



**EFFECT OF PROJECT MANAGEMENT PRACTICES ON IMPLEMENTATION OF KENYA PORTS AUTHORITY FUNDED PROJECTS**

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### ABSTRACT

*The objective of the study was to determine the effect of project management practices on implementation of funded projects at Kenya ports Authority. This study employed a descriptive research design, and targeted 364 respondents. A sample of 191 respondents of the target population was considered. The data was analyzed using SPSS version 23 and presented using frequency tables to facilitate comparisons and conclusions based on the identified independent and dependent variable. The data was analysed using Correlation regression where the study used Pearson's correlation to relate the variables. This was to establish if there was a correlation between dependent variable Implementation of KPA funded projects against independent variables: monitoring and evaluation practices, stakeholder's participation, risk management and project planning and design practices. The study revealed that monitoring and evaluation practices, stakeholder's participation, risk management and project planning and design practices play a vital role in determining the success in project implementation. It was concluded that Project management is important for success of any project implementation, yet in most projects it has not been adopted effectively. The role of monitoring and evaluation practices, stakeholder's participation, risk management and project planning and design practices leaves 51.2% unexplained. The P- value of 0.000 (Less than 0.05) implied that the model of project management factors implementation of project was significant at the 95% confidence level. The researcher affecting concluded that there was need to evaluate other factors which contribute to success of project implementation at Kenya Ports Authority and also stakeholder's participation should be given its due recognition to the role it plays in ensuring success of development projects.*

**Key Terms:** Project, Project Management, Risk Management, Procurement, Quality Management, Implementation, Stakeholder

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## INTRODUCTION

According to Irefin (2013), “managing projects is one of the oldest and most respected accomplishments of mankind with inputs from builders, architects, masons and craftsmen”. This is evidenced by successful construction of the pyramids, ancient cities, the Great Wall of China and other wonders of the World. The success of these Projects has put demand for higher adequate planning and design, control of resources during implementation process of any project undertaking.

The concept of project management practices has been applied from time to time since ancient times. However, there is no documentation on methodologies or techniques that were used until mid-1950s that saw emergence of new ideas which gave birth to modern project management practices tools. Since then, the concept of modern project management practices has gained much admiration and wide acceptance both in the private and public sectors in developed countries (Zhang & Skitmore, 2014).

However, the idea of project management practices has remained elusive in many organization in developed countries, in spite of their experience, many organizations especially big ones still struggle to translate it into action plan to enable organization achieve their strategic objectives successfully. A project as defined by Project Management Institute (PMI, 1996, as cited by Ackah (2016) is a short-term undertaking with definite ending aimed to create a unique product or service. Project Management Institute, (2013) defines project management as “an application of knowledge, skills, tools and techniques to project activities to meet project requirements.

As noted by Brian (2013) “new strategies without implementation are merely a theory”. Various studies have shown that in developing countries, the failure rate in implementations of projects in organization is very high. The study by Reilly (2015), on project management practices in public

sector revealed that poor project management practice contributes approximately 30% towards public sector projects failure. Due to high failure rate in developing countries, the scenario has increased the need for organizational accountability in public sector.

Although, the concept have infiltrated in some organizations, there is still need for better understanding and application of the principle of project management practices in developing countries. Ofori (2013) observed that in order to improve quality of project management practices, more emphasis should be put on senior management, commitment, competency and coordination. This confirms earlier observations by (Muriithi & Crawford, 2013) that most public organizations in non-industrialized countries are still struggling to understand and apply concept, hence, depriving the organizations and public the benefit of delivering projects on time, on budget and within scope.

According to Patunola- Ajayi (2015); Nwachukwu and Emoh (2014) findings is that awareness and use of Project Management is still low in developing countries and is the reason why projects are hardly completed on time, within cost, quality and material specifications. Consequently, improved practice of the project management delivery system is a way of avoiding these ills that have pervaded the industry.

According KPMG 2013, report, African Development Bank estimated that there is need for \$93 billion for basic infrastructure in more than 50 cities with over 1 million populations. Yet the continent is still struggling with “cost overruns, construction delays and red tape are common” (KPMG, 2013, p. 27). Although Africa relies on project management to achieve its development goals, although according to (Eneh, 2013; Ika, 2014) many projects are usually abandoned, failed, or poor performing projects are paramount in Africa and that they have even thwarted its development (Eneh, 2013; Ika, 2014).

Research on practice of Project Management by Frimpong et al (2013) in Ghana, on the practice of project management in Africa have shown the causes of delay and cost overruns in construction projects in Nigeria (Diallo & Thuillier, 2014). Studies by (Diallo & Thuillier, 2013; Ahimbishibwe & Nangoli, 2014) acknowledged the role of communication in project success in Africa. We are all aware of the issues on project management in Africa (Bredillet, Thomas, & Musila, 2014), because number of factors such as corruption, bad governance, and lack of (project) management capacity were singled out as silent killers of projects and growth in Africa (Collier, 2015; Moyo, 2017).

A survey carried out by Price Waterhouse Cooper pointed to fact that 50% of the reasons why projects fail were due to poor project management practices. In their findings, the public sector had the lowest project management levels compared to other sectors. Equally, the findings further states that use of project management practices increases the likelihood of project success (Price Waterhouse Cooper, 2014). This supports assertion by Martin (2013) that for “a product to grow and succeed, one must learn how to make strategies and ideas a reality”.

The Government of Kenya through Kenya Ports Authority management impact on improving the port infrastructures in Mombasa. One of such heavy investment projects was Terminal Operating System like Kilindini Waterfront Automated Terminal Operations System (KWATOS) with initial cost of KES 450million meant to improve efficiency in service delivery, although there is still uproar on inefficiencies within the Port of Mombasa, contrary to Abe & Wilson (2013) observation, who eluded that investing in port infrastructure lowers trade costs.

The K.P.A (Port of Mombasa) also spent KES 1.7 billion to acquire Integrated Security System to improve security at the Port in conformity with the International Maritime Organization (IMO) standards and comply with the International Ship

and Port Facility Security (ISPS). However, according to the Auditor General’s report on the ISPS project, it was not possible ascertain if the organization achieved the objectives. The assets worthy KES 105,568,932 could not be accounted for and some equipment, according to the report are not fully functional (RoK, 2014). The report further states that, the project faced some challenges during its initial stages of implementation.

A case in point is LAPSSET project identified as one of the flagship projects in the vision 2030, was expected to start in earnest in the course of 2012 but to date, the implementation time line still delayed (Construction review, 2015). Despite the positive feasibility reports indicating its potential of contributing a whopping 3% to the Country’s GDP, the project is yet to be implemented fully. Out of the seven components of the main project, only two are on time while the rest are behind schedule. This is a mere 28.5% complete, 71.5 % delayed and vision 2030 development blue print is midway (LCIDP, 2017).

Authority (KPA) in most cases faces challenges of delays due to disagreement between stakeholders and implementing government agencies. Some of the projects that took long to take off or are yet to start are; Dongo Kundu, dredging of Mombasa Port, corrosion protection to berth 16-18 and Rehabilitation of berth 18, Expansion of yards, repairs to container terminal yards and Extension of Mbaraki Wharf (Construction review, 2015).

The entire cycle of sea-port construction project begins with identifying the project which is meant to meet a need identified. This is followed by project planning, project design, implementation, and closure and project handover. A sea-port project could be implemented as a public private partnership (PPP), Design Built Finance Operate (DBFO), Built Operate Transfer (BOT) or leasing type projects (Ingpen, 2015). In all the implementation options, various factors will play out to successful project to be delivered within time frame. Most projects are usually completed

with less specifications and rarely on time and within budget.

The ambition of actualizing KPA's objectives to establish itself as a key transport hub in the regions, the researcher found it is necessary to investigate the causes of the delays in implementation of projects. The researcher further intended to establish if the implementation of projects has anything to do with stakeholder's interests, planning and design. The researcher, therefore to focus on effect of project management practices on Kenya Ports Authority funded projects that all project Managers need to address in order to improve success of projects.

The idea of project management practices has remained elusive in many organization in developed and developing countries, in spite of their experience, many organizations especially big ones still struggle to translate it into action plan to enable organization achieve their strategic objectives successfully.

The Government of Kenya through Kenya Ports Authority management impact on improving the port infrastructures in Mombasa. One of such heavy investment projects is Terminal Operating System like Kilindini Waterfront Automated Terminal Operations System (KWATOS) with initial cost of KES 450million meant to improve efficiency in service delivery, although there is still uproar on inefficiencies within the Port of Mombasa, contrary to Abe & Wilson (2013) observation, who eluded that investing in port infrastructure lowers trade costs. Another project undertaken by KPA was System Application Product (SAP), from analysis 3.8 billion for 2014 budget on capital projects, presented a massive problem, although there was positive variance of 58.38%, it was because some of the proposed projects were not fully undertaken.

A case in point is Lamu Port project managed by K.P.A was identified as one of the flagship projects in the vision 2030, was expected to start in earnest in the course of 2012. To date, the implementation

time line still delayed (Construction review, 2015). Despite the positive feasibility reports indicating its potential of contributing a whopping 3% to the Country's GDP, the project is yet to be implemented fully. Some of the projects that took long to take off or are yet to start are; Dongo Kundu, full dredging of Mombasa Port, corrosion protection to berths and Rehabilitation of berth 14 and 15, Expansion of yards, repairs to container terminal yards, Extension of Mbaraki Wharf and construction of berth 22 and 23 which is initial stages. (Construction review, 2015).

This confirms earlier observations by (Muriithi & Crawford, 2013) that most public organizations in non-industrialized countries are still struggling to understand and apply concept, hence, depriving the organizations and public the benefit of delivering projects on time, on budget and within scope. Consequently, improved practice of the project management delivery system is a way of avoiding these ills that have pervaded the industry.

In order to achieve these Kenya ports Authority has embarked on trying to develop their physical infrastructures, expand container terminals and related facilities, and construct more berths, with a hope of developing hub ports and international logistics centers, (The East African, 2014). Despite having necessary organizational structure and K.P.A being a Public entity is still struggling to understand and apply concept of project management, hence, depriving the organizations and public the benefit of delivering projects on time, on budget and within scope because worryingly, many projects take relatively longer and end up attracting huge overrun cost and delaying returns benefits on investment.

It is indeed the concern of all project stakeholders of KPA as to where the problem and what needs to be done to make project deliverable successful and organization enjoy returns benefit on investment. These is why the researcher proposes to carry out a research study on effects of project management practices on performance of Kenya Ports Authority funded projects, and specifically



determine effects; monitoring and evaluation, stakeholder's participation, project risk management, project planning and design.

### **Research Objectives**

- To determine the effect of project monitoring and evaluation practices on implementation of Kenya Authority funded projects.
- To determine the extent to which stakeholder's participation affect implementation of Kenya ports Authority funded projects.
- To determine the effect of project risk management on implementation of Kenya Ports Authority funded projects.
- To evaluate the effect of project planning and design on implementation of Kenya Ports Authority

## **LITERATURE REVIEW**

### **Theoretical Framework**

#### **Resource-Based View Theory**

The firm's resources can be defined as an economic or productive factors such as assets (tangible and intangible), capabilities, organizational processes required to accomplish an activity that enable the firm implement its strategies with the aim of gaining competitive advantage (Pinnington, 2014); The resource-based view (RBV) focuses on firm's internal resources such as assets, capabilities, information, knowledge, organizational process and attributes as the major determinants of competitive advantage and performance (Pinnington, 2014; Peteraf and Barney, 2013). The resource based view theory explains that a firm can gain competitive advantage if has capabilities to develop a unique product or service from no substitutable tangible or intangible resources by utilizing its internal resources.

The resource based view states the firm's competitive advantage lies with the firm's capability in harnessing its valuable non-substitutable and inimitable internal resources (Fang, Memili, Chrisman, & Welsh, 2014). As stated by Barney (2013), it's these heterogeneous,

immobile and no substitutable resources that are crucial in achieving competitive advantage to a certain level.

### **Management Theory**

Management theory generally known as Frederick Taylor's Scientific Management. In his theory he emphasizes on efficient training of workers (Harper, 2014). His major contribution was the concept of breaking a complex task down into unit (Work Breakdown Structure) to optimize the performance where management plays a role of performing the science and instruction and workers performing the labor, each group doing "the work for which it was best suited" (Mulder, 2015). This is his strongest positive legacy of breaking a complex task down into a number of subtasks, and optimizing the performance of the subtasks. However, many critics, both historical and contemporary, have pointed out that Taylor's theories tend to "dehumanize" the workers by loading all workload to the workers.

Management theory gives a modest conceptual framework and a plan that can guide a firm to achieve their objectives. This is demonstrated by its contributions to business process outsourcing (BPO) a practical application in the day to day running of organizations (Cole, 2014; DuBrin, 2016). It is this crucial factor for survival and being able as a firm to cope and adapt to the dictates of changing business environment such as dredging of sea, enlarging water ways, berth construction projects to allow large vessels to call at Mombasa port, in pursuit of achieving its objectives. The management theory indisputably captures the dynamism of being responsive and adaptive to the internal and external environmental needs of evolving organizations (Nwachukwu, 2014).

#### **The Knowledge-Based Theory**

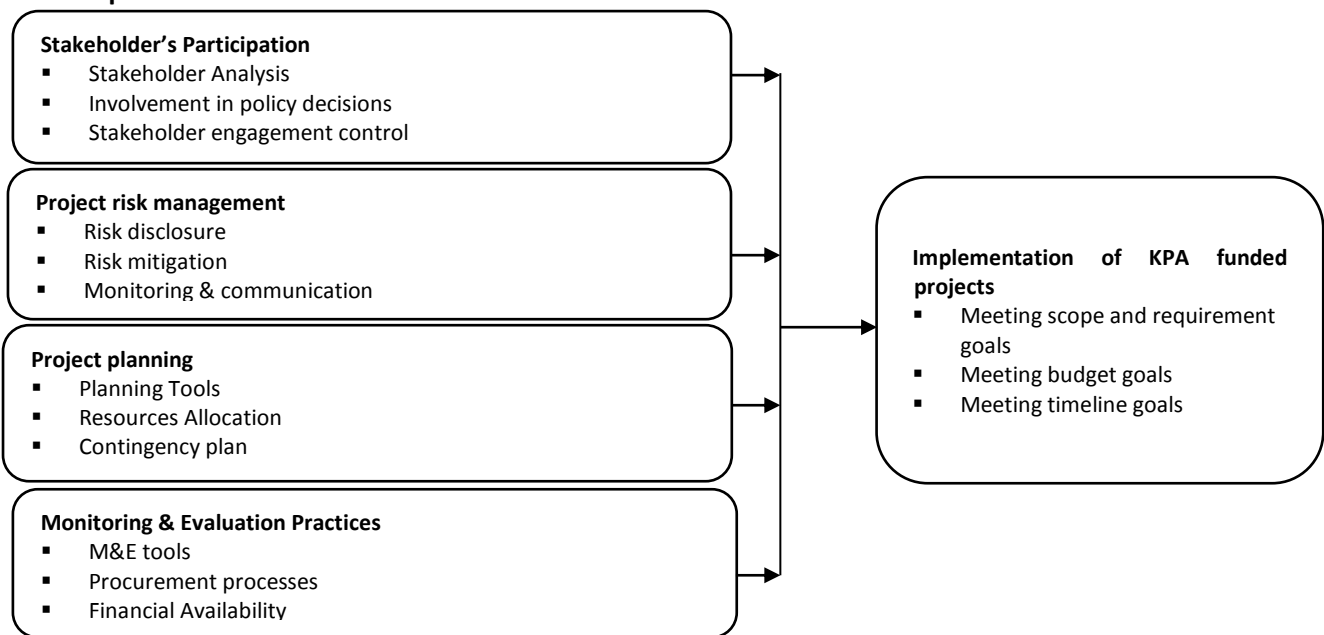
The knowledge-based theory of the firm considers knowledge as the most strategically significant resource of the firm. Its proponents argue that because knowledge-based resources are usually difficult to imitate and socially complex, heterogeneous knowledge bases and capabilities

among firms are the major determinants of sustained competitive advantage and superior corporate performance (Grant, 2014). This knowledge is embedded and carried through multiple entities including organizational culture and identity, policies, routines, documents, systems, and employees (Jetu & Riedl, 2013). The knowledge-based theory determines the nature organization human recourses capabilities which are mostly influenced by the nature of training given to the employees.

Existence of professional trained staff in professional field and availability of many staff with high education level plays an important role in strengthening the organization capabilities in terms of trained Manpower (Grant, 2014). The study thus used this theory to establish how an organization

trains employees in order to equip them with knowledge that helps them to support effective implementation of procurement practices. The Knowledge-Based Theory strategy of building human capital through training is largely applicable in Kenya Ports Authority. The study found out that KPA uses employee training and development as a strategy to improve its operations. According to Hamael and Prahalad (2014), perceived an organization as a foundation for sustained competitive advantage when it poses skills or resources that provide superior value to customers and that are difficult to imitate. In a turbulent environment, the more enduring advantage is ability to anticipate evolving customer needs and to generate new values creating capabilities based on that knowledge.

**Conceptual framework**



**Independent Variables**

**Dependent variable**

**Figure 1: Conceptual Framework**

**Source: Author (2019)**

**Review of Variables**

**Project Risk Management**

Risk management has become an important part of the management process for any project. Project Management Institute defines project risk as an uncertain event or condition and that the

occurrence has positive or negative effect on at least one project objective, such as time, cost, scope, or quality (PMI, 2013). Also ISO 31000 defines risk as the effect of uncertainty on objectives, which means that the effect may be either positive or negative. Risk and uncertainty can potentially have damaging consequences for

the construction projects (Ahlemann & Kaiser, 2013).

### **Project Planning and Design**

Project planning is widely thought to be an important contributor to project success. If done effectively, project planning has been known to lead to success of projects using all the parameters of time, cost and quality (James, 2014) Their review provided planning as plausible explanation for the success of development projects – that they are able to meet set targets due to effective planning. This project performance factor has been supported by other researchers among them (Agheneza, 2013) and (Khang, & Moe, 2014).

### **Stakeholder Participation**

Stakeholders are individuals or groups that either directly or indirectly are affected by the performance of the organization. These individuals or organization not only affected by the organization's performance, but have a claim on its performance Infragate, (2014). International projects involve international participation by the international multilateral, governmental or nongovernmental organizations through financing and technical assistance (Wanjiru, 2013). This characteristic makes them unique and therefore requires a different planning and implementation than national projects (Kwak, 2013). In a global context, the management and development of people inevitably leads to consideration of diversity and related challenges (Higgs, 2013).

### **Project Monitoring and Evaluation Practices**

According to Myrick (2013), monitoring and feedback are the project control processes whereby at each stage of the project implementation, the project team receive feedback on how the project is comparing to initial projections. Monitoring also involves feedback about the progress of the project to the donors, implementers and beneficiaries of the project. "The resulting information is used for decision making for improving project performance" (Ochieng & Tube, 2013). Allowing for sufficient monitoring and feedback mechanisms gives the project

manager the capacity to predict challenges, oversee counteractive actions and to ensure that no weaknesses are overlooked.

### **Implementation of KPA funded projects**

The Kenya Ports Authority is considered as one of the key sector that drives economic development Kenyan economy. According to the annual report of 2017, KPA contributes 35.6 billion to countries GDP. Most donor funded projects are implemented by Ministry of Transport and Infrastructure (Republic of Kenya, 2013). The nature of the implementation processes usually depends on the type and size of the project. Scope, time, cost, risk, quality, project organization, human resources, communications and procurement. However, a study by Owuoth & Mwangangi (2015), points out that delay in implementation of project public institution has been apportioned to procurement processes.

As observed Atego & Theuri (2015), public institutions are stained with inefficiencies, secrecy and undercutting and lots of tax payer's money is being lost through dubious procurement processes resulting to poor project implementation. Luyimbazi (2014) adds that political interference has continued to impact negatively on project implementation resulting in delay and escalation of prices. Other factors that affect effective implementation of donor funded project at KPA include: adequacy of funding; timing of funds disbursement, bureaucracy; stakeholders interest and social-cultural obstacles.

### **METHODOLOGY**

The study adopted a descriptive research design. The design is considered appropriate as it enables the researcher to reach many subjects within limited time. The data was analyzed using quantitative techniques, whereby the findings were presented in the form of tables while qualitative techniques were incorporated in the study to facilitate description and explanation of the study findings. By so doing this created good understanding of the study findings. The data collected was analyzed using Statistical Package for



Social Sciences (SPSS Version 22). The software packages enabled the researcher to analyze the data into percentages, means and standard deviations. Data from SPSS was then presented in tables. The multiple regression model was used. The equation of the regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

$Y$  = Implementation of KPA funded projects  $\beta_0$  = constant term indication the level of performance in absence of any independent variables

Then:  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$  will be the coefficient function of the independent variables,

$X_1$  = Monitoring and Evaluation

$X_2$  = Stakeholder's Participation

$X_3$  = Project Risk Management

$X_4$  = Project Planning and Design

$\epsilon$  = Error term of the regression.

## RESULTS

### Monitoring and Evaluation Practices

The researcher sought to determine the role of monitoring and evaluation practices in implementation of funded projects at Kenya Authority using a five point Likert scale of 1-5 where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, and 5=Strongly Agree. The results were as shown in table 1. The table shows that the responses had a mean of >3.0 which imply that project management practices highly determined implementation of funded projects in the organization. The results also had a standard deviation of <1.5 which showed that the difference

in response received from the population was almost similar.

Based, on the findings as indicated in table 1, monitoring of feedbacks about the progress of the project during implementation had (mean = 4.40, SD = 1.239). Poor or lack of M&E reporting mechanism, translated to reoccurring project implementation problems as highlighted in all the Auditor's Generals reports since 2013 to date. Thus making decision not founded on facts affects the quality of the project. Furthermore, it was agreed with (mean = 3.83, SD = 1.660) that sufficient and monitoring and feedback mechanisms gives the project manager the capacity to predict challenges, oversee counteractive actions and to ensure that no weaknesses are overlooked.

The implication was that sufficient monitoring and feedback mechanisms enables project manager to evaluate the potential of on - going project and choose the kind of projects to pursue or create new project activities (Ochieng & Tube, 2013). It was also found with (mean = 4.33, SD = 1.153) that the use of incorrect methodologies and lack the necessary capacity or strength may be a hindrance for the monitoring team to carry out their work effectively. There is, therefore, a reference point on what needs to be accomplished with regards to methodologies and capacity of monitoring team. With, (mean = 4.30, SD = 1.351), it was found that lack of necessary management support to support project team may have negative effects on project activities. Finally, respondents strongly agreed as indicated with (mean = 4.21, SD = 1.153), that the organization had adequate and proper monitoring and evaluation style that can make it in succeed in implementation of project activities.

**Table 1: Monitoring and Evaluation Practices**

	N	Mean	Std. Deviation
Monitoring involves feedback about the progress Of the project to implementers and beneficiaries of the projects	135	4.50	1.239
Sufficient and monitoring and feedback mechanisms gives the project manager the capacity to predict, challenges oversee counteractive actions	135	3.83	1.660

and to ensure that no weakness are overlooked.

The monitoring team lacks the necessary capacity or strength to carry out their work effectively or they may be approaching their work using incorrect methodologies	135	4.33	1.153
The project monitoring team lacks necessary management support.	135	4.30	1.351
The organization has adequate proper monitoring and evaluation style that has made it succeed in project implementation practices.	135	4.21	1.153

### Stakeholder's Participation

The researcher sought to determine the role of stakeholder's participation in implementation of project activities at Kenya Ports Authority using a five point Likert scale of 1-5 where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, and 5=Strongly Agree. The results were as shown in table 2. The table showed that the responses had a mean of >3.0 implying that stakeholder's participation highly determined project implementation at Kenya Ports Authority. The results also had a standard deviation of <1.5 which showed that the difference in response received from the population was almost similar.

Table 2 showed that, project implementation, external stakeholders were also the part of the project shareholder management and play important role in project portfolio as indicated with (mean = 4.31, SD = 1.156). It was also agreed with (mean = 4.37, SD = 1.136) that KPA operates in a unique and complex environment. This makes it deal with different and wide range of stakeholders. Further, it was agreed with (mean=4.33, SD=1.33) that the organization's clear formulated vision that involves key stakeholder had a turnaround image of the organization.

Furthermore, it was strongly agreed (mean=4.50, SD= 1.239) that stakeholders often had conflicting interests in some cases which increased the risks project discontinuation. Further, it was found that lack of stakeholders participation in project management was one of the reason for project failure (mean = 4.18, SD = 1.165). There was, therefore, a reference point on what needs to be done with regard to stakeholder's participation in implementation project activities in order to attain set goals/objectives.

**Table 2: Stakeholder's Participation**

	N	Mean	Std. Deviation
External stakeholders were also the part of the project shareholder management and play important role in project portfolio.	135	4.31	1.156
KPA works in a unique and complex environment, this makes it deal with different and wide range of shareholders.	135	4.37	1.136
We have formulated clear vision and involvement of key stakeholder that has turnaround the image of the organization.	135	4.33	1.154
Stakeholders often have conflicting interests which increases risks and uncertainty within the project implementation.	135	4.50	1.239

Lack of stakeholder participation in project management is one of the reasons for project failure in development. 135 4.18 1.165

**Project Risk Management**

The researcher sought to determine the effect project risk management in implementation of funded projects at Kenya Ports Authority using a five point Likert scale of 1-5 where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, and 5=Strongly Agree. The results were as shown in Table 3. The table showed that the responses had a mean of >3.0. This also implied that project risk management highly determined project implementation at Kenya Ports Authority. And, with a standard deviation of <1.5, it implied that the difference in response received from the population was almost similar.

Table 3 showed that, during project implementation, based on the findings, project management tools and Techniques (PMTT) contributed significantly to project implementation activities (mean = 4.50, SD = 1.239). Furthermore, was strongly agreed with (mean = 4.34, SD = 1.155) that lack of structured risk management

frameworks for risk identification and mitigation is the cause project implementation failure. It was also found with (mean= 4.31, SD = 1.156) that employing a project management approach, helps in eliminating time wastage and efforts that could have been used in directing irrelevant tasks during project implementation activities. This concurs with (Pushkarskaya & Tolin, 2015; Serrador & Turner, 2015) who observed that project management helps in reducing risk impacts that can adversely affect planned expenses, project schedule and quality of works.

As to whether lack of project risk management skills contributed to delay and failure of project implementation activities at KPA had (mean = 4.50, SD = 1.239). Finally, on whether project risk management had received considerable attention by management during project implementation had (mean = 4.22, SD = 0.798). This implied that the management was usually engaged in tracking project progress.

**Table 3: Project Risk Management**

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Project management tools and Techniques (PMTT) Contributes significantly to project implementation success.	135	4.50	1.239
Lack of structured risk management frameworks for risk Identification and mitigation is the cause project implementation failure.	135	4.34	1.155
Employing a project management approach could help eliminate wasted time and efforts that would have been directed at irrelevant tasks.	135	4.31	1.156
Lack of project risk management skills has contributed to delay and failure of project implementation at KPA.	135	4.50	1.239
Project risk management area has received considerable attention by management during project implementation.	135	4.22	0.798

### Project Planning

The researcher sought to determine the effect project planning in implementation of projects at Kenya Ports Authority using a five point Likert scale of 1-5 where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, and 5=Strongly Agree. The results were as shown in table 4. As indicated table below, the responses had a mean of >3.0 which means that project management highly determined project implementation in the organization. With, a standard deviation of <1.5 showed that the difference in responses received from the population was almost similar.

Table 4 showed that, during project implementation, based on the findings, project planning and design will lead to effective and efficient deployment of resources during project implementation activities as shown with a (mean = 4.43, SD = 1.136). On whether, project planning

and designing requires planning of cost, through which budget cost of the project is considered had (mean=4.35, SD=1.145).

Furthermore, it was found that lack of financial backing poses a great challenge to project implementation in organization as demonstrated with (mean = 4.27, SD = 1.123), cost of the project, location, availability of resources and time of completion of the project had a (mean=4.37, SD=1.124). Finally, respondents agreed with a (mean = 4.13, SD = 1.183) that lack of financial backing affected project planning and designing. In case of parastatals like Kenya Ports Authority, the issues of project planning was still a challenge. As such, the ISO certification should not only be for the purpose of audit and compliance, but should be geared towards public satisfaction exemplified by what is happening in other jurisdictions such as European states and international organizations (Njuguna, 2018).

**Table 4: Project Planning**

	N	Mean	Std. Deviation
Project planning and designing will lead to effective and efficient deployment of resources during project implementation process.	135	4.43	1.136
Project planning and designing requires planning of cost of the project through which cost budget of the project is considered.	135	4.35	1.145
Lack of financial backing is another challenge that affects project management.	135	4.27	1.223
Cost of the project, location, availability of resources and time of completion of the project influences planning of a project.	135	4.37	1.124
Lack of financial backing affects project planning and designing.	135	4.13	1.183

### Project Implementation

Finally, the researcher sought to find out the importance of project implementation using a five point Likert scale of 1-5 where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, and 5=Strongly Agree. The results were as shown in table 5. And, a mean of >3.0, it implied that project

implementation was key in determining performance of the organization.

Based on results findings as shown in table 5, the organization experienced higher turnover of trade volume following fast project implementation practices as indicated with a (mean = 4.33, SD = 1.354). It also found that quick project implementation led to a tremendous growth in

trade volume as indicated with a (mean=4.30, SD=1.351). Further, it was agreed as demonstrated by a (mean=4.27, SD=1.223) that most of the projects at KPA are not implemented within the budget and time schedule. On whether, implementation of project within the scope would

translate to reduction of costs of transacting business at the port of Mombasa had a (mean = 4.41, SD = 1.373). Besides, respondents also agreed with a (mean = 4.25, SD = 0.853) that implementation of projects can improve efficiency in the organization.

**Table 5: Project Implementation**

	N	Mean	Std. Deviation
We have Higher turnover of trade volume of following fast project implementation practices.	135	4.33	1.354
We have tremendous growth in trade volume as a result of quick project implementation.	135	4.30	1.351
Most of the projects at KPA have been implemented within the budget and time frame.	135	4.27	1.223
Implementation of project within the scope will translate to reduction of costs of transacting business at the port of Mombasa.	135	4.41	1.373
Implementation of projects improves efficiency in the organization	135	4.25	.853

**Table 6: Correlations**

	Implementation	M_E	Risk_Mgnt	Stakeholders	Planning
Implementation	1				
Sig. (2-tailed)	.				
M_E	.434**	1			
Sig. (2-tailed)	.000				
Risk_Mgnt	.607**	.460**	1		
Sig. (2-tailed)	.000	.000			
Stakeholders	.686**	.474**	.874**	1	
Sig. (2-tailed)	.000	.000	.000		
Planning	.564**	.471**	.881**	.762**	1
Sig. (2-tailed)	.000	.000	.000	.000	

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

### Regression Analysis

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699a	.488	.472	2.095

a Predictors: (Constant), Project Planning, Monitoring and Evaluation, Stakeholder's Participation, Project Risk Management

**Table 8: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	544.557	4	136.139	31.007	.000b
Residual	570.776	130	4.391		
Total	1115.333	134			



a .Dependent Variable: Project Implementation

b. Predictors: (Constant), Project Planning, Monitoring and Evaluation, Stakeholder’s Participation, Project Risk Management

**Table 9: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	8.585	1.295		6.631	.000
M_E	.231	.061	.130	3.783	.017
Stakeholders	.486	.103	.622	4.736	.000
Risk Management	.378	.137	.100	2.759	.000
Project Planning	.344	.099	.118	3.474	.001

a Dependent Variable: Implementation of Funded Projects

**Regression Coefficient**

The study presented the regression results on how monitoring and evaluation practices, stakeholder’s participation, project risk management and project are planning affect implementation of funded projects at Kenya Ports Authority. The multiple regression model equation:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ , hence multiple regression equation become;

$$Y = 0.231X_1 + 0.486X_2 + 0.378X_3 + 0.344X_4.$$

As depicted, in the above equation, there was a positive and significant effect of monitoring and evaluation practices ( $\beta_1 = 0.231$ ;  $t = 3.783$ ;  $p < 0.05$ ). This points to fact as to why there is a growing interest globally for NGO’s and the government to adopt monitoring and evaluation systems (Republic of Kenya, 2013), and why foundation for M&E is being build in many developing countries to demonstrate accountability and show tangible results (Sollis, 2013; Vivian, 2014).

There was positive and significant effect of stakeholder’s participation ( $\beta_2 = 0.486$ ;  $t = 4.736$ ;  $p < 0.05$ ). This was in agreement with Nthenge (2014) findings that stakeholder’s role is critical in project sustainability and sustainability cannot be achieved without the involvement and support of the stakeholders. In support of this Mungatu and Mulyungi (2017) observed that there is a positive association between stakeholders’ involvement in project implementation and project outcome. There was positive and significant effect of project

risk management ( $\beta_3 = 0.378$ ;  $t = 2.759$ ;  $p < 0.05$ ). There was positive and significant effect of project planning ( $\beta_4 = 0.344$ ;  $t = 3.898$ ;  $p < 0.05$ ).

The regression equation established that taking (monitoring and evaluation process, stakeholder’s participation, project risk management and project planning), Implementation of funded projects at Kenya ports Authority will be 8.585. The results finding also reveals that taking all other independent variables at zero, a unit increase in monitoring and evaluation process would lead to a 0.231 change in the score of project implementation at Kenya Ports Authority. A study also found out that a unit increases in stakeholder’s participation would lead to a 0.486 change in project implementation at Kenya Ports Authority. It was also found that a unit increase in the score of project risk management would lead to a 0.378 change in the score project implementation at Kenya Ports Authority. Further the study also found that a unit increase in the score of project planning would result to a 0.344 change in the score of project implementation at Kenya Ports Authority.

In overall, stakeholder’s participation had the greatest effect on project implementation at Kenya Ports Authority followed by project risk management, then project planning while monitoring and evaluation had the least effect on project implementation at Kenya Ports Authority.

All studied variables were significant since their p-value were less than 0.05.

### Hypothesis Testing

The first null hypothesis,  $H_{01}$  stated that project monitoring and evaluation has no significant influence on implementation of Kenya Ports Authority funded projects. The results indicated that ( $\beta_{01}=0.130$ ;  $t= 3.783$ ;  $p < 0.05$ ), hence the  $H_{01}$  was rejected leading to the conclusion that project monitoring and evaluation had significant influences on implementation of Kenya Ports Authority funded projects. The study findings concurred with Gacheru (2015) who concluded many projects fail to be implemented due to lack of regular monitoring and evaluation of projects. In support of this Murungi (2015) concluded that monitoring and feedback reinforces effective actions during project implementations and also triggers corrective actions in time.

The second null hypothesis,  $H_{02}$  stated that stakeholder's participation has no significant influence implementation of Kenya Ports Authority funded projects. The results indicated that ( $\beta_{02}=0.622$ ;  $t= 4.736$ ;  $p < 0.05$ ), hence the  $H_{02}$  was rejected leading to the conclusion that stakeholder's participation had significant influences on implementation of Kenya Ports Authority funded projects. The finding concurs with (Silvius & Schipper, 2014) research findings that lack of participation reduces project sustainability, and poor maintenance which may limit cost recovery of projects.

The third null hypothesis,  $H_{03}$  stated that project risk management has no significant influence on

implementation of Kenya Ports Authority funded projects. The results indicated that ( $\beta_{03}=0.100$ ;  $t= 2.759$ ;  $p < 0.05$ ), hence the  $H_{03}$  was rejected leading to the conclusion that project risk management had significant influences on implementation of Kenya Ports Authority funded projects. This findings concurs with (Ahlemann & Kaiser, 2013) observation that in construction of projects, risk and uncertainty can potentially have damaging consequences on construction of projects. Mitigating risk lessens their impact; hence a well-planned and properly administered risk mitigation strategy can be a replacement of uncertain and volatile events (Chapman & Ward, 2014).

The fourth null hypothesis,  $H_{04}$  stated that project planning has no significant influence on implementation of Kenya Ports Authority funded projects. The results indicated that ( $\beta_{03}=0.118$ ;  $t= 3.474$ ;  $p < 0.05$ ), hence the  $H_{04}$  was rejected leading to the conclusion that project planning had significant influences on implementation of Kenya Ports Authority funded projects. The results agree with (James, 2014) who noted that project planning is an important contributor to project success. This was also supported by (Agheneza, 2013; Khang, & Moe, 2014) who indicated that the process of project planning and implementation is able to resolve inherent challenges ranging from project inception to the end if there are well thought out. Gibson, Wang, Cho and Pappas (2016) also concluded that effective pre-project planning leads to improved performance in terms of cost, schedule, and operational characteristics.

**Table 10: Hypothesis Testing Results**

Hypothesis Statement	$\beta$	t	p-value	Decision
1) $H_{01}$ : Project monitoring and evaluation has no significant influence on implementation of Kenya Ports Authority funded projects.	.130	3.783	0.000	Reject the $H_{01}$
2) $H_{02}$ : Stakeholder's participation has no significant influence implementation of Kenya Ports Authority funded projects.	.622	4.736	0.000	Reject the $H_{02}$
3) $H_{03}$ : Project risk management has no significant influence on implementation of Kenya Ports	.100	2.759	0.000	Reject the $H_{03}$

Authority funded projects.

4)  $H_{04}$ : Project planning has no significant influence .118 3.474 0.000 Reject the  $H_{04}$   
implementation of Kenya Ports Authority funded  
projects.

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## CONCLUSIONS

On the first objective monitoring and evaluation process challenges underscores the (Ministries of Devolution, 2015 report) that projects in counties are not properly monitored. The study in support of Silvius & Tharp (2013) findings observed that most public or private organizations rarely have a formal mechanism to critically analyze monitoring reports.

In testing the relevance of introducing or adopting M&E mechanism, it was found necessary in support of Myrick (2013), importance of feedback at each stage of the project implementation, Murungi (2015) importance of feedback to reinforce effective actions and trigger corrective actions, Eliufoo (2017) importance of project audits and evaluations in identifying the challenges in project (Schien & Edigar, 2017) to avoid similar mistakes not to be repeated as project team receive feedback on how the project by comparing to initial projections. To ensure projects quality, stakeholder's benefits, financial benefits and projects control, there is need for organization to undertake proper project implementation as noted by the study and (Gaturu & Muturi, 2014).

The study concluded that stakeholder's participation affects project implementation at Kenya Ports Authority. And, with a moderate positive correlation between stakeholder's participation and project implementation, it was found necessary in support of (Eden & Alexander 2016) to satisfy all those involved or affected by the project undertakings, Mohammed (2013), importance of stakeholders' input in identifying mission, goals and definition of scope, areas of their interests, needs and constraints regarding the project, enables the project manager to tackle the

key problems in the stakeholder management process to minimize the potential impact it could have on the success of the project as a result of conflicting interests (Freeman, 2014, Jepsen & Eskerod 2014; Nguyen, 2015; Yang, 2013; El-Sawalhi & Hammad, 2015).

The study also concluded that the absence of stakeholders' participation leads lack of project ownership and support which can lead to the low up-take of project services; reduced sustainability of benefits; poor maintenance and; limited cost recovery of projects and ultimately project failure (Silvius & Schipper, 2014), Project Management Institute (2013), although deeper participation comes with more costs, it enhances competitive advantage of an organization.

The study further concluded that project risk management affects implementation of funded projects at Kenya Ports Authority positively and significantly. In this case project management tools and Techniques (PMTT) and lack of project risk management skills were found to have profound effects in implementation of funded projects at KPA. It was found necessary in support of (Harned, 2015) significance of project management tools and Techniques (PMTT) and skills in implementing projects successfully, Ahlemann & Kaiser (2013), importance of risk analysis and management, Gitau (2015), importance of risk management so as to achieve project objectives. The study concluded that adoption of risk management would impact positively on project implementation success at Kenya Ports Authority.

The study also found that project planning and design leads to effective allocation and utilization of resources that would lead to maximum output. Further the study found that project planning is able to resolve inherent challenges that may hinder

the project moving towards achievement its pre-set objectives. It was established that lack of financial backing greatly affects project management during project implementation processes. It also noted that successful projects employs limited resources while and maximizes on output and effectiveness (Zwikael, 2014).

## RECOMMENDATIONS

- The study recommends that Kenya Ports Authority adopt an effective monitoring system. The study found that effective monitoring system would help in collecting relevant data and information during project implementation process. The study also recommends that the organization adopt an effective evaluation program and reporting system. A reporting system helps to report data, and determines level of development.
- It is highly recommended that the executives in organization engage stakeholders' participation in identifying mission, goals and definition of scope, areas of their interests, needs and constraints regarding the project. This aspect would minimize the chances of project failure, avoid project alienation and ensure project ownership by stakeholders.
- The study also recommends that there is need for organization to reinforce project planning to ensure that it save on project cost, time and quality. This ensures proper allocation and

utilization of resources during project implementation.

- The study recommends that organization should aim at dealing with project uncertainty and unexpected challenges by having a comprehensive risk analysis mechanism. This aspect would help in assessing risks.
- It is the recommendation of the researcher that teamwork should be enhanced to ensure cohesiveness among the implementers and stakeholders. This will bring on board the interest of everybody to fast track project implementation which will eventually improve the performance of the organization.

## Areas for further Research

Project Management practices is a phenomenon has been applied worldwide to improve project undertakings. Given its wide contents, other studies should focus on how the other elements of project management can be adopted to enhance project implementation. The researcher suggests that more study to be conducted on how variables under study that is that is monitoring and evaluation, stakeholder's participation, project risk management and Project Planning and Design can be adopted in service sectors such as health, education etc. Other governments' parastatals can adopt the same principals and find out how they affect project performance.

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