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# **Abstract**

There is limited empirical literature supporting the interaction of risk management practices and the relationship between project implementation and performance of empowerment programmes. This theoretical limitation cannot just be ignored in the context of entrepreneurs' empowerment programmes due to their immense contribution to the National Gross Product (NGP) and national wellbeing. The purpose of this research was to examine the influence of risk management practices on the relationship between project implementation and performance of Jua-kali Empowerment Programmes (JEP) in Nairobi County, Kenya. The target population was 327 enterprises having benefitted from the JEP in Nairobi County Kenya. A sample of 181 entrepreneurs chosen using Krejcie and Morgan sample determination table. Both simple random sampling and purposive sampling techniques were used to select samples. The reliability of the questionnaire was tested using Cronbach Alpha Coefficient of reliability at 0.7. Pearson's Correlation Coefficient (r) was used in correlational analysis and regression analysis was used in predicting the research model. The results showed that at P=0.000<0.05, r= 0.575,  $R^2$ = 0.331 for F (1,145) = 4.632 depicting 1.4% change in performance of the programmes after introduction of risk management practices. It demonstrates that strength of the relationship between project implementation and performance of JEP depends on risk management practices. It was concluded that there is significance interaction between project implementation and risk management practices that moderates the effect of the project implementation on the performance of JEP. Hence Governments, implementors and supporters of entrepreneurs' empowerment programmes should strive to implement need-based project interventions while ensuring adequate risk mitigation measures in order to thwart adverse uncertainties and events that may derail sustainable delivery of results.

**Keywords:** risk management practices, project implementation, performance of Jua-kali empowerment programmes



#### 1.0 Introduction

# 1.1 Background to the Study

Across the globe, organizations are fast adopting project and programmes approaches towards satisfying their constantly changing own and clients' need. Empowerment programmes are examples of the emerging vehicles that governments and support organizations across the world are utilizing towards empowering and capacity building of entrepreneurs (World Bank, 2013; Mbhele, 2012). While successful delivery of such programmes will be influenced by the ability to overcome implementation challenges (Hobbs, Aubry &Thuillier, 2008), the demand for quality product is compelling organizations to transform their delivery approaches so as to meet customer needs through re-invention of the low risk delivery paradigm (Cleland &Ireland, 2002). Literature builds evidence supporting the association between project implementation and performance in the context of customer needs, cost, scope, quality, schedules and risks factors (Rehman, Usmani & Al-Ahmari, 2014). However, risk management is one of the project knowledge management areas that every manager is building concern on due to high level of uncertainties and detrimental repercussions associated with unforeseen events. In situations where effective risk management procedures and approaches are put into place the programme endeavors are very successful (Zwikael &Ahn, 2011). Hence this study attempts to develop a structure for the relationship between project implementation and performance of Jua-kali empowerment programmes and how such relationship interacts with risk management practices.

#### 1.1.1 Performance of Jua-kali Empowerment Programmes

Performance is a measure of the progress and achievements made during the programme implementation discourse relative to the plans and expectations (Chan& Chan, 2004). Owing to the temporally, unique and dynamic nature of projects and programmes, assessment of project performance is quite complicated (Kara & Kester, 2015; Turner & Muller, 2001). For this reason, the measures of project performance have not been scholarly consented. For example, while Shenhar, Levy and Dvir (1997) propose the dimensions of project performance and success in terms of customer satisfaction, budget and schedule, business success and future potential, Sadeh and Shenhar (2000) suggests that project performance can be measured based on extent of meeting design goals, benefits to the end users, benefits to the organization, benefits to the sector and the overall success. In a more pragmatic view, Chan and Chan (2004) argue that project performance can be measured by the following eight dimensions: cost, quality, time, environmental performance, user expectation/satisfaction, commercial/profitable value, health and safety, participants' satisfaction. Likewise, Project Management Institute (PMI, 2013) proposes evaluation of project performance based on the dimensions of cost,



time, quality and stakeholder satisfaction. However, Kerzner (2009) summarizes measures of project performance into four dimensions of namely: (a) schedule overrun, (b) cost overrun, (c) customer satisfaction and (d) project performance. While literature suggests that programme performance can be assessed by broad measures like outreach, effectiveness, efficiency and sustainability, lack of scholarly consented criteria for assessing programme performance leaves researchers at the option of selecting the most suitable indicators to assess programme performance by case characteristics. Naturally, principles of good practice have to be judged by the outcomes produced by the programmes that embody them (Nelson, 1997). Accordingly, programme performance cannot be assessed in isolation with meeting clients` needs. Due to the connectedness and enabling nature of empowerment programmes, the performance of JEP was indicated by qualitative and quantitative outcome indicators of effectiveness namely: new product development, changes in product quality, skill acquisition, skill application, access to new markets, changes in sales, changes in income and changes in customer relations.

# 1.1.2. Project Implementation

Empowerment projects and programmes are uniquely complex and operate in open and adaptive system for flexible and stable adjustments to the prevailing changes. As a result, project implementation factors will differ from one project to another depending on the nature of project and processes involved. Literature draws common themes and trends on the project implementation factors in by stage of implementation, plans underscore, resources, tasks and schedules, leadership approach and the and nature of products (Alaloul, Liew, Wan & Zawawi, 2016). Among other factors of project implementation that are claimed to hinder project delivery is poor coordination and integration of (Chan & Zailani, 2007). Naturally, it is good practice to have clear structure for project implementation to enable participants to have a clear sense of task, process and expectations. A study by Rehman, Usmani and Al-Ahmari (2014) on the implementation factors having impact on project performance projects in Saudi Arabian found significant correlation between project implementation process and performance of projects. Another study to determine the factors influencing effective delivery of energy projects in Rwanda by Higiro, Mbabazi and Kibachia (2015) found that operation procedures and practices greatly influenced effective delivery of projects. Poor prioritization of project needs, inadequate project operations coupled with failure to address emerging project needs may lead to unsuccessful programmes interventions (Culligan, Marks, Nelson, Radstone & Verzuh (2013). Projects and programmes need be implemented in a flexible and adaptable approach in order to seek to address the dynamic constraints that continue to hinder delivery of desired outcomes (Hallberg, 2000; Boh, 2007). In this study, the indicators for project implementation were: installation of working-space facilities, entrepreneurship training and promotion of product in line with the objectives of Jua-kali empowerment programmes.



# 1.1.3 Risk Management Practices

Risk management is a systematic process that entails application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context and identifying, analyzing, evaluating, treating, monitoring and reviewing risk (ISO 31000: 2016). As such, risk management is one of the project knowledge management that is claimed to influence major decisions in project implementation (PMI, 2013; Eskesen, Tengborg, Kampmann & Veicherts, 2004). While risks are factors or uncertainties which have a probability of occurring and may have potential threats in the realization of projects (Benta, Podean & Mircean, 2011), the probability of occurring and consequences of risks is what matters in relation to project well-being (PMI, 2013). Hence risk is considered as a constituent to the uncertainty dimension of project complexity (Williams, 1999). However, different authors have conceptualized risks factors in different categories. For example, Na, Lee, Shim and Ahn (2008) categorizes risk factors into six categories based on the likelihood of occurrence and likenesses in mitigation strategy as institutional and administrative, economic and financial, social and cultural, participant and stakeholder and designing and technological. Risks factors cause various ripple effects according to the type and occurrence frequency (Park, Cha & Hyun; 2016).

While untreated risks have adverse effects to the project health depending on the risk type and occurrence frequency, effectiveness in risk management process can be enhanced by robust and continuously practices of identification, analyzing, treating and controlling process (Park, Cha & Hyun, 2016). This suggests that risk management practices may be informed by the rationality of the risk management process (March, 2005). Past studies have explored the influence of risk management on project success with limited consideration to the practices and levels of risks involvement (Zwikael & Ahn, 2011; Carbone and Tippet, 2004). While there exists theoretical taxonomy supporting the flow of risk management process right from risk identification, risk assessment, risk mitigation to risk control (PMI, 2013), adequacy of such practices is claimed to increase the probability of project success by adopting contingent effects of risk to project implementation and reducing chances of uncertainties and consequent failure of realizing the objectives of the organization by (Shenhar & Dvir, 2010). Hence, the rationale of risk management process is to explore uncertainties employ appropriate practices in decision making processes in order to create value in the undertakings (Moller, 2011).

Still, there exist empirical contradictions on the interaction effects of risk management on the project implementation and performance discourses. While using a sample of 701 randomly selected project managers to examine the effectiveness of risk management on project success. Zwikael and Ahn (2011) found that risk management moderates the relationship between risk level and project success. In contrast, risk management is claimed to be the limiting step to project success (Carbone & Tippet, 2004). While a limiting factor is a critical stage that controls another, this study considers risk



management practices as having two levels namely: moderation to the relationship between implementation and performance of Jua-kali Demonstration and Training Empowerment Programmes and as an independent variable with direct and linear relationship with the performance of Jua-kali Demonstration and Training Empowerment Programmes. Additionally, this study advances the recommendations of Oehmen, Olechowski, Kenley and Ben-Daya, (2014) in their study on the effect of risk management on the performance of new product development programmes that future studies should focus on establishing how risk management influences project success for more generalizable conclusions.

According to ISO: 31000 (2016), the standard principles of effective risk management includes; a) systematic and timely process of creating and protects value, b) integrating organizational processes, c) decision making process, d) addressing all uncertainties, f) evidence based, g) customized to the context of the organization, h) considers human and cultural factors, i) transparent and inclusive, j) flexible and k) dynamic and adaptive and facilitates continuous learning and improvement. In support, ISO Guide 73 (2009) outlines the best practices to risk management as: a) early identifying of potential risks in the project life cycle, documenting and communicating the associated potential consequences to stakeholders, b) identifying continuously and communicate updates, c) analyzing the cause, origin, impacts and communicating, d), defining goal and response plans, e) communicating risk status and changes in all levels and soliciting feedback from stakeholders on the known risks and prospects and maintaining a risk management log, f) updating risk management log regularly both formally and informally, and g) educating all project stakeholders on risk management and encourage them to actively identify, communicate and mitigate risks. The standard principles and good practices of risk management can be summarized in term of good practice activities namely: a) risk identification, b) risk analysis or assessment, c) risk treatment or response and d) control of risk responses which form the indicators of risk management practices for this study.

# 1.1.4 Context of the Study

From the Kenyan context, Jua-kali is Swahili word meaning micro and small enterprises (MSE) who operate and work in open spaces utilizing local resources and producing commercial goods. In this study, these entrepreneurs were associated with productive activities like metal products, textile products, wood products and automobile work. Broadly, Jua-kali entrepreneurs are classified into two categories namely: micro enterprises having at most 10 workers and annual turnover not exceeding Kenya Shillings (Ksh) 500,000 capital investment, and small entrepreneurs having between 11 and 50 workers and annual turnover of between Ksh. 500,000 and 5Million capital investment in plant and machinery (RoK, 2012). Jua-kali empowerment programmes were government ran entrepreneurial-support interventions aiming at improving productivity of Jua-kali entrepreneurs through organized working places, entrepreneurship training and promotion of their products (RoK, 2013). This would increase entrepreneurs'



contribution to the employment, Gross Domestic Products, backward and forward linkages and national wellbeing. The World Bank (2013) observes that empowerment to entrepreneurs is critical aspect of boosting value chains towards the growth and expansion industry.

#### 1.2 Problem Statement

The indicators of Kenyan's Economy Survey of 2016 show that MSEs have potential to contribute to over 45% of Gross Domestic Product (GDP) and over 80% of total employment if the challenges facing MSEs are addressed (Republic of Kenya, 2016). In line with the social pillar of Vision 2030, the Government of Kenya allocated KSh. 40 Million to the implementation of Jua-kali Empowerment Programmes (JEP) with the core aim of building capacity and transferring technology to Jua-kali entrepreneurs through installation of work-space facility, training and promotion of product which would then lead to productive utilization of local resources for increased growth in employment, outputs, income, wealth and sustainable livelihoods (RoK, 2013). According to Republic of Kenya (2017), over 3,836 Jua-kali entrepreneurs have benefited from the implementation of Jua-kali Empowerment Programme (JEP) in Kenya. Nevertheless, KNBS (2016) contest that most of MSEs are not able to grow and expand notwithstanding the gains derived from the implementation of empowerment interventions. Whereas such a back fall is partly attributed to the low level of innovations in the utilization and application of the gains from empowerment interventions, this trend has persistently limited their competitiveness (Kithae, Gakure& Munyao, 2012).

Empirical studies reveal that empowerment programmes can have significant impacts to the beneficiaries if well implemented (Kanyari and Namusonge, 2013). But poor implementation has been suggested to contribute to poor performance of empowerment programmes (Rehman, Usmani & Al-Ahmari, 2014). Due to unconsented findings on the influence of project implementation on the performance of projects, this study attempted to fill the gaps by examining the influence of project implementation on the performance of Jua-kali Empowerment Programmes in Nairobi, Kenya. This study adopted outcomebased indicators of project performance namely: installation of working-space facilities, entrepreneurship training and promotion of product per the programme objectives. Risk management which ensures that appropriate mitigation measures are put in place to avert adverse consequences of undesired events to the success of project is considered moderate the relationship between project implementation and performance of Jua-kali empowerment programmes. Hence risk management practices were considered in the dimensions of risks identification, analysis, treatment and control and is conceptualized to moderate the relationship between project implementation and performance of Jua-kali empowerment programmes.



# 1.3 Research Objective

The overall objective of the study was to examine the influence of risk management practices on the relationship between project implementation and performance Jua-kali Empowerment Programmes in Nairobi County.

# 1.3.1 Research Hypothesis

 $\mathbf{H_{A}}$ : The strength of the relationship between project implementation and performance of Jua-kali demonstration and training empowerment programmes depends on risk management practices

#### 2.0 Literature Review

# 2.1. Performance of Project and Programmes

Projects are unique endeavors designed to produce a definite set of outcomes within a planned scope, schedule and cost (Nagesh & Thomas, 2015). The desires to understand why and how programmes succeeds or fails is formed by their performance. While using a sample of 1,000 practitioners in project management to assess the success criteria for projects in Myanmar and Vietnam, Khang and Moe (2008) recognized that the quantity, quality and sustainability of project outcomes under limited resources is adequate criteria for measuring performance. In their exploratory study on the extent to which change order management strategies influence overall success of building projects in Nigeria Kolawole, Kamau and Munala (2016) found that changes in order of project implementation influenced projects outcomes, performance and success. Equally, Kylindri, Blanas, Henriksen and Stoyan (2012) stress that the ability of the project outcomes (product and service) to meet the specified requirements and purpose is a vigor criterion for assessing project performance. In this context, Glaser (2004) argues that changes in scope and deadlines are significant outcome measures of project performance. Measuring project performance by assessing their effectiveness in meeting customers' needs is theoretically supported (PMI, 2013; Santos, Tavares and Varajao, 2014). Similarly, an empirical study on success factors of projects by Khang and Moe (2008) support the theoretical claims that evaluating the benefits realized from project is a significant dimension for measuring project performance and success. Likewise, Kylindri, Blanas, Henriksen and Stoyan (2012) outlines among other criterion for assessing project performance as the ability of the project deliverables to meet, satisfy and enhance the well-being of the beneficiaries. Due to SMEs being very reluctant and reserved in sharing or revealing their actual performances especially finances, it is recommended that researchers should use both subjective and objective measures when examining the performance of their enterprises (Zulkiffli &Perera, 2011). Literature suggests the following measures of programme performance: outreach, effectiveness, efficiency and sustainability. However, there lacks scholarly consented criteria for



assessing programme performance which leaves researchers at the option of selecting the most suitable indicators to assess programme performance by case characteristics. Guided by the pragmatic reasoning and principles of good practices in project management, this study employed both quantitative and qualitative measures of effectiveness to examine the performance of Jua-kali empowerment programmes namely: new product development, changes in product quality, skill acquisition, skill application, access to new markets, changes in sales, changes in income and changes in customer relations.

# 2.2 Project Implementation

Projects differ from one another based on different factors not limited to duration, stakeholders, needs, processes, budgeting, financing, risks among other characteristics (Begicevic, Divjak & Hunjak, 2009). These areas of diversities often make it very hard to standardize the project implementation process and factors. Equally, the International Standards of Organization for project management provide guides to the factors for effective project implementation based on good practices (Zandhuis &Stellingweref, 2013). The principles of good practices to project implementation call for coordinated interfaces, prioritization of resources based on needs and reduction of uncertainty (PMI, 2013). Larson, Clifford and Clifford (2011) supports that the best practices to project implementation entails integration of project tasks along with their interdependencies to reduce risks, improve stakeholder's cooperation. In a more systematic view, effectiveness of project implementation is attributed to the dimensions of inputs, process and outputs. While using a case study and grounded theory to explore the decision-making processes during project implementation, Kester, Griffin, Hultink and Lauche (2011) argued that the more integrated and understood decision making is the more focused, effective and efficient is the project implementation. Effective decision-making results into coordinated effort and effective implementation of projects (Chavan, 2009). Numerous studies draw consensus on the importance of aligning project implementation to the factors relating to the existing and emerging customers' needs (Archer & Ghasemzadeh, 2004; Pakseresht &Asgari, 2012). It follows that the project implementation factors for each project will vary based on the nature of the project under consideration. Due to the constantly changing customer needs that continuously pose constraints to the utilization of project resources, adaptive project implementation is recommended (Nwachukwu & Fedelis, 2011). Whereas the traditional approaches to project implementation claims that implementation is linearly connected to the project outcomes, the complexity of recipient needs coupled with constraining resources is claimed to sway project deliverables and performance (Howell and Lauri, 2000). This is supported by Engwall (2003) that project implementation should be based on the factors that help to fulfil project needs by effective use of the constraining resources.



While the project implementation depends on the nature and the context of a project underscore (Shenhar & Dvir, 1996), the more complex the project scope of operations are, the more sophisticated the project implementation (Shenhar, 1999). Hence adaptive approaches to project implementation ensure that projects are sustainably coordinated for response deliverable (Gharajedaghi, 2006). Owing to the complex nature of project needs in the context of dynamic environment, it requires systematic address needs in each step of implementation (Altschuld & David, 2010). Similar arguments are advanced by Kaufman, Alicia and Hannah (1993) that for beneficial impacts, project implementation should be consciously constructed with user needs in mind. Unlike functional organization whose operations are routine in nature, project implementation is organized by product to ensure optimum focus and delivery. This study considers the project implementation for Jua-kali empowerment programmes from three-dimension factors or variables namely installation of work-space facility, entrepreneurship training and promotion of product.

### 2.3. Risk Management Practices

Effective risk management practices are strongly associated with successful projects (Zwikael & Ahn, 2011). This is because risk management decisions influence major decisions during project implementation (Eskesen, Tengborg, Kampmann & Veicherts, 2004). Owing to the belief that high risks are hindrances to successful endeavors, organizations dedicate significant resources in risk management (Kerzner, 2009). However, apart from decision making literature is full of controversies on the exact influential role played by risk management in projects success. For example, a study by Zwikael and Ahn (2011) on the effectiveness of risk management practices on project success and using a sample of 701 randomly selected project managers reveled that while project context significantly impacts perceived levels of project risk and the intensity of risk mitigation, risk management was found to moderate the relationship between risk level and project success. In another related study, risk management is claimed to be the limiting factor to project success (Carbone & Tippet, 2004).

All in all, risk management has been examined with limited consideration to the practices involved. In projects where is effective risk management practices, there is maximization of performance of project outputs (Kinyua, Ogollah &Mburu, 2015). Equally, poor risk management practices are claimed to cause project failure in terms of meeting deadlines, cost targets and quality performance (Kululanga & Kuotcha, 2010). In this study the indicators of risk management practices are conceptualized as a) risk identification, b) risk assessment, c) risk treatment and d) control of risk treatment and are derived from the standard principles of effective risk management by ISO: 31000 (2016) and best practices to enhance risk management by ISO Guide 73 (2009).



#### 2.4 Theoretical Frameworks

# 2.4.1 Theory of Constraints

Theory of Constraints (TOC) which emphasizes on logical and systematic thinking when analyzing cause and effects of issues and verifying the basic assumptions and alternatives for process improvement formed the theoretical framework of this study (Goldratt, 1986). TOC suggests that organizations need to competently dedicate their resources in support of core discourses for sustainable impacts (Johnson, Whittington and Scholes, 2006; Porter, 1985). Similar views are echoed by Watson, Blackstone and Gardiner (2007), that the ultimate goal of TOC is to maximize the efficiency and effectiveness of process selectively at the most critical points and thereby maximize realization of corporate objectives through five steps namely; constraint identification, exploiting and eliminating the constraint, subordinating the system to the constraint, elevating the constraint and overcoming inertia by starting over

# 2.4.2 System Theory of Organization

Owing to the dynamic environment through which projects and programmes operate, agile project management calls flexible and adaptive systems of projects operations and decision making. System theory is grounded upon a set of interconnected, interrelated and interdependent components working and coordinating as whole in order to achieve a common goal (Barzilai, 2011). System theory is built upon subsystems that are open, focused, interrelated, continuously transforming inputs into outputs, flexible, responds to environment through feedback, brings about the equilibrium to the system and are coherent (Kast and Rosenzweig, 1972). In the same way, projects operate in an open system whereby project implementation is in constant contact with the dynamic environment (Ahrne, 1994; PMI, 2013). As the needs vary, project implementation become even more complex for empowerment programmes set up (Murray, 2000). As indicated by Ahrne (1994), projects run smoothly when a balance is stricken between the internal system and external forces. Kapsali (2011) holds similar view in that organizations should become more flexible and adaptable in managing complexities and uncertainties for enhanced success

#### 2.5 Conceptual Framework

Figure 1 shows the flow of research variables for the examination of how risk management practices moderates the relationship between project implementation and performance of Jua-kali empowerment programmes. The conceptualization was derived from various constructs from the literature supporting the relationships underscore.



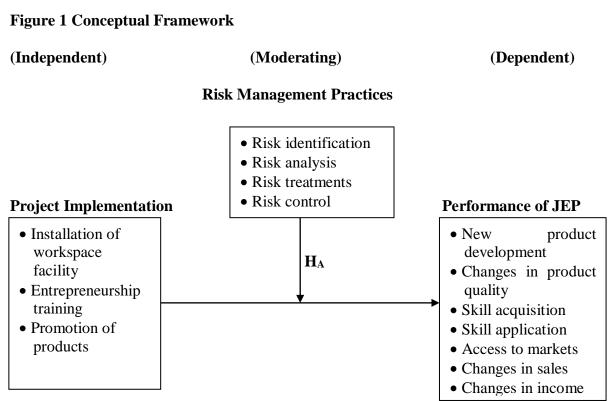


Figure 1: Conceptualization of the interaction between risk management practices, implementation and performance of Jua-kali empowerment programmes

# 3.0 Research Methodology

This study adopted pragmatic paradigm that integrates both positivism and constructivism paradigm to sustain the reasoning that an objective reality can only be subjectively interpreted by human beings (Creswell, 2003). In this study, descriptive survey design approach was helpful in describing and estimating the prevalence of phenomenon while providing a snapshot of the characteristics of interest. Also, correlational design was utilized in correlational analysis between variables of interest (Best & Kahn, 2009). The target population was 327 entrepreneurs who have benefited from the Jua-kali Empowerment Programmes in Nairobi County Kenya. A of 181 elements was reached using Krejcie and Morgan sample determination table. Simple random sampling was used to select the 181 respondents. However, purposive sampling technique was used to judge and select 10 implementors of JEP of above supervision level for interview. While structured questionnaires were used to garner quantitative data from the entrepreneurs, informant interview guide was used to gather data from the



programme implementors. The reliability of the questionnaires was tested using Cronbach's Coefficient Alpha method at acceptable levels of  $\alpha$  =0.70 (George and Mallery, 2003). The validity of the instruments was ascertained through matching and input from experts. Quantitative data was analyzed using both descriptive statistics (percentages, arithmetic mean and standard deviation) as well as inferential statistics. Correlational analysis was computed using Pearson's Correlation Coefficient (r). Regression analysis was used in predicting the research model. Hypothesis was tested using Fisher (F) test.

The following research model was tested;

Performance of JEP= f (project implementation, risk management practices)

$$E(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 (X_1 * X_2) + \varepsilon$$

Where:

Y= Performance of JEP

 $X_1$ = Project implementation (installation of workspace facility, entrepreneurship training, Promotion of products)

X<sub>2</sub>= Risk Management Practices

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  = Beta Coefficients

 $\beta_0$ : = Constant term

 $\varepsilon = Error term$ 

# 4.0 Key Results and Findings

Stepwise regression analysis was done to determine the influence of risk management practices on the relationship between the project implementation and performance of Juakali Empowerment Programmes (JEP). In step one, the project implementation was regressed on the performance of Juakali empowerment programmes before risk management practices as the hypothesized moderator was introduced in step two. If the influence of the interaction between the independent variable (project implementation) and moderator (risk management practices) on the dependent variable (performance of JEP) is statistically significant, then the moderation is supported.

# Step One: Test of the influence of project implementation on performance of Juakali Empowerment Programmes (JEP)

In this step, the project implementation was regressed on performance of Jua-kali empowerment programmes. The results are presented in Table 1



Table 1. Project implementation and performance of JEP

				Mod	del Summary		
Model	R	R R		ed R St	td. Error	F	P value
	Square		Square		of the		
				E	Estimate		
1 .563 .31		.317	.316		.1242	5.192	.000
				$\mathbf{C}$	oefficients'		
Model			Unstandardized		Standardized	t	Sig.
			Coeffici	ents	Coefficients		
			В	Std.	Beta		
				Error			
(C	Constant	)	853	.061		-3.698	.000
, Pro	ject						
1 im	plementation.		.049	.045	.091	1.092	.000
	_						

**Predictors:** (Constant), project implementation (installation of workspace facility, entrepreneurship training, promotion of products)

**Dependent Variable**: Performance of Jua-kali Empowerment Programmes

F = 5.192, at level of significance p=0.000<0.05, r= 0.563 and R square=0.317

The results in Table 1 indicate that at p=0.000<0.05, r=0.563 and R square=0.317 meaning that there exists a moderate positive slope between project implementation (installation of work space, entrepreneurship training and promotion of product) and the dependent variable (performance of Jua-kali Empowerment Programmes). Overall F statistics was (F (1,145) = 5.192) implying that there exists a positive correlation and the slope of the population regression line is not zero. This is a necessary condition for testing moderation effects of risk management practices on the established relationship.

# Step Two: The test for the moderation of Risk Management Practices on the relationship between project implementation on performance of JEP

This step involved the introduction of risk management practices (moderator) to the linear model between the project implementation and performance of JEP. The hypothesis was tested at significance level of 0.05. The results of the tests are presented in Table 2

Hypothesis  $H_A$ : The strength of the relationship between project implementation and performance of Jua-kali empowerment programmes depend on risk management practices



Table 2. Regression results depicting moderation effect of risk management practices on the relationship between project implementation and performance of JEP

				Mode	l Summary		
Mode	el R	R	Adjusted	R Std.	Error	F	P value
		Square	Square	of	f the		
		-	-	Est	imate		
1	.563	.317	.316	.1	242	5.192	.000
2	.575	.331	.319	.1	233	4.632	.000
				Coe	efficients <sup>'</sup>		
Mode	el		Unstandardized Standardized t			Sig.	
			Coeffici	ents	Coefficients		_
			В	Std.	Beta		
				Error			
(C	Constant)		811	.060		-4.712	.000
Pr	oject						
2 im	2 implementation*Risk			0.40	.086	1.131	.000
Management			0.047	.042			
Pr	actics						

**Predictors:** (Constant), Project Implementation (installation of workspace facility, entrepreneurship training, promotion of products), Risk Management Practices

**Dependent Variable:** Performance of Jua-kali Empowerment Programmes (JEP)

F(1,145) = 4.632 at level of significance p=0.000<0.05, r= 0.563 and R square=0.316

The results in Table 2 suggest that an introduction risk management practices into the relationship between project implementation and performance of Jua-kali Empowerment Programmes (JEP) as depicted in the model resulted into an increase of R square by 0.014. It means that the interaction between risk management practices and project implementation resulted into 1.4% variation in the performance of the JEP. Based on the F value of F (1,145) = 4.632 at p=0.000<0.05, the overall moderation effect was deemed significant. The results were indicative of the fact that the project implementation interact with risk management practices and the interaction has an effect on their influence on performance of JEP though the indirect effect was not clear from the results in this study. Thus, the study accepts the hypothesis that the strength of the relationship between project implementation and performance of JEP depend on the risk management practices.



Risk management is one of the project knowledge management areas that is claimed to influence major decisions in project implementation (PMI, 2013; Eskesen, Tengborg, Kampmann, & Veicherts, 2004). As demonstrated in Table 2, risk management practices moderate the relationship between project implementation and performance of Jua-kali Empowerment Programmes (JEP). The findings support the empirical establishments by Zwikael and Ahn (2011) in a study to assess the effectiveness of risk management in reducing project risks whereby the results suggested that risk management interacted the relationship between risk level and project success. In their study to examine the effects of risk management process on the performance of new product development programmes, Oehmen, Olechowski, Kenley and Ben-Daya, (2014) found that risk management directly correlated with improved decision-making, programme stability and problem solving and indirectly associated with project and product success. While risk management is claimed to support project success (Junior & Carvalho, 2013; Nderitu & Kwasira, 2016), this study has established that when risk management practices is introduced to project factors that form core project tasks, the direction of the programme performance is altered in a way that implies moderation effects.

Risk is a limiting factor for project success thus calling for systematic practices and approaches when managing risks (Carbone & Tippet, 2004). Hence theory of constraints emphasizes on logical thinking when solving project constraints (Goldratt, 1986). In this view, system theory of organization emphasizes for projects and programmes to operate in an open system of view in order to sustainably respond and adapt to the constant threats from risks (Ahrne, 1994; PMI, 2013). Kapsali (2011) holds similar view that project and programme implementors should be more flexible and adaptable in managing complexities, risks and uncertainties from the environment for sustainable outputs. Hence by practicing risk identification, analysis, treatment and control, implementors and beneficiaries of JEP were able to avert events that could hinder performance of the empowerment programmes. This is demonstrated by not only the benefits realized but also the stability in the running of the empowerment programmes whereby overall composite mean (M) and standard deviation for risk management practices was 3.7443 and 0.6521 respectively implying that a majority of the respondents agreed that risk management practices influences the performance of Jua-kali Empowerment Programmes.

The narrative data from interviews supports the results presented in Table 2 in that, most of the programme implementors (interviewees) agreed that adequacy of risk management strategies aided effective implementation and delivery of Jua-kali empowerment programmes in terms of safety in the workspaces and control of the project scope. Such realization was affected by good monitoring and control systems that checked on the interaction between the programmes system and the environment, proper management of stakeholders was cited as one of the greatest strategies that used to keep the peoples of interest at the top of the programme development. Rubin (2014) asserts that effective risk management increases chances of projects success at it allows dedication and focus on



the allocation of limited resources in solving the most important project risks. In Jua-kali empowerment programmes, the potential risks identified from the interview with the implementors included political risks, health and safety risks, organizational risks, market risks, financial risks and social risks as well. As Flouris and Lock (2008) suggest, effective risk management entails monitoring and tracking of current and emerging risk issues through interactive techniques and periodic review of mitigation strategies and strengthening learning and improvement process. Similarly, the implementors of JEP ensured effective risk management by strengthening and integrating their practices in order to reinforce the programme operations.

The purpose of this study was to examine how risk management practices influence the relationship between project implementation and performance of Jua-kali empowerment programmes (JEP) in Nairobi County Kenya. To achieve this, a corresponding research hypothesis was formulated and tested. The findings revealed that introduction risk management practices into the relationship between project implementation and performance of Jua-kali empowerment programmes resulted into an increase of R square by 0.014. The introduction of risk management practices into the relationship depicted 1.4% variation in the performance of the Jua-kali empowerment programmes. Based on the value of F (1,145) =4.632 at p=0.000<0.05, the overall moderation effect was deemed significant. The results were indicative that the project implementation interact with risk management practices and the interaction has an effect on their influence on performance of JEP though the indirect effect was not clear from the results in this study. Hence the null hypothesis was rejected and the alternative hypothesis not rejected as there was enough evidence to conclude that the strength of the relationship between project implementation and performance of JEP depend on the risk management practices.

#### 5.0 Conclusion

This study aimed at examining how risk management practices moderates the relationship between the project implementation and performance of Jua-kali Empowerment Programmes (JEP) in Nairobi County. The findings suggest that the strength of the relationship between project implementation and performance of JEP depend on the risk management practices. This implies that risk management practices have got significant influence on the project implementation in relation to project performance. Hence the conclusion that risk management moderates the interaction between project implementation and performance of Jua-kali empowerment programmes.



#### **6.0 Recommendations**

Practitioners of entrepreneurial empowerment programmes should ensure effective risk management practices for responsive delivery of programmes endeavors. Such approaches should be anchored upon systematic risk management approaches right from identification, analysis, treatment and risk control. This would help avoid extreme eventualities or events which can hamper programme performance.

This study was limited to Jua-kali empowerment programmes. Future researchers should focus on assorted projects across different settings and contexts while saturating evidence to for generalizing the results. Specific studies should focus on mediating role of risk management practices on the performance of entrepreneurs' empowerment projects. Other studies can focus on how each step of risk management influences the programme performance so as to draw a comparison between difference stage of practices.

Finally, government should come up with more state of art and modern-technology-built production and training centers for building the capacity and empowerment of Jua Kali entrepreneurs. Specifically, there is need for the development of a need-based training curriculum for entrepreneurs. In order to grow and graduate into medium enterprises, the entrepreneurs need continuous upgrade their technical skills in more innovative ways. Linkages between Jua-kali enterprises and large manufacturers and other tertial organization that offer technical assistance like Kenya Industrial Research and Development Institute, Technical Universities and many others should be emphasized so that artisans can utilize their services in design, production, branding and marketing.



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