars at any given time.

The University of Nairobi has recently been keen to expand its infrastructure after years of lull even as other public institutions like Kenyatta University have been on an expansion spree, setting up hostels and modern libraries.

China Wu Yi is putting finishing touches to a 22-storey complex at the University of Nairobi. The building boast VC's and deputy VC's suites, senate boardroom and lecture halls to accommodate 3,000 students. Other features are a council meeting room and offices for its Graduate School of Business.

The university also plans to put up a Sh2 billion building from March next year to host classes for Chinese language and culture. It is expected to take 18 months to complete.

The complex will house lecture halls and offices and will be financed by China through its Confucius Institute, which promotes Chinese language and culture overseas.

The university's management is also in talks with the French Development Agency (Afd) for a Sh3 billion loan to construct a state-of-the art science and engineering complex.

APPENDIX XVIII: UNIVERSITY WORLD NEWS ARTICLE

US\$200 million sought for university hostel expansion

UNIVERSITY WORLD NEWS- KENYA

Gilbert Nganga 26 January 2018

The Kenyan government has asked foreign and local private investors for more than US\$200 million

to build hostels at three public universities this year.

In anticipation of a growth in student numbers, in a fresh round of fundraising, the country's treasury

has asked potential bidders for proposals to add extra bed capacity at three institutions: South Eastern

Kenya University (SEKU), Embu University College and Moi University.

Treasury Cabinet Secretary Henry Rotich said this week that the infrastructure plan is expected to

provide more than 30,000 new beds. Under the arrangement, Moi University will get 16,000 beds,

Embu College 8,000 and Seku 6,000.

The government has asked a consortium of transaction advisers, led by South African firm Genesis

Analytics, to structure the proposal which will see the government publicly seek bids for

implementation in the coming weeks.

"We have witnessed tremendous growth of public universities which has put a strain on the

budgetary allocations. We are keen to partner with the private sector in meeting especially the

accommodation needs, where demand outstrips supply," Rotich told reporters in Nairobi.

It is understood that another phase is in the pipeline that will serve four other institutions – Jomo

Kenyatta University of Agriculture and Technology, Maseno University, Egerton University and the

Kenya School of Government – introducing 60,000 new beds in the coming two years.

The projects, undertaken through public-private partnerships, are expected to help the institutions

handle an expected surge in student numbers, following changes in admission criteria.

Earlier this month, Kenya's Education Cabinet Secretary, Fred Matiang'i, issued a directive to public

universities ordering them to absorb all secondary school leavers who scored a mean grade of C+ and

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above in the 2017 examinations. As a result, more than 70,000 students are expected to join 35 public institutions to pursue government sponsored education. Previously, at least half of these students enrolled at private universities on self-sponsored programmes.

However the number of those joining public universities is 10,000 lower than last year, following poor performance in the secondary education. Additionally, the government has directed that only those who got the cut off C+ in the secondary education will join universities to do degrees, locking out thousands of others who were initially joining the public institutions to pursue parallel (self-funded) programmes.

These two developments have seen some observers question the wisdom of expanding infrastructure in the institutions. In terms of the infrastructure plan, the universities will provide land for construction while investors develop the hostels, and run them for 20 years, to recoup investments, and hand them back to the institution, a model known as Build-Own-Transfer.

The move towards private funding in higher education comes at a time when Kenya's public coffers are strained by growing budgetary needs. This has seen the country turn to borrowing to finance deficits, pushing Kenya's debt to US\$4.5 billion from US\$2.2 billion five years ago. Kenya has been criticised for failing to cut borrowing after taking up debt.

Government statistics show that higher education admissions have risen by around 40% annually for the past five years, while real subsidies to public universities have increased by a miserly 9%. This means universities can no longer cope with rising student numbers or build adequate infrastructure to accommodate students.

As part of the trend towards public-private partnerships, New York-based private equity firm Africa Integras is constructing hostels at Kenyatta University, Kenya's largest institution by student numbers, under a US\$50 million partnership deal. Kenyatta University has allocated 20 acres to the project, which will house up to 10,000 students.

The University of Nairobi, Kenya's second largest tertiary institution, is looking for investors to construct a dwelling to accommodate 4,000 students on its main campus, just outside the city's central business district. In September, the International Finance Corporation said it was considering

funding a construction project by two private equity firms – Acorn Group and London-based Helios – to build 3,800 university hostel units in Nairobi, estimated at US\$40 million. The hostels will be built near Kenya's three top private universities – United States International University-Africa, Daystar University and Strathmore University – and are expected to cost at least US\$75 million.

APPENDIX XIX: DAILY NATION ARTICLE

UoN battles debt crisis

DAILY NATION THURSDAY MAY 09 2019 By OUMA WANZALA

The University of Nairobi is technically broke and cannot meet its financial obligations

unless it receives support from the government and lenders, according to the latest audit

report tabled in Parliament.

According to the audit report, UoN's financial statement as at June 2018 reflects current

liabilities of Sh5, 724,377,000 while assets stand at Sh4, 288,628 resulting in a negative

working capital of Sh1,435,749,000.

During the period under review, Auditor General Edward Ouko noted in a report tabled in

Parliament that the university was unable to meet its financial obligations.

In particular, Mr Ouko said that the university was unable to remit PAYE of Sh282 million,

NSSF Sh3 million, NHIF Sh10 million, Chuna Sacco Sh204 million and HELB Sh1.5

billion. According to the report, the university management attributed the debts to a decline

in capitation from the parent ministry, a decline in student enrolment in Module 2

programme, strikes by the academic staff and the prolonged presidential election which led

to the closure of the university.

"The university therefore is apparently facing financial problems, and its continued

operations as a going concern will continue to depend on the support of the government

and lenders," reads the report.

It indicates that the outstanding students' debt for the last one year stands at Sh871,067,587.

The auditor expressed concern over the recoverability of the debts.

The report, however, warned students that Section 8.1 of university's financial regulations

states that the institution shall withhold any and all services, examination results,

conferment of any degree, certificate or award until all outstanding fees are settled.

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## HOSTELS

The auditor also raised concern that the public may not get value for their money for the stalled students hostel at the Lower Kabete campus.

Mr Ouko pointed out that the project was started in 1990 but stalled in 1992, and the contract was mutually terminated in 2000.

At the time of termination, the university owed the contractor Sh50 million, which has remained unpaid to date.

The contractor has since gone to court and claimed the money plus interest and other costs.

A site visit of the project by auditors unveiled cracks in the columns and beams as well as chemical and physical damage.

"Completion of this stalled project would provide secure accommodation for students who are currently seeking accommodation in surrounding areas," reads the audit report.

# APPENDIX XX: UNIVERSITY WORLD NEWS ARTICLE

University hostel plan part of bid to woo foreign students

UNIVERSITY WORLD NEWS By Gilbert Nganga 14 October 2019

The University of Nairobi – Kenya's second-largest by student numbers – is seeking fresh funds to build new student hostels to accommodate both local and international learners.

In a plea to private investors and international financiers, the university said it is undertaking a feasibility study which will be used as a basis for concluding the process of constructing new student hostels.

Acting Vice-Chancellor Professor Isaac Mbeche said decreased funds from the national government and internally generated revenues, especially from self-sponsored students, has left the institution in dire need of new sources of funding.

Speaking in Nairobi at a graduation ceremony in September, Mbeche said inadequate facilities are hurting the university's credentials. "The university has attractive programmes, but our main hurdle is inadequate hostels. Plans are underway to develop new hostels to accommodate both local and international students," he said.

While the acting vice-chancellor did not disclose further details about the hostel projects, *University World News* has established that the university requires up to US\$300 million to build the new hostels. People familiar with the matter said if successful in raising the funds, the university will in the coming three years aggressively seek to recruit international students – those in the East African region and in other parts of the continent – for admissions.

Traditionally, foreign students have favoured private universities, which are known to have better facilities and run targeted campaigns to attract this niche market.

By seeking new funds, the university hopes to stem a biting cash crunch that has left formerly one of the most prestigious institutions of higher learning in East Africa nearly insolvent.

In August 2018, then vice-chancellor Professor Peter Mbithi set out a number of initiatives to cut operational costs and drive up revenues. They included a freeze on the hiring of lecturers and other staff; no replacement of retirees; a substantial cut to the number of staff working beyond the retirement age of 70; and the laying off of contract workers.

The university joins a growing list of institutions in the sector seeking to put up privately-funded infrastructure to meet the demand foraccommodation in both public and private institutions. Last year Kenya said it was seeking more than US\$200 million from foreign and local private investors to help build hostels in three public universities this year. The country's national treasury called for potential bidders to present proposals to add extra bed capacity in Embu University College, Moi University and South Eastern Kenya University.

Early this month, the country's Capital Markets Authority, a regulator, gave the go-ahead to global private equity fund Helios to raise a US\$500 million green bond to fund the construction of hundreds of student hostels. The instrument is to be raised by the firm in conjunction with local giant property developer Acorn.

In the new round of fiscal reforms, the University of Nairobi is also looking at growing the research kitty in line with the modern-day demand for research and innovation. "We endeavour to grow the research kitty by entering into multidisciplinary research collaborations with local and international institutions," Mbeche told journalists in Nairobi.

The university is a major producer of graduates for the Kenyan and East African job market. During its latest graduation ceremony – the first of two held annually – the university produced 4,107 graduates, including 20 PhDs, 429 masters, 3,082 bachelor degrees, 575 diplomas and one postgraduate diploma.