



Determinants of Implementation of County Government Projects: A Case of Infrastructural Projects In Kilifi County, Kenya

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Abstract: Infrastructural projects contribute towards the socioeconomic development of a country and individuals due to improved standard of living. County governments in Kenya have been implementing infrastructural projects since 2013 and several projects have been implemented since devolution following the implementation of the constitution of Kenya in 2010. Nevertheless, the implementation of these projects has been facing various challenges countrywide leading to having abandoned projects, incomplete projects and unutilized completed projects all of which are signs of poor project planning and implementation. The purpose of the study was to determine the determinants of implementation of infrastructure projects in Kilifi County so as to draw lessons that can help improve project implementation and was guided by the following objectives: First to examine how project manager competency influence implementation of infrastructural projects. Secondly, to determine how community participation influence implementation of infrastructural projects. Thirdly, to examine how project certification influence implementation of infrastructural projects and lastly to examine how project funding influence implementation of infrastructural projects. A survey of literature indicated that implementation of infrastructural projects experiences a number of influences including project manager's competency, community participation in projects identification and implementation, project certification and project funding in prioritization of projects. The study analysed the determinants of project implementation in Kilifi County specifically. The study adopted a descriptive survey design using questionnaires which were a quick way of obtaining information and cost effective within a short period of time over a target population of 60 from three sub counties in Kilifi County and the return rate was 83.33%. Purposive sampling technique was used to target all the target population because of technical knowhow with data collected analysed using statistical packages for social sciences (SPSS) 20.0. Spearman Rank Co-efficient was used to test the hypotheses. The findings of the study showed that Project managers' competency to be an effective strategy in implementation of infrastructure project in Kilifi County with community participation in project implementation of the infrastructural projects builds trust and reduce resistance to implementation of the projects by the local community in Kilifi County. This is the reason that improved relationships among stakeholders was observed after carrying out participation of local community on projects implementation of infrastructure projects in Kilifi county. Project certification also showed to determine the implementation of infrastructure projects in Kilifi County with experienced certified project managers effective on implementation strategies that would ensure projects success hence making them better placed in terms of project implementation than uncertified project managers without similar experiences. Project funding showed a positive relationship in terms of implementation of the infrastructure projects in Kilifi County and the relationship was significant at 0.05. This was seen as either funding is availed in good time, sufficient as well as good flow of funds in the projects to finance project activities. The study recommended that all the four factors should be embraced in project implementation and suggested for further research.

Keywords: Project Management Competency, Community Participation, Project Certification, Project Funding, Kilifi County Government

Introduction

Projects are used in all economic and non-economic fields as means of organizing the activity, aiming the achievement of desired objectives. Infrastructure refers to economic services from utilities such as electricity, gas, telecommunications and water and transport works such as roads, bridges urban transit systems, seaports and airports which are central in promoting economic activities in the country. Good infrastructure helps in providing economic services efficiently, promoting economic.

Infrastructural projects are continuously under development everywhere in the world; however, since the 1990s, much of this development has been approached in a new way. Infrastructure projects are no longer solely government-procured. The new approach calls for more and more private involvement in the development of infrastructure projects (UNDP 2012). Prior investigations of this trend have identified new roles



of project participants, new interests in infrastructure projects, and the formal process of infrastructure development. ALGA (2010) in support to this argues that for projects to benefit the total population of every country, devolution and decentralization of operations and implementation of projects is inevitable and has to be taken into reality

Globally, Projects implemented by the county governments in states like Texas for example include: modern community hospitals, mobile hospitals units, residential buildings, feeder roads, interconnecting railway lines, water projects, tourism project construction, waste management, agricultural projects, and housing units. However, Fernando (2009) in his comparative study on the development of manufacturing companies in America, Austria, Malaysia and India found out that there is imbalanced development in various states, counties and local states or municipalities in all these for countries. The major reason cited for this different development in states/counties despite the fact that they are operating in the same countries include: differing state/county by laws, rates of imposed taxes, financial resources availability, natural resources availability, corruption, infrastructure, politics, security, cultural factors and educational factors and climatic conditions. Factors like political opposition, level of technology, human resources development, financial resources allocation from the budgets, availability of minerals and many more (VOA, 2010), has greatly influenced projects implementation on the light railway line construction in Texas up to the tune of 55 %.

The global economy pressures countries to implement and upgrade infrastructure projects in order to remain competitive, gain advantage or keep from falling further behind. The international financial crisis and global downturn will influence prospects for infrastructure investment, particularly in developing countries where income growth will be significantly affected (Cohen1980). Likely policy changes (based on short-term political considerations) result in a riskier environment for investment. Furthermore, citizens will be particularly concerned with price increases in those network sectors that government agencies are supposed to be supervising.

Thus, it is a good time to examine the factors that affects infrastructure performance to assist businesses in fine-tuning their investment strategies and to help political leaders appreciate the importance of providing predictable policy environments if they are not to damage these key sectors of energy, water, telecommunications, and transportation. Borg (2000) identifies factors affecting infrastructure performance and citizen perceptions especially the legitimacy of regulatory institutions from the standpoint of investors, multilateral banks, and donors, and the credibility of the agency in the eye of citizens (both those receiving service and those as yet un-served).

In Africa infrastructure development is a vital driver of development to improve countries competitiveness and helping to integrate the continent into the global economy and it promotes sustainability and socially inclusive economic growth. African heads of State and Government adopted the Programme for Infrastructure Development in Africa (PIDA) which is a framework for regional and continental infrastructure development until 2040. In Tanzania, the country has for the last 15 years embarked on a range of reforms and development initiatives, which have led to substantial changes in local development practices. This led to significant development projects funding identification and implementation in the Zanzibar Islands and mainland Tanzania (Tsekpo and Hudson, 2012).

Traditionally, infrastructure projects in Kenya were owned and managed by the government or a government undertaking. Given the massive investments required in infrastructure, which plays an important role in economic development, there is now broad consensus that County Governments participation in this activity is vital. For many infrastructure projects, such as irrigation, rural roads, and electricity and water systems the active involvement of local community organizations in infrastructure planning, construction and maintenance decision was found to be critical to project success and sustainability. Theoretically, projects implemented by County government agencies have reasonable prospects for financial sustainability because such agencies are able to cover recurrent project costs from their budget.

Statement of the Problem

There have been many more failures than successes in the implementation of projects especially in the developing countries (World Bank, 2010). It is at implementation stage that most projects fail, and this has given concern to governments as well as the citizens. Implementation of development projects being the most crucial of all the stages of policy is not devoid of certain factors that influence it, some of these factors are: wrong priority; shortfalls in resource availability, inadequate assessment of targets, wrong scheduling of time for project completion, inadequate project identification, formulation and design and faulty conceptualization of policy. As noted by Kaliba, Muya&Mumba (2009), the difficulties of administration rather than the nature of the project, have been the main troubles with public projects implementation. As a matter of fact, there is an abundance of project failure, resulting from the inability to or poor performance in terms of implementation.



In Kenya, counties have for about Six years now carried out various projects successful with counties like Machakos, Meru and Kericho reporting up to 12% pa positive projects implementation, but a number of the 47 counties have failed on the way due to prevailing factors like wrong prioritization of development projects, lack of financial resources, political influence, corruption, low levels of technology, poor infrastructure, lack of community involvement, poor management support and many more.

Kilifi County Government remains the main implementer of capital projects and the implementing agency of many projects, particularly public infrastructure, such as schools, hospitals and health centres and roads. The factors influencing implementation of these infrastructure projects have not yet been adequately investigated in devolved governments. Counties are facing challenges in trying to plan and manage urban development and deliver services. The problems they face are compounded by the urbanization of poverty. The most visible manifestation of this are the slums and informal settlements in which the growing urban poor majority live and work and which have developed outside formal urban planning and regulatory frameworks. (Majale 2009).

In Kilifi County infrastructure projects are facing implementation challenges. Many infrastructure projects fail to be implemented due to factors like time in efficiency, financial constraints and lack of political will. It was against this background that the study sought to investigate how project managers' competency, community participation, project certification and project funding affects implementation of infrastructure projects in Kilifi County.

Purpose of the Study

The purpose of this study was to examine the determinants of implementation of infrastructural projects in County governments.

Objectives of the Study

The following were the objectives of the study:

- (i) To determine the influence of Project managers' competency on the implementation of infrastructural projects in Kilifi County.
- (ii) To determine the influence of Community Participation on the implementation of infrastructural projects in Kilifi County.
- (iii) To establish the influence of project certification on the implementation of infrastructural projects in Kilifi County.
- (iv) To examine the influence of project funding on the implementation of infrastructural projects in Kilifi County.

Research Hypotheses

1. **H₀1** There is no significant relationship between project managers' competency and implementation of infrastructure projects
H₁1. There is significant relationship between Project Managers' Competency and the Implementation of infrastructure projects in Kilifi County.
2. **H₀2** There is no significant relationship between project managers' competency and implementation of infrastructure projects
H₁2: There is significant relationship between Community Participation and the implementation of infrastructure projects in Kilifi County.
3. **H₀3** There is no significant relationship between project managers competency and implementation of infrastructure projects
H₁3: There is significant relationship between Project Management Certification and the implementation of infrastructure projects in Kilifi County.
4. **H₀4** There is no significant relationship between project managers competency and implementation of infrastructure projects
H₁4: There is significant relationship between Project Funding and the implementation of infrastructure projects in Kilifi County.

Literature Review



The concept of Infrastructural project

Infrastructure projects have the power to integrate economies by deepening trade, investment, business and financial links. Studies in several Asian developing countries have shown that the presence of basic infrastructure such as road transport are key factors in GDP growth. Infrastructure may be owned and managed by governments or by private companies, such as sole public utility or railway companies. Generally, most roads, major airports and other ports, water distribution systems, and sewage networks are publicly owned, whereas most energy and telecommunications networks are privately owned. Publicly owned infrastructure may be paid for from taxes, tolls, or metered user fees, whereas private infrastructure is generally paid for by metered user fees. Major investment projects are generally financed by the issuance of long-term bonds. Government-owned and operated infrastructure may be developed and operated in the private sector or in public-private partnerships, in addition to in the public sector. Many financial institutions invest in infrastructure among the County Governments in Kenya. The management of these infrastructure is essential so that the project can be completed on time and at cost consistent with the project plan. Project implementation is carried out following the already laid down scheduled or work plan. It leads to the realization of project outputs and immediate objectives. Infrastructure Project implementation phase relies on the previous phases of project cycle and more specifically on the formulation stage and it calls for use of resources as per the activity schedule which in turn leads to the realization of results and subsequently recognition of the project thus contributing to the project overall goal.

Project Managers' Competency and implementation of infrastructure projects

Competency originates from the Latin word *competentia* meaning: authority to Judge and the right to speak (Caupin et al. 2006). The English dictionary defines the word 'competence' as the state of being suitably sufficient or fit. Competency means 'the underlying attributes' of an individual, such as knowledge, skills, or abilities.

Competency is a basic feature of a person which results in effective and or superior performance in a job. (Boyatzis 1982) A fundamental characteristic could include a motive, trait, skill, an aspect of one's self-image or social role, or a body of knowledge. Spencer and Spencer, who advanced Boyatzis' original work, define competency as an 'underlying trait of an individual that is causally connected to criterion referenced effective and or superior performance in a job or situation' (Spencer and Spencer 1993). The use of this definition creates a focus on the essential inputs of individuals in order for them to construct competent performances [Hoffman (1999)]. Research by Brill, Bishop and Walker (2006) associates successful projects to matching project managers to project characteristics and project management critical success factors while Lindberg (2009) states that there is inadequate research on projects managers competence on project implementation.

According to Deinty, Cheng and Moore (2005) infrastructure projects are characterised by crisis and uncertainty which combines to test the ability and performance of the project manager. Project implementation therefore depends upon the organizing, staffing and leadership qualities of the project managers and ability to influence positively.

There is a growing awareness of the relationship between implementation of infrastructure projects and project managers' competence while Crawford (2000) states that project managers' competence is in itself a key feature in project implementation and success with the view supported by Patanakul and Milosevic (2009). Competencies provide organizations with a way to define in behavioural terms what it is that people need to do to produce the results that the organization desires, in a way that is in keep with its culture. By having competencies defined in the organization, it allows employees to know what they need to be productive. When properly defined, competencies, allows organizations to evaluate the extent to which behaviours employees are demonstrating and where they may be lacking (Dubois and Rothwell 2006). For competencies where employees are lacking, they can learn. This will allow organizations to know potentially what resources they may need to help the employee develop and learn those competencies. Competencies can distinguish and differentiate your organization from your competitors. Competencies can provide a structured model that can be used to integrate management practices throughout the organization. Competencies that align their recruiting, performance management, training and development and reward practices to reinforce key behaviours that the organization values.

Community participation and implementation of infrastructure projects

The Constitution of Kenya 2010 gives citizen the right to take part in activities that have a direct bearing on their lives (Mbaabu, 2012). In the context of development, community participation refers to an active process whereby beneficiaries influence the direction and execution of development projects rather than merely receive a share of project benefits. Stakeholders' involvement is paramount in development projects.



Even though, minor decisions and emergency situations are generally not appropriate for stakeholder participation, a complex situation with far-reaching impacts warrant stakeholder involvement and when done proactively, rather than in response to a problem, helps to avoid problems in the future (Maina, 2013). The focus of public participation is usually to share information with, and gather input from, members of the public who may have an interest in a project.

Championed since the early 1970s by mostly non-economics, Local participation is seen as one of solutions to the problem of project sustainability. A participatory approach not only improves the success of the project but also makes projects more efficient and effective (McGee, 2002). Proponents of participation of beneficiaries leading to sustainability of community development projects have most often relied on case studies to document the association (Briscoe and Ferranti 1988, Kortan and Siy 1989). These case studies however are easily dismissed by skeptics as inconclusive, as the small number of cases and informal method do not allow formal testing of the findings (Esman and Uphoff 1984, Finsterbusch and Van III 1987).

Since the 1990s, multilateral agencies such as the World Bank placed greater emphasis on stakeholder participation as a way to ensure development sustainability (Gonzales, 1998). It is now regarded as a critical component which could promote the chances of development initiatives being sustainable through community capacity building and empowerment (Lyons, 2001). Empowerment in this context means giving people who are marginalised, vulnerable, and excluded from development, the ability to be self-reliant to manage their own resources. It is believed that participation would lead to empowerment through capacity building, skills, and training (Lyons et al, 2001). By increasing the ability of people, projects, and or communities to be self-reliant, they are then able to contribute towards the sustainability of development projects which in turn could contribute to the broader notion of sustainable national development.

Chambers (1983) influential efforts led to the inclusion of participation as an important aspect of empowerment as a means to allow the poor control over decisions. There is also a shift to an increasing awareness that development is not just growth of national income, but a means of achieving basic human needs and development particularly those related to individual and collective wellbeing (Helleiner, 1992). Amartya's (1999) work influenced a shift in focus of development from material well-being to capability approach. Key characteristics in this approach were strategies that would lead to the empowerment of the poor, an agenda which was taken on by the World Bank and other international donors as part of their response to critiques of top-down development

Community participation in development projects has become an important element in the design and implementation of development projects. Participation of the community is in the form of Community Based Development (CBD) and is among the fastest growing mechanism for channelling development assistance. The aim of community participation in CBD projects is not only to reverse the existing power relations in a manner that creates agency and voice for the poor but also to allow the poor to have more control over development assistance. It is expected that this will result in the allocation of development funds in a manner that is more responsive to the needs of the poor, better targeting of poverty programs, more responsive government and better delivery of public goods and services, better maintained community assets, and a more informed and involved citizenry that is capable of undertaking self-initiated development activity (Mansuri and Rao 2003).

Evidence on the performance of community participation approach is scant, but the work that is available suggests that practitioners may be overoptimistic and naive about the benefits of the approach (Mansuri and Rao, 2004). The empirical literature on community participation acknowledges that there may be a large gap between the idealised textbook representation of the concept and non-profit organizations experiences with the approach. Case studies show that for a variety of reasons the textbook benefits do not always materialize. Given that community participatory processes are known to be expensive, demanding and time-intensive, it is vital to better understand the effect of this approach on the sustainability of community development projects. In fact, Mansuri and Rao (2004) conclude that little is known about the effects of community participation on community-based projects. They attribute ignorance on this matter to a lack of thorough and systematic evaluations with counterfactuals. They add that robust evidence regarding the influence of community participation is required urgently.

Project certification and implementation of infrastructure projects

Project Management Professional (PMP) is an internationally recognized professional designation offered by the Project Management Institute. The PMP is the gold standard of project management certification. Recognized and demanded by organizations worldwide, the PMP validates your competence to perform in the role of a project manager, leading and directing projects and teams. The Project Management Professional certification is a credential available from the Project Management Institute that assists professional project managers to stand out and present their skills to possible clients or employers. This relatively new qualifications has become one of the most popular in its industry, and many thousands of project managers are PMP certified.



Prerequisites for the PMP certification include either a bachelor's degree or equivalent, or a specific number of years in completed hours in a project manager role. A more basic credential called the Certified Associate in Project Management (CAPM) is also available.

Project Certification involves a structured approach to the delivery of once-off tasks, the introduction of organisational change and strategy implementation. It involves defining, planning, monitoring and controlling all aspects of a project, while motivating those involved, achieving the project objectives on time and to specified cost, quality and performance. The importance and impact of project management Certification knowledge, tools and techniques and the effective management of project teams is known by many. The continuing speed of change in the civil service, the health sector, state agencies and the increasing service demands placed on local authorities requires a disciplined and focused approach. As a result there is an increasing emphasis in the public service on project management certification discipline as a means of delivering strategy effectively and efficiently. Project management competencies are now seen as central, indeed an essential, part of the modern public servant skill-set.

In a survey by PMI on International Air Transport Association, IATA (International Air Travel Association, 2014) it established that after offering project management training, the beneficiaries reported an increased revenue, reduced cost and improved overall health and regulatory environment of the aviation industry. Globally, 80% of Executives believed that having project management as a core competency helped them remain competitive during recession (The Economist, 2009). In addition, McKinsey & Company (2010) survey report showed that 58% of 1400 global executives prioritized strong project management discipline for future growth. Information Technology professionals on Chief Information Officer (CIO) forum reckon that project management success factors include buy-in from top management, clear definition of scope and requirements, effective communications, right project resources amongst others (CIO, 2010).

Globally recognized and in-demand, the Project Management Professional (PMP)[®] credential demonstrates to employers, clients, and colleagues that you acquire project management knowledge, experience, and the skills to bring projects to successful completion. Year after year, the PMP credential has garnered global recognition and commanded higher salaries for certified individuals over non-certified individuals.

Project management has rapidly become a hot commodity in the jobs market. Organizations, government, institutions and companies are advertising for project managers. The perks are eye-catching and young graduates are going back to school to learn a thing or two in project management. There is an increasing need for qualified project managers in Kenya and the East African region at the moment. This is due to the fact that an increasing number of businesses get on large projects and require qualified and experienced workforce to manage them. For instance, the East African region has seen an increase in infrastructural development both for government and the private sector. The devolved system of government in Kenya for example, has also increased the need to develop county infrastructure. Leading to an increased demand for project managers. Further with oil, mining and gas and marine industries growing; multi-national companies have pitched tent in Kenya and the East African region. This has seen the demand for local skills in project management go up as these companies set up their infrastructure.

Multi-national companies coming to the country look for local talent with international project management certifications and while most of these openings are initially temporary in nature, there are instances where permanent contracts are essential and there are many facets to project management as a career in project management is well suited for those who are looking for a challenging and diverse work environment, where no two days are ever alike (Wachira 2015).

Local organizations including companies that are seeking to enlarge and carry out huge projects within the region are sponsoring their middle-level management staff for project management courses. Nevertheless, there has been a steady rise in the number of self-sponsored students who are pursuing project management courses so as to compete efficiently in the job market. Project management is no longer just a module you study on a business course but a full qualification which employers are familiar with. This is because when leveraged upon, project management contributes to the overall success of a business as it ensures that projects are successfully completed within the constraints of time, cost and quality.

Organizations that handle their business projects effectively achieve strategic advantage over their competitors. Many local and regional companies are starting to be familiar with the need for qualified project managers and are demanding that they get official recognition. Highly required certifications in project management include: PRINCE 2 and PMP. The PMI ranks project management among the three 'most promising careers' of 2020. These include: software development and information technology, user experience designers, and product and project managers. It is anticipated that there will be over 1.57 million project management jobs created yearly around the world come 2020 with most of these expected in developing countries such as Kenya. Project managers work across disciplines, taking the output of team members in various business departments and work to integrate these ideas into the bigger picture. The Project Management



Institute notes six areas of maximum guarantee for project practitioners: Energy, healthcare, IT, construction, finance, and aerospace and defense. As such, there are plenty of reasons to practice this avenue. For starters, it is about increasing job markets, rising salaries, and growing industries. But one of the most prominent characteristics of opportunities for project managers is their truly global nature. Project management was the number one vacancy for healthcare IT in the US in 2013. Due to the high demand for skills and knowledge in project management, the training comes at a cost. The cost of project management certifications has been on an upward trajectory in the past three years. Experts are anxious that the local jobs market may not be able to maintain the increasing demand for project managers in the long-term.

To conquer this challenge, companies may have to choose to invest more in project management training's for their staff, or a bursary is started for possible project management professionals countrywide. According to a current article by PMI Kenya Chapter, most projects are managed by unintended managers or technical personnel as opposed to qualified project managers and unless this changes, Kenya will have to resort in importing qualified project managers.

Project funding and implementation of infrastructure projects

Funding is the act of providing economic resources, usually in the form of money, or other values such as effort or time, to finance a need, program, and project, usually by an organization or government. Usually, this word is used when a firm uses its internal treasury to satisfy its necessity for cash, while the term financing is used when the firms acquires funds from external sources (Gyula, 2008). Available funds may also refer to funds that can be withdrawn from a margin account at a brokerage firm, where margin loans are still exceptional. Chen (2007) mentions that for a project to be successful there should be enough fund allocated to finance its completion. Jackson (2010) added that project funds availability is an important factor that influences delivery of a project. Sambasivan and Soon (2007) stated that reports are an important way of keeping everyone informed and therefore managers should manage the project, plan for the project and monitor. Also the structure of the industry is fragment with increasing number of small companies and consolidation of large companies. Strenman (2012) says that the international construction is dominated by very large contracting firms such as Bechtel, Skanska and Taisei Corporation, who embark on large volumes of work. Construction process is labor intensive includes management of difficult site condition, bulky materials.

Construction companies are diversified, have low fixed possessions, have positive cash flow, and subcontract extensively (Gyula, 2008). The strategic systems are the determinant of the success or failure of Large engineering projects (Hackley 2006). Strenman (2012) no ranging from small to large and very large contracts such as \$14.7 billion Channel Tunnel Project and \$20 billion Hong Kong International Airport (Chan & Mohan 2009). The situation governing every project changes rapidly and cannot be compared to each other. So, the governing principle connecting all construction projects can be said as Project Management Practice. Collins and Hussey (2009) indicate that Management in construction, on the other hand, has always been based on experience and organizational talent. In most of the construction projects, technicalities are frozen during design stage. Dai, Cao and Su (2006) mentions that the significant category in constructions is construction firm i.e. Contractor because; Contractor gives real shape to the artefact following the design. So, the key issue lies in managing resources, material, equipment, stakeholders efficiently by the contractor. Construction projects are inherently complex and dynamic. Also, every construction project is exclusive having its own set of stakeholders. (Hyvari 2006) argues that main contractor is employed to build what designers have specified and contracting was a response to the sophistication of industrialization. Also the issues such as economies of scale, employment, multiple use of plant are some issues which made contracting business popular and viable.

Infrastructure projects in general involve a sponsor who funds and owns the project. The sponsors are usually large public bodies such as local government or multilateral agencies. Karim and Marosszeky (2009) mention that considerable portion of public investment goes to infrastructure development not least, governments remain the dominant provider of infrastructure services worldwide, accounting for 78 percent of investment. As cited by Kenny, Kim et al. (2008), the sponsor engages various consultants to carry out design, supervise and project management of the work. Also the sponsor engages various contractors as per procurement strategy and contract documents. Speaking about contract documents, Jackson (2008) mentions that the every phase of the project will be controlled by contract documents and the work of contractor is judged by them. Lam, Wang, Lee and Tsang, (2007), also mentions that contractor is not involved in actual design. Major construction contracts worldwide are governed by FIDIC (Federation Internationale Des Ingenieurs-Conseils) and New Engineering Contracts.

Sambasivan and Soon (2007) mentions that failure to accomplish targeted time, budgeted cost and specified quality result in diverse unpredicted negative effects on the projects. Becerik, (2007) mentions that if the project meets practical performance and achieves high level of contentment among key players and various stakeholders, and then the project is considered as overall success. Also, Leslie (2005) mentions that vital aspect



about success is perception and further states that if the right people perceive that the project was a success, and then it was, for all practical purposes. The reasons for success and delays are mostly attributed to differing and vested welfare of participants and stakeholders. Some of the causes of delays in construction projects and poor performance in Malaysia noted were insufficient capital delay in receiving the advance payment, financial resource management, progress payment behind time and delay in payment of completed works from the owner to the contractor. Contractors do not have strong financial background to keep the work in progress. When the contractors' cash flow is significantly affected this causes delay in procurement of resources. Consequently time and cost performance of projects is affected (Assaf, 2012).

Theoretical Framework

A Theoretical framework is a set of statements or principles devised to describe a set of facts or phenomena especially one that has been continually tested or is generally accepted and can be used to make predictions about natural phenomena (Lucia, and Lepsinger, 2009). Theories are analytical tools for understanding, explaining, and making predictions about a given subject matter. It comprises the conceptual frame work, theoretical review, and empirical review, critique of the review and the research gap of the study.

Management Theory

Management is the process of designing and maintaining atmosphere in which individuals, working together in groups, efficiently achieve selected aims (Koontz and Wehrich, 2000). In its expanded form, this basic description means a number of things. First, as managers, people carry out the managerial functions of planning, organizing, staffing, leading, and controlling. Second, management applies to any type of organization. Third, management applies to managers at all organizational levels. Fourth, the aim of all managers is alike to generate surplus. Finally, managing is concerned with productivity this implies usefulness and efficiency. Managing, like all other practices whether medicine, music composition, engineering, accountancy, or even baseball is an art; it is know-how. It is doing things in the light of the realities of a situation. Yet managers can work better by using the designed information about management. It is this knowledge that constitutes science. However, the science underlying managing is quite crude and incorrect. This is factual because the many variables with which managers deals with are extremely complex. However, such management knowledge can definitely improve managerial practice. Managers who attempt to manage without management science must put their trust to luck, intuition, or what they did in the past (Gardiner, 2000). In managing, as in any other field, unless practitioners are to learn by trial and fault, there are no place they can turn for meaningful guidance other than the accumulated information underlying their training; this accumulated knowledge is theory. For practical purposes, all managers must develop three sets of skills, conceptual, technical, and human skills (Peterson 2004) .

Change Agency Theory

Change agency theory has been found to be of particular importance to understanding innovation linked with electronic construction project, where financial, managerial, informational and technological constraints tend to limit innovativeness and entrepreneurship (Mole, 2002). Agents can either be internal or external. Internally the owner of institutes and other sectors forces can act as champions, advocates and leaders of change (McElroy, 2010). According to Ross (2008), technology simplifies and reduces task needing handbook skill and strengths especially in factories and either forms of production property applied can increases productivity. The use of reprogram able robots for such tasks as welding spraying material handling and other helps to get rid of dirty or harassers and dull work robots and computer aid manufacturing (CAM) as well as reducing costs improving quality and the stability of finished quality and the consistency of finished commodities. The unused technology requirements improve problem solving skills and the ability to interpret, and is thus likely to lead to widening gap between skilled and non-skilled workers (Leslie, 2005).

According to Johnson, Kast (2012), creating an effective technology infrastructure is critical. A useful technology infrastructure is vital to all institutions. Infrastructure directly affects the value of service experienced by international and external users of the scheme in terms of speed and responsiveness to their requests for information. The choice of the software components of information is systematic. In this chapter we turn our effect to the hardware and men work components. Understanding the language of technology involved in the selection of information and communication technology is a major quarrel for non-literature office staff and business managers (Di Maggio, 2008).

Conceptual Framework

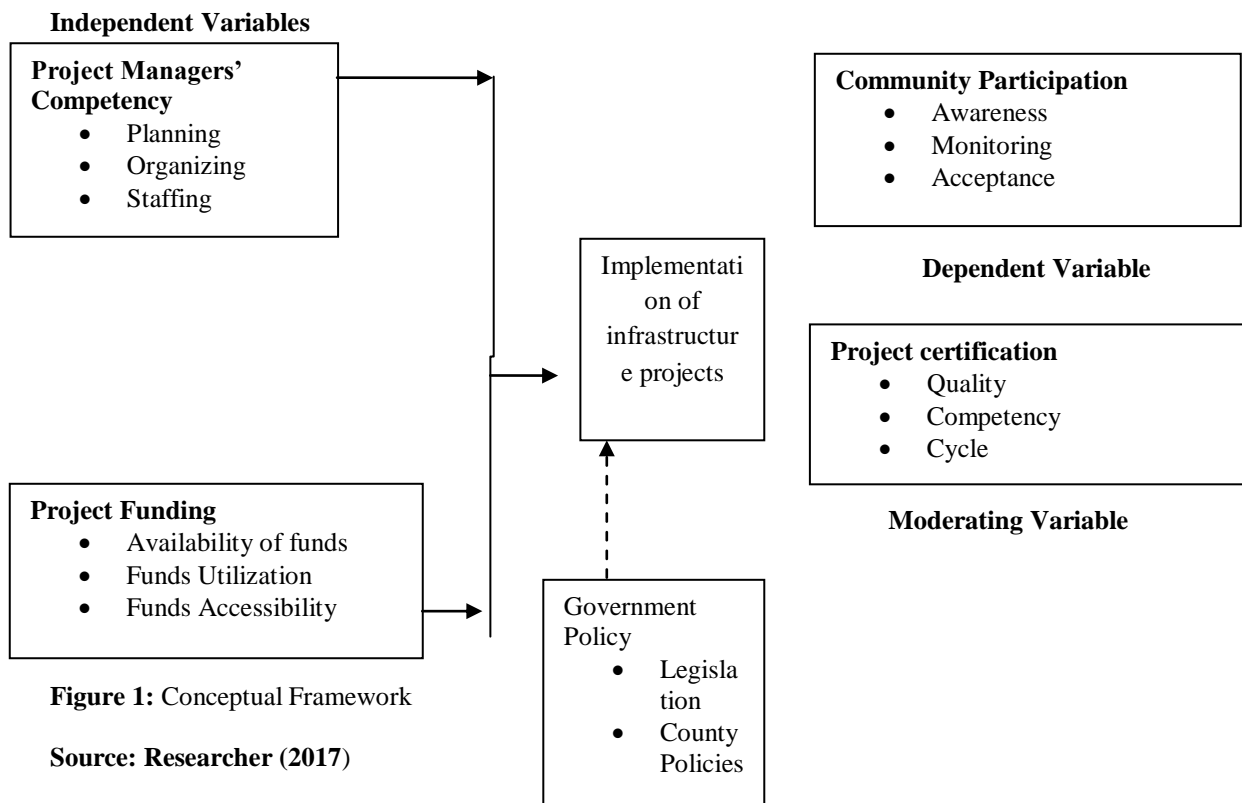


Figure 1: Conceptual Framework

Source: Researcher (2017)

Research Methodology

This study employed a descriptive survey research design. Descriptive survey research designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. Kothari (2004) says that a research design refers to a plan, blueprint or a guide for data collection and interpretation of set of rules that enable the researcher to conceptualize and observe the problem that is under study. According to Mugenda and Mugenda (1999) descriptive method of research is a process of collecting data in order to test hypothesis or answer questions concerning the current status of the study of the study. Such method of study determines and reports the way things are, by allowing the individuals give personal relevant opinions and attitudes. By studying a population sample, a descriptive design provides qualitative descriptions of trends, perceptions and attitudes of the population.

Data Analysis, Presentation and Interpretation

The researcher distributed sixty questionnaires to the employees of various cadres and the return rate of them was as shown in Table 4.1. This shows that 83.3% of the questionnaires were returned hence sufficient for data analysis in this research topic. This response rate is excellent and representative of the target population as noted by Mugenda and Mugenda (2003) which stipulates that a response rate above 70% is excellent while a rate of 60% is good and 50% is adequate for analysis and reporting.

Summary of Findings, Conclusions and Recommendations

Based on the findings of the study, the following conclusions are made on the factors influence of implementation of infrastructure projects in Kilifi County. All the four factors; project managers' competency, community participation, project management certification and project funding studied influenced the implementation of infrastructure projects. Project managers' competency has been found to be an effective strategy in implementation of infrastructure project in Kilifi County, with community participation in project implementation of the infrastructure projects builds trust and reduce resistance to implementation of the projects by the local community in Kilifi County. This is the reason that improved relationships among stakeholders was observed after carrying out participation of local community on projects implementation of infrastructure projects in Kilifi county. Project management certification has also shown to influence the implementation of infrastructure projects in Kilifi County with experienced certified project managers effective on implementation



strategies that would ensure projects success hence making them better placed in terms of project implementation than uncertified project managers without similar experiences.

Project funding level have also shown a relationship in terms of implementation of the infrastructure projects in Kilificounty. This could be seen as either fund is availed in good times, being enough to fund the project as well as good flow of funds in the projects to finance project activities.

Recommendation of study

On the basis of the findings from the study, it is recommended that:

1. The project management team should invest in all the four factors influencing implementation of the projects in Kilifi County in almost equal proportions with more emphasis on community participation, project managers' competency and availability of project funds and well as project managers' certification
2. On community participation, County governments and other project stakeholders should ensure that a component of capacity development of project management structures at local level is included in implementation of the infrastructure projects for project sustainability.
3. Future success of implementation of infrastructure projects in Kilifi County should embrace project management certification as a key requirement.
4. On project funding, the study recommends that County Governments to embrace Public Private Partnerships.

Suggestions for Further Research

On the basis of what has been found out from this study, the researcher recommends that similar studies be conducted in other locations and other departments' especially in Counties that have infrastructure projects for implementation to conduct factor analysis and correlation analysis study.

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