EFFECT OF LEAN MANAGEMENT PRACTICES ON PERFORMANCE OF SELECTED INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS IN NAIROBI COUNTY- KILIMANI WARD

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ABSTRACT
The purpose of this research was to identify the effect of lean management practices on the performance of selected non-governmental organizations in Nairobi County. The study specifically examined the effects of work teams, process simplification, corporate restructuring and cost management on performance of selected NGOs. The study was founded on various management theories including, the theory of constraints, systems theory, the agency theory and the resource based view. The study utilized the descriptive survey design. The sample population of study was 58 international NGOs involved in the implementation of health activities/ programs with based in Kilimani Ward of the Nairobi County. The researcher utilized purposive sampling to identify the NGOs that formed the unit of interest. The study utilized entire population as the sample of study. The statistical package for Social Sciences (SPSS) computer software was used for data analysis. The linear regression model was used to test the relationship between the variables. The data was presented using frequencies, pie charts and tables. The correlation results indicated that there was a positive relationship between team management and performance of NGOs. Correlation results also revealed that, process simplification, corporate restructuring and cost management had a positive and significant effect on the performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County. The findings from the regression results revealed that Work Team Management, process simplification, corporate restructuring and cost management has a positive and significant effect on the performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County. The study concluded that lean management practices had an effect on performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County. The study recommends for full implementation of lean practices so as to cater for the dwindling fortunes being met in the NGO Sector.

Key words: Work Teams management, Process Simplification, Corporate Restructuring, Cost Management, NGO Performance
Background of the Study
Non-Governmental Organizations (NGOs) have existed for very many years. In the recent times questions have been raised about the extent to which the anticipated benefits attributed to NGOs intervention have materialized, particularly in the underdeveloped countries in Africa (Nelson, 2007). Clark (2012) cited the Nonprofit Finance Fund (2009) as saying that non-profits organizations are struggling to maintain the level of service they have historically provided their clients. Today more NGOs are in high competition for less available donor funds (United Nations, 2014). The subject of accountability and performance measurement has become urgent for nonprofits as they encounter increasing competition from proliferating number of agencies, all competing for scarce donor funding (Kaplan, 2001). This is an indicator that performance is indeed an important factor in NGO answerability to the donor funds. There has also been an increase in demand for financial accountability and concrete evidence of program impact than ever. Private and Institutional donors recognize that NGOs that do not adapt their practices towards promoting impact, efficiency and accountability run the risk or bankruptcy as well as irrelevance.

Scott and Rathillal (2014) postulate that humanitarian agencies have become increasingly aware of the need for improving outcomes of programmatic activities through monitoring and enhancing institutional accountability. Despite this consciousness, equal response has not been reflected in the way they identify potential risks and solutions. These remarks were also echoed by Wassenhove (2006) who affirmed that humanitarian organizations were about 15 years behind the private sector in terms of understanding the importance of using efficient management practices for competitiveness. Hence appearing to be experiencing difficulties to move beyond their traditional systems and approaches and embracing new paradigms (Begam, Swamynathan & Sekkizhar, 2013).

The business world has been heavily criticized for exploiting the environment and ignoring human rights, this has resulted in an increased attention to the nonprofits organizations (Clark, 2012). Consequently, this increased attention has been followed by greater pressure on the organizations to fill the shortcomings of government and profit sector and demands on being able to show their accomplishments (Larsson & Kinnunen 2008). However, funding still remains to be a big challenge in meeting nonprofits goals. As a result, there is a dire need for nonprofits to re-evaluate their management practices to ensure that the limited funds received are used optimally to support long-term operations, donor retention and ensure their own survival. This project examined the effect of lean management practices on performance in the ever changing humanitarian environment.

Theories of constraints (TOC), agency theory, system theory and Resource Based View (RBV) formed the theoretical framework of this study. The constraint theory was relevant to this study because it resonated with some of the major notions of interest i.e. change management, flexibility and continuous improvement which are highly valued for lean thinking. The agency theory addressed the relation between the donor (principle) and the agent (NGO). System theory was used to explain the interaction between internal and external operating environment. Moreover, RBV is equally important as it emphasizes on the firms resources as the fundamental determinant for Competitive Advantage.
Specific objectives
i. To establish the effect of work team management on NGO performance.
ii. To assess the influence of process simplification on NGO performance.
iii. To establish the effect of corporate restructuring on NGO Performance.
iv. To assess the influence of cost management on NGO Performance.

Literature Review
Theoretical Review
The Theory of Constraints
The Theory of Constraints (TOC) was developed by Eliyaho Goldratt in the late 1970s. It is a philosophy that seeks to improve the operations of systems by focusing improvement on the weakest links (constraints) of the system (Gupta & Kline, 2008). It hypothesizes that every complex system, consists of multiple linked activities. A constraint here refers to the weakest link in the chain and therefore acts as a limitation upon the entire system (Balderstone & Mabin, 2008). The nature of a constraint can be either internal or external. Physical constraints include raw material shortages, limited capacity resources, and limited/lack of demand while non-physical constraints include obsolete rules, procedures, measures, training and operating policies. On the other hand, internal constraints include raw material and capacity constraints (Simatupang, Wright, & Sridharan, 2004).

The theory of constraints provides a powerful set of tools for achieving the ultimate goal (Rattner, 2006). It focuses on change at three levels (3Ms): the mindset of the organization, the measure that drives the organization and the methods employed within the organization. It has two major components; a philosophy which underpins the working principle of focus on continuous improvement philosophy by dealing with constraints and a generic approach for investigating, analyzing and creating solutions to problems called the thinking process (TP) (Rahman, 1998). TOC debates that the ultimate goal of an organization is to make money now and in the future (Simatupang, Wright, & Sridharan, 2004).

These views have been underscored by Madan and Motwani (2008) and Simsita, Guna and Vayvay (2014) who argue that profit making goal is the same for all organizations regardless of their for-profit or non-profit status, except that the former must make sufficient money to post a profit. Proponents of this theory such as Motwani and Vogelsang (1996) and Anderson, Erickson and Torstensson (2006) appraise that this theory can be used across industries that wish to eliminate bottlenecks within their organizations. Similarly, Simsita, Guna and Vayvay (2014) admit that even after thirty years TOC is still one of the greatest strategies for companies.

While TOC has been compared favorably to linear programming techniques, critiques have labeled this model as inferior to other competing methodologies. TOC provides an effective, systematic approach for identifying constraints to the overall business and developing a plan to alleviate these constraints (Tulasi & Rao, 2012). This theory is relevant to this particular study as it informs both the independent and dependent variables. The theory resonates with some of the major notions of this study such as change management, flexibility and continuous improvement which are highly valued for lean thinking, hence its relevance in this study.
Systems Theory
According to this theory, all successful living systems are open system such that information and resources flow across them (Lin, 2013). In systems theory, a system is defined in two parameters: Externally, by its purpose; each system has a role that it plays in the higher-level system in which it exists. While internally, by its subsystems and internal functions; each system is made up of components and sub-systems that interrelate and contribute to the overall purpose of the parent system (Burgess, 2012).

A fundamental notion of general system theory is its focus on interactions. The central tenet of this perspective is that organizations are not closed but are closely connected and interdependent with their external environments which they exchange and draw resources, participants, funding and information (Toepfer & Anheier, 2000). Open systems look at the relationship between the organization and the environment in which they are involved.

This focus reflects the organizations ability to adapt to changes in environmental conditions. Teams, managers and individual workers are all subsystems and components of subsystems and hence have to work together in order to serve not only the organization but the entire environment. Managers therefore have to plan structural adjustments to guarantee the survival of the whole system (Mele, Pels, & Polese, 2010). This theory stands out gallantly in this study as it vouches for the application of a global vision of a phenomenon in order to comprehend it fully. It emphasizes holism while resolving organizational problems. The focus is on the interactions of different independent variables and on the relationships between the parts in order to understand their effect, functioning and outcomes on the dependent variable.

Agency Theory
Agency theory also referred to as principal-agent model explains the behaviors of principals and agent. As a theory, the focus is on accountability by correcting for opportunistic behavior those results from exploiting asymmetric information (Slyke, 2006). Agency theory assumes that there is goal conflict between the principal and the agent as both parties in the relationship want to maximize their utility (Puyvelde, Caers, Bois, & Jegers, 2012).

The main tenets of agency theory focus on information asymmetry. This means that since agents have more information than principals, they can exploit for self-gain rather than for the collective interests of the two parties leading to mistrust. While proponent of this theory postulate that this model is specific to the issues of owners and managers of corporations (Hough & Ryan, 2005), critics of the principal-agent model have argued that the model is one sided as it negatively characterizes an individual agent(Slyke, 2006). To this effect, Hough and Ryan (2005) urge scholars of nonprofit governance not to replicate this same obsession with agency theory of scholars of for-profit governance. This theory is relevant to this study as it explains the reasons as to the donor–nonprofit relationship and expounds on the cause of conflict between the two parties. Hence it is useful to this study as it furthers our understanding in the factors surrounding NGO performance. It propels us to think about the resolution of this agency problem for organizational performance.

Resource Based View
Resources Based View (RBV) stresses on the internal capabilities of firms. The underpinning concept of the RBV is that no two organizations are identical because no two
organizations have acquired the same set of organizational resources such as capabilities, skills, experience and even organizational cultures. Thus organizations must possess organizational resources with attributes that are rare, valuable, costly to imitate and non-substitutable, which allow them to hold the potential of sustained competitive advantage over other competitors (Kong, 2008).

This approach has been appreciated as a basis of building flexible strategies enabling quick adaptation to dynamic environmental changes and identifying opportunities in the face of turbulent environment (Szymaniec-Mlicka, 2014). This theory focuses on the costly-to-copy aspects of an organization as the fundamental drivers of performance and competitive advantage. It allows organizations to rethink, identify, exploit and make growth possible in the global competition. Consequently this firm centered analysis is said to ignore the industry dynamics and thus has been quoted to be a major limitation in the RBV (Bridoux, 2013). This is because beyond the internal resources, research also suggests that organizations vary considerably in their networks resource endowments that influence their competitive advantage (Erya & Lin, 2007).

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent Variables</th>
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<tbody>
<tr>
<td><strong>Work Teams management</strong></td>
<td><strong>NGO Performance</strong></td>
</tr>
<tr>
<td>Team leadership</td>
<td>Donor confidence</td>
</tr>
<tr>
<td>Communication</td>
<td>Project impact</td>
</tr>
<tr>
<td>Virtual teamwork</td>
<td>Improved organizational brand</td>
</tr>
<tr>
<td><strong>Process Simplification</strong></td>
<td></td>
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<tr>
<td>Delivery of inputs</td>
<td></td>
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<tr>
<td>Conformance to standards</td>
<td></td>
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<tr>
<td>Levels of authorization</td>
<td></td>
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<tr>
<td><strong>Corporate Restructuring</strong></td>
<td></td>
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<tr>
<td>Staffing levels</td>
<td></td>
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<tr>
<td>Adaptability</td>
<td></td>
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<tr>
<td>Project delivery</td>
<td></td>
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<tr>
<td><strong>Cost Management</strong></td>
<td></td>
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<tr>
<td>Shared costing</td>
<td></td>
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<tr>
<td>Cost optimization</td>
<td></td>
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<tr>
<td>Volunteer programs</td>
<td></td>
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</table>

Conceptual Framework
Research Design

This study employed a descriptive research design to investigate effect of lean management practices on performance of selected international non-governmental organizations (health programs) in Nairobi County. Descriptive research design allowed the researcher to study the elements in their natural form without making any alterations to them (Dunn, 2001). The design also allows the researcher to come up with descriptive statistics that can assist in explaining the relationship that exists among variables.

Descriptive research design was used to allow researcher to gather, summarize, present and interpret information for the purpose of clarification. It is mainstreamed to fact finding and may result in the formulation of important principles of knowledge and solution to significant problems (Orodho, 2009). The design was selected for this study because it can provide numeric description of the population and describe events as they are, as they were or as they will be (Sekaran, 2006). This study therefore generalized the findings on the lean management practices on performance of selected international non-governmental organizations (health programs) in Nairobi County.

Study Population

Mugenda and Mugenda (2008), define population as an entire group of individuals, events or objects having common observable characteristics. According to Kasomo (2007) a target population refers to all the members of a real or hypothetical set of people, events or objects to which the researcher wishes to generalize the results of the research. The study population comprised of International NGOs in the health sector situated in Kilimani Ward of Nairobi County.

Kilimani ward was purposively sampled for this research as NGOs physical mapping exercise by the National Council of NGOs in Kenya revealed that there is a high concentration of International Health NGOs in the area and thus would boost the external generalizability and representativeness of the sample (The National Council of NGOs, 2014). The study was carried out on all the 58 International Non-Governmental Organizations that carry out health activities and situated in Kilimani Ward of Nairobi County (The National Council of NGOs, 2014).Mugenda and Mugenda (2008), define population as an entire group of individuals, events or objects having common observable characteristics. According to Kasomo (2007) a target population refers to all the members of a real or hypothetical set of people, events or objects to which the researcher wishes to generalize the results of the research.

The respondents for this study composed of program managers in charge of health components while the key informants included CEOs and HR managers for the respective INGOs. The CEOs and HR managers were used as key informants to gather data on their views on lean management and its effect on organizational performance. Staffs at the levels identified are basically those that make decisions, interpret, explain, supervise and execute the plans and policies of the organization. They provide necessary training to workers and arrange for necessary materials, tools and machines for getting the work done. Hence information garnered from these specific cadres of staff will be highly critical in enriching the study with critical knowledge and reliable information on issues under investigation.
Sample and Sampling Technique
This study focused on International NGOs whose focus is on health sector. This study used purposive sampling method of the non-probability sampling design to select the units of study. Purposive sampling was particularly appropriate for this study as it ensured that the research sample was aligned to the study objectives. The study identified 58 major stakeholders involved in the project implementation and operations as the key informants of the study as they are directly involved in the implementation of project.

Data Collection Instruments
Primary data was obtained using a questionnaire. The questionnaire consisted of both open ended and closed ended questions covering issues related to lean management practices on performance of selected international non-governmental organizations (health programs) in Nairobi County. Open ended questions allowed free responses from the respondents and the closed ended questions allowed responses from the respondents from limited stated alternatives where a Likert scale was adopted.

According to Mehta et al (2012), the open ended or unstructured questions permit greater depth of response from the respondents while the closed or structured questions are usually easier to analyze. The questionnaire was chosen because it is easier for the researcher to collect a lot of information over a short period of time (Kothari, 2008). The questionnaire designed in this study comprised of two sections. The first part included the demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent. The second part was devoted to the effects of lean management practices on performance of selected international non-governmental organizations (health programs) in Nairobi County where the variables of the study were put into focus.

Data Collection Procedure
A brief introduction was made to the respondents before administering the questionnaire with the aim of explaining the questionnaire. Confidentiality was assured to the respondents through the letter of transmittal that accompanied the questionnaire (Kothari, 2008). Questionnaires were used to collect primary data which was distributed to the staff. The researcher made personal follow-ups to ensure that the questionnaires are filled and collected (Torching, 2006). Each questionnaire was coded and only the researcher got to know which person responded (Serkin, 2006). The questionnaire were administered using drop and pick method. A set of closed and open-ended questions were used to collect the information in order to bringing out clearly the respondents opinions.

Open ended questions were aimed at giving the respondents a complete freedom of expression. The questionnaire were handed directly to the respective managers of the NGOs within the study location; Kilimani Ward of Nairobi. The collection of the questionnaire was done directly after contacting the respondents via telephone.

Data Analysis and Presentation
The data was gathered through questionnaires and analyzed by use of descriptive statistics. The data was edited, code numbers were assigned to each answer of question to
generate a coding list which was then fed into a computer software SPSS version 20. The mean and average were used to measure responses on key drivers that influence Lean management practices. The results from the analysis were presented in frequencies, charts and tables. In this study, Pearson correlation matrix was used to indicate the direction, strength and significance of the relationships (Cooper & Schindler, 2011). The r ranges between -1 and 1. Hence, when r is zero, it means that there is no relationship. When r is positive, it means that the two variables increase or decrease in the same direction. When r is negative, it means that the two variables are inversely related. A multiple linear regression model was used in the study to link the independent variables to the dependent variable 

\[ y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

Where: \( y \) = Organization performance; \( \alpha \) = constant; \( b_1, b_2, b_3, b_4 \) = net change in y for each change in \( X_1, X_2, X_3 \) and \( X_4 \).

\( X_1 \) = Work team management;
\( X_2 \) = Process simplification;
\( X_3 \) = Corporate restructuring;
\( X_4 \) = Cost management;
And \( \varepsilon \) = error term.

**Results**

**Response Rate**
A total of 58 questionnaires were distributed to the respondents. Out of these, 47 were filled and returned thus representing a response rate of 81.3%. This response rate was above the 60% which is considered adequate for a descriptive study (Mugenda & Mugenda 2008).

**Response Rate of respondents**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Response</td>
<td>47</td>
<td>81.3</td>
</tr>
<tr>
<td>Non-Response</td>
<td>11</td>
<td>18.7</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Demographic Information**
This section presents the demographic information of respondents. Specific demographic characteristics that the study was interested in were the respondent’s gender, educational background and years of experience.

**Distribution of Respondents’ Gender**
The study determined the gender of the respondents. The results are submitted in figure 4.1 where 64% were female and 36% female. This indicates that majority of staff in the selected International Health Non-Governmental Organizations were male. This findings are consistent with the provisions in the constitution that serve greatly in addressing gender issues and equality in access to basic needs and reasonable living standard for women and their involvement in decision making (Kiburi & Mwaniki, 2014).
Age Distribution of Respondents

The study determined the age distribution of the respondents. The results summarized in the table below. The findings indicate that 11% of the respondents aged between 41 to 50; 59% of the respondents were aged 31-40 years; 19% were aged between 18-30 years while 11% were above fifty years of age. These findings are consistent with a survey done in Portugal to analyze the capacity of the NGO sector where it was established that most NGOs operating there were led by energetic, middle aged men and women (Mota, 2015).

Distribution of Respondents’ Gender

Distribution of Respondents’ Education levels

The study determined the Education levels distribution of the respondents. The results summarized in the figure below. The findings indicate the respondents who had attained high school status were 11%, diploma holders had a 25% value, the respondents who had gotten a bachelor’s degree were 32% whereas finally master’s education graduates were at
The results revealed that the respondents were knowledgeable and would provide adequate insights to our study.

**Distribution of Respondents education levels.**

**Respondents’ Years of Experience**

The study sought to collect data on the respondent’s number of years of experience. The work experience of the respondents was considered important for the study. This was so because the study assumed that the more experienced staff would be well informed about issues under investigation and provide a deeper insight from their years of experience. The results are shown in table 4.2 below:

<table>
<thead>
<tr>
<th>Respondents Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 years</td>
<td>30</td>
<td>63.8</td>
<td>63.8</td>
<td>63.8</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>10</td>
<td>21.3</td>
<td>21.3</td>
<td>21.3</td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>7</td>
<td>14.9</td>
<td>14.9</td>
<td>14.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Results from table 4.2 shows that the majority of the respondents 30 (63.8%) had work experience ranging from 1 to 5 years. While 10 (21.3%) had work experience of between 6 to 10 years, and 7 (14.9%) of between 11 to 15 years. The results are similar to findings by Mota (2015) who asserts that NGO employees do not perpetuate themselves in their jobs and that their succession is not dynastic.
The correlation summary shown in Table 4.11 indicates that the associations between each of the independent variables and the dependent variable were all significant at the 95% confidence level. The correlation analysis to determine the relationship between team management and performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County; Kilimani Ward. Pearson Correlation Coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship ($r=0.18$) between team management and performance of NGOS. The researcher found the relationship to be statistically insignificant at 5% level ($p=0.0227$, $<0.05$).

The findings are consistent with results of a study by Aviram and Zwikael (2016) that found out that an effectiveness of teams is manifested where people with complementary skills who are committed to a common purpose, performance goals and approach for which they are mutually accountable. Earnhardt (2009) also identifies that clarity of objectives, communication, technology, team cohesion and leadership as the main factors that enable team success. NGOs are famous for the use of project teams. It is believed that quality,
productivity and morale are improved when teams are utilized (Alnsour, 2014). Moreover, innovativeness, improved understanding, motivation and risk-taking decision making have also been pointed out by Dragusha (2012) as the benefits working in teams.

Correlation analysis was instigated to determine the relationship between Process Simplification and performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County; Kilimani Ward, Pearson Correlation Coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship \( r=0.323 \) between Process Simplification and performance of NGOs. The researcher found the relationship to be statistically insignificant at 5% level \( (p=0.027<0.05) \).The results are in agreement with Lassiter (2007), who affirms that aim of process simplification is to ensure that operations relating to the goals of the organization are performed as easily as possible and with respect to the participants that are served by that organization.

Correlation analysis to determine the relationship between Corporate Restructuring and performance of NGOs, Pearson Correlation Coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship \( r=0.406 \) between Corporate Restructuring and performance of NGOs. In addition, the researcher found the relationship to be statistically insignificant at 5% level \( (p=0.05, <0.05) \). The results are in accordance with Piana (1999) remarks that the challenge confronting nonprofits is to look beyond collaboration to build sustainable, long-term relationships that fundamentally change the way they function. This study considered the role of inter-project restructuring and its influence on organizational performance.

The correlation analysis to determine the relationship between Cost Management and performance of NGOs, Pearson Correlation Coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship \( r=0.343 \) between Cost Management and performance of NGOs. Hence, it is evident that four of the independent variables could explain the changes in the performance of NGOs. The results echo those of a study in which Michael (2014) recommends that for the survival of nonprofits balancing and closing each projects funds independently is a key practice as well as creating an infrastructure that supports rapid customized reporting by funds or donors (Tiso,2014). Moreover Rad (2002) affirms that the most effective cost management system is one that ensures consultation with the stakeholders in all trade-off decisions. It should span all elements of the work breakdown structure.

**Regression Analysis**

In this study multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and independent variables. Regression analysis was conducted to find the proportion in the dependent variable (performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County; Kilimani Ward) which can be predicted from the independent variables (Work team management; Process simplification; corporate restructuring; cost management). Table 4.33 presents the regression coefficient of independent variables against dependent variable.
The results of regression analysis revealed there is a significant positive relationship between dependent variable (performance of NGOs and the independent variables (work team management; process simplification; corporate restructuring; cost management.).

The independent variables reported R value of 0.808 indicating that there is positive relationship between dependent variable and independent variables. R square value of 0.653 means that 65.3% of the corresponding variation in performance of NGOs can be explained or predicted by (Work team management; Process simplification; corporate restructuring; cost management) which indicated that the model was fitted the study data.

Adjusted R square in table 4.33 is called the coefficient of determination which indicates how performance of NGOs varied with variation in effects of factors which includes; work team management; process simplification; corporate restructuring; cost management.

Table 4.33 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of performance. The F critical at 5% level of significance was 19.735. Since F calculated which can be noted from the ANOVA table above is 117.939 which is greater than the F critical (value = 19.735), this shows that the overall model was significant. This was supported by an F statistic of 19.735 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. This is an affirmation to Arfmann & Federico (2014) who in their studies found out that lean thinking methods applied with the involvement of employees is said to bring about positive changes in the attitudes of the individuals that make up the organization. In the application of lean principles, any use of resources that does not deliver consumer value is a target for change or elimination.

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.808a</td>
<td>0.653</td>
<td>0.62</td>
<td>0.138</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), cost management, Process Simplification, corporate restructuring, Team Management

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1.499</td>
<td>4</td>
<td>0.375</td>
<td>19.735</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>0.798</td>
<td>42</td>
<td>0.019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.297</td>
<td>46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Dependent Variable: organizational performance
b Predictors: (Constant), cost management, Process Simplification, corporate restructuring, Management

The research used a multiple regression model.
\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \]

Where \( Y \) = performance of selected International Non-Governmental Organizations with Health Programs
\( \beta_0 \) = Constant
\( X_1 \) = Work team management
\( X_2 \) = Process simplification
\( X_3 \) = Corporate restructuring;
\( X_4 \) = Cost Management
\( \epsilon \) = Error Term at 95% confidence level.

The regression equation will be;
\[ Y = 1.275 + 10.477 X_1 + 0.192 X_2 + 0.018 X_3 + 0.012 X_4 \]

The regression equation above has established that taking all factors into account (Work team management; Process simplification; Corporate restructuring; cost management) constant at zero, Performance of NGOs will be an index of 1.275. The findings presented also shows that taking all other independent variables at zero, a unit increase in working management will lead to an increase in 0.477 Performance of NGOs. The P-value was 0.04 which is less than 0.05 and thus the relationship was significant from data analyzed. Earnhardt (2009) validates these results by pointing out that team work identifies that clarity of objectives, communication, technology, team cohesion and leadership as the main factors that enable team success.

The study also found that a unit increase in process simplification will lead to a 0.192 increase in Performance of NGOs. The P-value was 0.003 and thus the relationship was significant. Our research findings can be supported by literature according to Audrey (2014) who suggests that procedures should be examined for possible areas for reducing costs. During the reviews and check of authorization processes should also take place to ensure adherence to authorization limits. The study also found that a unit increase in corporate restructuring will lead to a 0.018 increase in Performance of NGOs. The P-value was 0.046 and thus the relationship was significant. According to Teresa and Maryanne (2015) they seem to be supporting this findings by pointing out that organizations have realized that in order for them survive in this complex and dynamic market environment, they need to conduct proper and continuous human resource planning especially when making strategic changes such as restructuring. Another factor haunting the sector is the aging population of experienced leaders and staff.

Lastly, the study found that a unit increase in cost management will lead to a 0.012 increase in the Performance of NGOs. The relationship was insignificant as shown by a p value of 0.800. However our results seem to differ from studies as suggested by Michael (2014) who recommends that balancing and closing each projects funds independently is a key practice as well as creating an infrastructure that supports rapid customized reporting by funds or donors (Tiso, 2014). Moreover Rad (2002) affirms that the most effective cost management system is one that ensures consultation with the stakeholders in all trade-off decisions and one that facilitates a full and prompt dissemination of the subsequent disposition of each change. The findings of the study show that, team management contributed most to the Performance of NGOs.
Coefficients

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<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>Sig.</th>
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<td>B</td>
<td>Std. Error</td>
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<td>0.012</td>
<td>0.047</td>
<td>0.023</td>
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</tr>
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</table>

a Dependent Variable: organizational performance

Summary of Findings

Effect of Work Team Management on performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County.
The findings from the regression results revealed that Work Team Management has a positive and significant effect on the performance of selected International Non-Governmental Organizations with health programs in Nairobi County. This is also supported by the majority of respondents who responded that in their opinion Work Team Management has an effect on performance of selected International Non-Governmental Organizations with health programs in Nairobi County. The findings presented also shows that taking all other independent variables at zero, a unit increase in working management will lead to increase in performance of NGOs.

Influence of Process Simplification on performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County.
The study found out that Process Simplification has a positive and significant effect on performance of selected International Non-Governmental Organizations with health programs in Nairobi County. In addition, the study found that a unit increase in process simplification will lead to a significant increase in the performance of NGOs. This implies that achieving performance excellence within an organization starts with defining core processes. By examining the process complexity, it is important to consider the total number of processes required to complete an authorization effect a process and eliminate non-value added steps.

Effect of Corporate Restructuring on performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County.
The regression model indicated that Corporate Restructuring has a positive and significant effect on performance of selected International Non-Governmental Organizations with health programs in Nairobi County. Thus, a unit increase in corporate restructuring will lead
to a significant increase in the performance of NGOs. This is also supported by majority of the respondents who agreed with most of the statements in the questionnaire. The relationship was positive and significant.

**Influence of Cost Management on performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County**

The regression results revealed that cost management has a positive and significant effect on performance of selected International Non-Governmental Organizations with health programs in Nairobi County. Lastly, the study found that a unit increase in cost management will lead to an increase in the performance of NGOs. Thus implications by the study point out to the need for cost management programs. This is as a result of reducing and controlling operational costs has become a necessity in this financially challenging environment.

**Conclusion of the Study**

The objective of this research was to examine effect of lean management practices on performance of selected international non-governmental organizations in Nairobi County. Based on the findings, the study concluded that lean management practices have an effect on performance of non-governmental organizations in Nairobi County-Kilimani Ward. The conclusion of study this is summarized below as per the objectives.

**Work team management**

Based on the findings above the study concluded that Work Team Management has a positive and significant effect on the performance of selected International Non-Governmental Organizations with health programs in Nairobi County. The findings indicated that the concept of work teams was understood differently by different respondents.

Where a team of people work together, diverse experiences are shared, collective meaning is derived from data, and plans are synchronized for swift coordination and implementation while still ensuring efficiency and effectiveness.

**Process Simplification**

The study found out that process simplification has a positive and significant effect on performance of selected International Non-Governmental Organizations with health programs in Nairobi County.

**Corporate restructuring**

The regression model indicated that corporate restructuring has a positive and significant effect on performance of selected International Non-Governmental Organizations with health programs in Nairobi County, hence the need for the benefits of the restructuring exercise need to be carefully conceptualized and the benefits identified before rolling it out.

**Cost Management**

The regression results revealed that cost management has a positive and insignificant effect on performance of selected International Non-Governmental Organizations with Health Programs in Nairobi County.
Overall, the study found that lean management practices can be implemented in numerous ways and customized to fit individual non-profits with varying protocols and need. Cost consolidation for management of costs among the nonprofits takes many angles including; mentoring, standardized HR practices, development of a common recruitment pool, shared staff, systems, database and servers, advocacy training for boards, shared marketing/development staff, bulk purchasing among others.

**Recommendations of the Study**
The recommendations were presented based on objectives.

**Work Team Management**
Work team management formed one of the objectives of the study. This study found a substantial positive association between work teams management and performance of selected international non-governmental organizations. The findings presented also shows that taking all other independent variables at zero, a unit increase in working management will lead to an increase in performance of NGOs.

The study realized that the primary points of leverage for team effectiveness and performance for NGOs include team cohesion, diversity of membership and most importantly the size of the group. This study recommends that regular reviews of plans and communication with all stakeholders as a means to enhance team effectiveness. Further the need to embrace the use of non-cost factors such as team management and its impact on performance could not be over emphasized.

While it might not be very easy to pick up issues in remote teams decision makers need to be part of the teams to enhance a more proactive communication and dialogues to reach a viable decisions which will assist to reach the planned goals. Setting clear objectives, goals and communication clearly the expectations could foster a clear understanding commitment and outcome among virtual teams. Finally staying in touch constantly and being open with teams would really help a lot for a smooth day to day business.

**Process Simplification**
The study found that a unit increase in process simplification will lead to an increase in Performance of NGOs. Hence organizations should always encourage process simplification consistently. This is because continuous Process Simplification leads to increased organizational performance thus promoting the NGOs image. Some of the ideas that assist promote work and process simplification for NGOs include streamlining administration, reporting and compliance requirements, monitoring progress by enquiring on feedback from stakeholders on how to make processes better, to remove red tape. It is also of much importance to map out current compliance and administrative processes associates with funding to identify opportunities to cut red tape and eliminate requests for unnecessary information or complicated processes.

**Corporate Restructuring**
The study found that a unit increase in corporate restructuring; will lead to a moderate increase in Performance of NGOs. This study shows that there is a significant relationship...
between Corporate Restructuring and performance of selected international non-governmental organizations (health programs) in Nairobi County.

Important to note is that for staff to support this activity, their understanding of importance or the benefits of undertaking the activity, their assurance and their involvement in the whole exercise is critical to the overall success of the organization. Therefore NGOs need to prioritize their own institutional strengthening though a structured organization development process and embrace some of the current practices such as lean management practices because the success of this professionalization will indeed impact on the stature of the institution (repute, ability to deliver & account. This said and done, non-profit will stand a better position in strengthening people and their institutions to be able to professionally and sustainably manage their affairs.

Cost Management
Lastly, the study found that a unit increase in cost management will lead to an increase in the Performance of NGOs. This study shows that there is a positive insignificant relationship between Cost Management and performance of selected international non-governmental organizations (health programs) in Nairobi County. While every humanitarian crisis presents different opportunities and constraints, the study recommends that there need for regularly review of the changing context and dynamics of the humanitarian crisis in order to identify new or better innovative ways to keep service levels up for a better response. The need for clearly thought-out approached to cost management of resources will help.

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