INFLUENCE OF MONITORING AND EVALUATION ON PROJECT PERFORMANCE: A CASE OF AFRICAN VIRTUAL UNIVERSITY, KENYA

BY

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A Research Project Report Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Arts in Project Planning and Management, University of Nairobi.

2015
DECLARATION

This research report is my original work and has not been presented for any award in any other University.

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DEDICATION

I dedicate this report to my mum Seraphine, whose words of encouragement and best wishes were a true source of inspiration.
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Last, but not least, I would like to thank my wife Lynn, my children Gweny, Bernard Jr, Jane, Samson and Grace who are an inspiration to me without which my research report would not have been possible.
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## ABBREVIATIONS AND ACRONYMS

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<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<td>AVU</td>
<td>African Virtual University</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>IS</td>
<td>Information System</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MNP</td>
<td>Multinational Project</td>
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<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<tr>
<td>ODeL</td>
<td>Open Distance and eLearning Centre</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>PIs</td>
<td>Partner Institutions</td>
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<td>PME</td>
<td>Participatory Monitoring and Evaluation</td>
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<td>RBM</td>
<td>Results-Based Monitoring and Evaluation</td>
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<td>UNDP</td>
<td>United Nations Development Plan</td>
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<td>VUCCnet</td>
<td>Virtual University for Cancer Control Network</td>
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ABSTRACT

This study was set out to assess the influence of Monitoring and Evaluation (M&E) on project performance at African Virtual University (AVU). Monitoring and evaluation helps track project performance at any given time and provides reasons for an observed project status. In this study monitoring and evaluation was defined by its activities: M&E planning, M&E training, baseline surveys and information systems while project performance was considered as the degree of goal achievement. The objectives of the study were to establish how M&E plans influence project performance; to assess the influence of M&E training on project performance; to determine how baseline surveys influence project performance; and establish the influence of information systems on project performance. Currently, there is inadequate knowledge on the influence of M&E on project performance a situation that this study addresses. It is hoped an understanding of M&E – Project performance relationship can improve the practice of M&E and consequently project performance among NGOs, learning institutions, students of project management and researchers in M&E. The study also reviewed the evolution of M&E and examined how the discipline has evolved over time.

Two projects successfully implemented by AVU, the Multinational Project (MNP) and the Virtual University for Cancer Control Network (VUCCnet) were analysed through a mixed research design of ex-post facto and survey to determine a possible M&E - project performance relationship. All documents for the two projects, the project appraisal reports, inception report, databases and end of project reports were reviewed. This secondary data was supplemented with primary data collected from a survey of two funding agencies, AVU as the implementer and 15 beneficiary institutions. This data was analysed using quantitative and qualitative methods. Results show that monitoring and evaluation as a management function, indeed has influence on project performance. This is demonstrated in activities like M&E planning in which prior to project implementation, appropriate performance indicators are identified and a data collection schedule is devised. How data would be analysed to show project performance is also planned under M&E. In this way all necessary measures to ensure project performance is enhanced, are taken care of under M&E planning. Further, results show that all participating institutions underwent M&E training, participated in baseline surveys and were privy to the M&E plans developed by AVU. On average, 92% of the respondents gave plausible reasons why they thought M&E influences project performance in reference to the projects under study. Spearman correlation showed a positive relationship of 0.6 between M&E and project performance for both projects. Particularly, it showed that on average, M&E planning and M&E training had statistically significant correlation with project performance at 0.8 and 0.7 respectively.

In conclusion, the study has shown that monitoring and evaluation has a directly proportional influence on project performance and that an M&E plan should be in place if a positive influence of M&E has to be seen. Further, M&E needs to be implemented in full and systematically in order to influence project performance. Considering that projects are implemented by institutions that have structures, it is hereby recommended that an M&E unit should be part of an institution. Short of that, a full-time M&E officer should be part of an institutional establishment in order to enhance project learning and retain M&E memory.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The conceptualization of project Monitoring and Evaluation (M&E) has evolved over time and has mirrored the paradigm shifts that have occurred in management of projects (Nyonje, Ndunge, & Mulwa, 2012). In the 1950s, M&E practice was dominated by a strong emphasis on prudent utilization of resources, reflecting the social scientific trend of the era (Rodgers & Williams, 2006). The focus of M&E then, sought to concentrate on lived experiences, and give voice to as many stakeholders in a consensus-shaping evaluation process (Schwandt & Burgon, 2006).

At present however, many organizations view M&E as a donor requirement rather than a management tool for reviewing progress and identifying and correcting problems in planning or implementation of projects (Shapiro, 2001; Alcock, 2009; Armstrong & Baron, 2013). Donors are certainly entitled to know whether their money is properly spent but the primary use of M&E should be for the organisation or project itself to see how it is performing and to learn how to do it better. Naidoo (2011) notes that effective project monitoring and evaluation enhances the basis for evidence-based project management decisions. M&E itself as a management function, consists four key activities: M&E Planning, M&E Training, Baseline surveys and Information systems (Ogula, 2002). Other scholars (Maddock, 2009; Roza, 2013) also hold this view.

With the advent of globalization, organizations all over the world are grappling with internal and external demands and pressures for continuous improvements in project management to enhance performance and stay competitive (Kusek & Rist, 2004). These demands come from a variety of sources including donors, governments, private sector, civil society and the media. Whether it calls for greater accountability and transparency in exchange for foreign aid or real results, organizations must be increasingly responsive to stakeholders’ demand to demonstrate tangible results (Khan, 2001).
As a consequence of this, many organisations are becoming increasingly wary of factors that determine project performance and the need to manage projects meticulously. According to Kusek and Rist (2004), one of the most powerful tools that influence the performance of a project, program, or policy is Monitoring and Evaluation (M&E). This is echoed by Shapiro (2004) that monitoring and evaluation enable one to assess the quality and impact of a project, against project plans and work plan. Wysocki and McGary, (2003) crowns it all by saying “If you don’t care about how well you are doing or about what impact you are having, why bother implement a project at all? You can only tell how well you are doing by monitoring performance (Wysocki & McGary, 2003)

This study deliberately uses the term M&E, as opposed to just monitoring and evaluation. This statement is about the unity between these elements, which whilst distinct at one level, are in fact necessary for a holistic understanding. The Organisation for Economic Cooperation and Development (OECD) definition of M&E are useful to consider, given their widespread use. Monitoring is seen as a continuous function that uses systematic collection of data on specified indicators to provide management and main stakeholders of an on-going project with indications of the extent of progress and achievement of objectives (OECD, 2002). Evaluation on the other hand is the systematic and objective assessment of an on-going or completed project, programme or policy (OECD, 2002). The aim of M&E is to determine fulfilment of objectives, determine efficiency, effectiveness and impact of a project. It should involve incorporation of lessons learned into decision-making process. It also relates to the worth or significance of an activity, policy or programme (Armstrong & Baron, 2013)

Monitoring is descriptive in nature and gives information on where a project is at any given time relative to respective targets and outcomes (Nyonje, Ndunge, & Mulwa, 2012). Evaluation on the other hand, is the systematic and objective assessment of a project and gives evidence of why targets and outcomes are or are not being achieved. It seeks to address issues of causality (Ogula, 2002). Applied as a function, monitoring and evaluation is an integral part of project management involving a system of reflection and communication supporting project implementation (Nuguti, 2009)
Monitoring, whilst seen as an on-going management function, and evaluation as the post-event function, which feeds information back to management for the next event, is too simplistic a distinction. In monitoring one is evaluating, as one is making a judgement about progress and intervening based on this judgement (UNDP, 2010). Similarly, when one does an evaluation, one does so on the basis of monitoring data, and judgements can best be made with these insights. In practice, the sequencing is not as linear as one following the other, but more dynamic depending on the situation (Khan, 2001).

The African Virtual University (AVU), an inter-governmental organization based in Nairobi Kenya, has been selected as a case study because it is among organizations practising monitoring and evaluation in implementation of its projects aimed at expanding access to higher education in Africa (Hamer & Komenan, 2004). It has institutionalised monitoring and evaluation of its projects by having a Monitoring and Evaluation Unit and a Monitoring and Evaluation Strategy. Further, the two (2) projects selected for this study; the Multinational Support Project (MNP) and the Virtual University for Cancer Control Network (VUCCnet) were successfully implemented while consistently practising M&E.

In view of the forgoing and considering that M&E is a key component of project management that gives control over the main parameters that define a project; scope, quality, resources, completion time and cost (Kohli & Chitkara, 2008), this study, in light of the success stories at AVU seeks to demonstrate the influence of M&E on project performance. It is hoped that evidence generated in this study can stimulate organizations to practise M&E for right reasons and still for others to start practising and consequently enhance project performance

1.2 Statement of the Problem

In many organisations, project monitoring and evaluation is activity seen as a donor requirement rather than a management tool (Babbie & Mouton, 2006). For this reason, organisations especially NGOs, implement project M&E just to cope with demands and pressures from funding agencies rather than as a measure to contribute to project performance (Kusek & Rist, 2004). Very few organisations have faith in M&E partly because its influence on project performance is not well understood despite many studies having been done (Khan, 2001; Ogula, 2002; Kusek & Rist, 2004; Nyonje, Ndunge, & Mulwa, 2012). There is
inadequate information on how the key activities of M&E: M&E planning, M&E training, baseline survey and information systems singularly and severally influence project performance. Simply put, the influence of M&E on project performance is not adequately established making organizations view the practice of M&E an extra burden of little or no benefit at all.

In addition, studies on M&E that have been done have seldom focused on higher education projects that utilize Information Communication Technologies (ICTs) as a mode of course delivery (UNESCO, 2013). This study therefore seeks to establish specifically, the influence that M&E activities play on project performance. The study analysed M&E plans, M&E training, baseline surveys and information systems for possible influence on project performance.

1.3 Purpose of the Study

The purpose of the study was to establish the influence of monitoring and evaluation on project performance: the case of African Virtual University, Nairobi Kenya.

1.4 Objectives of the Study

The following were objectives of the study:

1. To establish how monitoring and evaluation plans influence project performance
2. To assess how monitoring and evaluation training influence project performance
3. To determine how baseline surveys influence project performance
4. To establish how information systems influence project performance

1.5 Research Questions

The following research questions guided the study:

1. How do monitoring and evaluation plans influence project performance?
2. How does monitoring and evaluation training influence project performance?
3. To what extent do baseline surveys influence project performance?
4. To what extent do information systems influence information systems?
1.6 Significance of the Study

As the demand for transparency and accountability in project management increases, more and more organisations are thinking of project monitoring and evaluation as a way of coping with the demand. There is more to M&E, however. Monitoring and evaluation can be an effective way of enhancing project performance but very few organisations have faith in it.

Other than to AVU, this research is important to institutions like local NGOs, international organizations and more especially institutions with questionable project performance and those intending to start practicing M&E to enhance project performance. With this study, it is hoped organizations shall begin to monitor and evaluate projects with the sole aim of improving project performance and not necessarily as an obligation to the funder. This would be as a consequence of evidence that this study will bring to the fore on how M&E influences project performance. The study also aims at providing empirical literature to project management students as a step for further research that will add to the body of knowledge of M&E. Likewise; this study can find its importance among researchers in M&E as it will offer an opportunity to compare M&E in ICTs in tertiary education with other social sectors.

1.7 Delimitation of the Study

This study was conducted to determine the relationship between M&E and project performance. M&E was defined by its activities: M&E planning, M&E training, baseline surveys, and information systems. The African Virtual University was selected for this study because it is consistently practising monitoring and evaluation in implementation of its projects aimed at expanding access to higher education in Africa. Further, the two projects selected for this study; the Multinational Support Project (MNP) and the Virtual University for Cancer Control Network (VUCCnet) were implemented while practising M&E.

1.8 Limitations of the Study

This study involved analysing project reports, which in certain instances did not contain specific information for the research in question. This is because implementers could have collected project data for their own use and purpose. It was also difficult to assess the accuracy of project reports because the researcher did not participate in designing the
projects nor did he have control over conditions in which the projects were conducted. That notwithstanding, it was envisage that information so gathered be supplemented with primary data from funders, beneficiary institutions and the implementing institution itself. In a few isolated instances that project officers had left the institutions and could not be available for interviews, every effort was made to follow them-up. Were this completely failed other proxies were identified for the purpose

Another limitation was the wide geographical distribution of institutions. The funding institutions and beneficiaries are distant apart in different countries. This would not allow for site visits for data collection because of budgetary constraints; however, virtual meetings (through Skype or Elluminate) e-mails and phone calls for follow-ups were utilized extensively. The willingness to participate in the study was another factor that limited this study. Being an old and forgotten project, the enthusiasm of respondents was low and thus active follow-ups were done which improved the situation.

1.9 Assumptions of the Study

Assumptions considered important in this study was that the documents utilised were original and authentic documents. Other assumptions were that respondents answered questions correctly and truthfully.

1.10 Definitions of Significant Terms used in this study

African Virtual University: African Virtual University (AVU) is a Pan African Intergovernmental Organization established by charter with the mandate of significantly increasing access to quality higher education and training through the innovative use of information communication technologies (ICTs)

Baseline survey: This is a survey done on the target community prior to project implementation to establish the status quo of the situation to be addressed by the project.

Evaluation: Is a systematic and independent assessment of an ongoing or completed
project its design, implementation as well as results. Evaluation gives evidence as to why targets and outcomes are being achieved or not achieved. It seeks to address issues of causality.

Information systems: This is a system established to have data being collected organised in such a way it can be retrieved and used easily. Essentially such information is stored in a user-friendly database.

Monitoring and evaluation plans: A written plan on how project monitoring and evaluation will be conducted specifying details such as, who will be in charge, who will collect information and so on.

Monitoring and evaluation training: This is training for the entire project team on how M&E will be done including individual roles and responsibilities.

Monitoring: Is a continuous function that gives information on where a project is at any given time relative to respective targets and outcomes.

Project performance: The degree of project goal achievement within the stipulated project period and budget.

1.11 Organization of the Study

This research report consists of five chapters. Chapter one, is the introduction where background of the study, problem statement, purpose of the study, research objectives, research questions, significance of the study, delimitation 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 which includes evolution of monitoring and evaluation, types of monitoring and evaluations, monitoring and evaluation in project performance, influence of monitoring and evaluation activities on project performance, theoretical framework, conceptual framework, knowledge gaps and summary of reviewed literature.

In chapter three, the research methodology is presented: It comprises the introduction, research design, target population, sample size and sampling procedures, research instruments, data collection procedures, data analysis techniques, operational definitions of
the variables and ethical considerations. Chapter four presents data analysis, presentations, interpretations and discussions of the findings of the study. This is followed by chapter five, which presents the summary of findings, conclusions and recommendations of the study.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on M&E and its influence on project performance. It focuses on the manner in which the concept of M&E has been assimilated into project management. The first part of this chapter sketches out the Evolution of M&E in project management analysing the types of M&E. This is followed by a discussion on M&E activities: M&E Planning, M&E training, Baseline surveys and Information systems in light of their influence on project performance. From the discussion of M&E activities, a theoretical framework of this study is then presented followed by the corresponding conceptual framework. An outline of knowledge gaps addressed by this study is then presented and lastly, a summary of this Chapter.

2.2 Evolution of Monitoring and Evaluation

The philosophical orientation and conceptualization of M&E has evolved over time. This has mirrored the paradigm shifts that have occurred in management of projects, with M&E practice in the early 1950s being dominated by a strong emphasis on prudent utilization of resources, reflecting the social scientific trend of the era (Rodgers & Williams, 2006). The emphasis on monitoring and evaluation of projects mirrored the period of discontent around project management in the late 1950s when project management was formally recognized as a distinct discipline arising from the management discipline (Cleland & Ireland, 2007). The focus on M&E sought to concentrate on lived experiences, and give voice to as many stakeholders as possible, which was a secondary goal of a consensus-shaping evaluation process before (Schwandt & Burgon, 2006).

At present, it is important to try to resolve the question often asked about whether M&E can be categorised as a field, an approach, or a discipline. It is the very particular manner in which M&E has evolved that has resulted in Scriven (2010) choosing to refer to the field as “trans-disciplinary”, a concept that is used more in recent times to describe M&E as opposed to the term discipline or field. An important conceptual problem, similar to how to classify M&E, is “what is M&E?” The literature reviewed indicates that there is no single,
uncontested answer as to what M&E is, which may in turn be attributed to the fact that there is no consensus around its purpose (Khan 2001; Shapiro 2001; Wysocki & McGary 2003 & Kohli & Chitkara 2008). The purpose question thus influences the “what is?” question. The purpose ranges from promoting accountability, to transparency, to organisational learning, and depending on the particular purpose, the approach would vary (Binnendijk, 1989). There would also be different permutations to the above, which in turn would depend on the context and subject matter. It is for this reason that M&E can at times be a nebulous concept. The diversity can be seen in terms of methods used and the subject matter considered including the types of M&E (Jones, 2011) as discussed in Section 2.3

2.3 Types of Monitoring and Evaluation

Studies reviewed about classifications of M&E by different scholars show striking similarities. Based on area of focus, there are two types of M&E, Results-Based Monitoring and Evaluation (RBM) and Implementation-Based Monitoring (IBM). According to Kusek & Rist (2004), RBM is designed to provide feedback on the actual outcomes and goals of projects. This is in tandem with Parks et al (2012) who adds that RBM is normally done in conjunction with strategic partners and involves systemic reporting on progress toward outcomes. RBM, in this way helps in knowing if results are being met or indeed will be met as the project progresses (Naidoo., 2011)

On the hand, Implementation-Based Monitoring and Evaluation (IBM) focuses on inputs, project activities and outputs and promotes joint learning of stakeholders at various levels and catalyses commitment to taking corrective actions where necessary (Kusek & Rist; 2004, Neubert; 2010). This point again underscores the role M&E plays on project performance. Thus, it can be concluded that the current practice in project monitoring and evaluation revolves around RBM and IMB in as far as area of focus is concerned.

Regarding evaluations, Nyonje, Ndunge, & Mulwa (2012) in their book “Monitoring and Evaluation of Projects and Programs”, distinguish types from modes of M&E and point out that there three types of evaluations: (i) Ex-ante Evaluation or Needs Assessment - is pre-project evaluation, (ii) Formative Evaluation – assesses ongoing project activities and (iii) Summative Evaluation – Its purpose is to assess a mature project's success in reaching its stated goals. Blank (1993) adds that summative evaluation is a type of project evaluation
that collects information about outcomes and related processes, strategies and activities that have led to them.

2.4 Monitoring and Evaluation Activities

From the discussion on the types of M&E, it is important to acknowledge other views on what M&E means and what it should achieve. The most distinguishable views within this spectrum comes from those who see M&E as supporting a purely accountability function. This grouping aligns itself to the field of auditing, compliance and performance management (Cook, 2006). In accountability orientated M&E, high levels of scrutiny are expected, and judgement generally made against clear standards and norms established for a range of performance areas (Cheng, Daint, & Moore, 2007). This would include the proper management of budgets, personnel, legal and regulatory compliance with process and procedures. Deviation from any of the standards invites censure (Naidoo I. A., 2013). In this context, M&E is seen as supporting a management function, which Cook (2006) points out “encompasses the entire management, operating systems and culture of an institution”.

Apart from M&E serving the very necessary purpose of accountability, for reasons mentioned in the foregoing, it is also meant to promote the “learning organisation” (PMI, 2006) - this would be at the level of M&E, and comes about when results are presented. The assumption is that organisations would become more open and self-reflective when faced with evaluative information, but it is not necessarily the case, as operationalizing learning is not easy, given the complex array of protocols and management culture, which must be, negotiated (PMI, 2006). It has been shown that whilst it is implicit that M&E should lead to learning and reflection, this may not be the case, because the way organisations integrate information may be complex, and not as causal as suggested in classic M&E (Preskill, 2004).

As observed by Kennerly and Neely (2003), utilising evaluation in organisations is, however, not easy, and is influenced by several factors: contextual (political), technical (methodological) and bureaucratic (psychological). These factors overlap, but what is clear is that unless “all the elements are lined up, organisational learning is difficult”. Schwartz & Mayne (2005) assess this grouping in terms of how M&E contributes to learning and reflection, and notes that in this mode M&E is seen as one tool that supports management by improving the quality of information provided for decision-making. Whilst most of the
research has focused on NGOs, there is growing interest in seeing how M&E helps to build learning organisations in other organizations (Roper & Petitt, 2002; Hamer & Komenan, 2004). There is much potential for evaluation to lead to organisational learning, and not just accountability, which has been illustrated by Gray (2009). The point made is that M&E intent is very important, as it could lead to different outcomes – the interest of this study. It should be remembered that M&E has assumed different identities, due to context, and depending on this, it may be used for accountability, promoting a behaviour or practice, or learning, as demonstrated in a series on the subject (Bamberger, 2008).

On project performance, there is wide divergence of opinions in this field; the only agreement seems to be what constitutes ‘project performance’ (Murphy et al 1974; Pinto & Slevin 1988; Gemuenden & Lechner 1997 and Shenhar et al 1997). In this study, project performance, was considered as the overall quality of a project in terms of its impact, value to beneficiaries, implementation effectiveness efficiency and sustainability. M&E is analysed to see its influence on project performance, taken to mean degree of project goal achievement

It is important to recognise that monitoring and evaluation are not magic wands that can be waved to make problems disappear, or to cure them, or to miraculously make changes without a lot of hard work being put in by the project or organisation. In themselves, they are not a solution, but they are valuable tools (Verma, 2005). There are various processes involved in the monitoring and evaluation of projects which when done correctly can lead to improvement and good delivery of projects in future (Msila & Setlhako, 2013).

Monitoring and evaluation can help identify problems and their causes and suggest possible solutions to problems (Shapiro, 2001). In this way, M&E can have influence on project performance much as there is inadequate information on this (Singh & Nyandemo, 2004). So then, what activities are involved in M&E? According to UNDP (2009), conducting monitoring and evaluation involves a number of complementary activities of which the most important is to formulate a plan for M&E, which guide the rest of the exercise. Shapiro (2001) adds that monitoring and evaluation should be part of the project planning process and that there is need to begin gathering information about project performance in relation to targets right from the start.
2.4.1 Monitoring and Evaluation Planning and Project Performance

Most scholars of project monitoring and evaluation argue that planning for M&E should be done just at the very point of project planning (Kohli & Chitkara, 2008) while a few contend that it should be created after the planning phase but before the design phase of a project or intervention (Nyonje et al. 2012). Despite this difference in opinion however, almost all scholars agree that the plan should include information on how a project should be assessed (Cleland & Ireland, 2007)

Of great importance to this study, is what the M&E plan outlines that influences project performance. From the studies reviewed, it has been noted that an M&E plan generally outlines the underlying assumptions on which the achievement of project goals depend, the anticipated relationships between activities, outputs, and outcomes - the logical framework. Other contents of an M&E plan are well-defined conceptual measures and definitions, along with baseline data needed; the monitoring schedule; a list of data sources to be used; and cost estimates for the monitoring and evaluation activities. Most plans also include a list of the partnerships and collaborations that will help achieve the desired results; and a plan for the dissemination and utilization of the information gained (Olive, 2002; Wysocki & McGary, 2003; Mackay 2007; Alcock 2009; Nuguti 2009). This demonstrates that planning for monitoring and evaluation takes care of all aspects that need to be in place so that there is early detection of progress or lack thereof.

Literature also reveals that there are important considerations for an M&E plan: Brignall & Modell (2010) categorises these considerations into resources - how much money and time will be needed to conduct the activities. Capacity - does the project have internal capacity to carry out the proposed monitoring and evaluation activities; including analysis of data collected? Other considerations made and also acknowledged by Armstrong & Baron (2012) are Feasibility- Are the proposed activities realistic? Can they be implemented? Timeline - Is the proposed timeline realistic for conducting the proposed activities? Ethics - What are the ethical considerations and challenges involved with implementing the proposed activities, and is there a plan in place for addressing those considerations? Has a protocol been submitted for review to a research ethics committee? With these considerations, it can be said that M&E planning is complete in terms of coverage for the purposes of giving an oversight on project direction during implementation.
2.4.2 Monitoring and Evaluation Training and Project Performance

Regardless of how experienced individual members are, once a team to implement a project has been identified, training and capacity building for M&E reporting is important. This, it has been observed, enhances understanding of the project deliverables, reporting requirements and builds the team together (Wysocki & McGary, 2003). Generally, everybody involved in project implementation is also involved in the implementation of M&E, including partners, and should receive training (Acharya et al., 2006). Training of implementers in M&E is deliberately participatory to ensure that those responsible for implementing and using the system are familiar with its design, intent, focus, and how to use the M&E tools.

Regarding M&E training, M&E resource and capacity assessment carried out earlier during project planning helps identify initial capacity gaps in M&E as well as the resources needed to conduct M&E training. Thereafter, training needs assessments can be informal based on knowledge of staff experiences and performance or can be a more formalized process (Pfohl & Jacob, 2009). The route to choose depends on the size and complexity of the project being implemented. On larger projects with more staff, it is important to be sure the training plan is very well tailored to staff capacity gaps, as there will be a limited number of opportunities to engage with individual staff members. With training needs identified, there is need to develop an M&E training and capacity building plan that include topics to be covered and persons to be trained (Alcock, 2009). It is important to note that not all management and staff members need training in all the topics or at the same level of detail.

Similarly, some training will occur periodically and will include initial training for management and staff at M&E system inception and in-service training over the life of the project in order to improve practice (Gray, 2009). This aspect definitely contributes to influencing project performance. Topics covered in M&E training are very important in shaping up the entire process of data collection. They include, at a minimum, the M&E system to be followed the key performance indicators for the project information gathering methods and tools and data analysis (UNDP, 2006). Such content of training significantly refocuses the implementation team in M&E data collection, which contributes to understanding of how a project is performing at any given time hence can be influenced positively.
According to UPWARD (2011), the topics of M&E training help implementers and other data collector to understand questions like “who this is all for – who are we gathering information for, how do we expect they will use this information and why have we decided to gather the information in the ways that we have”. It is important, particularly for those responsible for collecting and sharing information for the M&E system that they understand the rationale behind the system and their role in it (UPWARD, 2011). This is yet again another hallmark of how M&E contributes to influencing performance of a project, the purpose of this study.

As alluded to earlier, M&E training should also include a review of key performance indicators to be collected. Issues covered in the review include the definition of each indicator, how the indicator is measured, how data on the indicator will be collected, the timeline for collecting and reporting the indicator, and how the indicator satisfies client needs (Alcock, 2009). In essence, such information enables implementers to understand more how M&E will contribute to project performance

The bulk of literature on M&E training also reveals that data collection methods and tools are an important element (Wysocki & McGary 2003; Preskill 2004; Acharya et al 2006; Armonia et al 2006). Issues covered in the review include the purpose for each method and tool and the rationale for including the method or tool in the M&E system (Kusek & Rist, 2004). Others are, how the method or tool satisfies stakeholder information needs, the method or tool’s implications for data validity, and issues related to method or tool implementation (Ward & Pene, 2009).

According to Woodhill, Jim, & Lisa, (2012), M&E training should include topics on roles and responsibilities. At the conclusion of the training, management and staff should have a clear understanding of: (1) their individual role and responsibilities in ensuring the effective operation of the M&E system; and (2) where their role fits in relation to the roles of other managers and staff members.

On the sequence of events in M&E training, it has been observed that, normally it is tailored towards the needs of the project in terms of how complex and hence tend to vary from one project to another (Reviere et al, 1996). The most important part of the training is however, the development of M&E tools using the project log frame matrix which, it has been argued
by many researches should involve would-be users (Narayan-Parker & Nagel, 2009). Development of M&E tools through a participatory method enhances the understanding of project indicators and their importance in tracking project performance during implementation (Marsden, David, & Oakley, 2001). This understanding is critical as it enhance the chances of collecting M&E data on schedule allowing for timely detection of errors and their possible correction if needed (PAMFORK, 2007) – ultimately leading to improvement in project performance.

From the forgoing, it can be deduced that training in M&E is critical. Sending untrained staff to gather information on outcomes and impacts can result in serious compromises to the validity of information resulting in complete invalidation in some cases. It is typically best to start with trainings on the monitoring components of the system and build to evaluation pieces and the capacities needed to be built within the team.

2.4.3 Baseline Surveys and Project Performance

Ideally, if M&E planning has been done well and information about a situation has been collected at the beginning of the intervention, then one has baseline data (Hogger et al, 2011). A baseline survey, simply put, is a study that is done at the beginning of a project to establish the status quo before a project is rolled out (Estrella & Gaventa, 2010). In a baseline survey, values for the identified performance indicators are collected as well. The baseline survey, which aims at collecting baseline data about a situation, is an early element in the monitoring and evaluation plan whose information is used to systematically assess the circumstances in which the project commences (Frankel & Gage, 2007). It provides the basis for subsequent assessment of how efficiently the activity is being implemented and the eventual results achieved (Armstrong & Baron, 2013), a very big contribution to influencing project performance. A baseline survey gathers key information early in a project so that later judgments can be made about the quality and development results achieved by the project.

Focusing on how project performance can be influenced by M&E, particularly by the baseline survey, a number of authors on M&E have given an account about the importance of baseline surveys. According to Action Aid (2008), baseline surveys are important to any project for the following reasons: It is a starting point for a project - One important and recommended way of starting a project is to carry out a baseline study. Through its results, a
baseline serves as a benchmark for all future activities, where project managers can refer to for the purposes of making project management decisions. Establishing priority areas/planning - Baseline studies are important in establishing priority areas for a project. This is especially true when a project has several objectives. The results of a baseline study can show how some aspects of a project need more focus than others (Action Aid, 2008)

On a point of attribution, Krzysztof et al (2011) argue that without a baseline, it is not possible to know the impact of a project. A baseline study serves the purpose of informing decision makers what impact the project has had on the target community. These writers also add that M&E tools used during a baseline study are normally the same tools used during evaluation as this is important for ensuring that project management compares “apples to apples” Krzysztof et al (2011). As such, conducting a baseline means that time and other resources for designing evaluation tools are minimized or even eliminated altogether and there is a real opportunity to detect along the way if the project is performing or not.

Other reasons why a baseline survey would be conducted are that it is a donor requirement as part of the project process (Abeyrama, Tilakasena, Weber, & Karl, 2008). Since M&E is integral for any donor to establish future project success, they always compel implementing organizations to carry out baseline studies. In essence, this helps the donor in future, to compare the realization of results as the project progresses. Unfortunately for some organisations, donor requirement of an M&E becomes the only reason, missing the real reasons why there is need for M&E (Nyonje et al 2012)

Like for other activities of M&E, a few issues need to be considered before conduction a baseline survey. In their Paper “Monitoring and Evaluating Urban Development Programs, A Handbook for Program Managers and Researchers”, Bamberger et al (2008) point out that just as the name suggests, baseline surveys should be carried out at the very beginning of a project and for obvious reasons. Any manager wants to ensure that any possible impact of a project is captured at evaluation. Where a baseline study is conducted after project activities have already been initiated, the accurate picture of the initial status cannot be reflected since the project is already having some impact, however little. It is therefore always best practice, to conduct a baseline before project implementation (Bamberger, 2008).
Other important considerations to be made before a baseline survey is conducted are the identification of indicators, which are essentially measurable or tangible signs that something has been done or that something has been achieved (UNDP, 2009). They help in the designing of the questionnaire and in determining evaluation questions – dictating the type of data to collect and analyse. One other consideration to be made is the target population (Gosling, Lousia, & Edwards, 2009). Like for any other activity in project implementation, for one to carry out a baseline survey, funds are needed. Almost all researchers of M&E identify funds as a requirement for conducting a baseline survey. Availability of funds will dictate the intensity and scope of the baseline study. More funds might also mean that both quantitative and qualitative methods are adopted, while limited funds might imply that an organization only goes for quantitative methods (Armonia et al, 2006)

After the baseline survey, subsequent monitoring of project progress gathers and analyses data using the same logical framework matrix and tools to compare progress made in achieving the set results of the project. In this way, baseline surveys contribute to influencing project performance if the project manager is able to interpret the results of M&E correctly.

2.4.4 Information Systems and Project Performance

Collecting information on project performance during monitoring and evaluation eventually leads to accumulation of data depending on how complex the project is. If this large amount of information has to add value to project management, there is need to decide how to make sense of it or to analyse it. As stated by Shapiro (2001), data analysis is the process of turning the detailed information into an understanding of patterns, trends and interpretations. The starting point for analysis in a project is to have an organised set of data – thus the concept of information system as an M&E activity (Technopedia, 2013).

Essentially, Information Systems (IS) or database, is a data handling system that provides information that is needed to manage projects efficiently and effectively (Beynon-Davies, 2008). Information systems involve three primary resources: people, technology, and information or decision making as in the case of M&E data. It is in this vein that M&E data is captured in a user-friendly database that can be used by project staff to store, retrieve and analyse data. In the light of this study, it can be seen that an M&E information system is a contributing factor to influencing project performance, as it is a tool for organising important
information collected about a project. According to Hailey & Sorgenfrei (2009), the importance of developing an information system is that it is a readily available source for requisite information at each level of project management on which performance can be assessed. Information in the system also helps in highlighting the critical factors for the successful functioning of the project (Cheng, Daint, & Moore, 2007).

One feature of an information system that make it a valuable component of M&E is that it is management oriented- the development of IS should start from an appraisal of management needs and overall project objectives and should be designed from the top downwards. As Olive (2002) writes, it is important to ensure that whatever information is stored in the information system is credible information that will eventually find use in information project implementation. Another feature of an information system is that it is integrative- it is holistic in its approach. It covers all the functional areas of the project. It blends information from all areas of a project. Clearly, these features make an information system a backbone of M&E that holds information.

The most important benefit of having an information system is that in its own rights, it acts as a communication, planning and re-planning tool. An information system facilitates recording, organization, retrieval, and dissemination of knowledge, which may include documents, reports, procedures, practices and skills (Beynon-Davies, 2008). For the purposes of this study therefore, it can be said that a database of this nature is a source of valuable information that can be used to inform the performance of the project.

2.5 Theoretical framework

The theoretical framework of this study is guided by the theory of change and the realistic evaluation theory. The theory of change, first published by Carol Weiss in 1995, is defined quite simply and elegantly as a theory of how and why an initiative works. It focuses not just on generating knowledge about whether a project is effective, but also on explaining how and what methods it uses to be effective (Cox, 2009). The theory of change provides a model of how a project is supposed to work. In other words, it provides a road map of where the project is trying to reach. Monitoring and evaluation tests and refines the road map while communications helps in reaching the destination by helping to bring about change. Further, the theory of change provides the basis for arguing that the intervention is making a
difference (Msilu & Setlhako, 2013). This theory suggests that by understanding, what the project is trying to achieve, how and why, project staff and evaluators will be able to monitor and measure the desired results and compare them against the original theory of change (Alcock, 2009).

This theory however falls short since project success is much more complex (Babbie & Mouton, 2006). It is important to understand success beyond just knowing “what works”. Experience has shown that blindly copying or scaling an intervention hardly ever works (Mackay, 2007). An important task for monitoring and evaluation is to gather enough knowledge and understanding in order to predict – with some degree of confidence – how a project and set of activities might work in a different situation, or how it needs to be adjusted to get similar or better results, hence influencing project performance (Jones, 2011).

On the other hand, the realistic evaluation theory, first published by Pawson in 1997, provides a model centred on finding out what outcomes are produced from project interventions, how they are produced, and what is significant about the varying conditions in the which the interventions take place (Pawson & Tilley, 2004). Realistic evaluation deals with ‘What works for whom in what circumstances and in what respects, and how?’ (Pawson & Tilley, 2004). The model allows the evaluator to understand what aspects of an intervention make it effective or ineffective and what contextual factors are needed to replicate the intervention in other areas (Cohen, Manion, & Morison, 2008). Realistic evaluation seeks to find the contextual conditions that make interventions effective therefore developing lessons about how they produce outcomes (Fukuda-Parr, Lopes, & Malik, 2002).

This theory can greatly aid in understanding how project deliverables are produced, however it falls short, as it is not explicitly about that influences project performance – the concern of this study.
2.6 Conceptual Framework

Figure 1 shows a conceptual framework of the relationship between monitoring and evaluation and project performance. It is a symbolic representation of concepts and their relationship.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Moderating variables</th>
<th>Intervening variables</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. M&amp;E Plans</td>
<td>• M&amp;E Plans</td>
<td>• Project funding</td>
<td>• Timeliness</td>
</tr>
<tr>
<td>• Scope of M&amp;E</td>
<td>• Feasibility of data collection</td>
<td>• Skills of project staff</td>
<td>• Number of deliverables achieved</td>
</tr>
<tr>
<td>• Critical reflection</td>
<td>• Communication &amp; reporting</td>
<td>• Appropriate technology</td>
<td>• Number of activities</td>
</tr>
<tr>
<td>• Necessary conditions</td>
<td></td>
<td>• Government environment</td>
<td>• Number of satisfied customers</td>
</tr>
<tr>
<td>2. M&amp;E Training</td>
<td>• Relevance</td>
<td>• Project staff attitude</td>
<td>• Cost of project</td>
</tr>
<tr>
<td>• Level of training</td>
<td></td>
<td>• Culture</td>
<td></td>
</tr>
<tr>
<td>3. Baseline Survey</td>
<td></td>
<td>• Global economy</td>
<td></td>
</tr>
<tr>
<td>• Coverage of indicators</td>
<td></td>
<td>• Political environment</td>
<td></td>
</tr>
<tr>
<td>• Target values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Information System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• User friendliness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Comprehensiveness</td>
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<td></td>
</tr>
</tbody>
</table>

Figure 1: Conceptual framework of the study

In this conceptual framework of the study, the independent variable, M&E, consisting of four constructs regarded as subcomponents, is considered to have a directly proportional influence on project performance. By implication, if something goes wrong with M&E, or is indeed absent, project performance is negatively affected and the converse is true. This implies that
all activities of M&E should be as credible as possible so that necessary information on how the project is progressing is provided.

Project performance, which in this study, means the degree to which results have been achieved (Krzysztof, Potkański, & Stanisław, 2011), consists of timeliness, number of deliverables achieved, number of activities, number of satisfied customers and cost of project (Acharya, Kumar, Satyamurti, & Tandon, 2006). Information on all these sub-components of project performance, are interestingly considered at project planning design. During project implementation, all that is done is monitoring whether an activity has been done on schedule and if not evaluation provides a reason why and project management on the other hand can adjust the project plan accordingly.

As noted earlier, this proportional relationship between M&E and Project Performance could be affected by other factors outside the control of project management. Factors such as attitude of people towards work have far-reaching consequences especially if they are people who do not take initiative. Culture of the native people is another; it may not allow them to work at certain time of the day and this may affect the implementation of the project, monitoring and evaluation and eventually the performance of the project. Other factors include the prevailing political environment at the time of project implementation, which is not guaranteed to be stable, just like the global economy and could affect funding of the project or indeed the institutions supporting the project at the time.

Overall, through M&E, status of various parameters of project performance are continuously provided, availing an opportunity to make necessary adjustments to achieve project objectives.

2.7 Knowledge Gaps

This study generated knowledge in several areas, but most importantly, it provided insight in how M&E as a global practice has been absorbed into the Kenya civil society, modified and used in pursuit of achieving global standards of service delivery. It analysed M&E and its activities and demonstrated the influence of each one of them on project performance. Table 2.1 shows specific knowledge gaps addressed:
Table 2.1: Knowledge gaps addressed by the study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Literature source</th>
<th>Findings</th>
<th>Knowledge gap for study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and Evaluation</td>
<td>Nyonje et al, 2012; Kusek &amp; Rist, 2004; Armonia, Ricardo, Dindo, &amp; Campilan, 2006; &amp; Bamberger, 2008</td>
<td>Some organizations neglect to institute M&amp;E mechanisms on account of inadequate understanding</td>
<td>Inadequately established influence of M&amp;E on project performance</td>
</tr>
<tr>
<td>Project Performance</td>
<td>Armstrong &amp; Baron, 2012; Brignall &amp; Modell, 2010; Wysocki &amp; McGary, 2003</td>
<td>Project performance is understood differently and in piecemeal</td>
<td>Validate popular understanding of project performance</td>
</tr>
<tr>
<td>Monitoring and evaluation planning</td>
<td>UNESCO, 2013; Glen, Isaacs, &amp; Trucan, 2007 (Nyonje, Ndunge, &amp; Mulwa, 2012)</td>
<td>Monitoring and evaluation planning can influence project performance</td>
<td>Inadequately established influence of M&amp;E plans on project performance</td>
</tr>
<tr>
<td>Monitoring and evaluation training</td>
<td>Government of the Republic of Kenya, 2007; Hamer &amp; Komenan, 2004</td>
<td>Conducting monitoring and evaluation training can influence project performance</td>
<td>An understanding of what influence M&amp;E training has on project performance</td>
</tr>
<tr>
<td>Baseline survey</td>
<td>(Acharya, Kumar, Satyamurti, &amp; Tandon, 2006) (Starling, 2010)</td>
<td>Conducting baseline surveys at the beginning of a project can influence project performance</td>
<td>Inadequately established influence that baseline surveys have on project performance</td>
</tr>
<tr>
<td>Information systems</td>
<td>(Cleland &amp; Ireland, 2007)(Tuckermann, 2007)</td>
<td>Setting up an information system can influence project performance</td>
<td>Is project performance influenced by information systems?</td>
</tr>
</tbody>
</table>

2.8 Summary of Literature Reviewed

This chapter has presented a review of literature, which has shown among others, the evolution of M&E, and illustrated that given its ability to address progress of projects, it has a wider application on project performance. Under the section on types of M&E, this chapter shows that M&E serves several purposes, and uses different methodologies for attaining its goal of improving project performance. In the section on M&E in project performance however, M&E remains a strategy and tool for the promotion of project management, and the
results generated need to be applied through a management hierarchy. The section presenting how M&E activities influence project performance brings out a number issues: i) M&E Planning sets the guide on how to monitor and evaluate a project; ii) M&E training promotes team building and unity of purpose; iii) Baseline surveys on the other hand gathers information on the status quo of issues to be addressed by the project and lastly iv) Information systems ensures that collected data is organised in a usable manner to generate knowledge.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology of the study, and justifies the research methods and choices by presenting an objective research process. The topics discussed include research design, target population, sample size, sampling procedures and data collection instruments. Other topics are data collection procedures, data analysis techniques, ethical considerations and lastly operational definition of the variables.

3.2 Research Design

The research design for this study was a mix of ex-post facto research design and survey. In the context of social and educational research the phrase ex-post facto research design means ‘after the fact’ or ‘retrospectively’ and refers to those studies which investigate possible relationships by observing an existing condition or state of affairs and searching back in time for plausible causal factors (Kerlinger & Rint, 2004). More formerly, Cohen, Manion, & Morison (2008) defines ex-post facto as that research in which the independent variable or variables have already occurred and in which the researcher starts with the observation of a dependent variable. He/she then studies the independent variable or variables in retrospect for their possible relationship to, and effects on, the dependent variable or variables (Cohen, Manion, & Morison, 2008). This study considered activities of M&E as independent variable; M&E planning, M&E training, baseline surveys and information systems. These activities were considered to have influence on the dependent variable, project performance. However, moderating variables like political environment, and intervening variables like the culture of people on the project team, were also considered in that they affect the relationship between M&E and project performance.

From the forgoing, ex-post facto research was therefore suitable for this study because the African Virtual University has already successfully implemented projects while utilizing monitoring and evaluation as a management tool. Therefore, there was no need to costly experiment whether M&E has influence on project performance, but rather to study how this was the case. Moreover, AVU as an M&E practising institution has the necessary documents
needed for this study; project appraisal documents, end of project reports and raw data collected during project implementation. In terms of projects to study, AVU has a number of projects it has implemented to promote utilization of Information Communication &Technology (ICT) in tertiary education (Hamer & Komenan, 2004; African Virtual University, 2012). These conditions at AVU allowed for a retrospect study of projects successfully completed in order to determine the influence of M&E on project performance.

In addition to ex-post facto, this study employed a survey research design to gather primary data from various participants in the two projects. A survey allows gathering of self-reported data from study participants. A survey may focus on information about a phenomenon, or it might aim to collect the opinions about what has been observed (Cherry, 2015). Collection of information may be done in a couple of different ways - in one method known as a structured interview, the researcher asks each participant questions. In another method known as a questionnaire, the participant fills out the survey form on his or her own. Surveys are generally standardized to ensure that they have reliability and validity. Standardization is also important so that the results can be generalized to the larger population (Cherry, 2015). In this study, the survey method was used to collect opinions and facts from projects participants regarding the subject of monitoring and evaluation and project performance. It was also used to collect information gaps in secondary data.

Through an assessment of four distinct, but interrelated activities; M&E planning, baseline survey, M&E training and information systems, a differentiated picture of how they influence project performance was sought in the two projects MNP and VUCCnet. These projects were purposefully selected as they were done within the same period; had similar objectives and monitoring and evaluation was extensively employed. Ex-post facto, as a qualitative case study method, goes beyond descriptive questions to answer the “how and why” questions (Yin, 2003). The study thus was exploratory in nature, and sought explanations for questions related to the M&E - project performance relationship. It also allowed the researcher insights to be fed into the analysis and allowed for analytic generalisations, and had the potential for theory building (Babbie & Mouton, 2006).

A survey of institutions that participated in the two projects, MNP and VUCCnet, was also conducted to collect primary data to complement and compare with secondary data. This allowed for an opportunity to compare two sources of information around the relationship of
M&E - project performance. The survey allowed the researcher to get more insights on how monitoring and evaluation was conducted and how project performance was determined for both projects. In this way the researcher compared what was documented against what was reported by project partners.

3.3 Target Population

The study relied more on documentary evidence about the two projects under scrutiny for possible M&E – project performance relationship. All project documents, starting with proposal to end of project evaluation reports. However to supplement this information, the researcher conducted interviews in all institutions that were involved in the projects. In total 27 respondents, representing participating institutions were targeted.

3.4 Sampling Procedures

Owing to the research design of this study, and the small population size of beneficiaries, a census was conducted of all institutions that participated in the projects. These are the project implementing team from the African Virtual University, representatives from funding and beneficiary institutions. Essentially the interviews were designed to get more information about the two projects, MNP & VUCCnet in the area of M&E and project performance and their individual views on the projects. Appointments with each person who served on the implementation team were scheduled and a questionnaire administered. Table 3.1 shows the number of people that were interviewed:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Category of respondent</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Virtual University</td>
<td>Project team members</td>
<td>7</td>
</tr>
<tr>
<td>African Development Bank</td>
<td>Project supervisor</td>
<td>1</td>
</tr>
<tr>
<td>International Atomic Energy Agency</td>
<td>Project supervisor</td>
<td>1</td>
</tr>
<tr>
<td>MNP beneficiary institutions</td>
<td>Contact persons</td>
<td>12</td>
</tr>
<tr>
<td>VUCCnet beneficiary institutions</td>
<td>Contact persons</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>
3.5 Methods of Data Collection

For each of the projects, one questionnaire was used for project implementers, funders and beneficiaries. The questionnaires focused on M&E and project performance of the two projects under investigation, the MNP and VUCCnet. Section A of the questionnaire gathered general information about the institution. This included the name and nature of the institution, and contact information for possible follow up. Section B collected brief information about the project, such as when the project was implemented, what the objective was and the role the institution played. Section C of the questionnaire gathered information on the monitoring and evaluation aspects of the project. This being the main part of the questionnaire, it reconnoitred the possible role institutions played in monitoring and evaluation as it relates to the various activities - M&E planning, M&E training, baseline surveys and information systems. Section D of the questionnaire, on the other hand gathered information on project performance. This was measured in terms of timeliness, activities implemented, cost of the project and general satisfaction of the customers. For document review, a tool for content analysis was drafted which essentially was a procedure to follow when reviewing project documents. The steps in content analysis tool lead to identifying and highlighting sections that answer research questions and later reviewing them.

3.6 Validity of instruments

Validity is described as the degree to which a research instrument measures what it intends to measure and performs as it is designed to perform (Cherry, 2015). In general, validity is an indication of how sound the research is. As a way of ensuring validity, the researcher discussed the questionnaires with the supervisor. A content validity, consisting of a match between test questions and content of the subject area of M&E and project performance was used. Content validity is an important research methodology term that refers to how well a test measures the behavior for which it is intended (Lune, Parke, & Stone, 1998). As such only inferences related to the variables under discussions were considered during the match between test questions and content of the subject area of M&E and project performance. When a test has content validity, the items on the test represent the entire range of possible items the test should cover. In an event where a test measured a construct difficult to define, the researcher rated each item’s relevance.
3.7 Reliability of instruments

Reliability is the degree to which an assessment tool produces stable and consistent results (Cherry, 2015). It contributes to standardization of research instruments. Standardization is important so that the results of a study can be generalized to the larger population. To ensure reliability, the researcher pre-tested the questionnaires on an institution similar to AVU, University of Nairobi School of Continuing and Distance Education, Department of Extra Mural Studies. This process offered hope of improving some questions and the style of questionnaire administration. In addition, an alternative way of estimating reliability of a questionnaire, the split-half method was applied to measure internal consistency of the instrument (Trochim, 2006). This is a method used to gauge reliability of a test; two sets of scores are obtained from the same test, one set from the odd items and one from even items, and the scores of the two sets are correlated (Trochim, 2006; Zimba, 1998). In this study, a sample of 14 respondents was used and then the results split into odd and even numbers. The outcome was interpreted in accordance with Eisinga et al, 2013; If the questionnaire is reliable the results in the two halves would be correlated. Where the reliability coefficient is 0.0 the test is totally unreliable and 1.0 means perfectly reliable test. The reliability coefficient was calculated using the Spearman-Brown prophecy formula as indicated here below:

\[ r = \frac{2 \times \text{reliability for 1/2 test}}{1 + \text{reliability for 1/2 test}} \quad \text{or} \quad r = \frac{2\gamma}{1+\gamma} \]

The reliability coefficient was found to be 0.6 and the questionnaire was considered reliable. To further improve reliability of the questionnaire, three questions on one half of the test which had a correlation of less than 0.25 were re-written.

3.8 Data Collection Procedures

This study utilized both qualitative and quantitative data. Most of the qualitative data was obtained from the review of project documents for the MNP and the VUCCnet. This was supplemented with data from interviews with project implementers, funders and beneficiaries. Quantitative data was obtained from the survey. When the proposal to conduct this research was approval by the University of Nairobi, permission to conduct this research was sought from the National Council of Science and Technology. Further, consent was obtained from AVU management to use project data of the MNP & VUCCnet projects.
including raw data collected during project implementation. Specific reports requested for were the project appraisal reports, inception reports and end of project reports. On the hand, primary data was collected through interviews with identified respondents. These interviews were conducted on a one-on-one basis in a few cases, were self-administered. Responses of interviews were captured using questionnaires and were utilised by the researcher in data analysis. Confidentiality was assured to the respondents

3.9 Methods of Data Analysis

Quantitative data was analysed using descriptive statistics including correlation analysis while qualitative data was analysed using narrative and thematic methods. This helped to identify information relevant to the research questions and objectives. In analyzing data qualitatively, the researcher aimed at cross checking the M&E activities implemented and at what time, in either project and the resultant effect. It was also of particular interest to compare the trends, patterns and relations of project performance during implementation for both projects.

Qualitative data was analysed using content analysis, which is a method concerned with the explanation of the status of some phenomenon at a particular time or its development over a period of time (Cherry, 2015). It is a method that permits researchers to study an observed phenomenon unobtrusively- that is, without being directly involved with people or situations (Msila & Setlhako, 2013). Documents for both projects were subjected to careful criticism to ensure authenticity and validity to establish the trustworthiness of all the data. They were then analysed for their content regarding the four key activities of monitoring and evaluation and their influence of project performance. Qualitative data was managed in a manner which ensured that it was broken down into discernable units to show patterns and trends (Bogdan & Biklen, 2007). The use of different sources of information used in this study to assess a particular area was important, increased the validity of the findings. All of the data was treated with due circumspection, and the relevant qualifiers were applied in terms of these data streams.
The use of three different sources of information to collect data about the two projects and later doing content analysis ensured triangulation of data to increase validity and reliability of data. Triangulation is generally considered to be one of the best ways to enhance validity and reliability in qualitative research, such as ex-post facto, and can partly overcome the deficiencies associated with using one type of method (Merriam, 2008; Neuman, 2006).
3.10 Operational Definition of the Variables

Table 3.2 shows how the definition of variables and concepts were measured in this study.

Table 3.2: Operational definition of variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Measurement scale</th>
<th>Method of data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. M&amp;E Plan</td>
<td>1. Number of officers who participated in M&amp;E plan formulation</td>
<td>- Ordinal scale</td>
<td>• Descriptive statistics</td>
</tr>
<tr>
<td></td>
<td>2. Scope of M&amp;E</td>
<td>- Nominal scale</td>
<td>• Correlation analysis</td>
</tr>
<tr>
<td></td>
<td>3. Feasibility of data collection</td>
<td></td>
<td>• Content analysis: examine the data, interpret it via forming an impression and report a structured form.</td>
</tr>
<tr>
<td></td>
<td>4. Critical reflection</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Communication &amp; reporting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Necessary conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. M&amp;E Training</td>
<td>1. Number of officers trained</td>
<td>- Ordinal scale</td>
<td>• Descriptive statistics</td>
</tr>
<tr>
<td></td>
<td>2. Relevance</td>
<td>- Nominal scale</td>
<td>• Correlation analysis</td>
</tr>
<tr>
<td></td>
<td>3. Level of training</td>
<td></td>
<td>• Content analysis: examine the data, interpret it via forming an impression and report a structured form.</td>
</tr>
<tr>
<td></td>
<td>4. Topics covered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Baseline Survey</td>
<td>1. Number of officers who participated in the baseline survey</td>
<td>- Ordinal scale</td>
<td>• Descriptive statistics</td>
</tr>
<tr>
<td></td>
<td>2. Coverage of indicators</td>
<td>- Nominal scale</td>
<td>• Correlation analysis</td>
</tr>
<tr>
<td></td>
<td>3. Target values</td>
<td></td>
<td>• Content analysis: examine the data, interpret it via forming an impression and report a structured form.</td>
</tr>
<tr>
<td>4. Information System</td>
<td>1. Number who participated in information systems</td>
<td>- Ordinal scale</td>
<td>• Descriptive statistics</td>
</tr>
<tr>
<td></td>
<td>2. User friendliness</td>
<td>- Nominal scale</td>
<td>• Correlation analysis</td>
</tr>
<tr>
<td></td>
<td>3. Comprehensiveness</td>
<td></td>
<td>• Content analysis: examine the data, interpret it via forming an impression and report a structured form.</td>
</tr>
<tr>
<td><strong>Depended variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project performance</td>
<td>1. Timeliness</td>
<td>- Ordinal scale</td>
<td>• Descriptive statistics</td>
</tr>
<tr>
<td></td>
<td>2. Number of deliverables achieved</td>
<td>- Nominal scale</td>
<td>• Correlation analysis</td>
</tr>
<tr>
<td></td>
<td>3. Number of activities</td>
<td></td>
<td>• Content analysis: examine the data, interpret it via forming an impression and report a structured form.</td>
</tr>
<tr>
<td></td>
<td>4. Number of satisfied customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Cost of project</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.11 Ethical Considerations

In this research, respondents were informed about the nature and purpose of the study in order to secure consent from interviewees. All the respondents’ information and identity was kept confidential and the information gathered was used only for the purposes of this study. The respondents participated in the study voluntarily. A copy of the findings can be availed to any requesting institution.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents results of interviews with respondents from the implementing institution, funding institutions and beneficiary organizations of the two projects: the Multinational Project (MNP) and the Virtual University for Cancer Control Network (VUCCnet) project. These interview results are analysed in light of documentary evidence from appraisal reports, inception reports and end of project reports of the two projects regarding the influence of M&E on project performance. Data is analysed according to procedures outlined in the previous chapter, methodology, and according to interpretations made based on the research questions outlined in chapter one.

4.2 Response rate

The response rates for the two projects were 90% (18) for the MNP and 93% (13) for VUCCnet project. Table 4.1 shows the distribution of respondents.

Table 4.1: Distribution of respondents by category and by project

<table>
<thead>
<tr>
<th>Category of Respondent</th>
<th>Multinational Project</th>
<th>Virtual University for Cancer Control Network Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Implementers</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Funders</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>100.0</td>
</tr>
</tbody>
</table>

All the targeted respondents from the implementing organization, AVU and its two funding institutions AfDB and IAEA participated in the survey, participation from beneficiary institutions varied. Out of the six beneficiary institutions for the VUCCnet project, five were responsive while that for MNP 10 out of the targeted 12 institutions, were responsive.
4.3 Period of existence and primary objective of organizations

The period of existence of institutions that participated in the study varied between 9 years to 53 years (Table 4.2). The primary mandate of beneficiary institutions however was only in two categories: provision of university education for MNP institutions and provision of health care services for VUCCnet institutions.

Table 4.2: Period of existence of institutions in the study

<table>
<thead>
<tr>
<th>Years of existence</th>
<th>Funder</th>
<th>Implementer</th>
<th>MNP beneficiaries</th>
<th>VUCCnet beneficiaries</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10yrs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>10-15</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>16-20</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>21-30</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>31 &amp; above</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>5</td>
<td>18</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2 shows that majority of the institution in the survey had been in existence for the 16 years and above. Particularly it was noted that 6 had been in existence for 16-20 years, 4 for 21-30 years and 6 again for 31 years and above.

The implementing institution, African Virtual University, is established through a charter by 17 African governments. It has the mandate of significantly increasing access to quality higher education and training through the innovative use of information communication technologies. AVU implemented the VUCCnet project in a period of one year six months from 2011, while MNP was implemented in a period of five years from the year 2005. All beneficiary institutions participated in their respective projects for the whole duration of the respective projects. The International Atomic Energy Agency (IAEA) funded the VUCCnet project while African Development Bank funded MNP. Beneficiary institution of the MNP, like for VUCCnet are all spread out in different African countries.
4.4 Monitoring and evaluation roles and responsibilities

All respondents in the survey played a part in monitoring and evaluation of the two projects under review. The roles and responsibilities of individuals varied according to the institutions they represented. Respondents from AVU, the implementing institution consisted the actual project team having a project manager responsible for project planning and financing. The team also had project officers responsible for coordinating Information Communication Technology (ICT), officers responsible for data collection and officers responsible for documentation and liaison and communication. AVU also had support staff to handle administration and logistical requirements of the two projects MNP and VUCCnet (Table 4.3)

Table 4.3: Role of respondents in the MNP and VUCCnet projects

<table>
<thead>
<tr>
<th>Category</th>
<th>Role in the project</th>
<th>Frequency</th>
<th>MNP</th>
<th>VUCCnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementer</td>
<td>Project planning</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Project financing</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Data collection and documentation</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT coordination</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration &amp; logistics</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liaison and communication</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Funder</td>
<td>Project financing &amp; project planning &amp; Liaison and communication</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Beneficiary</td>
<td>Liaison and communication, Data collection and documentation &amp; Administration &amp; logistics</td>
<td>10</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, from funding institutions, respondents stated that their role was supervisory and also to work with AVU regarding project planning and financing and also to act as contact persons between AVU and their own institutions, IAEA or AfDB. The various beneficiary institutions, for the projects; MNP or VUCCnet had the role of reporting data to AVU on project implementation. Thus the roles of the respondents for the beneficiary institutions were liaison and communication, progress report preparation and documentation from within their institutions and reporting to AVU
4.5 Value of Monitoring and Evaluation at AVU

Table 4.4 shows the proportion of respondents who said monitoring and evaluation contributes to the success of the project. Out of the 24 respondents interviewed, 22 (92%) reported in the affirmative while only one apiece, either did not know whether M&E contributes to project performance or thought otherwise.

Table 4.4: Role of M&E in project success by number of respondents

<table>
<thead>
<tr>
<th>Perception about M&amp;E</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributes to success</td>
<td>21</td>
<td>91.3</td>
</tr>
<tr>
<td>Doesn’t contribute</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The respondents who said M&E contributes to project success gave a number of reasons. Most of the respondents said monitoring and evaluation promotes ‘evidence based decision-making’ (9): M&E strengthens the production and use of objective information on implementation of project. It also enhances the basis for decision making, to enable managers make evidence-based project decisions in the interest of achieving project results. This was followed by those who said monitoring and evaluation ‘promotes accountability’ (7): through M&E project staff are held accountable based on agreed outputs and expectations and assessed through the control, monitoring and evaluation systems. M&E also addresses compliance with norms and procedures, and physical and financial implementation of the project. The rest of the respondents said monitoring and evaluation promotes managing for results (5): monitoring and evaluation of projects focuses on measuring results as planned at any particular instance and generates lessons for improving planning of future projects. Evaluation results also offer opportunities to correct project mistakes early enough.

Considering that AVU implemented the projects, a structural set-up of the institution was examined which revealed that AVU has a fulltime M&E officer who is accountable for all monitoring and evaluation matters of projects. AVU also has an M&E Strategy document for the institution, which guides implementation of M&E activities. Data base designing, data capturing and updating are responsibilities of the M&E officer who is assisted by a Projects
Assistant. The M&E Officer reports directly to the Project Manager who oversees the projects.

Secondary data analysis, which also corresponded to the M&E Officer’s response, revealed that the roles of the M&E Unit at AVU are to: Ensure effective planning and management of monitoring and evaluation systems; Evaluate project progress and performance on activities based on indicators outlined in project logical framework; Conduct beneficiary impact assessments and assess project effectiveness from the perspective of the beneficiaries served by the project; Make necessary recommendations on the way forward to improving project outputs; and Ensure donor regulations are met in implementation of project activities.

According to the AVU project implementation team, M&E activities have significant bearing on the success of the projects because the periodic reporting on the project by various players allows opportunities to gauge project performance against project plans. Such opportunities allowed for adjustments in implementation which otherwise would have been impeded by various situations in beneficiary institutions. The Projects Manager had this to say:

“Monitoring is largely about ‘watching’ or keeping track and may well involve observing key features of the project related to performance indicators. Evaluation involves making careful judgements about the worth, significance and meaning of projects.”

4.6 Monitoring and Evaluation Plans and Project Performance

The survey revealed that all respondents, 18 for MNP and 13 for VUCCnet (100%), were privy to the M&E plans of the two projects. Much as not all respondents participated in formulating M&E plans, they were privy to them during M&E trainings. Both M&E plan for MNP was formulated soon after project launch while for VUCCnet was formulated just after finalizing the project plan. The M&E plans were developed by the implementing institution, AVU. As given by responses from AVU, a number of considerations were made in coming up with M&E plans, which included: Finances - how much money and time was needed to conduct the activities; Capacity – if the project had internal capacity to carry out the proposed monitoring and evaluation activities; including analysis of data collected; Feasibility – If the proposed activities were realistic and could be implemented; Timeline – If the proposed
timeline was realistic for conducting the proposed activities; Ethics – If there were ethical considerations and challenges involved with implementing the proposed activities.

That notwithstanding, the main parts of the M&E plans as given by the frequency of despondences for both the MNP and VUCCnet projects in the survey were: Objectives of the project (23) Determination of project performance (21), project indicators (19); outputs and outcomes (19). Others include conceptual measures and definitions, along with baseline data; Monitoring schedule i.e. data collection schedule, how often the beneficiary institutions needed to report on project progress; A list of data sources to be used; and the cost estimates for the monitoring and evaluating activities.

From the foregoing, it can be seen that consideration was given to achievement of project outputs, outcomes and goals. Implying that the M&E plan was meant to guide the tracking of achievement of results and provide information on what is happening in the project through data collection. Further analysis of these M&E plans, for both projects revealed that they were drafted to show steps in conducting M&E and use the results of M&E to determine project performance. The steps of conducting M&E in these plans were (i) Identification of indicators to be measured, (ii) Setting target values for indicators (iii) Performing measurements (iv) Comparing measured results to the pre-defined standards, (v) Making necessary changes (Figure 2).
On the question of whether M&E plans helped understand project expectations, all respondents answered in the affirmative. As regards rating influence of M&E plans on project performance, on average the 18 MNP respondents rated it at 7.7 out of 10 while the 13 VUCCnet respondents rated it at 8.1 out of 10. As alluded to earlier, VUCCnet project was implemented after the MNP, scored higher most probably because it benefitted from lessons learnt from MNP.

4.7 Monitoring and Evaluation Training and Project Performance

Save for funding institutions, all respondents in the survey participated in trainings for monitoring and evaluation, which were convened by AVU soon after the start of each project. For the MNP 88.9% (16) attended M&E training while for VUCCnet 92.3% (12) did, Table 4.5.
Table 4.5: Number of participants who attended M&E training by type of institutions and by project

<table>
<thead>
<tr>
<th>Project</th>
<th>African Virtual University (AVU)</th>
<th>African Development Bank (AfDB)</th>
<th>International Atomic Energy (IAEA)</th>
<th>Beneficiary institutions</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNP</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>VUCCnet</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

Respondents, by frequency of answers they gave, reported that M&E trainings covered a number of issues, which included project indicators (26), M&E reporting using reporting tools (21), communication strategy and (20) and deliverables (20). However when asked, most respondents (85%) said the main focus of the training was on how to use the data collecting tools while the rest said the focus was on project indicators. Those who said the focus was on data collecting tools elaborated further by saying that it was important to understand the tools and how to use them so that AVU could be given accurate data in order to tell if the project was on course. In each case of the project, respondents confirmed that M&E training provided an opportunity to enhance their understanding of project deliverables and why it was important to report accurately and on time. The reason for this was that, accurate and timely reporting would inform the implementing institution on the status of the project and “afford chance to correct mistakes if any” according to a number of responses.

Document review for either project showed that training programs were tailored to meet staff capacity gaps. According to frequency of responses, the topics of M&E training covered included a review of each key performance indicators to be collected (24), definition of each indicator, how the indicator is measured (23), how data on the indicator will be collected (18), the timeline for collecting and reporting on the indicator (16), and how the indicator satisfies client needs (16). In essence, such information enabled implementers to understand more on how M&E would contribute to project performance.

A look at the records of M&E training revealed that the meeting was held for a day were the M&E plan was shared and roles and responsibilities of the beneficiary institutions explained i.e. reporting performance indicators according to the templates provided. In each case of the projects, the logical framework matrices were discussed for purposes of developing common understanding and possible revision. Further, review of M&E training documents showed
that each beneficiary institution was encouraged to develop institutional M&E plan to feed into the one developed by AVU. This was meant to allow institutions to work according to their mandates and on respective projects in harmony.

The 17 MNP respondents’ average rating of the influence of M&E training on project performance was 7.1 out of 10 while for the 12 VUCCnet respondents was 7.6. Comparatively, the influence of M&E training on project performance was rated lower than that of M&E planning.

4.8 Baseline Surveys and Project Performance

According to AVU, a baseline survey was conducted for each project. For the MNP, the baseline survey was done in 2005 while that for the VUCCnet it was done in 2010. These surveys were done to analyze situations prior to project implementation. This study confirmed that indeed AVU conducted baseline surveys for the two projects MNP and VUCCnet and involved respective beneficiary institutions who said their role was to provide data about performance indicators in their institutions and on their preparedness.

Interviews with AVU revealed that a survey protocol together with data collection tools had to be developed for each project. The protocol identified respondents and the kind of data to be collected from each institution. Further, the protocol had a schedule of data collection and a method of how data would be stored and analyzed. As revealed by secondary data analyses, the two baselines ascertained the status quo of the situations to be addressed by the project. According to the 15 MNP respondents for this study, the baseline survey they participated in collected data on number of ICT facilities in beneficiary institutions, lecturers’ ICT level of training and number of online students. Regarding their roles in the baseline survey, 10 participated as interviewees, 5 participated in design of research tools, 2 in data collection, database design and data capturing. Meanwhile the 10 VUCCnet respondents for this study said data collected during the baseline survey they participated in included number of trained oncologists in their facilities including a census of cancer specialist equipment. Put together, respondents from both projects agreed that participation in the baseline surveys helped them to understand project expectations.
Additional information gathered from the questionnaires used in both baseline surveys show how critical it was to have reference points for project performance in all key indicators. Both projects set out to increase counts in these indicators besides many others, through various interventions. This information functioned to give impetus to project implementers towards achieving set targets. All respondents from beneficiary institutions confirmed participating in the baseline surveys.

In view of this, the 15 MNP respondents’ average rating of the influence of baseline surveys on project performance was 5.6 out of 10 while that of the 10 VUCCnet respondents was 5.3. This M&E activity, the baseline survey, much as it was acknowledged to be important, was however rated comparatively lower than both M&E planning and M&E training.

4.9 Information Systems and Project Performance

This M&E activity, information systems, included data capturing in various beneficiary institutions, data cleaning, data entry, data analysis and report writing. This was confirmed by the 18 MNP respondents and 13 VUCCnet project respondents. All respondents from beneficiary institutions, 10 for MNP and 5 for VUCCnet reported participating in data collection, while 2 project officers from AVU reported conducting data cleaning and periodic data analysis and report writing. Those who collected data added that the exercise helped them understand project expectations as they could see trends developing over time. It was also noted that data collected from baseline surveys and later, from progress reports in the course of implementation of the projects was captured in databases developed at AVU. This was revealed by interviews with the project team. “The database for the MNP was rather complicated, build in Ms Access, and required services of a consultant unlike the one for VUCCnet” said the M&E officer at AVU. In either case of the databases, measures were put in place to ensure databases were user-friendly and were updated regularly until the end of the projects. Secondary data analysis also revealed that the databases in either case were used as a means to store data in an orderly way owing to the fact that projects generate a lot of information.

Databases were also used to retrieve information about projects and to generate trends of project progress from which new strategies were devised to improve project performance. In addition, databases were also used to generate reports for the funders. Average rating of the
influence of information systems on project performance by the 18 MNP respondents was 6.6 out of 10 and 7.2 for VUCCnet project by the 13 VUCCnet respondents. This rating was higher than for the baseline survey but still lower than for M&E planning and M&E training.

4.10 Respondents’ perception of Projects Performance

Respondents were asked to rate project performance on a scale of 1 – 5 in terms of success; 1 being ‘not successful’ and 5 being ‘outstanding’. They were also asked to comment were possible. A number of attributes of project performance such as timeliness, number of activities implemented were rated by respondents and results are shown in Table 4.6.

Table 4.6: Performance rating of the MNP project by attributes by number of respondents

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Success rating (1 least &amp; 5 most)</th>
<th>Average score</th>
<th>Percentage (%)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness of project delivery</td>
<td>0 0 3 13 2</td>
<td>3.9</td>
<td>78.0</td>
<td>Very successful</td>
</tr>
<tr>
<td>Number of project deliverables</td>
<td>1 1 2 3 11</td>
<td>4.2</td>
<td>84.0</td>
<td>Very successful</td>
</tr>
<tr>
<td>Number of activities implemented</td>
<td>2 3 8 1 4</td>
<td>3.1</td>
<td>62.0</td>
<td>Successful</td>
</tr>
<tr>
<td>Cost of project</td>
<td>0 2 8 4 4</td>
<td>3.5</td>
<td>70.0</td>
<td>Successful</td>
</tr>
<tr>
<td>General level of satisfaction of project performance</td>
<td>0 0 1 1 16</td>
<td>4.8</td>
<td>96.0</td>
<td>Outstanding</td>
</tr>
<tr>
<td>Average score</td>
<td></td>
<td>3.9</td>
<td>78.0</td>
<td>Very successful</td>
</tr>
</tbody>
</table>

It can be seen in Table 4.6 that on average, the MNP project performance was rated as ‘very successful’ by the respondents, scoring 3.9 out of 5. This means respondents rated the project as being 78% successful. Among the attributes of project success, ‘general level of satisfaction’ was rated highest (96%) and ‘number of activities implemented’ rated 62%. This was purely opinions of respondents and is anticipated in that not all were privy to the activities implemented and probably why some activities were not implemented.

In the same vein, respondents gave their opinions on what they felt about other variables that affect project performance. On average moderating variables, which can behave like independent variables, had their influence on project performance rated higher, 74% than intervening variables, 62% Table 4.7.
Table 4.7: Performance rating of intervening and moderating variables of MNP project by number of respondents

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Effectiveness rating (1 least &amp; 5 most)</th>
<th>Average score</th>
<th>Percentage (%)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intervening variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project staff attitude</td>
<td>3 2 4 6 2</td>
<td>2.9</td>
<td>58.0</td>
<td>Not effective</td>
</tr>
<tr>
<td>Culture</td>
<td>2 2 5 4 5</td>
<td>3.4</td>
<td>68.0</td>
<td>Effective</td>
</tr>
<tr>
<td>Global economy</td>
<td>2 2 11 2 1</td>
<td>2.9</td>
<td>58.0</td>
<td>Effective</td>
</tr>
<tr>
<td>Average score</td>
<td></td>
<td>3.1</td>
<td>62.0</td>
<td>Effective</td>
</tr>
<tr>
<td><strong>Moderating variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project funding</td>
<td>0 0 1 1 16</td>
<td>4.8</td>
<td>96.0</td>
<td>Very effective</td>
</tr>
<tr>
<td>Skills of project staff</td>
<td>0 0 1 9 8</td>
<td>4.4</td>
<td>88.0</td>
<td>Very effective</td>
</tr>
<tr>
<td>Appropriate technology</td>
<td>2 3 4 5 2</td>
<td>3.1</td>
<td>62.0</td>
<td>Effective</td>
</tr>
<tr>
<td>Political environment</td>
<td>5 4 8 1 0</td>
<td>2.3</td>
<td>46.0</td>
<td>Not effective</td>
</tr>
<tr>
<td>Average score</td>
<td></td>
<td>3.7</td>
<td>74.0</td>
<td>Effective</td>
</tr>
</tbody>
</table>

On average, intervening variables were deemed to have comparatively mild effects on the performance of the project meaning these variables could have affected the relationship between M&E and project performance but it would be difficult to measure or to see the nature of their influence. Moderating variables on the other hand, were comparatively rated higher meaning their effect on the relationship between M&E and project performance could be stronger. Moderating variables have a contingent effect on the M&E – project performance relationship; depending on the ‘strength’ of M&E, the relationship of M&E and project performance can be influenced were possible. Infact all respondents commented on project funding and said it has high potential to influence performance of a project. “Without money, it would be impossible to deliver a project” said most respondents. With a strong M&E plan in place however, the effects of both intervening and moderating variables can be countered – this can be through putting measures in place such as training of staff and securing funding well in advance.
Project performance rating for VUCCnet followed a similar pattern to MNP and the results are shown in Tables 4.8. Average scoring for project performance was 4.1 out of 5, which translated to 82% ‘very successful’ with general level of satisfaction scoring the highest mark 4.8 out of 5, (96%). Meaning there was a general high level of satisfaction among project beneficiaries. The average rating of 4.1 means, respondents rated the project as being 82% successful.

### Table 4.8: Performance rating of the VUCCnet project by attributes by number of respondents

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Success rating (1 least &amp; 5 most)</th>
<th>Average score</th>
<th>Percentage (%)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness of project delivery</td>
<td>0 0 1 10 2</td>
<td>4.1</td>
<td>82.0</td>
<td>Very successful</td>
</tr>
<tr>
<td>Number of project deliverables</td>
<td>0 1 1 2 9</td>
<td>4.5</td>
<td>90.0</td>
<td>Very successful</td>
</tr>
<tr>
<td>Number of activities implemented</td>
<td>1 2 4 1 4</td>
<td>3.4</td>
<td>68.0</td>
<td>Successful</td>
</tr>
<tr>
<td>Cost of project</td>
<td>0 1 7 2 3</td>
<td>3.5</td>
<td>70.0</td>
<td>Successful</td>
</tr>
<tr>
<td>General level of satisfaction of project performance</td>
<td>0 0 1 1 11</td>
<td>4.8</td>
<td>96.0</td>
<td>Outstanding</td>
</tr>
<tr>
<td>Average score</td>
<td></td>
<td>4.1</td>
<td>82.0</td>
<td>Very successful</td>
</tr>
</tbody>
</table>

Attributes that can have an influence on the relationship between M&E and project performance for VUCCnet were equally graded by respondents. Again it was noted that the influence of moderating variables were rated higher (72%) than intervening variables (66%). Moderating variables such as project funding can strongly affect the relationship of M&E and performance of the project, rated at 96%. Meaning, if there poor project funding project inputs would be affected and consequently timing and project outcomes would be affected.

The influence of intervening variables like project staff attitudes were rated higher at 70%. It means their effect on the relationship between M&E and project performance is stronger. But collectively all intervening variables were comparative rated lower than moderating variables (Table 4.9)
Table 4.9: Performance rating of intervening and moderating variables of VUCCnet project by number of respondents

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Success rating (1 least &amp; 5 most)</th>
<th>Average score</th>
<th>Percentage (%)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intervening variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project staff attitude</td>
<td>1 1 2 7 2</td>
<td>3.5</td>
<td>70.0</td>
<td>Not effective</td>
</tr>
<tr>
<td>Culture</td>
<td>1 2 5 2 3</td>
<td>3.3</td>
<td>66.0</td>
<td>Effective</td>
</tr>
<tr>
<td>Global economy</td>
<td>1 1 8 2 1</td>
<td>3.1</td>
<td>62.0</td>
<td>Effective</td>
</tr>
<tr>
<td>Average score</td>
<td></td>
<td>3.3</td>
<td>66.0</td>
<td>Effective</td>
</tr>
<tr>
<td><strong>Moderating variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project funding</td>
<td>0 0 1 1 11</td>
<td>4.8</td>
<td>96.0</td>
<td>Most effective</td>
</tr>
<tr>
<td>Skills of project staff</td>
<td>0 0 1 6 6</td>
<td>4.4</td>
<td>88.0</td>
<td>Very effective</td>
</tr>
<tr>
<td>Appropriate technology</td>
<td>1 2 3 5 2</td>
<td>3.4</td>
<td>68.0</td>
<td>Effective</td>
</tr>
<tr>
<td>Political environment</td>
<td>4 3 5 1 0</td>
<td>2.2</td>
<td>44.0</td>
<td>Not effective</td>
</tr>
<tr>
<td>Average score</td>
<td></td>
<td>3.6</td>
<td>72.0</td>
<td>Effective</td>
</tr>
</tbody>
</table>

Considering the overall score for performance for each project out of a maximum of 5, (3.9 for MNP and 4.0 for VUCCnet) the average score is 4.0 which translates to 80%. From the foregoing, it can be concluded that indeed monitoring and evaluation positively influenced project performance. The M&E activities make monitoring and evaluation a project management tool to support implementation, estimate progress and make evidence-based decisions that influence the course of project performance (Table 4.10)

Table 4.10: Average project performance rating for MNP and VUCCnet

<table>
<thead>
<tr>
<th>Project</th>
<th>Average performance rating (out of 5)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNP</td>
<td>3.9</td>
<td>78.0</td>
</tr>
<tr>
<td>VUCCnet</td>
<td>4.1</td>
<td>82.0</td>
</tr>
<tr>
<td>Average</td>
<td>4.0</td>
<td>80.0</td>
</tr>
</tbody>
</table>
4.11 Correlation analysis between M&E and Project Performance

To further determine the influence of M&E on project performance statistically, the relationship that exists between these two variables was statistically assessed using correlation analysis. A correlation analysis is a form of descriptive statistics concerned with making comparisons between two or more variables in a single group. Correlation analysis provides estimates on how strong the relationship is between two variables. This is measured by the coefficient of correlation or coefficient of determination ($r$), an index that shows both the direction and the strength of relationships among variables, taking into account the entire range of these variables. The sign (+ or −) of the coefficient indicates the direction of the relationship. If the coefficient has a positive sign, it means there is correlation, when one variable increases, the other also increases and the converse is true. To compute correlation between the study variables and their findings, Spearman Coefficient of Correlation at 95 percent confidence interval was used.

Data from MNP showed positive correlation between M&E planning and project performance with a correlation coefficient of 0.745. M&E training, Baseline survey and Information system also showed positive correlation with project performance of 0.697, 0.465, and 0.473 respectively (Table 4.11).

**Table 4.11: Spearman Correlation for the MNP project**

<table>
<thead>
<tr>
<th></th>
<th>Project performance</th>
<th>M&amp;E Planning</th>
<th>M&amp;E Training</th>
<th>Baseline survey</th>
<th>Information system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project performance</td>
<td>Spearman Correlation</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;E Planning</td>
<td>Spearman Correlation</td>
<td>0.745*</td>
<td>1.000</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;E Training</td>
<td>Spearman Correlation</td>
<td>0.697*</td>
<td>0.301</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline survey</td>
<td>Spearman Correlation</td>
<td>0.465</td>
<td>0.198</td>
<td>0.688</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information system</td>
<td>Spearman Correlation</td>
<td>0.473</td>
<td>0.218</td>
<td>0.220</td>
<td>0.631</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

Positive relationship indicates that there is a correlation between the M&E activities and project performance. The significant values for the relationship between the M&E activities; M&E planning, M&E training, Baseline survey and Information system; were 0.025, 0.034, 0.311 and 0.301 respectively. Thus at 5% confidence level and at p-value (P<0.05), only M&E planning and M&E...
planning were significantly correlated to project performance. From this, it can be deduced that with an M&E plan in place and M&E training conducted, project performance can be positively influenced significantly.

Similarly, correlation analysis of data on VUCCnet project showed positive relationship between the M&E activities and project performance. For M&E planning, the correlation coefficient was 0.783 while it was 0.685 for M&E training. Correlation coefficient for baseline survey was 0.546 and for Information system 0.371 (Table 4.12).

Table 4.12: Spearman correlation for the VUCCnet project

<table>
<thead>
<tr>
<th></th>
<th>Project performance</th>
<th>M&amp;E Planning</th>
<th>M&amp;E Training</th>
<th>Baseline survey</th>
<th>Information system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project performance</td>
<td>Spearman Correlation</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;E Planning</td>
<td>Spearman Correlation</td>
<td>0.783*</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.023</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;E Training</td>
<td>Spearman Correlation</td>
<td>0.685*</td>
<td>0.313</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.031</td>
<td>0.412</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline survey</td>
<td>Spearman Correlation</td>
<td>0.546</td>
<td>0.209</td>
<td>0.689</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.062</td>
<td>0.621</td>
<td>0.057</td>
<td></td>
</tr>
<tr>
<td>Information system</td>
<td>Spearman Correlation</td>
<td>0.371</td>
<td>0.216</td>
<td>0.216</td>
<td>0.631</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.349</td>
<td>0.600</td>
<td>0.601</td>
<td>0.093</td>
</tr>
</tbody>
</table>

Significant values for the relationship between the M&E activities; M&E planning, M&E training, Baseline survey and Information system; were 0.023, 0.031, 0.062 and 0.349 respectively. Thus at 5% confidence level and at p-value (P<0.05), only M&E planning and M&E planning were significantly correlated to project performance. From this, it can be deduced that with an M&E plan in place and M&E training conducted, project performance can be positively influenced significantly.
CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents an abridged version of overall findings, conclusions and recommendations of the study on the influence of monitoring and evaluation on project performance. It also presents suggestions for further research. The first section is a summary of the general findings of the study. It is drawn from interviews as well as from secondary data analysis of the two projects MNP and VUCCnet. It centres on findings on individual M&E activities: M&E planning, M&E training, baseline surveys and information systems. The next section presents conclusions of the study based on the study findings. It is followed by the section on recommendations drawn from conclusions. Suggestions for further research are presented in the last section of this chapter.

5.2 Summary of findings

Findings of this study emerged from responses given by respondents in the survey juxtaposed on secondary data analysis of project documents of the two projects studied, the MNP and VUCCnet as presented in the preceding chapter. This was in response to the study objectives outlined in chapter one. The findings are the basis on which conclusions and recommendations are made in light of how they compare with literature reviewed. With a response rate of 90% and above, this study found out that monitoring and evaluation as a management function indeed has influence on project performance as all M&E activities are undertaken with intent to contribute to project performance.

5.2.1 Monitoring and Evaluation and Project Performance

The first objective of the study was to establish how monitoring and evaluation plans influence project performance. This study, like espoused by empirical literature of Naidoo I. A., (2011), together with other scholars on M&E, revealed that M&E planning is considered a grand activity of M&E. Formulation of an M&E plan ultimately guides the
entire process of project monitoring and evaluation and offers an opportunity to review the entire design of the project for best performance. It also outlines measures for adherence to project design. All respondents in the survey confirmed having being privy to the M&E plans of respective projects under study. Respondents from AVU and funding institutions participated in the formulation of M&E plans while beneficiary institutions used the plan during M&E training. Secondary data analysis confirmed that M&E plans stipulate the kind of data required to gauge project performance. This was also echoed by other respondents. In addition, M&E plans identify who should do what, when and how. M&E plans, also detail roles and responsibilities of staff regarding project implementation. As a result, M&E planning offers yet another opportunity to re-examine the entire project design adjusting it further to meet set objectives. These are the most crucial aspect of M&E planning that made respondents rate it highest (average of 7.9 out of 10) among other M&E activities. Correlation analysis between M&E planning and project performance also indicated the highest magnitude of positive correlation (average of 0.8) compared to the other M&E activities.

5.2.2 Monitoring and Evaluation Training and Project Performance

The second objective of the study was to assess how monitoring and evaluation training influence project performance. For both projects, all respondents from beneficiary institutions confirmed having undergone M&E training. They reported that M&E training is important as it provided an opportunity for team building and most importantly, an opportunity to learn on how to use data collection tools. These tools are very important in capturing accurate project information, which would latter contribute to determining project progress. In essence, M&E training facilitated understanding of roles and responsibilities, which, themselves were designed to enhance project performance. Training therefore, prepared M&E staff for their tasks ahead and also on how to capture data accurately. Because of this, respondents’ rating of how M&E training influence project performance was second to M&E planning (average 7.4 out of 10). Correlation analysis between M&E training and project performance was also second to that of M&E planning (average 0.7).

5.2.3 Baseline Survey and Project Performance

The third objective of the study was to determine how baseline surveys influence project performance. As stated by the implementing team at AVU, the purpose of conducting a
baseline survey at the beginning of a project is to collect data on project benchmarks in the target group. Baseline surveys alone mark reference points at the beginning of a project and additionally move the focus of the project team higher, to aim at project objectives. The desire to achieve set targets is stirred up. This is confirmed from secondary data analysis on baseline protocols responsibility is placed on officers to achieve set targets. Baseline surveys are rewarding on project performance in the sense that they give impetus to the project team to move the status quo towards the set targets. Data of baselines is more important to officers charged with responsibility of analysing it than those merely collecting it. For this reason average rating of how baseline surveys influence project performance was somehow rated lowest 5.5 out of 10. It however still showed positive correlation of magnitude 0.5.

5.2.4 Information System and Project Performance

The fourth and last objective of the study was to establish how information systems influence project performance. This particular M&E activity, ‘information systems’, involves organising and storing information in such a way that analyses on project performance can be done in addition to providing a clear picture of the status quo on whose basis re-planning can be done. AVU reported that they developed databases for the two projects under study, and yes, this study has confirmed this. Other tasks under ‘information system’ included scheduled data collection, data capturing, data cleaning and data analysis. By and large, the most important contribution here is that it would be impossible to make sense out of so much data generated from project implementation. In view of this, respondents’ average rating of the influence of information system on project performance was 6.9 out of 10 scoring higher than the rating of baseline surveys. Correlation analysis was positive with a magnitude of 0.4.

The findings, from both the survey and secondary data analysis, clearly show that for both project under study, MNP and VUCCnet, performance was rated highly. Performance of VUCCnet was actually rated higher (96%) than MNP (78%). As earlier alluded to, it can be concluded that through M&E, AVU had learnt better project implementation from MNP, which was consequently utilised on VUCCnet. The study has also shown from the initial question how 92% of respondents affirm that M&E influences project performance. The reasons forwarded to back up this claim were that through M&E, measures are put in place on how to gauge project performance and compliance to project plans. Other than making the project staff accountable, M&E also raises the focus of the project team to achieving
results and not merely carrying out activities. The focus is moved to seeing the situation change as the project is being implemented.

Statistically, the study showed that there was a positive correlation between M&E and project performance. Among monitoring and evaluation activities, it has been shown that M&E planning and M&E training have a significant correlation with project performance.

5.3 Discussion of the Findings

The foregoing findings on the two projects studied, MNP and VUCCnet project show similarities in the way M&E influences project performance. Results of the survey, which correspond with secondary data analyses, show that the M&E activities under study, M&E planning, M&E training, baseline survey and information systems influence project performance individually and severally as detailed in this section.

5.3.1 Monitoring and Evaluation Planning and Project Performance

The findings show that M&E plans guided monitoring and evaluation of the projects. M&E plan for the MNP was formulated soon after the project was launched while that for VUCCnet was formulated just after finalizing the project plan. These findings are consistent with Gray (2009). Further, Nuguti (2009), noted that an important content of an M&E plan is the identification of data needed to track project performance during implementation, performance indicators. With all respondents (100%), reporting that they were privy to M&E plans for both projects which contained the identified performance indicators, content of M&E plans are consistent with literature reviewed. Alcock (2009), noted that during M&E planning a schedule for data collection and allocation of M&E roles and responsibilities is done. This study has shown that the architects of the M&E plan, AVU developed a schedule of data collection and indicated the roles and responsibilities to all participating institutions. These measures set the stage to determine project performance of the two projects studied and are consistent with findings of M&E researchers as shown in literature review in chapter two.

From the studies reviewed, it was noted that an M&E plan generally outlines the underlying assumptions on which the achievement of project goals depended, the anticipated relationships between activities, outputs, and outcomes- the logical framework just as
described by (Olive, 2002; Wysocki & McGary, 2003; Mackay 2007; Alcock 2009; Nuguti 2009). This study confirmed that AVU developed logical framework matrices for both projects which indeed contained identified indicators for performance and outcomes, underlying assumptions on which the achievement of project goals depended and the anticipated relationships between activities, outputs, and outcomes. Brignall & Modell, (2010) noted that some important considerations for an M&E plan were resources like money and time needed to conduct project monitoring and evaluation, internal capacity, and whether the proposed activities were realistic. Both M&E plans analysed, made available by AVU showed that indeed, there was a budget for each, that a timeline was devised and a full-time M&E Officer was employed. Again, these measures ensured that monitoring and evaluation was achievable and consequently influenced project performance.

Most M&E plans follow a popular 5-step outline as stated by Nyonje, Ndunge, & Mulwa, (2012). As presented in Figure 3 in this study, AVU utilised the model in developing M&E plans for its projects: (i) Identification of indicators to be measured, (ii) Setting target values for indicators (iii) Performing measurements (iv) Comparing measured results to the pre-defined standards, (v) Making necessary changes. The observation of these steps ensured that all that was needed to gauge project performance was in place.

One disparity noted however, between M&E plans for the MNP and VUCCnet was how dissemination of information was done. Whereas the MNP M&E plan had an M&E information dissemination guide, as recommended by Shapiro, (2001), the VUCCnet did not have. In VUCCnet, feedback was given on continuous basis while in MNP feedback was given during the regular partners’ meetings. According to AVU, this difference did not affect how each M&E plan worked as the goal of disseminating M&E information was still achieved at the right time in accordance to plan.

5.3.2 Monitoring and Evaluation Training and Project Performance

Other than in M&E plans, African Virtual University’s intension to implement projects with the purpose of achieving objectives is demonstrated in M&E trainings convened for all beneficiary institutions. Concerning M&E training, Khan, (2001) observed that it enhances understanding of the project deliverables, reporting requirements and builds the team together. This study noted that what Khan, (2001) stated was very similar to the training
program drafted by AVU for its projects. Equally this was revealed by 21 (88%) participants who attended the training. It was also observed that training of implementers in M&E was deliberately participatory to ensure that those responsible for implementing and using the system were familiar with its design, intent and focus, and generally how to use the M&E tools as noted by Cheng, Daint, & Moore, (2007). All beneficiary institutions from either projects, and at different times, were trained on how to capture data using reporting templates. They were also acquainted with the monitoring schedule by which they were expected to report. These are some of points regarding training that are also noted by Khan, (2001). Essentially, M&E training as noted here, prepared participants for the task of ensuring a project performs to expectation.

Like in the literature review referred to in chapter two, M&E trainings conducted by AVU were tailored to meet staff capacity gaps. As noted by Neuman, (2006), AVU topics for training included a review of each key performance indicators to be collected, their definitions, how the indicator would be measured and how data on the indicator will be collected. However, in contrast to literature reviewed, the trainings convened by AVU did not include an activity were M&E tools were jointly developed. This is in regards to assertions that M&E tools should be developed jointly (IFAD, 2002). AVU drafted the tool in advance, which were later reviewed by participants during the M&E training. According to AVU, this approach gives trainees a quick start to understanding the tools, which consequently would be used to capture data on project performance.

### 5.3.3 Baseline Survey and Project Performance

As recommended by literature reviewed, AVU conducted baseline studies for the projects prior to commencing implementation. Action Aid, (2008) noted that a baseline survey is the first field activity for M&E that should be conducted to establish the status of the situation before project implementation. Indeed, without a baseline, it is very difficult to determine the difference a project would make at the end. In the case of AVU, baseline studies provided the basis for subsequent assessments of how efficiently the projects were implemented and the eventual results achieved particularly in beneficiary institutions were projects were to be implemented. This study has shown that all beneficiary institutions 15 (100%) participated in the baseline survey and made baseline data available to AVU. As noted in the two projects, beneficiary institutions were spread out in different countries in Africa and required AVU to
organise launch missions in these institutions during which baseline data was collected. From each institution, as earlier allured to, a contact person was identified and acted as a respondent in the baseline surveys conducted.

Similar studies on how baseline studies are conducted, show that baseline data can also be collected during needs assessment (Armonia, Ricardo, Dindo, & Campilan, 2006) - This is basically a process of identifying and acquiring an accurate and thorough picture of community problems by collecting, analyzing and interpreting data that would form the rationale for starting any project intervention. In these two projects however baseline studies were done well after project plans were in place – a slight contrast of the study findings and available literature. As observed from baseline survey protocols developed by AVU for each project, baselines serve as benchmarks for all future activities, where project managers can refer to for the purposes of making project management decisions. This is especially stressed by Cohen, Manion, & Morison, (2008) that baseline surveys set reference-starting points for projects as they get implemented.

In line with what is stated by Kennerly & Neely, (2003), the AVU project team reported that baseline studies are important in establishing priority areas for a project especially when a project has several objectives as in the case of the MNP. The results of a baseline survey can show how some aspects of a project need more focus than others as observed by Starling, (2010).

5.3.4 Information Systems and Project Performance

According to AVU, information generated from the baseline studies, just like what was collected during project implementation was captured in an information systems (database) developed for each project. Hogger, Kuechli, Zimmerman, Engler, & Vokra, (2011), like most literature observe that information systems are basically used to store information in an organised and usable manner which otherwise would be impossible owing to amounts generated. This study has shown that like-wise, AVU developed information systems for each of the project under study. As all (15) beneficiary institutions reported, other than using it for data storage, AVU used the information system for data analysis and to generate reports to show and demonstrate trends in performance of the project. Evidence generated from information systems were the basis for making decision to move the project forward. This
aspect is also shown in the empirical literature by reviewed, stating that projects generate a lot of data which when not stored in an organised manner, it would be impossible to make any sense out of it (Naidoo., 2013).

Information system for the MNP was complicated so was the project design (African Virtual University, 2012). As allured to earlier, it required specialized knowledge of a consultant on databases. This database was built in Ms Access and was used to generate reports on all deliverables. On the other hand, information system for VUCCnet was less elaborate and was built in Ms Excel.

5.3.5 Project performance of MNP and VUCCnet

The high performance rating for both projects as noted in the foregoing can be attributed to adherence to project plans, which in turn can be attributed to M&E, which addressed compliance to project plan and allowed for periodic reviews of project performance. M&E also necessitated planning and re-planning to correct wrongs in the course of projects implemented. On respondents rating the performance of VUCCnet higher (96%) than MNP (78%), it can be concluded that through M&E, AVU had learnt better project implementation from MNP, which was consequently utilised on VUCCnet. The lessons learnt from MNP were applied in designing the VUCCnet project and thus was better executed. One other reason for better performance of VUCCnet could be that it was less complicated in terms of the kind of deliverables expected and involved less institutions comparatively.

5.4 Conclusion of the study

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 four key activities of M&E in this study need to be implemented in full.

From the findings of this study, it can be concluded that M&E planning is the blue print of project monitoring and evaluation that lead to influencing project performance. Without an
M&E plan it would be very difficult to conduct any meaningful project monitoring and evaluation tasks, as there would be no organised way of doing that, no identified key performance data to collect, no schedule to collect data, no delegated responsibilities and no agreed upon method of data analysis. The M&E plan details capacities needed, necessary resources and more importantly, the kind of data required to monitor performance of projects. In the M&E plan, a schedule to collect identified data is devised, including who should collect this data, how often and in what format. Based on the M&E plan, necessary training can be conducted for identified staff, a baseline survey conducted and an appropriate information system developed. It is in the M&E plan that details of various tasks are identified and outlined in such a way that they complement each other in enhancing project performance. According to this study, therefore, for monitoring and evaluation to have influence on project performance, there has to be an M&E plan that guides what should be done and how it should be done to keep project performance in check.

Not having an M&E plan can be just as bad as sending untrained officers to collect project data; chances are that without understanding the meaning of what they are doing, untrained officers would not collected the right information from the right sources and accuracy would equally be compromised. Therefore M&E training is just as invaluable as M&E planning. Making judgements based on data wrongly collected would not reflect what is obtaining regarding project performance. Training in M&E would provide a forum for understanding the expectations of the project as well as roles and responsibilities and deal with staff attitude and culture. In this way, the relationship between M&E and project performance would be enhanced. From the forgoing, it can be deduced that training in M&E is critical to eliminating serious compromises that may result from incompetence.

Baselines mark the start of a measurement, therefore without a baseline study it is impossible to estimate project progress or performance as there would not be a reference starting point. This means without a baseline study, it would not be easy to tell what difference the project has made after implementation. Additional information collected during baseline studies also help in re-planning and identification of additional strategies, which could contribute to achieving project goals. It can be said that project baseline studies can contribute to enhancing performance by virtual of being a benchmark of reference and it shifts the focus of project officers higher to achieving project goals.
Further, as allured earlier, projects generate a lot of data which if not organised in an orderly manner, would be meaningless. This means that without an information system through which to manage data, it is impossible to carry out an in-depth evaluation, which can help tell whether a project is performing well. For this reason, information system greatly contribute to influencing project performance as it provides a platform for generating ‘meaning’ of what is obtaining regarding a project under implementation.

All in all, the four key activities of M&E: M&E planning, M&E training, baseline survey, and information system need to be implemented in full for M&E to be an effective management tool that would influence project performance. As seen in the discussion of the results, all these activities are carried out to detect the status of the project (monitoring), and generate evidence for the status quo (evaluation). Evidence generated in project evaluation saves as the basis for evidence-based decision-making to improve performance.

It can also be said that an effective M&E set-up should be implemented in conjunction with the funder and beneficiary institutions. Beneficiaries provide feedback on performance of the project while the funder contributes to project planning and financing. It has also been learnt that the relationship between M&E and project performance can be affected by moderating variables such as project financing as stated by all the respondents. To counter the effects of a moderating variable such as project financing it is important to have a strong M&E system that can avert the emergence of the effects of such a variable by putting counter-measures in place. As in the case of AVU, this can be done by including the funding agency on the M&E team to ensure steady flow of funds. This can also be the case of dealing with others factors such as staff attitudes or culture which may affect the project.

The high performance rating for both projects as noted in this study can be attributed to adherence to project plans, which in turn can be attributed to M&E, which addressed compliance to project plan and allowed for periodic reviews of project performance. M&E also necessitated planning and re-planning to correct wrongs in the course of projects implemented. On respondents rating the performance of VUCCnet higher (96%) than MNP (78%), it can be concluded that through M&E, AVU had learnt better project implementation from MNP, which was consequently utilised on VUCCnet. The lessons learnt from MNP were applied in designing the VUCCnet project and thus was better executed.
Statistically, the study showed that there was a positive correlation between M&E and project performance. Among monitoring and evaluation activities, it has been shown that M&E planning and M&E training have a significant correlation with project performance.

5.5 Recommendations of the study

Based on the findings of the study, recommendations have been formulated which if implemented would enhance further the influence of monitoring and evaluation on project performance.

1. Based on the findings that M&E planning has the highest correlation with project performance, it is hereby recommended that a well thought out M&E plan needs to be in place and be fully implemented if project performance is to be enhanced.

2. From the findings, it shows that M&E training included reviewing M&E tools, which consequently cements an understanding the purpose of data collection. This study therefore recommends that M&E training, is a must for M&E.

3. An information system should be tailor-made in order to make it more user-friendly to data clerks and should be updated as and when data is collected. It should be easy to store and retrieve information and perform data analyses.

4. As revealed by this study, looking at how critical M&E is in influencing project performance, the study recommends that organizations should institutionalise monitoring and evaluation. Create a monitoring and evaluation unit and/or employ a monitoring and evaluation officer.

5.6 Suggestions for further research

This study reveals many interesting areas where further research can be carried out. In particular, the following can be considered:

1. An assessment of monitoring and evaluation capacities needed for an M&E Officer
2. An investigation into the various types of monitoring and evaluation among NGOs
REFERENCES


Jones, H. (2011). *A guide to monitoring and evaluating policy influence*, Overseas Development Institute Background Notes, ODI. ODI. ODI.


OECD. (2002). *Glossary of Key terms in Evaluation and results Based management*. OECD.


APPENDICES

Appendix I: Letter of Transmittal of Data Collection

C/o Caritas Switzerland/Luxembourg,
New Rehama House, Rhapta Road, Westlands,
P. O. Box 14954 – 00800, Nairobi, Kenya

Dear Respondent,

Re: Participation in a Study on Monitoring and Evaluation

I am a student of the University of Nairobi pursuing a Masters’ Degree in Project Planning and Management.

You are being asked to participate in a study I am conducting on Influencing of Monitoring and Evaluation on Project Performance: the case of African Virtual University, Nairobi Kenya, which is part of the requirement for completing my Masters’ Degree.

Your participation in the research study is voluntary and all information obtained from you during this interview is for academic purposes only. The results will remain strictly confidential.

Please answer the following questions as comprehensively and honestly as possible. Use the space provided to write your answer and if you need more space, feel free to add more lines or enclose an additional sheet.

Thank you for your assistance and your precious time.

Yours faithfully,

Bernard Phiri
Student Registration No: L50/84062/2012
Tel. +254 (0) 706 863697
Email: benphiri2004@yahoo.co.uk
Skype: bernard.phiri4
Appendix II: Research Tool for all Project Participants

Dear respondent, please answer all questions objectively and as honestly as possible.

A. General Information

1) Name of organization (optional) ________________________________________________________

2) What is the primary objective of the organization?

________________________________________________________

3) When was the organization established?
   a. Less than 10yrs
   b. 10-15yrs
   c. 16-20yrs
   d. 20-30yrs
   e. 31yrs and above

4) For how long did you participate in the Project?________________________________________

5) What was your role in the project?
   a. Conceptualization and project planning
   b. Project financing
   c. Data collection and documentation
   d. ICT coordination
   e. Liaison and communication
   f. Administration & logistics
   g. Others (specify) __________________________________________________________

B. Monitoring and Evaluation

6) Do you think monitoring and evaluation contributes to the success of your projects?
   a. Yes
   b. No
   c. Don’t know

7) If yes/no, please explain __________________________________________________________

8) Was there an M&E unit for the project?
   a. Yes
   b. No
   c. Don’t know

9) If yes, where you part of the M&E unit of the project?
   a. Yes
   b. No

10) If yes, what was the main purpose of the M&E unit the project?______________________
11) Do you think the purpose of the M&E unit contributed to the success of the project?
   a. Yes
   b. No

12) If yes, please explain?
______________________________________________________________________________
______________________________________________________________________________

13) Where you privy to the M&E plan?
   a. Yes
   b. No

14) If so, briefly describe the M&E plan, what were the main parts?
______________________________________________________________________________
______________________________________________________________________________

15) Did the M&E plan help in understanding project expectations?
   a. Yes
   b. No

16) On a scale of 1-10 (10 being the highest), rate the influence M&E plans on project performance.
   *Enter zero for abstaining*

17) Did you participate in M&E training for the project?
   a. Yes
   b. No

18) If so, what was the focus of the training?
   a. Indicators of the project
   b. M&E reporting using reporting tools
   c. Communication strategy
   d. Project components and deliverables
   e. Others (specify) ___________________

19) Did the M&E training help in understanding project expectations?
   a. Yes
   b. No

20) On a scale of 1-10 (10 being the highest), rate how M&E training influenced project performance.
   *Enter zero for abstaining*
21) Did you participate in the baseline survey?
   a. Yes
   b. No

22) If so, what was your role?
   a. Designing research tools
   b. Data collection
   c. Participated as respondent
   d. Data capturing
   e. Database design
   f. Others (specify) ________________________

23) Did the baseline survey help in understanding project expectations?
   a. Yes
   b. No

24) On a scale of 1-10 (10 being the highest), rate how the baseline survey influenced project performance. Enter zero for abstaining

25) Was there a data capturing system for the project?
   a. Yes
   b. No
   c. Don’t know

26) Did the information system help in understanding project expectations?
   a. Yes
   b. No

27) On a scale of 1-10 (10 being the highest), rate how the baseline survey influenced project performance. Enter zero for abstaining
C. Project Performance

On a scale of 1-5 (1 being the most effective/successful and 5 least), what was the rating for project performance in the following?

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating (1 least &amp; 5 most)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Timeliness of project delivery</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>2) Number of project deliverables</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3) Number of activities implemented</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4) Cost of project</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>5) General level of satisfaction of project performance</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

Please indicate how much you think the following variables affected the project

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating (1 least &amp; 5 most)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6) Project staff attitude</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>7) Culture</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>8) Global economy</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>9) Project funding</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>10) Skills of project staff</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>11) Appropriate technology</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>12) Political environment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

13) In your view, if any other factor played a role in influencing project performance, briefly explain.

Thank you very much for sparing your time and for the valuable information you have given
God bless you
Appendix III: Content Analysis Procedure used

1) Identify and confirm a list of project document to be reviewed. Both for the Multinational Project (MNP) or Virtual University for Cancer Control Network (VUCCnet)

2) Read through the transcript and highlight the necessary sections- make brief notes in relation to the variables under study; M&E planning, M&E training, Baseline Survey, Information System and Project Performance

3) Read through the notes made and categorize each item in a way that offers a description of what it is about in relation to the variables

4) When you have done the above with all of the transcripts, review and examine each in detail on its relevance to answering the study objectives

5) Return to the original transcripts and ensure that all the information that needs to be categorized has been categorized

6) Transcribe this information accordingly to answer the four research questions of the study
Appendix IV: Interview Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary contact with prospective respondents &amp; sending introductory letter to all 21 institutions</td>
<td>June 9 - 16, 2014</td>
</tr>
<tr>
<td>Sharing questionnaires and booking appointment for interviews (on ‘as and when available basis’)</td>
<td>June 9 - 16, 2014</td>
</tr>
<tr>
<td>Conducting interviews</td>
<td>June 16 – August 16, 2014</td>
</tr>
<tr>
<td>Follow-ups on interviews</td>
<td>June 16 – August 16, 2014</td>
</tr>
</tbody>
</table>