

Project Control Challenges Affecting the Management of Non-Motorized Transport System in Urban Centers in Kenya - A Case of Eldoret Town, Uasin Gishu County

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Abstract: This study sought to establish the challenges in managing Non Motorized Transport system in Kenya with Eldoret town as a case study. Drastic increases in the number of vehicles have strained urban road networks in Kenya, resulting in traffic congestion for most of the day. The high proportion of all motor vehicles in Eldoret town are private cars, where more than 70% only carry one passenger and the use of bicycles is very limited. The road infrastructure within CBD is majorly designed for Motorized Transport giving little attention to Non Motorized Traffic. Non Motorized Transport passengers generate no air pollution, no greenhouse gases, and little noise and air pollution; they are efficient and environmentally sustainable means of making short trips within urban centers. The study was guided by the following research objectives: To; examine how Project governance challenges affect management of NMT, evaluate how Project financial management challenges affect management of NMT, and assess how Project management practices challenges affect management of NMT. Descriptive survey design was explained fully to answer research objectives outlined. It includes quantitative data using self-administered structured questionnaires and qualitative data using interview schedules was collected. Participatory transect walks for two weeks was undertaken to observe and document the modes of NMT system. Photographs were taken to document the existing challenges on the mobility facing the Eldoret town residents. To strengthen illustrations, visual aids such as maps and sketches were used to propose the physical infrastructural intervention that can promote the NMT within Eldoret town. Secondary data were collected from the review of published and unpublished materials, government reports, print media and the internet. A Population of 520 non motorized road users on Nairobi-Malaba Highway, Kapsabet and Iten Roads were targeted. Targeted also are 5 Government officials of Kenya Urban Roads Authority-North Rift Region, Kenya National Highways Authority-North Rift Region and NEMA as well as 10 senior employees in the Department of Physical Planning, County Roads and Transport and County Enforcement unit. Both simple and stratified random sampling technique was employed to collect data from respondents. Pearson's correlation and multiple regression methods will be applied to analyze the data. This study sought to establish the management of NMT (cycling and walking) as a factor in the reduction of traffic congestion and air pollution. The study found that there was a significant relationship between the effects of project control measures on project quality and the effects of project control measures on project budgets ($p=0.000$). It concluded that accomplishment of objectives is very important in the project delivery schedules. This is mainly because a project that meets its intended objectives qualifies it to control systems that are expected to deliver ever-higher levels of effectiveness. The study recommended that the management of the NMT systems and other projects should ensure timely accomplishment of the project objectives through careful monitoring and evaluation of the projects against the set targets and orientation.

Keywords: Non Motorized Transport system, Non Motorized Traffic, Eldoret town, Kenya.

1. INTRODUCTION

1.1 Background of the Study:

Non-Motorized transport system (also known as active transportation and human powered transportation) includes walking and bicycling and variants such as small wheeled (cycle rickshaws, skates, skateboards, push scooters and hand carts) and wheelchair travel. These modes provide both recreation and transportation and are especially important for short trips up to seven kilometers which take up the largest share of trips in urban areas Writing, (2006). NMT offer low cost private transport, emit no pollution, use renewable energy, emphasize use of labor rather than capital for mobility, and are well suited for short trips in most cities regardless of income, offering an alternative to motorized transport for many short trips. Thus, they are appropriate elements in strategies dealing with poverty alleviation, air pollution, management of traffic problems and motorization, and the social and economic dimensions of structural adjustment. NMT have a most important role to play as a complementary mode to public transportation (Wilmink, 2001).

The management of Non Motorized Transport System can be stimulated by a policy package consisting of investment in facilities, awareness campaigns, smart urban planning, improved public transport and disincentives for the use of motorized private vehicles. According to Langen et al (2001) cycling provides a highly improved mobility to its users, 50% more trips and longer trip distance than non-cyclists, at a unit cost. Most cycling is on mixed traffic roads (NMT and MT) with average motor vehicle speeds of 50 Km/hr. with relatively simple and low cost measures. The improved safety on the number of collector roads through speeds bumps and raised pedestrian crossing seems to play a positive role in encouraging more people to cycle and walk within the urban centers. He further stated that in most urban settings, traffic conditions are generally so unsafe for cyclists and pedestrians due to poor road design and lack of proper strategy.

Globally, the “liveability” and productivity of many cities are threatened by deteriorating urban environment and poor planning on Non-Motorized transport. In some of the major capitals in Asia, such as Manila and New Delhi, the situation is getting out of hand this will affect urban economy, health and welfare of the people living in the city (Steg et al, 2005). In 1990’s the Federal Highway Administration (FHWA) of the US government described bicycling and walking as “the forgotten modes” of transportation in urban centers as stated in FHWA (1997). This led many Federal, State, and local agencies to neglect the non-motorized options for years, even as others acknowledged their importance. Sources of funding for NMT projects were limited, with only \$6 million in federal funds spent on pedestrian and bicycle projects in 1990 compared to what was spend in 1980,s. Several studies amongst the Highway statistics commissioned by FHWA of 2008 have confirmed that bicycle and pedestrian crashes accounts for more than 15 percent of traffic fatalities (4 and 11 percent, respectively).

Recognizing the decline in walking and bicycling, and the rise in fatalities, the US Department of Transportation (USDOT) adopted the first national transportation policy to “increase use of bicycling, and encourage planners and engineers to accommodate bicycle and pedestrian needs in designing transportation facilities for urban and suburban areas, and increase pedestrian safety through public information and improved crosswalk design, signaling, school crossings, and sidewalks.” These priorities represented a significant shift in the attention given to bicycling and walking to cover short journey (FHWA, 2012).

In Africa, studies conducted by Langen et al (2001) noted that the effective instruments to improve bicycle mobility and pedestrian safety exists in Africa but lacks proper planning and funds to be achieved. The most immediately applicable interventions are of a small scale, of a spot intervention nature, and do not require large sum of money. Their application is straight forward, and their benefits/cost ratio is high, since their primary function is to repair serious deficiencies in the existing urban roads networks. The second is a large scale interventions that can significantly improve the mobility of most urban inhabitants and the same time reduce their transport cost burden is the large scale provision of basic bicycle access infrastructure and coherent of pedestrians and bicycle routes

NMT modes such as cycling have due recognition in some African cities, however, they have been neglected as an important mode of transport because of heedless urban transport planning and unplanned city developments. This has significantly affected accessibility of city residents in particular those that are living in urban rural fringes but make their livelihood by working in the city centres. In this process, initiatives of improving the urban mobility of the low income people in cities such as Dar-es-Salaam have been tried mainly to integrate the low cost modes (primarily cycling) into the urban transport system (Wilmink, 2001).

In the past few years, considerable achievements have been made in terms of increase of low cost mobility policy and commitment of municipal and local government bodies towards the use of non-motorized transport for urban mobility (Interface for Cycling Expertise [I-CE], 2007). In effect, the modal share of cycling has shown a modest increase from 3% in 2002 to 5% in 2007 in cities such as Dar-es-Salaam where cycling promotional initiatives has been implemented. Despite this marginal growth the modal share remains very low as compared to the enormous potential. Convincingly, Interface for Cycling Expertise [I-CE] (2007) argued that if cycling is done below potential, then there are obviously other physical or psychological barriers, which need to be investigated and removed. Given the potential of cycling in addressing some of the transport problems and its contribution for utilitarian travel, the questions why more people do not cycle and how more people can cycle are justified. Such an investigation related to cycling potential is less or hardly investigated in African cities. Similarly, looking at commuters' travel attitudes and preferences in relation to the proposed Bus Rapid Transit (BRT) system, i.e. in terms of proximity, travel cost and service quality for access, can reveal very strategic information about the role of BRT in providing a viable, sustainable alternative to trip makers in Dar-es-Salaam Yuri, (2004).

The variety of modal mixes of non-motorized vehicles (NMVs) which include bicycles, cycle-rickshaws, and carts now plays a vital role in urban transport in Asian Cities. Linda Baker in 2009 stated that the NMVs used in Asian account between 25 and 80 percent of vehicle trips, this is more than anywhere else in the world. However, the growing motorization, loss of street space for safe NMV use, lack of adequate funding of Non-Motorized Transport (NMT) projects and perception associated by NMT prompted by motorization have threatened the future of NMVs in Asian. The NMT Strategies are to be developed and adopted to slow or reverse this trend.

In Kenya, the rapid population growth and spatial expansion has led to a sharp increase in demand for proper urban transport facilities and social services in many towns all over the country. However, the provision of social services in Kenya been hindered due to high cost of spatial expansion with little or no development planning, while in some cases the failure of the instruments of governance has resulted in a significant wastage of resources or substandard quality of social infrastructure. The huge capital costs, institutional weaknesses and time required to develop high capacity transport systems have prevented the timely implementation on transport sector in urban areas. This has led to a situation where many cities only rely on road-based transport systems, which have serious capacity constraints, negative environmental consequences and other limitations. Consequently, many towns in Kenya are facing serious urban transport problems, including significant levels of traffic congestion, air pollution, high rates of traffic accidents and inadequate access to transport facilities by poor and vulnerable groups, such as people with disabilities Hung, (2002)

Problem Statement:

Many projects keep failing, resulting in loss of millions of money for organizations. This persisting challenge has led many project management professionals to attempt to identify the critical factors that need to be tackled head on to produce a successful project management outcome. There exist literatures on critical success factors for specific industry sectors, or specific country situation, and very little empirical research on critical success factors for specific organizational operational unit, like procurement department, network roll – out department among others.

In Eldoret town NMT projects planned by management and stakeholders hardly take off and when they do they are numerous complains about the same projects. Issues such as quality, delivery schedules and the budgets of these projects are suspect. The most prominent manifestation of this scenario is the persistence of traffic congestion being experienced in the Central Business District (CBD) both during peak hours and anytime of the day and in all the directions. The capacity of the CBD road carriage ways are over-stretched and needs to be designed to ensure the urban mobility is effective, affordable and sustainable to meet the mobility needs of all road users. The purpose of this study is to establish the project control challenges affecting the management of NMT (cycling and walking) as a factor in the reduction of traffic congestion and air pollution.

Objectives:

1. To examine how Project governance challenges affect management of NMT
2. To evaluate how Project financial management challenges affect management of NMT
3. To assess how Project management practices challenges affect management of NMT

Justification of the Study:

In Eldoret, the control of road transport sector is split between the public sector and the private sector. The public sector supplies the transport infrastructure, through the Ministry of Roads and Public Works and the Uasin Gishu County Government. The private sector supplies the bulk of the transport services through passenger vehicles provided by private bus operators, and mini-buses, known locally as matatus. Most urban road infrastructure constructions in Uasin Gishu county focus on motor vehicle traffic and car traffic in particular, with little attention given to the NMT.

This study offered an opportunity to identify challenges and potentials for sustainable transportation planning for NMT (cycling and walking) within the Eldoret town area and its effects in the reduction traffic congestion and air pollution. It will also present the current use level of cycling and walking within the Eldoret town area compared other modes of transport. The major issues for NMT includes firstly, many junction designs and roadway designs are not optimal for pedestrian and cyclist safety; secondly, a network of protected or separated bicycle lanes and pedestrian tracks has not been developed on existing transport systems; thirdly, bicycle parking facilities at key locations such as bus stations, shopping centers, and public facilities are insufficient (Asian Development Bank, 2009).

2. LITERATURE REVIEW

2.1 Introduction:

This chapter covers empirical review on various modes of non motorized transport. It explores the challenges facing non motorized transport and examines the factors that would promote the development of a feasible NMT system. The conceptual framework for the study that will guide in understanding the management of NMT in this study is also illustrated. This chapter also explores research gaps on the management on NMT and critiques existing literature thereof.

2.2 Theoretical Review:

2.2.1 Project Management Issues:

Project control is an essential element of organizations in determining the quality of any work. Control is necessary to ensure physical security, to safeguard assets, and ensure compliance with policies and regulations (Starts 2001). Generally, the project control system is viewed as “the policies and procedures used to provide reasonable assurance that the objectives of an enterprise will be accomplished” (Thomas, 2008)

According to the International Organization of Management there are three criteria that must be fulfilled for project controls to be effective in producing quality work. The controls must be appropriate, must function consistently as planned without being bypassed in difficult situations, and must be cost effective - that is the benefits of the control should outweigh the costs of implementing the control (USGAO, 2002)

Project control activities are described as: “the policies, procedures, techniques, and mechanisms that help ensure that management’s directives to mitigate risks identified during the risk assessment process are carried out”. Control activities are necessary to ensure that actions are taken to address the risks of an organization (Edmonds, 2004). There is a diverse range of computerized and manual control activities that can be implemented at any and/or all levels of an organization, (Edmonds, 2004)

Information and communications are considered the timely and reliable recording and reporting of relevant information relating to internal and external events. Operational and financial information is necessary for managers to determine if they are meeting performance plans and goals for accountability (Thomas, 2008). Adequate and comprehensive information is essential for effective organizational decision making regarding the pursuit of organizational objectives.

Finally, monitoring is a standard of project control because of the requirement to assess the quality of performance (Thomas, 2008). Without active monitoring, including internal auditing, organizations will not have adequate information to assess the effectiveness of the project controls and their ability to manage organizational risk.

Throughout the literature, there are a number of recognized characteristics of a good system of control. Competent, reliable personnel who possess integrity: Without quality employees, who understand and carry out the control activities, any control system is bound to fail. Training programs are an essential element of a system of controls and contribute to maintaining employee competence.

Clearly defined areas of authority and responsibility: Clearly defined areas of authority and responsibility not only ensure that employees know what is expected of them, but also helps determine where assistance or training is needed when errors or abuse is detected. Further it is likely that employees will exercise maximum caution when they are held accountable for their actions (Starts, 2001). Proper authorization procedures: Procedures must be established to ensure that all transactions are initiated or approved by a person who has the requisite authority included should be a current list of employees with the authority to purchase, and their dollar limits.

Adequate documentation and records: The operation of effective controls should result in the creation or revision of a document. Each transaction should have adequate documentation to allow for proper payment, and recording in accounts. *Segregation of incompatible duties*: Duties should be separated such that no one person has custody of assets and also maintains the records of those assets and no one person has custody of assets and also authorizes transactions relating to those assets (Porter, 2006).

Independent checks on performance: Even trained and competent employees are subject to making mistakes. Independent checks on performance are one element of the project control structure that protects against user errors (Thomas, 2008). Physical safeguarding of assets and records: Assets and records need to be physically safeguarded against theft and tampering. Restricted access combined with records of serial numbers are particularly important with the books as once they are lost or stolen, they cannot be controlled.

2.2.2 Financial Management Issues:

Budgets were first introduced in the 1920s as a tool to manage costs and cash flows in large industrial organizations. Johnson (2006) states that it was during the 1960s that companies began to use budgets to dictate what people needed to do. In the 1970s performance improvement was based on meeting financial targets rather than effectiveness companies then faced problems in the 1980s and 1990s when they were not willing to spend money on innovations in order to stay with the rigid budgets, they were no longer concerned about how customers were being treated, only meeting sales targets became essential, (Johnson, 2006).

Budgeting in business organizations which were formally associated with the advent of industrial capitalism during the industrial revolution of the eighteenth century, presented a challenge for industrial management Glautier (2007) states that “the emergence of scientific management philosophy with its emphasis on detailed info’ as a basis for taking decision provided a tremendous impetus for the development of management accounting and indeed budgeting techniques, (Glautier, 2007).

However, budgeting at the early stage of its development was concerned with preparing and presenting credible information to legitimize accountability and to permit correct performance evaluation and consequently, rewards. Over the years, the function and focus of budgeting has shifted considerably and business organization become more complex and their environment becomes dynamic coupled with the emergence trend, the term budget and budgeting have been differently defined and examined by various scholars in several ways, (Glautier, 2007).

Omolehinwa (2009) defined a budget as a plan of dominant individuals in an organization expressed in monetary terms and subject to the constraints imposed by the participants and the environments, indicating how the available resources may be utilized, to achieve whatever the dominant individuals agreed to be the organization’s priorities. The impressive thing about this definition is that, it recognizes the constraint imposed on budget by other participants who are to ensure that the objectives and targets enunciated in the budget are achieved. Pandey (2003) defines budget as a short term financial plan. It is an action plan to guide managers in achieving the objectives of the firm. Lucey (2003) in his formal definition, defines budget as “a qualitative statement, for a defined period of time, which may include planned revenue, expenses, assets, liabilities and cash flows. A budget provides a focus for the organization, aids the co-ordination European Journal of Economics, Finance And Administrative Sciences - Issue 12 (2008) of activities and facilitates control whereas control is generally exercised through the comparison of actual costs with a flexible budget, (Kenneth, 2008).

The process of preparing and agreeing budgets is a means of translating the overall objectives of the organization into detailed, feasible plans of action” Welsh (2003) opines that budgeting is the only comprehensive approach to managing so far developed that, if utilized with sophistication and good judgment fully recognizes the dominant role of the manager

and provides a framework for implementing such fundamental aspects of scientific management as management by objectives, effective communication, participative management, dynamic control, continuous feedback, responsibility accounting management by exception and management flexibility, (Welsh, 2003).

Budgeting, at both management level and operation level looks at the future and lays down what has to be achieved. Control checks whether the plans are being realized and put into effect corrective measures, where deviation or short-fall is occurring (Egan, 2007) Egan emphasized that without effective controls, an enterprise will be at the mercy of internal and external forces who can disrupt its efficiency, and be unaware, such enterprise will not be able to combat such forces. When a budgeting and control system is in use, budgets are established which set out in financial terms, the responsibility of managers in relation to the requirement of the overall policy of the company, (Egan, 2007).

Continuous comparison is made between the actual and budgeted results, which is intended to either secure, thorough action of managers, the objectives of policy or to even provide a basis for policy revision. Morgan (2007) opines that the budget had grown beyond a financial tool. It is above all managerial tool, in essence, it is the best tool for making sure that key resources, especially performance resource are assigned to priorities and to results. It is a tool that enables the manager to know when to review and revise plans, either because results are different from expectation or due to environmental, economic conditions, market conditions or technologies change, which no longer correspond to the assumptions of the budget. Morgan emphasized that budgets should be used as a tool for planning and control, (Morgan, 2007).

According to Hudson and Andrew (2006), control involves the making of decisions based on relevant information which leads to plans and actions that improve the utilization of the productive assets and services available to organizations management. Effective control is said to be based on standards with which actual performance can be compared. If there are no standards, then there can be no effective measure of attainment. Hudson and Andrew identified and elaborated on five categories into which standards fall, they are: quantity, quality, time, complaint and value.

Most developed countries keep registers for their transactions at each stage of the expenditure cycle, or at least at the obligation stage and the payment stage. This, whatever their accounting system or budget execution procedures. Many developing countries keep similar registers, either at the spending agency level or through centralized control procedures. However, in both cases, budgetary accounting presents inadequacies. On the one hand, when registers are kept by agencies, information is not systematically available at the level of the Ministry of Finance, which would need it to supervise budget implementation. In practice, in some of these countries budgetary accounting covers only payments (Hudson, 2006). On the other hand, where control procedures are centralized, sometimes information on budget execution concerns administrative steps that do not correspond to the stages in the expenditure cycle.

Such "administrative" information is useless for analyzing budget implementation. In FSU countries, spending agencies keep books on an "accrual" basis (although not in conformity with generally accepted accounting principles). Such arrangements, despite their advantages, created difficulties in the timely monitoring of payments according to the budget classification. Therefore, in these countries efforts are currently focused on the implementation of a system of monitoring payments.

The benefits of monitoring either obligations or expenditures at the verification stage or the payments stage are sometimes debated. Actually, information is needed at each stage of the expenditure cycle and can be easily compiled, thanks to developments in electronic technology. Adequate recording of appropriations, revisions in appropriations, transfers between appropriations, apportionment, etc. is a prerequisite for good management. In several developing countries, it is difficult to know exactly which budget is being implemented, because decisions concerning allocations and reallocations of appropriations are contained in various circulars and are not gathered into a single document (Welsh, 2003). The budget implementation plan should be updated regularly to take into account decisions concerning appropriations.

Some countries that have non-pure cash accounting system do not report payments along the budget classifications (Stewart, 2007). Actually, expenditures should be recorded according to the budget classification at each stage of the expenditure cycle, to identify sector or program imbalances at that stage. A comprehensive and timely monitoring of budget transactions could be ensured with adequate information systems recording transactions at each stage of the expenditure cycle, and appropriate electronic connections between the "Ministry of Finance" and line ministries. Basic financial controls can be automated and made when registering the transactions. To some extent, differences between

budget executions systems based on external ex-ante control and system based on project controls are dimming with modern technologies. Nevertheless, implementing an information system is not a panacea. It is costly, but overall it requires appropriate budget accounting procedures that do not exist in many developing countries. Computers do not make up for poor governance and systemic lack of compliance. In such situations, they can only increase the number of non-regular transactions and off-budget procedures aiming at overcoming computerized controls (Morgan 2007).

2.2.3 Effects of Project Management Practices:

Control systems are expected to deliver ever-higher levels of effectiveness. Similarly, companies increasingly need to demonstrate what action they have taken. The effectiveness, and especially the efficiency, of project control systems and the compliance processes that build on them have not kept pace with these more stringent requirements (Stewart, 2007). Sustained improvements in efficiency can only be achieved by deploying a holistic, consistent method and implementing a central platform to support a project control system where business processes form the common basis for all controls needed to comply with the various laws and regulations.

According to Locker (2002) before 1980, businesses were primarily concerned with the production, marketing, delivery and management of physical goods. By 1955 the service sector accounted for just over 50 per cent of the UK's gross domestic product, overtaking the product-based sectors. Yet it took another 20 years before the operations management of the day started to apply their knowledge and skills to service operations. Operations management in 1970 was known as production management (Chase, 2003). It had developed out of an even more focused view of operations, factory management.

On the other hand Adam (2002) observed that production and delivery management was concerned with applying method study techniques, production planning and control, capacity management and materials management, for example in production settings, with examples coming from a wider base than "pure" manufacturing and including examples such as distribution, transportation, hospitals, libraries and publishers. The service delivery appears to have gathered greater momentum in the field of marketing. Johnson's dissertation (2000) was the first to ask the question "Are goods and services really different?" (Brown, 2004). Judd (2000) proposed a typology of service and Rathmell (1966) encouraged marketers to devote more attention to the service sector.

Public accountability pertains to the obligations of persons or entities entrusted with public resources to be answerable for the fiscal, managerial and program responsibilities that have been conferred on them, and to report to those that have conferred these responsibilities. From this definition of public accountability it is clear that the public entities that utilize public resources have an obligation to account for the way these resources are allocated, used and the results these spending have achieved. In other words, the main objectives of all public accountability initiatives are to ensure that public money is spent most economically and efficiently, that there is minimum of wastage or theft and finally that public actually benefit from public finance, (Pondey, 2003).

In response to these accountability requirements of public sector spending, most governments have put in place various expenditure tracking and reporting systems and of these, the most important one happens to be the audit. The Supreme Audit Institutions (SAI) has been set up in most countries to conduct regular audit of public expenditure and report, where such arrangements exist, to the Public Accounts Committee (PAC) of the parliament for review and scrutiny of the veracity of such expenditure. The whole idea of SAI audit and reporting is to detect anomalies (if any) and by doing so, ensure cost-efficiency and integrity in public expenditure. Indirectly, the objective of SAI audit is also to curb malfeasance in public expenditure and thus ensure corruption free and a results-based outcome of public finance (Kaplan, 2006).

However, in recent times it has been observed that in spite of increased budget of SAIs across the world, the impact on corruption control and service delivery tend to remain somewhat uneven. Based on the results of primary research done at the United Nations (UN) this paper argues that the capacity of audit to curb corruption and improve service delivery depends on a range of issues, some of which are outside the control of the SAIs themselves and these involve the overall socio-political governance environment within which audits are undertaken. Regardless of how well budgeted an SAI is and however technically competent its auditors are an unhelpful socio-political governance arrangement can easily stymie its capacity to access required information, conduct objective analysis, report truthfully and most importantly, enforce compliance, (Lockyer, 1992).

2.2.4 Theoretical Framework:

The Theory of Sustainable Transport System

Yuri (2002) argues that a sustainable transport system must meet the mobility and accessibility needs of people by providing safe and environmentally friendly modes of transportation. Sustainability in transport sector is a complex and difficult task in the mega-cities of developing countries because the needs of people belonging to various income groups are not only different, but also often conflicting in nature. For example, if a large section of the population cannot afford to use motorized transport – private vehicles or public buses – they have to either walk to their place of work or use bicycles.

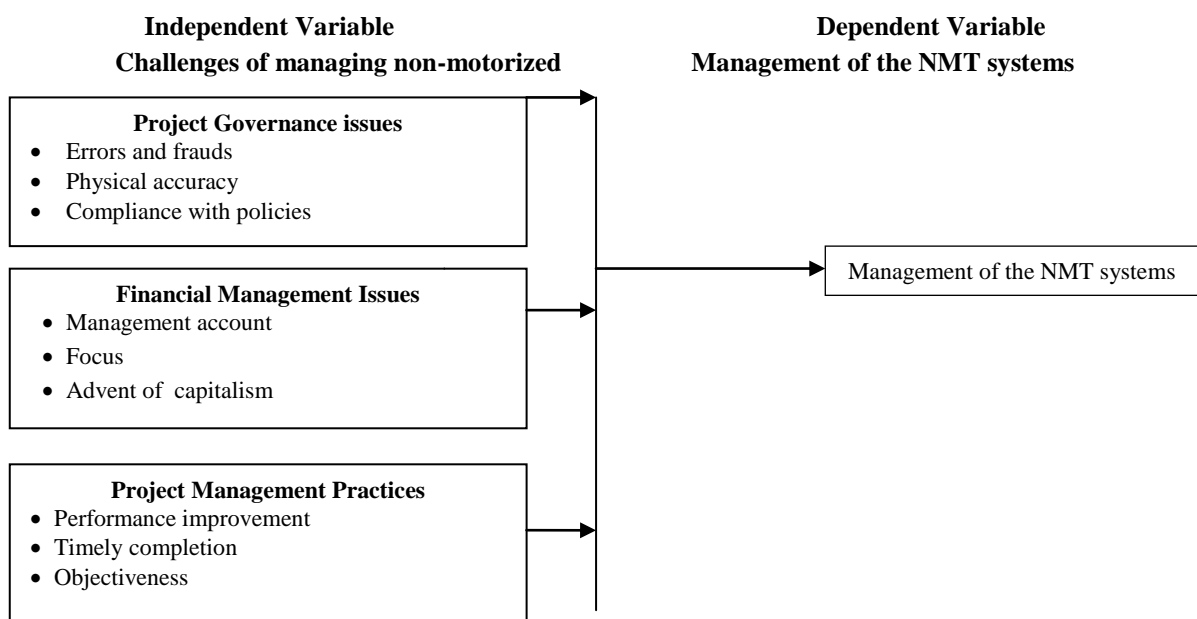
Providing a safe infrastructure for cyclists and pedestrians means either physically segregating road space for cyclists and pedestrians from motorized traffic, or, if that is not possible, reducing the speed of motorized traffic. Both measures imply restricting the mobility of car users to by promoting the mobility of pedestrians and bicycle users amongst others to achieve the aim.

Todd (2003) acknowledged that accessibility is not just the ability to overcome space but the ease with which one reaches destination merit for its own sake. Whilst many journeys are necessary and many of them are too far for walking or cycling, they need to be made with mechanical transport. So very often, in defining the function of transport, the view that transport exists to serve the people's needs must be sustainable. The economic, the environmental and the socio-cultural determinants are key pillars to sustainable development that interact to produce the complexity of weighing costs and beneficiaries.

In relation to this study, the theory of sustainable development provides for the establishment of a transport system which allows the basic access of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations. It must also be affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy. More so it also limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.”

2.2.5 Conceptual framework:

The interplay between the variables of this study is illustrated in figure 2.1 below



Source: Researchers Data, (2015)

Figure 2.1 Conceptual framework

2.3 Critique of the existing literature relevant to the study:

The current body of knowledge on NMT does not provide for holistic approaches of tackling the problems facing the cities in the developing world. Existing literature has impacted very little on the development of policies across a range of issues that must be developed and executed in an integrated fashion to develop a viable NMT. The force of the concept of sustainable development is that it is based on just integration across environmental, social and economic dimensions as was highlighted by Walter, H. in 2010. This has been argued strongly by the environmental movement for some time but is also supported by those with a more social or economic interest, and in particular those committed to the reduction of poverty are recognizing that environmental issues and poverty must be tackled together. The global theoretical analysis has sometimes been misused to castigate entire modes of transport as inefficient and worthy of being suppressed, not recognizing the complementary function of different transport modes (Adam, 2002). It is against this background that this study sought to investigate the potential viability of Non Motorized Transport system in Kenya with Eldoret town as a case study

2.4 Summary:

In summary, understanding the management of NMT with regards to the various modes of non motorized transport, the challenges facing non motorized transport and examining the factors that would promote the development of a feasible NMT system provides for the establishment of a transport system which allows the basic access of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations.

2.5 Research gaps:

This study may offer an opportunity to identify the management of NMT (cycling and walking) within the Eldoret town area and its effects in the reduction of traffic congestion and air pollution which will go a long way in developing options tailored towards encouraging NMT and its promotion within the framework of sustainable transport development due to its health, transportation, economic, quality of life and environmental benefits.

3. METHODOLOGY

The study applied a descriptive survey design where research characteristics will be explained fully to answer research objectives outlined. The design was adopted because of its appropriateness in describing the current situation of the phenomenon, flexibility and its ability to explore management of different variables. Mugenda and Mugenda (2003), define population as an entire group of individuals, events or objects having common observable characteristics. The study targeted a total of 520 non motorized road users of the Nairobi-Malaba Highway, Kapsabet and Iten roads which passes through the heart of the Central Business District in Eldoret Town of Uasin Gishu County. In this case the Nairobi-Malaba Highway Kapsabet and Iten roads are hereby treated as a traffic analysis zone. The case study area was chosen because it is compact, ever congested (both with NMT and MT), high number of public transport, and high concentration of small and medium business activity.

4. RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction:

This chapter sought to analyze the data collected relating to the specific objectives of the study. The reliability results are presented together with the data, interpretations and the discussion of the findings of the study.

4.1 Background information of the respondents:

The study sought to determine the background information of the respondents. The study sought to determine the gender, age, level of education and the type of occupation. The results were as illustrated in table 4.1

Table 4.1 Background Information of the Respondents

Gender	Frequency	Percent
Male	148	67.27
Female	72	32.73
Total	220	100
Age		
10-20	6	2.73
21-30	76	34.55
31-40	46	20.91
41-50	92	41.82
Total	220	100
Level of education		
Diploma	20	9.09
Bachelor	117	53.18
Masters	83	37.73
Total	220	100
Occupation		
Formal employment	64	29.09
Self employed	95	45
Farmers	42	20
Manual labourer	29	5.91
Total	220	100

The findings on the age of the respondents indicated that majority of the respondents 67.27% were male while 32.73% were female. This implies that the study collected data from both genders.

The findings on the age bracket of the respondents indicated that majority of the respondents 41.81% were of age between 41-50years, 34.55% were of age between 21-30 years, 20.91% were of age between 31-40years and 2.73% were of age between 10-20 years. This implies that study collected data from aged respondents who were knowledgeable and understood what non motorized system entailed.

The findings of the study on the level of education of the respondents indicated that 53.18% had bachelor's degree, 37.73% masters and 9.09% had diploma. These findings imply that the respondents were learned people and understood what the study required of them.

The findings of the study on the type of occupation of the respondents indicated that 45% were self employed, 29.09% were formally employed, 20% were farmers and 5.91% were manual laborers. These findings indicate that the study collected responses from all types of occupation represented in the study and therefore were in a position to give informed judgment to the study.

4.2 Descriptive Analysis of the Specific Information:

4.2.1 Project Governance Issues:

The study sought to measure the effect of project control measure on project quality. The responses were recorded and grouped separately according to Table 4.2.

Table 4.2 Project Governance Issues

		S	D	U	A	SA	TOTAL	MEAN	%Mean	SD
Ensure compliance with policies and regulations	F	0	2	40	69	109	220	4.3	86	0.79
	%	0	0.9	18.2	31.4	49.5	100			
Detect errors and frauds	F	6	9	46	63	96	220	4.06	81.2	1.03
	%	2.7	4.1	20.9	28.6	43.6	100			
Timely accomplishment of project objectives	F	6	4	51	64	95	220	4.08	81.6	0.99
	%	2.7	1.8	23.2	29.1	43.2	100			
Ensure physical accuracy	F	0	7	40	87	86	220	4.15	83	0.83
	%	0	3.2	18.2	39.5	39.1	100			

The findings on the effect of project control measures on project quality indicate that 86.0% (mean=4.3) of the responses were of the opinion that ensuring compliance with policies and regulations had an effect on project quality, 83% (mean = 4.15) of the responses were of the opinion that ensuring physical accuracy had the most effect on project quality, 81.6% (mean= 4.08) of the responses were of the opinion that timely accomplishments of project objectives had the most effect on project quality and 81.2% (4.06) of the responses were of the opinion that detecting errors and frauds had the most effect on project quality.

These findings indicated that majority of the responses were of the opinion that ensuring compliance with policies and regulations had the most effect on project quality. This could be because following policies and regulations in project implementation enhances the quality of the project. This may be because the policies and regulations give guidelines and requirements on the level of quality to be attained by each project. Policies and regulations also provide a frame work in which projects can be evaluated and controlled against set objectives.

Findings of a study by Edmonds (2004) concur with these findings that compliance with policies and regulations affects project quality. The project control system should be viewed as the policies and procedures used to provide reasonable assurance that the objectives of a project will be accomplished. Project controls should be effective in producing quality work by considering policies and regulations governing the activities of the project. The controls must be appropriate, must function consistently as planned without being bypassed in difficult situations and must be cost effective. Project control activities are described as: the policies, procedures, techniques, and mechanisms that help ensure that management's directives to mitigate risks identified during the risk assessment process are carried out. Control activities are necessary to ensure that actions are taken to address the risks of an organization. There is a diverse range of computerized and manual control activities that can be implemented at any and/or all levels of an organization

Findings of the study by Hung (2002) agree with the findings that ensuring compliance with policies and regulations affect project quality. The study noted that management of projects in the construction industry is constantly challenged, in particular the implementation of processes and the application of the project management knowledge base in complex projects. These challenges require a non-linear approach, a transformation from the control to the behavioural paradigm and a better understanding of how complexity in projects can be managed. Interconnections between the various project parties, from individuals to companies, have always been identified as an area which requires attention. Indeed, project management sub-processes that have to consider interconnections, such as selection of project team members, structuring the project teams as well as the management style adopted, are either not implemented or the execution remains subjective, despite the existence of appropriate techniques. Considering that complexity occurs in non-linear systems and interconnections, the lack of appropriate means affects the implementation of such sub-processes and consequently performance. Investigating the complexity of the interconnections for the two sub-processes and the management style adopted and enabling the management of its effects must enhance implementation and thus project outcome. Therefore, the development of a framework is proposed which, by using existing knowledge and complexity characteristics, will allow project management practitioners the multiple implementation of actions for the management of the effects of the complexity of interconnections on construction projects through the two sub-processes and the management style adopted.

Project control measures in order to enhance project quality should comply with set policies and regulations. This will enable the project be managed within the framework. Compliance with policies and regulations helps the project work within the acceptable criteria.

4.2.2 Project Financial Management Issues:

The study sought to establish the effect of project control measures on the projects budgets. The results were illustrated in table 4.3

Table 4.3 Project Financial Management Issues

		SD	D	U	A	SA	TOTAL	MEAN	%Mean	SD
Performance improvement	F	0	2	87	67	64	220	3.88	77.6	0.84
	%	0	0.9	39.5	30.5	29.1	100			
Develop management account	F	8	3	100	51	58	220	3.67	73.4	1.00
	%	3.6	1.4	45.5	23.2	26.4	100			
Provide focus on the organization	F	4	8	86	54	68	220	3.79	75.8	0.98
	%	1.8	3.6	39.1	24.5	30.9	100			
Advent of industrial capitalism	F	3	76	83	58	220	220	3.89	77.8	0.81
	%	1.4	34.5	37.7	26.4	100	100			

The findings on the effect of project control measures on project budgets indicate that 77.8% (mean=3.89) of the responses were of the opinion that advent of industrial capitalism had an effect on project budget, 77.6% (mean = 3.88) of the responses were of the opinion that physical improvement had the most effect on project budget, 75.8% (mean= 3.79) of the responses were of the opinion that providing focus on the organization had the most effect on project budget and 73.4% (3.67) of the responses were of the opinion that developing a management account had the most effect on project budget.

These findings indicated that majority of the responses were of the opinion that advent of industrial capitalism had the most effect on project budgets. This implies that advent of capitalism emphasizes on information on budgeting techniques which enhances correct performance evaluation of projects and consequently leads to better rewards.

The findings from a study by Brien (2005) agrees with these findings that advent of capitalism has an effect on project budget. Some construction projects encounter cost overrun, delay on completion time or poor workmanship upon completion. Cost overrun, poor quality workmanship and delay of construction projects require an in-depth investigation to improve the outputs of the construction industry. It is not uncommon to see construction projects failing to achieve their mission of creating facilities within the specified cost and time. Hardly few projects get completed on time and within budget since construction projects are exposed to uncertain environments because of such factors as construction complexity; presence of various interest groups such as the project owners, end users, consultants, contractors, financiers; materials, equipment, project funding; climatic environment; the economic and political environment and statutory regulations.

The successful execution of construction projects, keeping them within estimated cost and the prescribed schedules, primarily depends on the existence of an efficient construction sector capable of sustained growth and development in order to cope with the requirements of social and economic development and to utilize the latest technology in planning and execution. According to the study adequate planning at the early stages of a project is crucial for minimizing delays and cost overruns. Cost overrun is common in infrastructure and building construction projects. Researches on construction projects in some developing countries indicate that by the time a project is completed, the actual cost exceeds the original contract price by about 30 %.

These findings agree with those a study by Egan (2007) that advent of capitalism affects projects budget. The study noted that control involves the making of decisions based on relevant information which leads to plans and actions that improve the utilization of the productive assets and services available to organizations management. Effective control is said to be based on standards with which actual performance can be compared. If there are no standards, then there can be no effective measure of attainment. The study identified and elaborated on five categories into which standards fall, they are: quantity, quality, time, complaint and value. Budgeting in an organization which is formally associated with the advent of industrial capitalism for the industrial revolution of the eighteenth century, which presented a challenge for industrial management

Expenditures should be recorded according to the budget classification at each stage of the expenditure cycle, to identify sector or program imbalances at that stage. A comprehensive and timely monitoring of budget transactions could be ensured with adequate information systems recording transactions at each stage of the expenditure cycle. Basic financial controls can be automated and made when registering the transactions. To some extent, differences between budget executions systems based on external ex-ante control and system based on project controls are dimming with modern technologies.

4.2.3 Project Management Practices:

The study also sought to determine the effect of project control measures on project quality delivery schedules of projects. The results were analyzed and illustrated in the table 4.4

Table 4.4 Project Management Practices

		SD	D	U	A	SA	TOTAL	MEAN	%MEAN	SD
Ensure compliance	F	0	4	37	98	81	220	4.16	83.2	0.97
	%	0	1.8	16.8	44.5	36.8	100			
Timely completion of the given work	F	6	7	56	56	95	220	4.03	80.6	1.03
	%	2.7	3.2	25.5	25.5	43.2	100			
Accomplishment of objectives	F		6	51	58	105	220	4.17	83.4	0.76
	%		2.7	23.2	26.4	47.7	100			

The findings on the effect of project control measures on project quality delivery schedules indicated that 83.4% (mean=4.17) of the responses were of the opinion accomplishment of the objectives had an effect on project quality delivery schedules, 83.2% (mean =4.16) of the responses were of the opinion that ensuring compliance had the most effect on project quality delivery schedules while 80.6% (mean=4.03) of the responses were of the opinion that timely completion of the given work had the most effect on project quality delivery schedules of projects.

These findings indicated that majority of the responses were of the opinion that accomplishment of objectives had the most effect on project quality delivery schedules. This implies that projects that accomplish their intended objectives are quality projects. This could be because objectives provide the time frame and the intended outcome of the projects. Accomplishment of objectives could also be a measure of project quality delivery schedules since objectives measure the end result of the project and could be used as the quality measure of projects. Projects that accomplishment their intended objectives could be rated as quality delivering scheduled projects.

Findings of another study by Momani (2002) agree with these findings that accomplishment of objectives affects project quality delivery schedules. The study stated that the success of any project is related to two important features, which are service quality in construction delivered by contractors and the project owner's expectations. Managing the construction so that all the participants perceive equity of benefits can be crucial to project success. It is obtained that the complete lack of attention devoted to owner's satisfaction contributes to poor performance. Declining market shares, low efficiency and productivity, and the rapid construction cost escalation also lead to poor performance. The study remarked that the success of construction projects depends up on technology, process, people, procurement, legal issues, and knowledge management which must be considered equally.

Project success is the completion of a project within acceptable time, cost and quality and achieving client's satisfaction. Project success can be achieved through the good performance of indicators of the project. So, project success and performance refers to performance of indicators such as accomplishment of objectives. It is obtained that project owners play the most important role in determining project success through accomplishment of objectives.

4.3 Inferential statistics:

4.3.1 Correlation analysis:

The study sought to correlate the independent variables to assess the suitability of the selected independent variables which would then be related to the dependent variable.

Table 4.5 Correlation results of the independent variables

		Correlations		
Project governance issues	Pearson Correlation	1	0.302	0.658
	Sig. (2-tailed)		0.000	0.000
	N	220	220	220
Project Financial management issues	Pearson Correlation	0.302	1	0.458
	Sig. (2-tailed)	0.000		0.000
	N	220	220	220
Project management practices	Pearson Correlation	0.658	0.458	1
	Sig. (2-tailed)	0.000	0.000	
	N	220	220	220

****.** Correlation is significant at the 0.01 level (2-tailed).

The study findings indicated that there was a significant relationship between the effects of project governance on project quality and the effects of project control measures on project financial management ($p=0.000$) and the nature of the relationship was positive and strong (Pearson = 0.302). This can interpreted to mean that the two the independent variables were significantly correlated and had a significant relationship. This implies that all the variables affected each other. This could be attributed to the fact that effective project control measures could help meets the budgets of the projects. Project quality controls could also enhance projects ability to prevent malpractices which therefore leads to saving of funds. Project financial management issues also have an effect on the level of project quality in that projects well budgeted for are likely to be quality projects.

The study findings indicated that there was a significant relationship between the effects of project governance issues and the effects of project management practises ($p=0.000$) and the nature of the relationship was positive and strong (Pearson = 0.658). This can interpreted to mean that the two the independent variables were significantly correlated and had a significant relationship. This implies that all the variables affected each other. This could be attributed to the fact that quality controls of a project could help meet the delivery schedules because when the project is of required quality it will achieve the intended schedules without interference. Delivery schedules also have an implication on the quality of projects in that projects allocated a short delivery schedule tend be of poor quality. Control measures on the delivery schedules may also affect the quality controls of the project such compliance with policies and regulations.

The study findings indicated that there was a significant relationship between effects of project financial measures and the project management practices ($p=0.000$) and the nature of the relationship was positive and strong (Pearson = 0.458). This can interpreted to mean that the independent variables were significantly correlated and had a significant relationship. This could be interpreted to mean project budgets have an impact on delivery quality of these projects. This may be because project budgets may determine the outcome of a project in that well budgeted for projects deliver the best results due to lack of interruptions in the cycles that is its initiation, implementation and evaluation since the resources allotted to it are adequate.

This is supported by Brien (2005) that organizations initiate projects with the best of intentions to succeed. But due to complex nature of project activities, and the challenges associated with managing a project restriction or constraints of budget, quality and time are also unique and ever changing. The management of project constraints explains, if not fully, why many projects fail. Like any other organizational endeavors, projects are part of a wider super-system of an organization and are also influenced by both internal and external forces in a super system. Some external forces like government regulations, environmental forces, society, pressure groups, financial markets, labor markets, technology, customer influence, shareholder etc. are very dynamic and much erratic. Internal forces also like changes in operating processes, management style, resources allocation, skills, internal conflicts etc. are becoming more adaptive to the external environment. Hence, managing projects in this mix of dynamic factors requires a lot from project managers and also show how easy it is for a project to fail

4.3.2 Regression analysis:

The study sought to compute the regression model for the study in an effort to understand the effect of project control challenges on the Non-Motorized system. The study findings were presented in the table 4.7

Table 4.6 Regression model on project control challenges

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	0.545	0.927	0.928	0.512	30.368	0.000
a. Predictors: (Constant), C, B, A						
Coefficients						
Model	Unstandardized Coefficients		Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	1.760	0.398		4.418	0.000
	Project governance	0.291	0.082	0.288	3.559	0.000
	Project financial management	0.000	0.065	-0.132	-0.005	0.996
	Project management practices	0.288	0.072	0.310	4.005	0.000
a. Dependent Variable: management of Non-Motorized system						

The study findings indicated that 92.7% of the data that was used in the regression model could be accounted for in the regression model (R Square = 0.927) while the comparison of the model was significant to imply that the model had been correctly computed ($p=0.000$)

The coefficients in the regression equation were used to compute the regression equation as follows;

$$Y = 1.760 + 0.288 (\text{project governance}) - 0.132 (\text{project budget}) - 0.037 (\text{project quality delivery schedules}) + 0.398(\text{Error Rate})$$

These results were interpreted to mean project quality delivery schedules was the most important variable in management of Non-motorized system contributing about 31.0%. Project quality was also important in the management of non motorized contributing 28.8%. project budget had a negative impact with 13.2%.

These findings imply that project quality delivery schedules makes management of a project run more effectively and efficiently. Every project is intended to deliver certain outcomes. These outcomes are good criteria for measuring and assessing project quality. A project is quality if it delivers the expected outcomes within the schedules.

This is supported by Love et al. (2004) project delivery schedules approaches are flexible, allowing for change and improvement in development work. Due to late contractor involvement, design-bid-build encounters more problems and involves more disputes than design-build and construction management deliveries. Design-bid-build inherently excludes the contractors, experts in constructability practices, from participation until the design is complete. By bringing contractors into the project earlier, design-bid-build can add construction expertise in design. This creates partnering between the designer and contractor similar to what is inherent in design-build or construction management. Expanding the partnership between the designer and contractor is necessary for constructability practices. Including community owners in these early decisions- making phases also incorporates local knowledge into design and builds community ownership of the project.

Construction managers provide valuable construction expertise during design in the construction management delivery system. Acting in this role, development agencies need to involve construction personnel in design. Development agencies can either staff a contractor or hire contractors during the design to gain construction knowledge early. Involving potential contractors in the detailed design phase also provides continuity of construction personnel between the design and construction. If the contractor is involved early he can express his needs and learn those of the other participants. Through partnering, the parties can understand each other's needs and common goals can be created. However, the owner's goal of a cost-effective project may conflict with the contractor's profit motive. Incorporating these changes into typical project delivery is a viable way to address constructability issues. The changes are small and affordable, effectively improving sustainability.

4.4 Discussion of the interview schedule:

According to the management the most common types of non motorized systems are cycling and walking. They are the most commonly used because of their flexibility, cheap and that they are not prone to challenges of traffic congestion. They can easily penetrate narrow paths and that their maintenance cost is low compared to the motorized systems.

The major challenges facing the non motorized systems are sometimes impassable routes due to adverse weather conditions, narrow pathways causing congestions, insecurity for instance they could be attacked and also these systems are prone mainly fatigue since they rely heavily on human energy.

Some of the factors that would promote the development of a feasible non motorized system are setting of separate paths for non motorized systems, establishing of designated crossing sites, establish of road signs particularly those targeting these systems and expansion of streets and existing pathways to accommodate the increasing number of the systems.

The government can promote development of a feasible NMT system through ensuring proper implementation of policies regarding these systems, proper planning of foot paths and the main roads used by the motorized means and tightening of security within the town to ensure the safety of the systems.

According the management of the NMT systems their conditions are quite impressive though if nothing is done could change to worse. The foot paths are poor because due to increasing number of passersby, they are becoming impassable and the conditions are deteriorating. The cycle tracks are good despite the fact that they are threatened by the increasing number of the motorized systems.

Some of the major sustainable transportation planning challenges of NMT systems within the CBD is; most foot paths pass through tall buildings which cannot accommodate transport of goods, these systems do not accommodate heavy loads and distances covered by these systems is also limited. The potential of NMT system is that they can tolerate road bends; suitable for short distances and that they are widely available. They can therefore be utilized for short distances and reduce time wasted on traffic congestion. The key players in the transport sector are Kenya Urban Roads Authority, Kenya National Highways Authority, the government and all the road users. They can promote the NMT system by creating awareness on use and safety, improve and maintenance infrastructure, enforcing rules and regulations and implement policies aimed at improving the NMT system.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Findings:

These findings indicated that majority of the responses 86% (mean=4.3) were of the opinion that ensuring compliance with policies and regulations had the most effect on project quality. This could be because following policies and regulations in project implementation enhances the quality of the project. These findings indicated that majority of the responses 77.8% (mean=3.89) were of the opinion that advent of industrial capitalism had the most effect on project budgets. This implies that advent of capitalism emphasizes on information on budgeting techniques which enhances correct performance evaluation of projects and consequently leads to better rewards.

These findings indicated that majority of the responses 83.4% (mean= 4.17) were of the opinion that accomplishment of objectives had the most effect on project quality delivery schedules. This implied that projects that accomplish their intended objectives are quality projects. This could be because objectives provide the time frame and the intended outcome of the projects.

The study findings indicated that there was a significant relationship between the effects of project control measures on project quality and the effects of project control measures on project budgets ($p=0.000$) and the nature of the relationship was positive and strong (Pearson = 0.302). The study findings indicated that there was a significant relationship between the effects of project control measures on project quality and the effects of project control measures on project quality delivery schedules ($p=0.000$) and the nature of the relationship was positive and strong (Pearson = 0.658). The study findings indicated that there was a significant relationship between effects of project control measures on project budgets and the effects of projects control measure on the project quality delivery schedules ($p=0.000$) and the nature of the relationship was positive and strong (Pearson = 0.458).

The findings also indicated that project quality delivery schedules were the most important variable in management of Non-motorized system contributing about 31.0%. Project quality was also important in the management of non motorized contributing 28.8%. project budget had a negative impact with 13.2%.

The study further found that most common types of non motorized systems are cycling and walking and the major challenges facing the non motorized systems are sometimes impassable routes due to adverse weather conditions, narrow pathways causing congestions, insecurity for instance they could be attacked and also these systems are prone mainly fatigue.

5.2 Conclusion:

Every project is initiated with the major intention of accomplishing given objectives. Accomplishment of objectives is very important in the project delivery schedules. This is mainly because a project that meets its intended objectives qualifies it to control systems that are expected to deliver ever-higher levels of effectiveness. Similarly, companies increasingly need to demonstrate what action they have taken. The effectiveness and efficiency, of project control systems and the compliance processes that build on them have kept pace with these more stringent requirements of accomplishment of objectives. Sustained improvements in efficiency can only be achieved by deploying a holistic, consistent method and implementing a central platform to support timely completion of the given work within the intended objectives where business processes form the common basis for all controls needed to ensure compliance. In other words public entities that utilize public resources have an obligation to account for the way these resources are allocated, used and the results these spending have achieved in order to be facilitated further.

The study concluded that in determining quality of a project ensuring compliance with policies and regulations is one of the main elements considered. This is because policies provide reasonable assurance that the objectives have been achieved. It also forms a basic criterion in which projects are effective in producing quality work. This may be because the policies and regulations give guidelines and requirements on the level of quality to be attained by each project. Policies and regulations also provide a frame work in which projects can be evaluated and controlled against set objectives.

The successful execution of construction projects, keeping them within the organizational focus and the prescribed budgets, primarily depends on the existence of an efficient construction sector capable of performance improvement and development in order to cope with the requirements of social and economic development and to utilize the management techniques in planning and execution. According to the study adequate planning in terms of budgeting of a project is crucial for minimizing delays and cost under runs.

5.3 Recommendations as per the Findings:

- i. The management of the NMT systems and other projects should ensure timely accomplishment of the project objectives through careful monitoring and evaluation of the projects against the set targets and orientation. This will enable the project practitioners realize the best outcomes of the project.
- ii. The managers of the NMT system should develop a management account through proper implementation of the budget. This will ensure project accountability and permit correct project evaluation. Effective project controls will also provide focus to the organization and there is performance improvement.
- iii. The management and project practitioners should ensure timely completion of the given work in a project through effective and efficient controlling of the variables such as cost, time and delivery. This will enhance project quality through accomplishment of objectives.

5.4 Suggestions for Further research:

Based on the research findings of this study, the study sought to make the following recommendations for further researchers to study.

- i. Influence of project delivery methods on achieving sustainable performance
- ii. Factors for effective implementation of project controls in companies
- iii. Roles of project controls in achieving project success

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