MONITORING AND EVALUATION TOOLS ON PROJECT PERFORMANCE IN RWANDA

A CASE STUDY OF ONE LAPTOP PER CHILD PROJECT, KICUKIRO DISTRICT

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A Research Project submitted in partial fulfillment for the Award of degree of Masters in Business Administration (Project Management) of Mount Kenya University.

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DECLARATION

This research project is my own work and has not been used to any other Institution or for any other awards.

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Declaration by a supervisor:

I hereby agreed that the work reported in this project was done by the candidate under my supervision.

Supervisor’s Name: Dr Bogere Mohammed

Sign ____________________       Date _____________
DEDICATION

I dedicate this work to my father, Hategekimana Stanislas, and mother, Cresence Siyomvo, for their commitment, guidance and financial support towards my education. To my brother, Angilbert Desire for your encouragement and overwhelming support and all my brothers and sisters for your good companions.

For love and cooperation I dedicate this thesis to you.
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ABSTRACT

According to Ministry of Finance and Economic Planning (2013) it indicates that although, the Government of Rwanda has established a programme for Monitoring & Evaluation of projects, till now; many of Government projects do not perform well hence some fail. The general objective of this study was to analyze the role of M&E tools on projects ‘performance using a case study of OLPC Project in Kicukiro District, Rwanda. The specific objective of the study aimed to identify how data quality contributed to the performance of OLPC project, determine the influence of effective information on the performance of OLPC project and to analyze how human capacity influences the performance of OLPC project. This research will benefit the researchers, planners and policy makers and other stakeholders in project management to be aware of the importance played by M&E practices in project implementation and project performance. The researcher used both descriptive and analytical research design in order to address the research gap. The study adopted a statistical research in which helped the researcher to analyze, establish, interpret and describe the population and all data concerning this study. The study examined the role of M&E as tools for project performance. The study targeted all project beneficiaries particularly (students, teachers, parents, DEOs and OLPC’ staffs) since 2008 when the project was launched and the staffs of OLPC. The target population was 75 beneficiaries of OLPC project. The data was analyzed through the content analysis method. This included developing themes and subthemes fit with the study objectives which are analyzing the role of M&E tools on performance of OLPC project and divide the data collected in line with the objectives. Other data from the field also was arranged into themes and subthemes as well, and the field was organized to make sure that no information was left out or missing. Same information was gathered under one theme or subthemes in order to avoid generalization and unorganized information and they were presented in tables. The findings indicated that more
than 62% of all respondents agreed on all M&E variables set in this study. It showed that Human capacity is important in developing skills systematically up skilling individuals in order to benefit society as a whole. Data provide a reflection of the situation and it facilitates proper representation of opinions among all the project stakeholders. It was observed that data quality, human capacity, use of the logical framework and utilization of monitoring and evaluation information improve the accuracy, quality and access of information provided by the monitoring and evaluation system. Program officers had monitoring and evaluation experience and training, utilized monitoring and evaluation information adequately and carried out regular data collection from various sources. To conclude it has been seen in this study that M&E has a direct influence on project performance in that monitoring, is basically ‘watching over’ the project as it is being implemented while evaluation is ‘judging’ performance of the project in relation to its target. This means that it is only through M&E that project performance can be assessed and corrections made to improve performance. The study recommends that M&E reporting should be adequately planned in order to improve the data quality, human capacity and ensuring that the process uses proper M&E tools such as logical framework. M&E reporting should be factual in the sense that every report should be based on facts, verified information and valid proofs, clear and easily understandable. The team should ensure that the report is free from errors and duplication, should facilitate the decision makers in making the right decision, result focused and result oriented, well organized and structured as well as observing ethical reporting style. By so doing the above, the management and other decision makers will be able to utilize the M&E findings without difficulties hence facilitating the project performance and the sustainability of M&E in the organization.
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ABBREVIATIONS AND ACRONYMS

CDF - Constituency Development Fund
CLEAR - Centre for Learning and Evaluation Results
DCM - Digitalizing Construction Monitoring
DEO - Director of Education
GSDRC - Government Social Development Resource Center
ICT - Information communication technology
IFAD - International Fund for Agricultural Development
LFA - Logical Framework Analysis
MINICOFIN - Ministry of Finance and Economic Planning
MPP - Micro Project Programme
M&E - Monitoring and Evaluation
NGO - Non-Governmental Organizations
NIMES - National Integrated Monitoring and Evaluation System
OLPC - One Laptop Per Child
PM&E - Participatory Monitoring and Evaluation
PMC - Project Management Committee
RBM - Results Based Management
REB - Rwanda Education Board
UN - United Nation
UNDP - United Nation Development Program
USAID - United State Agency for International Development
VRCWSP - Volta Region Community Water Supply Programme
WB - World Bank
DEFINITION OF KEY TERMS

**Evaluation:** Assessment of the program or project over the pre-set objectives.

**OLPC: One Laptop Per Child:** This is the key project that strives to the enhancement of education through the introduction of ICT in primary schools. The OLPC project through the use of interactive, digital, animated graphic rich content is able to help scholars visualize, simulate and share various complex concepts which improve their understanding, retention and ability to innovate.

**Project Performance:** The level of project goals achievements within a given period of time and budget.

**Monitoring:** Could be regarded as the systematic and regular collection and analysis of information to track the progression of project implementation against pre-set objectives and targets.
CHAPTER ONE: INTRODUCTION

1.0. Introduction

This section was highlighting the background of the study, the problem statement, objectives, and research questions, significance of the study, the scope of the study and the organization of the study.

1.1 Background of the study

The most important with measuring performance is a critical factor in optimizing it. The optimal performance is sustainable for achieving multiple, often conflicting, objectives under changing conditions. The performance measurement during a project implementation is to know how things are moving so that we can have pre-warning of problems and issues that might get in the way of achieving projects goals and so that we could be able to manage expectations. Another key benefit is information that can be used to improve the planning and performance of future projects. These objectives for any given project to perform them well, it is mostly enabled by the process of monitoring and evaluation which could be defined as the regular and methodical ways of information gathering and analysis to assess the project progress against pre-set objectives and project goals, (Borton T, 1997).

M&E assist all with any kind of given project to make sure whether that the progress wanted is being attained. However, M&E has historically suffered from underinvestment, absence of necessities to do the evaluation and continuous lack of professionalism and experience, and weak commitment to evidence based policymaking hence the performance of many project ended failing meet their objectives.
Over the past 50 years, many organizations worldwide in the public sectors have established Monitoring and Evaluation functions to improve sustainable results. This mostly caused by the growing importance of monitoring and evaluation worldwide, though many projects discovered the advantages and they are trying to establish it in their daily operations (Baker, 2011). Government projects have been occupying the role of main service providers over the past few years (Ashbaugh, 2004). While you take a look at national or international scales, sustainability criterias and monitoring and evaluation indicators are key important tools for project management towards set objectives, and influence policy making and practices as well.

On regional and sub-regional level M&E is very crucial for assessing the sustainability of local practices and it is an important tools to help with management planning especially in non-governmental projects (Margoluis, & Salafsky, 2010).

In Spain, Monitoring and evaluation (M & E) has become a widened and speedy tool within global efforts towards attaining social, environmental and economic sustainability (Mrosek, Balsillie& Schleifenbaum, 2006). In western counties or generally the developed countries, mostly ones of Organization for European Cooperation and Development(OECD), the government projects has experienced monitoring and evaluation more than 20 years, and this is differ from developing countries while most of them are just beginning to use this key public management tool and audit. The developing countries should learn experiences from the developed ones which are instructive, and can clearly provide tremendous lessons for developing countries (World Bank, 2004).
Developing countries are performing some kind of regular M&E tasks and activities and are range especially from comprehensive national evaluation systems in countries such as Malaysia and India to basic monitoring of selected program and projects in many countries in Africa and the Middle East (Zvoushe & Gideon, 2013). For any project or program to be successful, monitoring and evaluation capacity should be focused on and strengthened across all governments ‘corner (Mackay, 2007). Generally, in most developing countries, project success and sustainability is still a major problem. A big numbers of projects are implemented at a huge cost and they experience difficulties with successfulness. This matter was raised several times by world major donors such as Asian Development Bank, World Bank and other different Aids agencies (Khan, 2012).

In Rwanda after 1994 Tutsi Genocide, the country was demolished and nothing was on the right way. Several projects were launched sponsored by European Union, United Nation etc…in every sector of the country. In education sector, post-genocide years focused on human capital rebuilding and increasing enrolment rates, and emphasis on ICT as a key for development. Several project were launched and among them is one of One Laptop Per Child also known as OLPC project. The OLPC is a major project that aims to enhance the education in primary schools through the introduction of ICT. Through their digital, interactive and animated graphics rich contents, it helps scholars to visualize, simulate, and share various complex concepts which improve their understanding, retention and ability to innovate. (Rwanda Education Board, 2012). Their goals are to provide the means of learning and self expression and knowledge expansion through digital contents. They also strive to improve education conditions of teachers, children, schools and the community in general.

However, regardless of its immense contribution to promoting the use of information and communication technology in education and improving critical thinking in young learners, the
One Laptop per Child (OLPC) programme has for long been stained by issues of poor management, ineffective evaluation and some operational challenges that were feared to limit the programme’s objectives. The Auditor-General’s report that covered the year ending 2014 mentioned. Though this study will be dealing with the role of M&E on the performance of OLPC project in Kicukiro District.

1.2 Statement of the problem

Although, the Government of Rwanda, has established a programme for Monitoring & Evaluation of projects, till now; many of Government projects do not perform well their M&E hence poor outcomes (Ministry of Finance and Economic Planning (MINECOFIN, 2013). Some examples of these project are the failing of energy power project with MINIFRA. The six micro power plants that drew the lawmakers’ attention are Mukungwa expected to produce 2.5 MW, Nshili 400 KW, Nyabahanga 200 KW, Gashashi 200 KW, Janja 200 KW and Nyirabuhombohombo 500 KW. “The failure of some of these projects is attributed to the initial contractor, Hydropower International (HPI) who failed to deliver in time. HPI’s contract was later nullified and replaced with another contractor who had to deal with all the substandard work that HPI left behind” Ministry of infrastructures’ (MINIFRA, 2013).

However regardless of One Laptop Per Child huge contribution to promote ICT in education and improving critical thinking among young learners, it has been stained by the issue of poor management and more other issues. According to the Auditor General’s report that covered the year ending July 2014, on the implementation of One Laptop per Child programme in schools, there were operational challenges which were feared to limit the programme from achieving its intended objectives.
The report indicated that, out of 2,334 schools targeted by the programme for distribution by 2017, only 407 schools had received laptops by April 2014 and there was no clear roll out plan covering the remaining schools.

“There was no integration plan showing how the One Laptop programme will be integrated with the primary schools curriculum in Rwanda and no assessment criteria for children under the One Laptop programme,” the report said. The site visits made to different schools across the country revealed that a number of laptops had gone missing (528 laptops were missing in 35 of 67 schools visited). “In most schools, laptops are still kept in boxes and store rooms and have not been put to use, while 42 out of 67 schools visited had laptops in boxes),” the report noted. The laptops are not yet loaded with e-Learning modules and many schools use few of them for ICT lessons. Many schools do not have teaching of ICT or use of laptops on their school timetables. This has limited pupils’ use of the laptops as a tool for learning. The report further says that 4,730 laptops were distributed to 13 schools which had no access to electricity between 2010 and 2013. They stayed unutilized for between one and four years and were only re-distributed to other schools in March 2014. The AG also faulted Rwanda Education Board for not tracking the pupil enrollment in schools regularly to facilitate matching of laptops distributed to pupil enrollment per year. This, at some point, led to cases of schools with high number of excess laptops and others with fewer laptops due to the changing number of pupils enrolling per year.

However, this does not rule that M&E only affect its’ performance of the projects. Therefore this led to the researcher to carry out a study on relationships and the role of M&E on OLPC projects’ performance and fulfillment.
1.3 Objectives of the study

The study objectives is very important in line with research project due to they give sense to the researcher with the study direction towards specific objectives to attain which fall into general objective.

1.3.1 The general objectives

This research generally has the objective of analyzing the role of M&E tools on projects ‘performance a case study of One Laptop Per Child Project in Kicukiro District, Rwanda

1.3.2 The specific objectives

The specific objectives of this research aimed:

i. To identify how data quality contribute to the performance of OLPC project.

ii. To determine the influence of effective information on the performance of OLPC project.

iii. To analyze how human capacity influence the performance of OLPC project.

1.4 The research questions

This research basically aimed to answer the following questions.

i. How does data quality contribute to the performance of OLPC project?

ii. What is the influence of effective information on the performance of OLPC project?

iii. How does human capacity influence the performance of OLPC project?
1.5 Significance of the study

This research will benefit the researchers, planners and policy makers and other stakeholders in project management to be aware of the importance the role played by M&E practices in project implementation and project performance. Besides help, performances of a project to achieve its objectives, this research will also helps all the key actors involved in the community development in these ways follows:

On the side of project executors, M&E can help a manager to improve his work by comparing the project progress against set goals. Thereafter he can decide the change to take for the sake of the project.

For companies ‘side, whether executing a given project or help it trough funding or partnership, M&E could help to illustrate the management performance internally and to external stakeholders. Beneath the management tangible outcomes could lead to the continuation of supports or funding and justify the return on investment. Externally, results of M&E illustrate the courage and effort made in the community development and thus assist the company to keep its reputation hence ability to keep operating.

On the other side of community members, partaking with M&E is a key important for the design and execution of community development programs. It assists to review and helps to ensure that the project progress and results are fit with the community needs and wants. So far, monitoring and evaluation serves as a mighty and tremendous tool for accountability of projects performance.
1.6 Limitation of the study

The researcher got some issue on exploring documents because there were some libraries which were hard to access thought I looked and found others, where I got the information needed. And also some respondents didn’t answer the questionnaire I gave them and as a remedy I sought others willing to collaborate and replaced these rejected.

1.7 The scope of the study

This is referred as the delimitation of the study

1.7.1 Geographical and time scope

This research sought to examine the role of M&E tools in project performance strictly on OLPC project in Kicukiro District, Rwanda as a piloting District of OLPC project. The study reflected the entire image of Rwanda in general and worldwide, not as isolated case. The research covered the period of 2008 to 2018. The research chose 2008, because the project was launched in that year and the year 2018, which is the academic year of the present research study.

1.7.2 The Subject scope

This study was carried out in order to access the effects of M&E tools in project performance and their mix up with various components of project management that may contribute to the successful performance of OLPC project.

1.8 Organization of the study

This research report consists of five chapters. Chapter one, is the introduction were background of the study, problem statement, purpose of the study, research objectives, research questions, significance of the study, scope of the study, limitations of the study, assumptions of the study
and definitions of significant terms are discussed. It is then followed by chapter two, which presents a literature review whereby the researcher discussed citing the work of other researchers relating to it and the chapter four which presents the discussion of the findings and lastly chapter five which presents the summary, conclusion and recommendation for further study.
CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter reviews and considers the literature pertaining to the research variables, which has been developed by other authors. It attempts to define and explain the issue related to the topic of the research to get at conceptual clarification.

In this sub-section the researcher will focus on different Philosophy, techniques and all other factors familial with monitoring and evaluation and project performance especially OLPC.

2.1 The meaning and importance of Monitoring and Evaluation

2.1.0. Monitoring

This is could be regarded as the regular systematic collection and analysis of information to track down the progress of a given program implementation against pre-set targets and objectives. It deals with answering the question “did we deliver?” regarding to the expectations (Khan,2012).

It illustrates program objectives, links several activities and their resources towards objectives and, translate these objectives onto performance indicators and set targets to be achieved. Basically, it helps for data collection on these indicators mentioned above and do the comparison between actual results with set objectives and report to the manager the progression and alert to him to any issue within the project implementation.

Monitoring focuses particularly on efficiency, and resource usage. It is therefore providing activities records and results assessment. Through the assessment, it provide remedial of problems observed though it is so descriptive even though sometimes may not illustrate why such issue has arisen or why such outcome has appeared or did not (Khan,2012).
On other side Evaluation concerns with questions of causes and effects. Then it is moreover focus typically on periodic assessment and value estimation, worth and intervention impacts or results of a given program. For instance on annual basis or at the end of a phase within a program implementation (Hans, R 2015).

2.1.1 Evaluation

This could be defined as the project assessment over the pre-set objectives or goals. It seeks to answer a question on what happened in order to come up with such results (Hans R, 2013).

It goes deeper and demonstrates why targeted results did or did not attained, and assess the results contribution of particular occasional activities and examine the whole process of implementation. It explores unachievable goals and anticipates a liar and focuses on meaningful accomplishment of the program and furthermore recommends ways for improvement. The evaluation emphasize on the efficiency and effectiveness as well as ability to sustain a given intervention. The evaluation therefore see the relevance and give proof of what is going on and so far addresses issues of causality (Kusek, 2004).

2.1.2 The importance of Monitoring and Evaluation

The M&E plays a big role to assist all concerned with the project to make sure if they are on the right path of the project achievement. Monitoring and Evaluation helps in community development in different ways as:

On the side of project executor, such company foundation or partnership nongovernmental organization, the M&E helps a manager to improve his work by comparing the project progress against set goals. Thereafter he can decide the change to be taken for the betterment of project implementation. This as results helps to make it possible the improvement on the right way
things are being handled. On companies side, whether through project execution or partnership through supporting it or funding it, M&E could help to illustrate the internal management performance and to external stakeholders. Beneath the management tangible outcomes could lead to the continuation of supports or funding and justify the return on investment. Externally, results of M&E illustrate the courage and effort made in the community development and thus assist the company to keep its reputation hence ability to keep operating. As results it helps companies to take good decisions concerning major projects implementing and a clear understanding of where to invest.

On the side of community members and NGOs, partaking with M&E is a key important for the design and execution of community development programs. It assists to give feedback and reviews to make sure that results attained are what the community expected and wants. Monitoring and Evaluation serves as strong and tremendous tools to use for accountability of projects ‘performance (Amin, 2005).

2.1.3 Monitoring and Evaluation concept

Monitoring and Evaluation system are regarded as tools that help us to determine how well project is working towards meeting program objectives. This requires a combination of many things partaking together effective and efficiently towards achieving set goals. The main Monitoring and Evaluation key characteristics are what we are going to look on below. More studies carried out have shown that M&E to be effective does not only to be a good effective and adequate staffs to be employed in that unit. These employers must have also all necessities, knowledge and skills and even much experience in M&E system. This goes in hand with enough financing system and effective human resources to run the whole M&E function. This will play a big role in helping to hire qualified employers who has all necessities to run M&E system. This
qualification mostly requires good knowledge and skills as well as experience in M&E implementation. It doesn’t stop only on that, furthermore these employees need to sharpen and always update their know how through the M&E seminars and regular training with different capacity building initiatives to make sure that the employees are well updated to the occurring trends in M&E field (Fernando, Loperez&Beker 2009).

To make M&E implementation more adequate at any level requires that there is a specific unit whose main purpose is to coordinate all the M&E functions and activities at its level. While some companies and entities prefer to have an internal organ to oversee its M&E functions, others prefer to outsource such services. In this sense, it require that the M&E focus mostly on the need for monitoring and evaluation unit within the organization, how its role are elaborated and defined and how adequately those role functions and supported by organizational administration and how other units within the organization are aligned to support the M&E functions within the organization (Tache, 2011).

Moreover the monitoring and evaluation system time bound illustrate more often objectives to be achieved, investment to put in and intended results and even the directional to be followed and used while measuring all of them. It is furthermore illustrate all components and trend that the Monitoring and Evaluation will adopt and follow. While joining the whole process and the objectives M&E plays a big role and it helps a lot to the M&E experts to come up with the ideas of what to measure and how. An essential for a successful M&E systems within the organization or even at a national level is mostly the availability of monitoring and Evaluation partners. Partnerships in this system are mostly for organizations due to the fact that they help to assist M&E implementation to be completed and give all efforts necessary to make it and verify M&E key functions are in line with intended objectives. They also play a big role in auditing purpose
whereby all concerns and all stakeholders could have ability to make a comparison of reported works with activities done on the field (Stem, Margolui, Salafsky, & Brown, 2005).

On the other side, we cannot talk only M&E functions without highlighting the role played with the effective communication and culture within M&E environment. They are often favored by existence policy and strategies within the organization. When the communication is not effective, it is very difficult for an organization to embrace M&E culture within it hence communication is a key factor. These should be supported and strengthened by organizational structure as well. The M&E organizational structure, policy, strategies and regulations combined with the continuous use of M&E system outcomes on communication channels are the key important for communication improvement, embrace M&E culture, and it’s time bound, and improvement of the work plan and cost adjustment. On the other side, the framework shows project’s objectives and results intended and detailed work plan of how resources given for M&E functions should be used to meet project ‘objectives and targets (Micheal & Eleanor, 2011).

In relation to routinely programme, monitoring and evaluation helps a lot the management and project manager especially to ensure that the progress is moving in line with project objectives or need some collective action. These two aspects namely Monitoring and Evaluation also helps project managers to keep routine collecting of data during project implementation. Normally all data are required to be gathered together and continuously reported on daily basis to make sure that the activities being implemented are in line with expected results as planned. All data need to be compiled onto program activities for routine analysis and thus help to avoid or collect where project tend to be wrong at early stage where collection should be still applied. M&E at the project level plan entails how frequent relevant project survey is carried out. Every project survey and surveillance need to be carried out consistently and being often use to assess the
progress of similar or other projects which have the common relationship with (Mrosek, Balsillie, & Schleifenbaum, 2006).

Finding data nowadays is becoming very open. Many organizations are searching data relating to their needs and organizational purposes. This on another way means that The M&E functions should set up strategic way and means of finding and making data available in abundant, and they must be relevant valid and reliable as well. Each and every M&E systems and functions must have a plan of action for supervision and data auditing as well. A good and helping supervision is one which insure that an individual or an organization is well capable and has ability to supervise regularly the M&E process in a way that the supervision offers suggestions on ways of improvement and perfection. While auditing data, it implies that the data are always subjected to verification to make sure that they are reliable and valid. This regular check up and verification is much important since it helps to ensure that the M&E is running efficiently and smoothly and beside there must be data auditing which is very crucial since all project decisions are taken based on data (Kusters, 2000).

Normally one aspect of M&E is research and the other one is the evaluation. The evaluation of a project is done at a given specific times most often mid-term and at the end of the project. A goal oriented assessment is very important for M&E system since it help to establish and ensure whether the project is in a good line with set objectives or met desired goals. It obviously provides for the organization a big lesson based on the results got and a sharing of successes with other project stakeholders and a big lesson for further users. For conclusion, with reference on data dissemination, all information gathered in project implementation phase need to be used and being referred for future activities, either to reinforce the implementation strategies or to change them if necessary. Moreover, the results got from both monitoring and evaluation must be shared
within the relevant stakeholder for accountability purposes and lesson for further projects. (Paulinus & Iyenemi, 2014).

2.1.4 Data Quality

Data are key important to give value to any findings or results. Source of data should be reliable and accurate in order to lead to reliable outcomes. There are 2 types of data, which are primary data; which those collected directly by M&E from the ground and as well the secondary data which are ones got from others sites and give value to M&E system (Gebremedhin, Getachew & Amha, 2010).

Data should be collected via different techniques, include such as surveys and questionnaire focus group, interview, observations, documents and records or history and case studies if I list few. The frequent data collection basically means more data points; more data points helps and enable managers to track down every single trend and understand intervention dynamics hence the more often measurements are taken, the less guess work and they will be regarding what happened between different specific measurement intervals. But, normally the more time that passes between measurements, the greater the chance that events and changes in the system might happen or that may be missed (Guijt, 1999).

This researcher concludes that any data to be useful, information need to be collected at optimal momentum and with a certain frequency. However, beside some indicators which are negotiated are more likely to be understandable by each and everyone concerned through consulting his /her timetable, normally ideal moments for data analysis and correction seems hard to identify. According to Cornielje, Velema and Finkenflugel (2008), only when the M&E systems are owned by the users the system is like it generate valid and reliable information to be used. In
addition, there is a time when similar users might be overwhelmed by the size and effort of routine work which is in their view is seen as more tremendous and important than collecting data and subsequently the system may become somehow corrupted. For conclusion, it is more crucial and very important that the front line employees are well informed and being part of M&E systems and have enough ideas about the activities and services they largely provide in interaction with other stakeholder and beneficiaries.

In 2009, Singh carried out a research on numeric paper forms for NGOs, and they illustrated more concerns especially about data collection stipulated: training, time, cost, data accuracy and consistency, means of data analysis and storage. Additionally, those NGOs who had experimented with electronic systems highlighted difficulties with infrastructure and maintenance. Some of the finding of the research was that for various NGOs, data collection and form filling is key tremendous activities every NGO should consider. Others such as cost and effective use of resources allocated, concerns about technology and its control, the use of digitalized data even if hence most of time affect to narrow the data collection effort. It is very important to make sure that data collection system should be well and self- organized and moving forward as it collect all information from the field where the employees got data and information from in the course of their routine works (Innes & Booher, 1999: 415). In a report of strengthening the M&E system of HIV and AIDS projects in ChildFund Uganda, Ediau (2012) found that data was not routinely collected, compiled, stored, analyzed and shared by ChildFund Uganda and project stakeholders. As a result such data was not effectively utilized to track and measure performance as well as inform program improvement and learning. Obure (2008) in a study of RBM in Northern Ghana indicates a problem associated with post collection data management. Most field officers witnessed that the processing, storage and data interpretation was not effectively catered for and well interpreted. The research findings proven a
big failure in the system due to the lack of ability of all stakeholders to sort out and process data in a clear and understandable ways. As conclusion, he recommend that due to all errors illustrated, a huge amount of data could be collected which at the other side might not be used in an advantageous manner. Data must be collected and analyzed regularly on the objectives and intermediate results. Furthermore, the PME&R system allows for three levels of information by project, activity and organization where the data for all organizations involved in a specific activity can be averaged up to the activity level, and the data for all activities can be averaged up to the project level (Booth, Ebrahim & Morin, 1998).

2.1.5 Human Capacity

The M&E is done by people. This means that M&E cannot be done without skilled man power. Hence Human Capacity play a big role to make M&E more effective, because it is human capacity that make M&E progress and possible. It is better to have adequate number and right skilled people to perform that work in order to give a good outcome. Capacity building is needed by training in order to sharpen the skills of people who are executing M&E hence human capacity is a key role for M&E system. M&E done by not well trained and experienced people could lead to confusing and irrelevant results hence wasteful of time and more cost. This can therefore impacted a lot on projects results (Nabris, 2002).

In the Pacific, the assessment of CSOs, UNDP (2011) after a long discussion and analysis illustrated that one of the challenges facing organizational development is one of inadequate monitoring and evaluation systems. Additionally, the lack of capabilities and opportunities to train staff in technical skills in this area is clearly a factor to be considered. Through a consultation process done, there was an agreement that within CSOs, there is a big issue of absence of monitoring and evaluation mechanisms and skills which were the major systematic
challenges and problems facing the region. Moreover, if for CSOs possessing a huge, extraordinary and complex monitoring and evaluation system is no need of it, there is at least a must and need for them to possess the basic skills and knowledge and as well to have a good and effective capacity of monitoring and evaluation reporting systems.

White (2013) carried a study on monitoring and evaluation best practices in development INGOs, and found out that INGOs faced a multiple numbers of problems while implementing and one of M&E activities management being insufficient where M&E capacity and agents work and assist more projects at a time and have many assignment to accomplish within similarly time. This may limit the Monitoring and Evaluation system throughput as well.

There are several studies done on Monitoring and Evaluation systems and among them is one of Mibey, 2011 whereby he carried a research in Kazi Kwa Kijana project on the factors affecting implementation of monitoring and evaluation programs, and he obviously recommended that one of major component to focus on for all project across Kenya is the capacity building and this calls for enhanced investment in training and human resource development in the crucial technical area of monitoring and evaluation.

2.1.6 Utilization of M&E Information

The information play a key role in M&E, normally set procedures and collected information are used to evaluate the performance to goals. The M&E information is a vital and important to the sustainability of M&E system since it give update on how work is going. The evaluators also use that information to come up with credible results. Though M&E information serves as a key important for a meaningful decision making for evaluators (Martin, 2011).
David Otieno (2012) carried a study and find out that any decision made of the project is resulted from the information got while evaluating it or monitoring it. He advised that most of the time project control should be strengthened and participation of project members to give credible information as a way of coming to good results of M&E system. Motivation and encouragement need to be offered for the use of performance information, thus means that good results must be acknowledged and awarded and issue need to be sorted out and handled, the management and economic status must be shared and organizational learning should be considered (Kusek&Rist, 2014).

Thomas 2010 stated that the outside request for any given information on a certain results and consequences helps in evaluation of work development and maintain the integrity of the M&E system. Beside where the outside or inside demand is lacking, there is no motivation and encouragement hence the deficiency of M&E system.

The report from USAID (2000) showed that the review and feedback from all projects workers and projects owners while imprimenting a project contribute a lot to credibility of the M&E information in a given project. Moreover to ameliorate the quality of given information, the consultation should be considered to verify the credibility of that information before. A piloting study and survey is very crucial for any work in order to dig out the existence needed information. This help on ameliorating the quality of work implementation and activity delivery. Once there is no study before the project might face the challenge on tracking its progress based on indicators. (Tache, 2011).
2.1.7 Project Performance

Evaluating project management is a key challenge and very crucial in business industry nowadays. The earlier big projects failure in 1970s mostly in construction and computer system serves as a lesson and has opened the mind and illustrated the new meaning of word performance in project management. Auditing or any other forms of project assessment has become a routine tool for professional management and project consultancy (Salapatas, J. N. 1985). The project performance is mainly measure based on project ‘specific objectives which are an end results and very costly and they must be achieved throughout a specific time bound. This clearly explains that projects which manage to attain their set objectives and targets at an expected cost and schedule are namely successful. Those which do not are failures. Therefore, the successfulness and failure of the projects are ones of indicators and measurement of performance. This is most applicable especially for the small project such as making a couch or tables but it might not work for most project especially the big projects.

Salapatas, 1985 has illustrated that through his experience, the measurement of the project performance should be in terms of arcane based on project’s value to the mere company or in another way as a quantities earned value used on big projects. The end product must act satisfactory in service and this means that parties associated with and affected with by the project should be satisfied at the same time that the good cost and schedule performance are realized as well. For any given project to succeed, a judicious trade off among the four tests are required which are completion within time and budget, success factors of timeliness, satisfactory technical performance and lastly customer acceptance (Ochieng, 2012). A failure of a project is mostly demonstrated by failing to attain the four components mentioned above. This may lead to the project abandonment which is the failure to complete the contract as signed.
For the fact that M&E and key indicators play a big role in measuring of project performance, but it require a full commitment of the project management. There are other factors such as; personnel tasks, planned targets, management system, credibility of data, time management, achievable objectives and a clear reporting system. The key indicators of project performance could be seen as assessed measurable values that illustrate the performance of the project. These assessed measurable key values known as key indicators could be used to evaluate the performance of the project. Here are some keys indicators mentioned which used for effective project monitoring mainly are based on the cost and schedule comparison. Eg; Current vs planned cost, original and final costs, Current vs planned schedule, scheduled completion time etc…

The indicators status of project is often used for assessing the changes appeared during the reporting time to another. The most important is to examine the rate of deviation whether is getting better or worse hence recovery measures when it is getting bad.

During the changes, there are key indicators that could illustrate the critical way to be focused based on the work completed and money used as well and they use many elements to show that status. Such elements are the design changes; inspection carried out and rejected inspections. The managements also play a big role to make a full control of the project. They must develop a control system build on auditing (internal and external auditing), problem detect and solving system and tangible key controls. These are activities or specific tasks done by the management to check on project performance, approval or make decisions that stipulate the projects results.

Project control and existence of periodic reviews over problems raised give out reasonable outcomes to ensure whether or not the project is going on planned line. A problem stands for any
issue that could affect projects outcomes. It might be a technical problem or delay of certain phase as planned or a new design implementation that will lower the cost.

Records of new and how solving the problems illustrate how good unexpected issues are being sorted out. Moreover auditing is very crucial because it serves as objectives review and project control tool. Audit identified the issue earlier before they get bigger and difficult to handle (Salapatas. J, 1985)

Generally a project performed successfully when it has met the cost goals or set budget, time frame, quality standards and customer satisfaction. Satisfaction may be regarded as when the projects’ outcomes meet its main targets like providing a good return on investment, saving a certain amount of money or making the sponsors satisfied (Salapatas. J, 1985).

A project performance is achieved helped by a strong and committed project management which work hand in hand on daily basis to address any issue which could be occurs or protect what is being done so that they may keep in a good line for better results.

2.2 Empirical review

2.2.1 Empirical Literature Related to Monitoring and Evaluation

Zubair, Muhd, Majid and Mushairry (2006) did a study called a systematic approach for monitoring and evaluating the project progress. The aim of the research carried out was to find out the techniques that could be used in the building industry for monitoring and evaluation of the physical progress and as well to set up how current computer technology can be used for monitoring at the site of construction. They discussed the outcome of questionnaire survey held within Malaysian Constructon Industry and propose a prototype system known as Digitilizing Construction Monitoring (DCM). By the use of updated technology and information system the
DCM re-engineer the traditional practice for monitoring the project progression. The research showed that the system can automatically interpret drawings of buildings and extract it on its structural components and keep in database for further use. The system can even extract the engineering information from digital images and when these two both databases are replicated the percentage of progress can be calculated and viewed in Microsoft Project perfunctory.

In Romania, there was a research done by Tache (2011) on developing an integrated monitoring and evaluation flow for sustainable investment projects. The purpose of the research was to develop a sustainable, general integrated flow combining both a project monitoring system and also a project evaluation system as well for the investment projects including economic objectives and others objectives regarding social and environment purposes. He presented his study and the whole approach as a flowchart, which illustrates and highlighting a closer relationship between both monitoring and evaluation processes, and he recommended a clearly framework to perform a logical M&E processes by considering at the same time the social, economic and environmental factors around before investing in any given project. The study used critical analysis and found that both the estimated advantages and the disadvantages of such a managerial tool, opening new perspectives for developing further improved models and systems. In Romania, Monitoring and Evaluation has benefited and sustained many different projects.

A study carried out by Iyenemi and Paulinus (2014), named Monitoring and Evaluation on rural water supply and sustainable development in both Ghana and Nigeria found that there was sustainability issues associated with rural community water provision and these were similar with the challenges experienced as well in delta region of Nigeria where also experienced the problems of sustaining the projects benefits. The sustainability of this approach to water provision was assessed using a qualitative research methodology and undertaking a comparative
review of Micro-Projects Programme (MPP3) in Nigeria with that of Volta Region Community Water Supply Programme (VRCWSP). The study also found out that in current approach there was an absence of sustainability and recommendation from paper reveal that if community based hand pump operated well, they will be a sustainability of rural water supply projects and the sustainability factors must be given full consideration in its design and implementation.

Zvoushe and Gideon (2013) made a analysis on a case of UNDP in Zimbabwe on the use of M&E tools on Agencies Development. Through the study done, by the use of UNDP on Zimbabwe as a case study, they undersaw and assessed the use of monitoring and evaluation systems (M&Es) by international development agencies.

The study used documentary analysis and found that, they didn’t consider a lot the utilization of evaluation findings from earlier programmes and it was biased on quantitative side. This problem on quantitative is very risky and it has affected a lot the total projects and in the development programmes as well.

In Kangema District (Kenya), a study was made by Karanja (2014), on the role of management practices on project sustainability of the youth. This research was held in Kangema District, Muranga’s County, Kenya, with the purpose of examining the influence of management practices on the sustainability of the projects in that region. More emphasis was on training, M&E systems, and financial management and leadership prospects in regard to the relationship with the sustainability of projects.

A descriptive survey design was adopted with 13 groups selected through stratified sampling where the chairperson and member of each group included in the sample. Two groups were involved in focused group discussion. District officer was also interviewed. Data was analyzed using descriptive statistics. The results were presented in form of tables and percentages. The
A study revealed that, sound financial management, appropriate training, leadership and effective M&E exert project sustainability.

In Kenya, Kimweli (2013) analyzed the influence of M&E on food security founded projects. In his study, he featured residents of Kibwezi District and the research utilized the design technique because it was considered a robust research method particularly when a holistic and in-depth investigation is required. By the use of purposive sampling, through four selected regions namely, Nzambani, Makindu, Mtito and Masongaleni, all from the larger Kibwezi District; a sample of forty respondents was taken. Through a questionnaire, data was collected with 10 questions in which Likert scale was used to indicate statements of respondents ‘responses. Other data like, from Semi structured interviews from key informants, focused groups’ discussion and the government officers who had been involved in these projects were used for triangulation. Quantitative data collected was analyzed using MS Excel 2010. The findings of the study illustrated that, there was not any involvement of the community in monitoring and evaluation regarding the food security intervention projects. The study went further and revealed that the agencies which implement the food security projects should have to recognize well the influence and part played by participatory monitoring and evaluation (P M&E) process in the performance and strengthening of projects sustainability and successfulness.

Quaisar and Javid (2012), analyzed the internal control system as a mechanisms of M&E; analyzing theoretical and practice in Pakistan. The study was aimed to illustrate the theoretical perspective and practices through relevant literature review on internal control system (ICS) as mechanism of M&E. Authors used the systematic research on academic and non academic literature. Three legislations, twenty working papers of professional bodies, thirty research articles and ten books were consulted to review the ICS. It is found that a properly developed
and effectively implemented internal control system helps to protect against wastage of resources and a basis for a smooth operations of all type of organizations. It produces reliable financial reports which are helpful to the stakeholders to make their best decisions. They found the importance that internal control system helps the organizations to reduce their operational risks and improve the reliability of financial reporting in order to build confidence of shareholders.

In Kenya, Ochieng, Paul, Ruth and Kuto (2012) analyzed the efficient of M&E of CDF projects in Ainamoi area. They used a research design methodology where targeted population comprises of CDFC members, project management committee (PMC), selected constituents, and district development officers (DDO). The outcomes illustrated that PMC, CDFC and external assessors take part in M&E of project with a few participation of constituents.

There were various researches done on M&E, and among them there is one on how monitoring and evaluation affect the outcome of constituency development fund projects in Kenya, and it was done by Andove and Mike (2015). The main objectives of the study was basically to find out if the project monitoring and control efforts made by the contractors and project supervisors as well, lead to the results improvement and success of the projects. A field survey was conducted using a sample of 45 respondents who were selected by stratified random sampling. The data were collected using structured questionnaires and analyzed using Statistical Package for Social Sciences. The study findings showed that supervisors and project contractors used M&E tools at a certain level in their routine projects operations hence as a results producing a successful outcomes. Furthermore the findings illustrated that within allocated time frame and budget most of constituency development fund projects in Kenya, were completed and majority of respondents ranked them very successful. Jackson, Joseph, and Ben (2015) carried the same study with reference to technical capacity, political influence, stakeholders’ participation, and
budgetary allocation of Constituency Development Fund (CDF) projects in Kenya. Descriptive research design was used. The target population was all the Project Management Committee (PMC) and CDF members. Stratified random sampling was used to get the sample. Data was collected using questionnaires which were subjected to content, face and construct validity tests. Descriptive and inferential statistics were used. For determining the effectiveness of monitoring and evaluation for CDF projects statistical concepts were used such as standard deviation, correlation, mean, anova and multiple regression analysis as well. After all, chart illustrated that 85.6% of the variances in effectiveness in monitoring and evaluation hence at 5% is a meaningful tool on CDF projects in Kenya.

2.3 Critical review and research gap identification

2.3.1 Critical review

Several authors have carried out studies on the concept of M&E tools, and mostly they have shown that updated trending referred M&E as a PCM necessary part. World Bank, 2004 illustrated M&E as a systematic tool used for variables measuring over a certain time for the purpose of education concern (learn from the past), service delivery improvement, resources planning and allocation, auditing and accountability and finally a tool to illustrate project’s based results to the stakeholders.

For many authors seen like Zubair,Muhd, Majid and Mushairry(2006) carried out a study called systematic approach for monitoring and evaluation on the construction project progress. The objectives of the study was to identify techniques that can be used in the construction industry for monitoring and evaluating the physical progress, and also to establish how current computer technology can be utilized for monitoring the actual physical progress at the construction site,
Tache (2011) called developing an integrated monitoring and evaluation flow for sustainable investment project in Romania. The objectives of the study was to develop general integrated flow, encompassing both a project monitoring system and also a project evaluation system for the investment projects involving economic objectives as well as cross-cutting social and environmental targets. Zvoushe and Gedeon (2013) analysed the utilization of monitoring and evaluation system by development agencies, the case of UNDP in Zimbabwe. They examined the utilization of monitoring and evaluation system by the international development agencies, using UNDP in Zimbabwe as the case study, Karanja(2014) investigated the influence of management practices on sustainability of youth income generating projects in Kangema District(Kenaya). According to the above motioned studies majority of them did not focused on the role of monitoring and evaluation especially on the project performance. Even if the above researchers carried out their studies related to monitoring and evaluation and even its importance on project performance they did not analyze how data quality, the effective information and human capacity once are not well utilized could affect the performance of a project especially one laptop per child project in Rwanda.

2.3.2 Research gap identification

This study was unique as compared to the other previous conducted studies in the sense that it addressed the issues in Rwandan context. Secondly, the study was unique because it uses a different case study of One Laptop per Child Project and finally, the research targeted more informed beneficiaries of the project. It is therefore important to note that the study attained its intended purpose in addressing the research gap.
2.4 Theoretical Framework

This research will be guided by the theory of change, done by Kusters (2000). This theory helps M&E to have a meaningful outcome chain(s) and illustrate which strategies have been chosen, why this set of strategies have been used and not that one and how they are expected to develop. This theory of change assist to design and concentrate the M&E framework in early stage of the designing process and not in the early implementation as it is most of the time the case. The critical assumptions, the main actors, intended outcomes and key indicators are there as available as basis for the M&E framework.

The change processes as stipulated by this theory strengthen the understanding of stakeholders, and this help in thinking through the utilization of M&E data and results hence consequences awareness. Monitoring is usually defined as tracking progress against set objectives and plans, milestones and what we expect to be resulted. With Theory of change managers have a wide perspective and also looking at the problem the programme is addressing, the broad context and changes in the relationship between the main actors or process indicators and unintended outcomes. Revising the assumption that have been made at the start during the program implementation is of great importance to know if they prove to be valid. If not it may necessary to adapt the strategy, or review the theory of change.

This change theory is helpful to measure the results and to have a clear understand of the role of programme and other factors that contributed to the results. M&E mainly helps as midterm review, towards the end of a programme or sometimes after the programme. A main aims of mid-term review is to check and make sure if the programme is helping to achieve changes in a match with the highlighted theory of change.
During M&E the managers of the project decide whether they may decide to change some activities and strategies in relation to the goals of the project.

2.5 Conceptual Framework

A conceptual framework is referred as analytical tool with different variations, ideas and context to structure a meaningful presentation, with the purpose to make conceptual distinctions and ideas organization. In this study the conceptual framework to be used is presented in Figure 2.1 below:

![Conceptual Framework Diagram]

**Independent variables**

- Monitoring and Evaluation
  - Data Quality
  - Human capacity
  - Effective Information

**Dependent variables**

- Performance of the project
  - Provide means of learning and self expression
  - Enhancement of education through ICT at a low cost
  - Improve education conditions of students, teachers, children, schools and community
  - Expand knowledge through digital contents

**Intervening variables**

- Education policy in Rwanda
- Environmental factors

Source: (Researcher, 2018)

Figure 2.1: Conceptual framework
The diagrammatic presentation in Fig.2.1 explains the relationship between the independent, extraneous and dependent variables. In this study an attempt was made to find out how the independent variables, which is data quality, human capacity, and effective information, influence M&E performance and the project in general. Education policy and environmental factors are also presented as an extraneous variable.

2.6 Summary

This chapter has reviewed different concepts regarding monitoring and evaluation as well as project performance and goes through farther theories relating to the study. The researcher also described conceptual framework reflecting the relationship between the independent variables (factors influencing) and dependent variables (project performance).

Since a longtime M&E system is regarded mostly by development projects as an instruments used to account for outcomes got more than reflection and focus on learned. Moreover, if M&E is applied effectively by project managers as a tool for learning improvement purposes it helps the member to improve on their performance thus leading to projects goals and good project performance as well. Also a critical review and gap analysis were carried out in this chapter.
3.0. Introduction

In this chapter the researcher discusses the methodology and procedures applied in this research. Though in this sense methodology is a major aspect of a research. The chapter shows the process that were used for collecting and analyzing data in order to explore and measure the role played by M&E on project performance, a case study of one laptop per child project in Kicukiro District.

3.1 Research Design

This is referred as the process of the study of the problem formulation through dissemination of findings. There are two types of research design: Descriptive and analytical design (Sekaran, 2000).

Both designs were used in order to have issues related to the study described and analyzed. The study adopted a descriptive research also named statistical research in which helped the researcher to analyze, establish, interpret and describe the population and all data concerning this study.

However, it does not answer the questions like how/when/why the characteristics occurred, which were done under analytical research. This explains the reasons why the researchers used both designs. The research design was based on both qualitative and quantitative methods.

The willing to use these designs was because it is cheap in terms of money, time and human resource since data was collected the same time from different areas of our case study sectors at single point in time. The design further helped the researcher to differentiate between the quantitative survey questionnaire, key informants interviews and make the observations.
3.2 Target population

This could be defined as everything of interest in the eyes of a researcher to be investigating on. It is the group of people, events or things of interest for which the researcher wants to make inferences (Sekaran, 2000).

The study examined the role of M&E as tools for project performance. The study targeted project beneficiaries particularly (teachers, parents, students and DEOs and OLPC staffs) since 2008 when the project was launched and the staffs of OLPC. The target population was 300 beneficiaries include OLPC project staffs. Those will be sampled for a population to be used in the study through Yamane Formula.

Yamane formula \[ n = N / (1 + (N*e^2)) \]

\[ n = N / (1 + (N*e^2)) = 300 / (1 + (300*0.1^2)) = 75 \text{ respondents} \]

Where: \( n \) = samples size which is 75 respondents

\( e \) = margin of error / the margin error estimated is 10% or 0.1.

\( N \) = Total population which is 300 persons

Hence a sample was selected from the study population and was;

OLPC beneficiaries\( = \frac{180+75}{300} = 45 \)

OLPC staffs\( = \frac{120+75}{300} = 30 \)
3.3 Sample design

3.3.1 Sample size

A sample is simply a subject of large population. Normally, the sample size is an important feature of any empirical study in which the objectives is to make inference about the population from a sample. Practically, sample size determination in this study was based on the need to have sufficient statistical power and data collection expenses as well limited time. The researcher used (Yamane, 1967) formula to establish sample size related to the population under study. The sample size of the study was proportionally to OLPC staffs and involved project beneficiaries of OLPC project in Kicukiro District since 2008 when the project was launched.

3.3.2 Sampling techniques

In this research study, stratified sampling technique were used to get the sample population thereby stratification was based on individual status and within that , the simple random sampling techniques was used and thus was consider Yamane formula \( n = N / (1 + (N*e^2)) \)

\[ n = N / (1 + (N*e^2)) = 300 / (1+ (300*0.1^2)) = 75 \text{ respondents} \]

Where: \( n \) = samples size which is 75 respondents

\( e \) = margin of error / the margin error estimated is 10% or 0.1.

\( N \) = Total population which is 300 persons

According to Ochieng, (2009), sampling ought to be done in such a way that the sample be representative of the target population in characteristics, if findings are to be generalized to the rest of the population. Thus, a sample was selected from the study population and was;
OLPC beneficiaries = \[\frac{180 \times 75}{300} = 45\]

OLPC staffs = \[\frac{120 \times 75}{300} = 30\]

3.4 Data collection methods

3.4.1 Data collection instruments

Data was collected from both primary and secondary sources. Primary sources were collected from the OLPC staffs and project beneficiaries (teachers, parents, students, headmasters…) as well as and DEOs from Kicukiro District. The secondary data source was collected from texts books, journals, reports and internet sources related to the topic.

While carrying out this study a variety of tools was used as practical means of obtaining information related to the research topic. The research focused mainly on documentation, questionnaires and interview as techniques of data collection.

**Questionnaire**

A questionnaire could be defined as set of written questions, in which the answers are given by respondents. With questionnaire, respondents read and analyze the questions carefully, interpret what is expected and write down their answers (Ranjit, 1996).

The questionnaires were designed and use in the way that they helped the researcher in obtaining detailed information thereby data was collected through questionnaires from 30 of OLPC project staffs and 45 projects beneficiaries. In order to get data, questionnaires were composed by some questions relating to the study which were the same to all. In questionnaires, the questions were both open and closed ended style. Some parts of questions were designed to get respondents
‘opinions and ideas on specifics issues from the study. The researcher used close ended questions for the sake of time saving and open ended questions to get in deep knowledge and insight, as well as individuals’ experiences and own observation about the research topic.

**Interview**

An interview schedule is a conversation in which a researcher tries to get information from an interviewee. Like how a conversation involves two people taking, an interview also does the same. It involves two people talking to each other about something they are both interested in. But a bit difference between the two is that an interview is likely to be more one sided than a conversation due to the fact that, one person; the interviewer, has to listen very carefully to what is being said and ask follow up questions (Kenneth, 2003). In this study, primary data were also collected through the interview done by the researcher covering OLPC beneficiaries and staffs.

**Documentary review**

This is a secondary data collection techniques based on reading books and other documents of the organization. These include reading textbooks providing several related literature, various reports and journals with information related to M&E as tools for project performance. This also was used to have enough data.

**3.4.2 Administration of data collection instruments**

The researcher administered the instrument through face to face conduct with the respondents who had clear informed about the purpose of the study and requested to express their views on the study topic. Appointments were made with active respondents on best when to have questionnaire filled and picked. The instruction of not to indicate names enabled the respondents to provide credible information. The act of collecting copies of completed questionnaire copies
from the respondents were done by the researcher. For secondary data reviewing the existing literature on the subject helped answer the questions of the study.

3.4.3 Reliability and validity

The reliability was ensured by testing the instruments for the reliability of values (Alpha values) as recommended by Cronbach coefficient. Cronbach was recommending analysis for alpha values for each variable under this study.

The information collected from respondents was edited in order to avoid any form of errors. The researcher further based the research on the previous research. The researcher tried as much as possible to ensure the findings of the research were properly analyzed and interpreted for accurate conclusions.

The researcher extracted data from questionnaires and presented it using tables and figures so as to ascertain frequencies and percentages of the respondents views up which analysis and interpretation was based.

In order to ensure quality and reliability to the replies that was collected, the researcher conducted a pretest or pilot study on 5 respondents selected from sample size population that constitute the location area of the study. On the other side, to ensure the validity of the questionnaires, research supervisor and the defense panel checked the instrument for the constituency of the items, conciseness, intelligibility and clarity. Their inputs were helpful to make necessary adjustments for the improvement of that instrument.
3.5 Data analysis procedure

Data analysis procedure involves both quantitative and qualitative processes.

3.5.1 Qualitative analysis

Generally data was analyzed through the content analysis method. This included developing themes and subthemes fit with the study objectives which are analyzing the role of M&E tools on performance of OLPC project and divide the data collected in line with the objectives. Other data from the field also was arranged onto themes and subthemes as well, and the field was organized to make sure that no information was left out or missing. Same information was gathered under one theme or subthemes in order to avoid generalization and unorganized information.

The researcher then analysed and interprets the data some answers used as quotation in the presentation and discussion of findings. An extraction of relevant tables were added in the report in order to give clear and deep, understandable meaning of data.

3.5.2 Quantitative data analysis

The collected data through questionnaire were organized and analyzed through descriptive statistics thereby frequencies, percentage, tables using SPSS, 20 version.

3.6 Ethical consideration

They said that, an ethical consideration in a research implies human participants and a formal process of research ethics review done by a researcher. So it is in that sense that in this research, respondents were treated autonomous agents whereby the researcher insured that a given subject were receive a full disclosure of the nature of the study, the benefits, the risks and other
alternatives, with and widened opportunities to ask questions. Besides, any respondents with reduced autonomy were entitled to protection as well.

As research aim, it minimized possible troubles and maximizes possible advantages and benefits by reducing all kind of risks that could occur from the study. Consequently, fairness in distribution was respected through equitable selection of the respondents.
CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.0 Introduction
This chapter presents the data analyzed from the field. The information was presented in tables whereby descriptive statistics were used. All the objectives of the study are analyzed using frequency tables and percentages.

4.1 Response rate
The researcher targeted 75 people in this study. Questionnaires were administered to all the respondents and 71 questionnaires were adequately addressed. This translates to 95% response rate. This indicates that the opinion of the majority of the respondents is represented in this study.

4.2 General information
The general information provides insight understanding about the characteristics of the respondents who were sampled during the study. This was considered to be necessary because it assist the researcher to understand the targeted group in details. The statistics were generated using SPSS software version 20.

4.2.1 Gender of the respondents
The researcher sought to establish the gender distribution of the respondents in order to determine to ensure that the study captures the opinion of both gender in Kicukiro district. The results are indicated in table 4.1 below;
The study indicates that 39.4% of the respondents were male and 60.6% were female. It indicates that in average, majority of the respondents were women, however the opinions between gender is represented in this study. This also reflects the level at which majority of the female are participating in monitoring and evaluation practices in Rwanda. However, majority of the population in Rwanda is dominated by female gender according to the National Institute of Statistics. This is according to the survey which was conducted in 2012 and the figures shows that women make up 51.8 percent of Rwandan 10.5 million inhabitants while males account for 48.2 percent. It is therefore scientifically argued that in any given sample of population, there is high likeliness to observe the same replica whereby majority of the respondent are male. Additionally, due to women empowerment which have been tirelessly conducted in the country, there is little to argu that there are some jobs which attract male gender as compared to femal gender. Nowadays, what men can do, also female can do, and indeed they say can do better.

4.2.2 Level of education of the respondents

The researcher sought to find out the average level of qualification of the respondents in order to assess their level of competence in caring out M&E activities. This was necessary because the most obvious reason education is important is to acquire the basic knowledge needed to execute certain task worth accomplished. The results are indicated in the Table 4.2 below;

### Table 4. 1: Gender of the respondents

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28</td>
<td>39.4</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>60.6</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)
Table 4.2: Level of education of the respondents

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>22</td>
<td>31.0</td>
</tr>
<tr>
<td>University</td>
<td>46</td>
<td>64.8</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

From the statistics above findings shows that 64.8% of the respondents had University degree education, 31.0% had secondary level of education and 4.2% had primary level of education. In general it can be concluded that majority of the respondents have higher level of education and therefore they are competent to carry out their assigned duties, in this case Monitoring and Evaluation of OLPC project.

4.2.3 Level of experience

The researcher sought to find out the level of experience of the respondents in order to ascertain their familiarity in the field of monitoring and evaluation. The results are highlighted in the Table 4.3 below;
Table 4.3: Level of experience of the respondents

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years</td>
<td>11</td>
<td>15.5</td>
</tr>
<tr>
<td>2-5 years</td>
<td>32</td>
<td>45.1</td>
</tr>
<tr>
<td>5 &gt;10 years</td>
<td>28</td>
<td>39.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>71</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study revealed that 45.1% of the respondents had experience of between 2 to 5 years, 39.4% for 5-10 years whereas 15.5% had experience of less than 2 years. Although a sensible number of respondents seemed to have worked less than 5 years in the organization, quite number of them seems to have understood the results based management adopted by their organizations considering their level of experience and the level of education they have as well. However, this project is relatively new in Rwanda since its inception was just recently in 2009. After a successful piloting done in Rwanda, by 2010 in which 10,000 laptops were deployed to 10 schools, urban, semi-urban and rural, the government of Rwanda aimed bigger and by 2011 accomplished a deployment and integration of 100,000 laptops in more than 121 schools countrywide.
4.3 M&E (Monitoring and Evaluation)

Table 4.4: Respondents view whether there is monitoring and evaluation department in OLPC project

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44</td>
<td>62.0</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>15.5</td>
</tr>
<tr>
<td>I don't know</td>
<td>16</td>
<td>22.5</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study sought to establish whether there is a function M&E department in OLPC project and the findings indicates that 62% of the respondents agreed that there is a functioning department, 22.5% didn’t know whether there is one and finally 15.5% mentioned that there is no functioning M&E department. In general it can be concluded that OLPC project has a functioning M&E department. This department is responsible in sharing and utilisation of information, combined with the potential of people’s skills, technical competencies, insights, thoughts, commitments and motivations.

4.4 Human Capacity

Table 4.5: Respondents view whether human capacity matters on performance of OLPC

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>52</td>
<td>73.2</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>26.8</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)
The study also sought to establish whether human capacity in OLPC project plays a significant role in project implementation. The study reveals that 73.2% of the respondents agreed while 26.8% disagreed. Human capacity is important in developing skills systematically up skilling individuals in order to benefit society as a whole. This is accomplished as, once a person has been trained and educated, they move out into their respective society and create economic, social activities. In order to realize full implementation of OLPC project, it is therefore evident that human capacity development plays an important role.

**Table 4.6: Respondents view whether employees received the training before or during the OLPC implementation**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66</td>
<td>93.0</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study sought to find out respondents view whether employees received the training before or during the OLPC implementation. It is observed in the above findings that 93% of the respondents agreed while 7% disagreed that indeed employees are trained. Training is critical in any project because it allows employees to strengthen those skills that each of them need to improve. A robust training and development program ensures that employees have a consistent experience and background knowledge. The consistency is particularly relevant for the company's basic policies and procedures.
4.5 Data Quality

Table 4.7: Respondents view whether M&E staff collects data on project activities

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study sought to find out respondents view whether M&E staff collect data on project activities. The study reveals that majority of the respondents who consisted 91.5% agreed that they always seek for data during this process while 8.5% disagreed with their counterparts. Indeed it is difficult to conduct monitoring and evaluation of the project without having a data. Data provide a reflection of the situation and it facilitates proper representation of opinions among all the project stakeholders.

Table 4.8: Respondents view on the frequency which data collection is conducted

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>6</td>
</tr>
<tr>
<td>Weekly</td>
<td>11</td>
</tr>
<tr>
<td>Monthly</td>
<td>41</td>
</tr>
<tr>
<td>Quarterly</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study sought to find out the consistency in which data is being collected for the purpose of conducting M&E of OLPC project and the results showed that majority of the respondents who
consisted of 57.7% of the total population stated that the data is collected monthly, 18.3% stated that they do so in a quarterly basis, 15.5% mentioned that they do the same in a weekly basis while 8.5% mentioned that they always collect data in a daily basis. Indeed, data is availed in a in nearly all the time. There are those which are availed in a daily basis, weekly basis monthly basis and also quarterly basis. However, a meaningful data ought to be compiled, sorted and arranged in order to give meaningful information.

**Table 4. 9: Type of data used in baseline survey for M&E purpose**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Sources (e.g. individuals, groups, organizations)</td>
<td>50</td>
<td>70.4</td>
</tr>
<tr>
<td>Secondary data</td>
<td>21</td>
<td>29.6</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study wanted to find out the most used data for M&E purpose and the results indicates that 70.4% are based on primary data while 29.6% are based in secondary data. Primary data is important because it gives a raw data from the respondents. It provides clear reflection of the information on the ground and therefore in most cases, majority of the M&E experts prefer first-hand information rather than second hand information in order to come up with final recommendations which addresses the subject matter.
4.6 Utilization of Monitoring and Evaluation Information

Table 4.10: Respondents view whether M&E staff collects information from the projects above on time

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
<td>11.3</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>88.7</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study sought to find out respondents view whether M&E staff usually collect information from the projects above on time. The findings shows that 88.7% said no while 11.3% said yes. Timely collection of data is essential while conducting M&E because it ensures that the information sought is focused on obtaining data which are accurate, valid, reliable, timely, relevant and complete.

Table 4.11: Respondents view whether they utilize monitoring and evaluation findings

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
<td>91.5</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The researcher also sought to find out respondents view whether they utilize monitoring and evaluation findings. It was observed that 91.5% of them stated that they indeed do so while 8.5% denied that they usually utilize the sought findings. In general it can be concluded that the
findings of M&E is being utilized in OLPC project because majority of the respondents attest to the fact.

**Table 4.12: Respondents views on frequency of utilizing monitoring and evaluation findings**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>54</td>
</tr>
<tr>
<td>Frequently</td>
<td>14</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>71</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The researcher also wanted to find out how often M&E findings are being utilized and the results indicates 76.1% said they always utilize the findings, 19.7% said they frequently utilize them while 4.2% said they occasionally utilize the findings. Constant utilization of the project findings enables the project implementers to follow the track of the project and make necessary adjustments if need be. This facilitates the process of project implementation and also addresses some upcoming challenges.

**Table 4.13: Respondents view whether they conduct baseline surveys**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>71</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)
The study indicates that 70.4% of the respondents agreed that they usually conduct baseline survey while 29.6% denied. The purpose of a baseline study is to provide an information base against which to monitor and assess an activity's progress and effectiveness during implementation and after the activity is completed. So it is important to find out what information is already available.

Table 4.14: Period in which M&E staff conduct baseline survey

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the implementation of the project</td>
<td>5</td>
<td>7.0</td>
</tr>
<tr>
<td>During the implementation</td>
<td>7</td>
<td>9.9</td>
</tr>
<tr>
<td>After the implementation</td>
<td>11</td>
<td>15.5</td>
</tr>
<tr>
<td>Before and after the implementation</td>
<td>48</td>
<td>67.6</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study indicates that 67.6% of the respondents stated that baseline survey usually conducted before and after implementation, 15.5% of them stated that baseline survey id conducted after implementation, 9.9% said it is done during the project implementation while 7% said that it is done before implementation of the project. In actual sense M&E planning should begin during or immediately after the project design stage. Early planning will inform the project design and allow for sufficient time to arrange for resources and personnel prior to project implementation. M&E planning also involve those using the M&E system. Involvement of project staff and key stakeholders ensures feasibility, understanding, and ownership of the M&E system.
Table 4.15: Ratting the use of baseline information during project implementation

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>40</td>
<td>56.3</td>
</tr>
<tr>
<td>Very satisfactory</td>
<td>30</td>
<td>42.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>71</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study sought to ask the respondents to rate the use of baseline survey information in M&E and project implementation and the results indicates that 56.3% of them stated that it is satisfactory, 42.3% said it is very satisfactory and 1.4% said it is unsatisfactory. It means that the information which is obtained from the baseline survey is essential in providing relevant information concerning the project. If there are some issues which needs address, the results from the survey will highlight and proper measures will be taken.

Table 4.16: Whether baseline information improve on the quality of project information

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>68</td>
<td>95.8</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>71</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study indicates that 95.8% agreed that baseline information improve on the quality of project information while 4.2% denied. Baseline information provides necessary information which is vital to project implementation. Such information can be used to rectify certain areas in project implementation.
Table 4.17: Respondents view whether timing of baseline survey determine the quality of project information

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>41</td>
<td>57.7</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>42.3</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data, (2018)

The study found out that majority of the respondents consisting of 57.7% agreed that timing of baseline survey determine the quality of project information while 42.3% disagreed with their counterparts. Baseline Survey gathers key information early in a project so that later judgments can be made about the quality and development results achieved of the project. The project’s monitoring and evaluation plan is closely linked to each (objective) level of the log frame and includes indicators of achievement and means of verification. The Baseline Survey is an early element in the monitoring and evaluation plan and uses the log frame structure to systematically assess the circumstances in which the project commences.
Table 4.18: Descriptive Statistics on the performance of the project

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective information</td>
<td>1.38</td>
<td>.704</td>
</tr>
<tr>
<td>Project findings</td>
<td>1.86</td>
<td>1.060</td>
</tr>
<tr>
<td>Human capacity</td>
<td>1.41</td>
<td>.729</td>
</tr>
<tr>
<td>Data quality</td>
<td>1.45</td>
<td>.771</td>
</tr>
<tr>
<td>ICT</td>
<td>1.46</td>
<td>.771</td>
</tr>
<tr>
<td>Education System</td>
<td>1.69</td>
<td>1.064</td>
</tr>
</tbody>
</table>

Valid N (listwise)

Source: Primary data, (2018)

The study sought to find out the role of M&E in OLPC project implementation and the response indicates that in terms of effective information, majority of the respondents rated it as excellent as indicated by a mean of 1.38 and a heterogeneous standard deviation of 0.704. In terms of project funding, majority of the respondents rated it as good as indicated by a mean of 1.86 and a heterogeneous standard deviation of 1.060. In terms of human capital, majority of them rated it to be excellent by a mean of 1.41 and heterogeneous standard deviation of 0.729, in terms of data quality, majority of the respondents stated it to be 1.45 and a standard deviation of 0.771. In terms of ICT majority of the respondents rated it to be excellent with a mean of 1.46 and a standard deviation of 0.771 and finally majority of the respondents stated that education system is good as rated by a mean of 1.69 and a heterogeneous standard deviation of 1.064.
4.7 Relationship between OLPC and pupils performance

Table 4.19: Relationship between OLPC and pupils performance

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitation of work for both teachers and students;</td>
<td>1.21</td>
<td>.406</td>
</tr>
<tr>
<td>Greater access to current, high-quality information;</td>
<td>1.33</td>
<td>.677</td>
</tr>
<tr>
<td>Greater student motivation;</td>
<td>1.26</td>
<td>.591</td>
</tr>
<tr>
<td>Greater student attentiveness;</td>
<td>1.23</td>
<td>.424</td>
</tr>
<tr>
<td>Development of student autonomy;</td>
<td>1.21</td>
<td>.437</td>
</tr>
<tr>
<td>Individualized, differentiated learning;</td>
<td>1.22</td>
<td>.474</td>
</tr>
<tr>
<td>Engaging, interactive and meaningful learning using multimedia support;</td>
<td>1.23</td>
<td>.424</td>
</tr>
</tbody>
</table>

Valid N (listwise)

Source: Primary data, (2018)

The study sought to seek the link between OLPC and student performance and from the statistics in table 4.19 above, it is indicated that in average majority of the respondents strongly agreed with the suggested variables stating that the link between the variables exist in facilitation of work for both teachers and students (mean=1.21), greater access to current, high-quality information (mean=1.33), greater student motivation (mean=1.26), greater student attentiveness
(mean=1.23), development of student autonomy (mean=1.21), individualized, differentiated learning (mean=1.22), and also engaging, interactive and meaningful learning using multimedia support (mean=1.23). Judging from the means of the above stated variables, it is evident that in average the average mean is between $1.00 \leq \text{mean score} \leq 1.50$ which signified strong ratings.
5.0 Introduction
This chapter presents the information about analysis collected from the field and how data was interpreted using tables, frequencies and percentages.

5.1 Summary

5.1.1 M&E (Monitoring and Evaluation)
While seeking to establish whether there is a function M&E department in OLPC project and the findings indicates that 62% of the respondents agreed that there is a functioning department, It was therefore concluded that OLPC project has a functioning M&E department. This department is responsible in sharing and utilization of information, combined with the potential of people’s skills, technical competencies, insights, thoughts, commitments and motivations.

5.1.2 Human Capacity
While seeking to establish whether human capacity in OLPC project plays a significant role in project implementation majority of the respondents who were 73.2% agreed. Human capacity is important in developing skills systematically up skilling individuals in order to benefit society as a whole. Majority of the respondents 93% of agreed that employees received the training before or during the OLPC implementation. Training is critical in any project because it allows employees to strengthen those skills that each of them need to improve.

5.1.3 Data Quality
The study sought to find out respondents view whether M&E staff collect data on project activities. The study reveals that majority of the respondents who consisted 91.5% agreed that
they always seek for data during this process. Indeed it is difficult to conduct monitoring and evaluation of the project without having a data. Data provide a reflection of the situation and it facilitates proper representation of opinions among all the project stakeholders. The study sought to find out the consistency in which data is being collected for the purpose of conducting M&E of OLPC project and the results showed that majority of the respondents who consisted of 57.7% of the total population stated that the data is collected monthly, 18.3% stated that they do so in a quarterly basis, 15.5% mentioned that they do the same in a weekly basis while 8.5% mentioned that they always collect data in a daily basis. Indeed, data is availed in a in nearly all the time. There are those which are availed in a daily basis, weekly basis monthly basis and also quarterly basis. However, a meaningful data ought to be compiled, sorted and arranged in order to give meaningful information. Primary data is important because it gives a raw data from the respondents. It provides clear reflection of the information on the ground and therefore in most cases, majority of the M&E experts prefer first-hand information rather than second hand information in order to come up with final recommendations which addresses the subject matter.

5.1.4 Utilization of Monitoring and Evaluation Information

The study sought to find out respondents view whether M&E staff usually collect information from the projects above on time. The findings shows that 88.7% said no wile 11.3% said yes. Timely collection of data is essential while conducting M&E because it ensures that the information sought is focused on obtaining data which are accurate, valid, reliable, timely, relevant and complete. The researcher also sought to find out respondents view whether they utilize monitoring and evaluation findings. It was observed that 91.5% of the respondents agreed that M&E is being utilized in OLPC project because majority of the respondents attest to the fact.
The study indicates that 70.4% of the respondents agreed that they usually conduct baseline survey while 29.6% denied. The purpose of a baseline study is to provide an information base against which to monitor and assess an activity's progress and effectiveness during implementation and after the activity is completed. So it is important to find out what information is already available.

The study indicates that 67.6% of the respondents stated that baseline survey usually conducted before and after implementation, 15.5% of them stated that baseline survey is conducted after implementation, 9.9% said it is done during the project implementation while 7% said that it is done before implementation of the project. In actual sense M&E planning should begin during or immediately after the project design stage. Early planning will inform the project design and allow for sufficient time to arrange for resources and personnel prior to project implementation. M&E planning also involve those using the M&E system. Involvement of project staff and key stakeholders ensures feasibility, understanding, and ownership of the M&E system.

The study sought to ask the respondents to rate the use of baseline survey information in M&E and project implementation and the results indicates that 56.3% of them stated that it is satisfactory, 42.3% said it is very satisfactory and 1.4% said it is unsatisfactory. It means that the information which is obtained from the baseline survey is essential in providing relevant information concerning the project. If there are some issues which needs address, the results from the survey will highlight and proper measures will be taken.

The study indicates that 95.8% agreed that baseline information improve on the quality of project information while 4.2% denied. Baseline information provides necessary information which is vital to project implementation. Such information can be used to rectify certain areas in project implementation.
The study found out that majority of the respondents consisting of 57.7% agreed that timing of baseline survey determine the quality of project information while 42.3% disagreed with their counterparts. Baseline Survey gathers key information early in a project so that later judgments can be made about the quality and development results achieved of the project. The project’s monitoring and evaluation plan is closely linked to each (objective) level of the log frame and includes indicators of achievement and means of verification. The Baseline Survey is an early element in the monitoring and evaluation plan and uses the log frame structure to systematically assess the circumstances in which the project commences.

The study sought to find out the role of M&E in OLPC project implementation and the response indicates that in terms of effective information, majority of the respondents rated it as excellent as indicated by a mean of 1.38 and a heterogeneous standard deviation of 0.704. In terms of project funding, majority of the respondents rated it as good as indicated by a mean of 1.86 and a heterogeneous standard deviation of 1.060. In terms of human capital, majority of them rated it to be excellent by a mean of 1.41 and heterogeneous standard deviation of 0.729, in terms of data quality, majority of the respondents sated it to be 1.45 and a standard deviation of 0.771. In terms of ICT majority of the respondents rated it to be excellent with a mean of 1.46 and a standard deviation of 0.771 and finally majority of the respondents stated that education system is good as rated by a mean of 1.69 and a heterogeneous standard deviation of 1.064.

5.2 Conclusion

It has been seen in this study that monitoring and evaluation has a direct influence on project performance in that monitoring, is basically ‘watching over’ the project as it is being implemented while evaluation is ‘judging’ performance of the project in relation to its target. This means that it is only through monitoring and evaluation that project performance can be
assessed and corrections made to improve performance. In addition, the three key activities of M&E in this study need to be implemented in full.

Data quality, human capacity, use of the logical framework and utilization of monitoring and evaluation information improve the accuracy, quality and access of information provided by the monitoring and evaluation system. Programme officers had monitoring and evaluation experience and training, utilized monitoring and evaluation information adequately and carried out regular data collection from various sources.

Furthermore, the performance of monitoring and evaluation systems was satisfactory given information was accessible to organizational staff, feedback after measurement of project activities was received and the information needs of staff were met. However, challenges faced with the storage and processing of data, results measurement in upper levels of the logical framework and the low choice of qualitative indicators for project activities influence project success.

It was observed that one of the fundamental factors affecting the performance and effectiveness of M&E in OLPC project related with the governance. Moreover, M&E is a rigorous process which requires strong governance which will be able to facilitate the process of M&E. Good governance will ensure that there is a right team to engage in design of a monitoring and evaluation system, the objective is to collect indicator data from various sources, including the target population for monitoring project progress, a team to collect data, undertake data analysis of the project activities using latest software among other requirement.

Therefore governance which factors in mind the issue of accountability, participation and transparency will go a long way in facilitating efficiency in M&E process. This is because the
process has to deal and manage matters regarding data collection namely: cost, time, training, data accuracy and consistency, storage, and means of data analysis.

Nonetheless, staff competency is affects the performance of M&E and therefore some key players in the field of project management like project and programme managers, M&E officers, project staff and external evaluators still require specialized training not just in project management and M&E; but specifically in areas like Participatory monitoring and evaluation and results based monitoring and evaluation. Budgetary allocation is also a key factor which can affect the performance of M&E process because without enough funding, few people may participate and the opinion of the majority can be locked out during the policy implementation based on the recommendations of the findings.

5.5 Recommendations

Based on the findings of the study, these recommendations should be considered. The M&E reporting should be adequately planned in order to improve the data quality, human capacity and ensuring that the process uses proper M&E tools such as logical framework. M&E reporting should be factual in the sense that every report should be based on facts, verified information and valid proofs, clear and easily understandable. The team should ensure that the report is free from errors and duplication, should facilitate the decision makers in making the right decision, result focused and result oriented, well organized and structured as well as observing ethical reporting style. By so doing the above, the management and other decision makers will be able to utilize the M&E findings without difficulties hence facilitating the sustainability of M&E in the organization.

Utilization of monitoring and evaluation information improve the accuracy, quality and access of information provided by the monitoring and evaluation system.
The study also recommends that the information should be made accessible to organizational staff, feedback after measurement of project activities was received and the information needs of staff were met.

Proper storage and processing of data needs to be improved in order to provide quality information for those in need of it.

The study recommends that there is a need for improving the process of accountability in the cyclical process of monitoring, review and remedy/action to assess progress, document success, identify problems that need to be rectified and take prompt action as and where needed. This will facilitate prudent management of cost, time, training, data accuracy and consistency, storage, and means of data analysis.

Also the study recommends that there is a need for holistic engagement of all the stakeholders to increase the level of participation in M&E process so that the opinion of the majority can be factor in during policy development.

The study recommends that more training of M&E staff especially project management like project and programme managers, M&E officers, project staff and external evaluators still require specialized training not just in project management and M&E; but specifically in areas like Participatory monitoring and evaluation and results based monitoring and evaluation.

It was also recommended that the funding levels for M&E needs to be increased in order to facilitate more training to be conducted, increase the scope of outreach during data collection and also facilitate effective and efficient data processing and storage for future use.
REFERENCES


Hunter J. (2009). *Monitoring and evaluation: are we making a difference?* Namibia Institute for Democracy John Meinert Printing, Windhoek, Namibia,


Mrosek, T., Balsillie, D., & Schleifenbaum, P. (2006). *Field testing of a criteria and indicators*


APPENDIXES
Dear respondent,

For academic purpose and oriented am carrying a survey on role of Monitoring and Evaluation on project performance, A case study of One Laptop per Child project and am seeking your views. Please assist me in answering this questionnaire by providing the most appropriate answers in your opinions in a given space. Your responses will be kept very confidential and the respondent will remain anonymous.

Your faithfully.

A. Instructions

The questions are very short, for each question, alternative answers are proposed. Please tick or fill the blank space where provided.

Part 1: General Information

Name (Optional): ____________________
Surname First name ________________
Gender: Male□ Female□
Academic Qualification: □ Primary □ Secondary □ University
A) How many years have you been part of OLPC project? □ <2 years □ 2-5 years □ 5 >10 years
Part 1: M&E (Monitoring and Evaluation)

1. Is M&E very important for the performance of OLPC project?
   a) Yes
   b) No
   If yes, describe how?

2. Is there monitoring and evaluation department in OLPC project?
   a) Yes
   b) No
   c) I don’t know
   3. If yes what is its role for OLPC progress?

Part 2: Human Capacity

4. Do you think Human capacity matter on performance of OLPC?
   a) Yes
   b) No

5. Does the employees receive the training before or during the OLPC implementation?
   a) Yes
   b) No

6. If Yes to 2, how often? And how contributed to the OLPC performance?
Part 3: Data Quality

7. Do you collect data on project activities for your organization?
   a) Yes
   b) No

8. How often do you collect data on project activities?
   a) Daily
   b) Weekly
   c) Monthly
   d) Quarterly
   e) Only when required by donors/organization

9. What is the source of data collected?
   a) Primary Sources (e.g individuals, groups, organizations)

10. A) Are you able to collect information from the projects above on time?
    a) Yes
    b) No
    B) If No to 4, why? ______________________________________________________________

Part 4: Utilization of Monitoring and Evaluation Information

11. Do you utilize monitoring and evaluation findings?
    a) Yes
    b) No
    B) If No, what do you do with the findings? ____________________________________________

______________________________________________________________________________
12. A) How often do you utilize monitoring and evaluation findings?
   a) Always
   b) Frequently
   c) Occasionally

13. Does you conduct baseline surveys?
   a) Yes
   b) No

   B) If No, which data do you rely on before starting a project? ____________________________
   ________________________________________________________________________________

14. If Yes to 13, when is that?
   a) Before the implementation of the project
   b) During the implementation
   c) After the implementation
   d) Before and after the implementation

15. How could you rate the use of baseline information during project implementation?
   a) Unsatisfactory
   b) Satisfactory
   c) Very satisfactory

16. Does the use of baseline information improve on the quality of project information?
   a) Yes
   b) No
17. Does the timing of baseline survey determine the quality of project information?

a) Yes

b) No

Part 5. Project Performance

18. Kindly illustrate your view on how the below variables altered the project performance.

Please tick only one option in each row on Likert scale ranging from strongly disagrees to strongly agree: whereby 1= Excellent, 2= Good, 3= Average, 4= Poor 5= Very Poor. According to your perception, chose one alternative in each column.

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<thead>
<tr>
<th>Statements</th>
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<th>2</th>
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18 Respond to the following questions showing the importance of laptop in improving the quality of education

<table>
<thead>
<tr>
<th></th>
<th>strongly agree</th>
<th>agree</th>
<th>I don’t know</th>
<th>disagree</th>
<th>strongly disagree</th>
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<td>Facilitation of work for both teachers and students;</td>
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<td>Greater access to current, high-quality information;</td>
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<td>Greater student attentiveness;</td>
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<td>Development of student autonomy;</td>
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<td>Individualized, differentiated learning;</td>
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<td>Engaging, interactive and meaningful learning using multimedia support;</td>
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Thanks!
APPENDIX 4: INTERVIEW GUIDE

Project beneficiaries (Students, Teachers, Parents, Headteachers, DEOs)

1. A) Is your school has laptops?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   B) If yes, how many?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   c) Is the number said what was given by the OLPC?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. Is the school has power facilities?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
3. Are all computers given are in use by the students?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

4. A) Are all computer loaded with e-learning modules?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

   b) If not, why?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

5. How do you track student’s enrollment in schools?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Students

1. A) Do you have your own laptop?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
b) If yes, what that laptop helps you to deal with your studies (Normal lesson)?

OLPC staffs

1. When are the laptops distributed were fabricated?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

2. A) Are all computer distributed, loaded with e-learning modules?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

b) If not, why?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Thanks!