



ASSESSMENT OF MONITORING AND EVALUATION TO THE SUSTAINABILITY OF DIGITAL HEALTH PROJECT, AT BABYL PROJECT, KIGALI, RWANDA

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ABSTRACT

The study entitled "Assessment of monitoring and evaluation to the sustainability of digital health project, at Babyl project, Kigali, Rwanda" the study was guided by three specific objectives: to determine the influence of M&E planning process to sustainability of Babyl project, to assess the influence of human resource capacity in Monitoring and Evaluation to sustainability of Babyl project, to determine the influence of partnerships in the M&E Systems on to sustainability of Babyl project and to examine the influence of communication in monitoring and Evaluation to sustainability of Babyl project. The study used quantitative research design. The study covers 516 stakeholders among 1548 stakeholders of Babyl project in Rwanda as sample size and was selected by using stratified sampling technique. The study used descriptive research design where questionnaire was used as to collect data techniques and descriptive statistics and inferential statistics was used to analysis data. For the first specific objective, the findings revealed that &E plan process has significance positive influence on sustainability of Babyl project as indicated by $\beta_1 = 0.134$, $p\text{-value} = 0.000 < 0.05$, $t = 4.295$. This implies that taking all other independent variables at zero, a unit increase in M&E plan process would lead to 0.134 increase in the sustainability of Babyl project. For the second specific objective, the findings revealed that human resource capacity in M&E has significance positive influence on sustainability of Babyl project as indicated by $\beta_2 = 0.228$, $p\text{-value} = 0.000 < 0.05$, $t = 8.710$. This implies that taking all other independent variables at zero, a unit increase in human resource capacity in M&E would lead to 0.228 increase in the sustainability of Babyl project. For the third specific objective, the findings revealed that partnerships in the M&E system have significance positive influence on sustainability of Babyl project as indicated by $\beta_3 = 0.081$, $p\text{-value} = 0.000 < 0.05$, $t = 4.131$. This implies that taking all other independent variables at zero, a unit increase in partnerships in the M&E system would lead to 0.081 increase in the sustainability of Babyl project. For the fourth specific objective, the findings revealed that communication in M&E has significance positive influence on sustainability of Babyl project as indicated by $\beta_4 = 0.360$, $p\text{-value} = 0.000 < 0.05$, $t = 14.921$. This implies that taking all other independent variables at zero, a unit increase in communication in M&E would lead to 0.360 increase in the sustainability of Babyl project. Clearly, M&E communication advocacy positively influences the sustainability of women based agricultural projects. The study concluded that the variation of 62.8% in sustainability of BABYL project was due to changes in monitoring and evaluation such as communication in M&E, partnerships in the M&E system, human resource capacity in M&E and as well as M&E plan process at 95% of confidence interval. The study recommends that Babyl project should come up with policies that support adequate training of the field staff involved in monitoring and evaluation through offer of adequate training for the requisite skills and also finally the management board of Babyl project should enhance monitoring and evaluation feedbacks, enhance capacity and response, engage stakeholders to achieve improvement in monitoring and evaluation and improve success in projects funded by faith-based organizations.

Key words: Assessment, monitoring and evaluation, sustainability and digital health project.

1. INTRODUCTION

1.1 Background of the Study

During the past 50 years, organizations worldwide in the public sectors have established Monitoring and Evaluation (M&E) functions to improve their sustainability outcomes. Due to the growing importance of the monitoring & evaluation all-over the world, many projects identified the benefits and they are trying to establish it in their operations. Government projects have been occupying the role of main service providers over the past few years at national and international scales, sustainability criteria and indicators for M&E were important tools for project management towards goals, and influencing policy and practices. At regional and sub-regional scales M&E is important for assessing the sustainability of local practices, and can be an important tool to assist with management planning in Non-Government Projects (Margoluis & Salafsky, 2017).

In Spain, monitoring and evaluation (M&E) has become a more essential instrument in global efforts to achieve environmental, economic, and social sustainability. For the sake of clarity, the evolution of Monitoring and Evaluation in France has been divided into various separate phases. This helps to highlight how concepts have generally evolved and expectations have extended over the years (Roger & Tim, 2018).

In Africa, the challenges associated with weak M&E systems in various projects are immense especially in sub-Saharan Africa. For instance, in addition to the limited financial resources that malaria M&E systems in SSA face, they also must deal with poor access to technology and a lack of personnel with the required M&E knowledge and skills. Concerns about HIV/AIDS and MHPs monitoring and evaluation have surfaced in Botswana, where biological data reveals strong links between HIV/AIDS and maternal mortality (WHO, 2014).

In eastern African countries like Kenya, challenges in implementation and monitoring and evaluation of maternal health and other related programs in Kenya explains the ineffectiveness of these programs. An assessment of M&E functions at the Division of Reproductive Health by Ministry of Health in Kenya revealed the weakest areas to be; supervision and auditing processes, human capacity for M&E functions, Research and Surveillance, and development of national and sub-national databases (MOH-Kenya, 2013).

In Rwandan context, Rwanda receives a large amount of foreign assistance, most of which is distributed through NGOs. Many of these NGOs have offices in Kigali and operate at all levels. Many conducts high-impact; high-resource projects, and operates in the fields of health, refugees, environment, human rights, education, and key aspects of international development. The NGOs use a number of approaches in addressing their objectives and these are categorized into three broad areas of advocacy, service provision and capacity building although a number of NGOs employ more than one strategy. However, there is little response from NGOs to the growing demand for public accountability to citizens on how assistance is used, what results are achieved, and how appropriate these results are, in bringing about desired changes in human development (Agaba & Mulyungi, 2018).

Babyl Project opened in Rwanda, through different local partnerships, Babyl is allowing every Rwandan to be able to get healthcare using technology and without struggling. Now days, Babyl project operating its activities in 30 districts of Rwanda helping Rwandan citizen to access quality health services by using technology. Babyl's mission to transform healthcare delivery in Rwanda will provide virtual consultations with the best clinical experts and doctors, extensive medical Q&A, cutting-edge monitoring and diagnostics, one-tap appointment booking and prescription delivery, and secure 24/7 access to clinical records.

1.2 Problem Statement

Digital health (DH) project has contributed to the transformation of healthcare delivery in Rwanda in the past decade (RBC, 2020). According to MoH (2019), the level of digital health activity is growing in Rwanda. However, very few donor-funded projects achieve their objectives despite millions

injected into their implementation owing to a lack of commitment to M&E; additionally, NGOs are typically unable to hire the services of skilled M&E professionals and ICT staff who have adequate understanding of M&E systems to enable them develop appropriate tools and poor follow-up of patients used digital health platforms leading to poor sustainability of health project, poor problems identification faced by beneficiaries in using digital health platforms, the lack of accountability for the disbursed funds. This leads to the inability of attaining project sustainability, and absence of any evidence of the attainment of the objectives for which the funds were disbursed to the NGOs

For example, MoH (2019) reported that out of 62 health projects implemented in Rwanda, 35% of projects did not achieve its objectives, reported that out of 62 health projects implemented in Rwanda, 35% of projects did not achieve its objectives 45% of projects are not regular maintenance, 35% of projects did not continue after withdraw of projects funder and 55% of projects did not deliver it expected quality.

Effective M&E requires holistic participation of all critical partners during the project implementation which demands significant resources and technology in the management of stakeholders which may not be possible for many cash-strapped organizations; it also calls for more training of the staff on how to incorporate M&E partnership ideals into project implementation (Phiri, 2015). Given the expense involved in setting up such partnerships, most organizations find it difficult to implement them which negates their M&E initiatives and hamper project sustainability. Hence, this study seek to assess whether monitoring and evaluation is needed to ensure to sustainability of digital health project in Rwanda with reference of Babyl project in Rwanda.

1.3 Objective of the study

The general objective of this study is to investigate the assessment of monitoring and evaluation systems to sustainability of digital health projects in Rwanda with reference of Babyl project.

Specific objectives

- i. To determine the influence of M&E planning process to sustainability of Babyl project.
- ii. To assess the influence of human resource capacity in Monitoring and Evaluation to sustainability of Babyl project.
- iii. To determine the influence of partnerships in the M&E Systems on to sustainability of Babyl project.
- iv. To examine the influence of communication in monitoring and Evaluation to sustainability of Babyl project.

1.4 Research hypotheses

H₀₁: There is no significant relationship between M&E planning process and sustainability of Babyl project.

H₀₂: There is no significant relationship between human resource capacity in M&E and sustainability of Babyl project.

H₀₃: There is no significant relationship between partnerships in the M&E systems and sustainability of Babyl project.

H₀₄: There is no significant relationship between communication in M&E and sustainability of Babyl project.

2. LITERATURE REVIEW

The relevant literature are presented and discussed under different sub-sections such as conceptual review theoretical framework, a conceptual framework, and the knowledge gap.

2.1 Conceptual review

This section describes review of related literature under the study based on the research objectives.

Monitoring and evaluations practices and sustainability of health project

Monitoring and evaluation are becoming more and more important tools in program management. Monitoring is the collecting and analysis of data about a specific program or intervention, while evaluation is an assessment aimed at answering questions about that program or intervention. All of these different definitions portray monitoring as an ongoing process that is primarily based on set targets and planned activities during the work planning stage. It assists in keeping the project on track and can alert management if things aren't going as planned during the project's execution. If done correctly, it is a valuable tool for project management and provides a solid foundation for evaluation (IFAD, 2009).

M&E planning process and sustainability of health project

During the project, M&E plans should be documented and communicated with all stakeholders, including donors. This is the best practice, which advises as much participation from many stakeholders as possible, and everybody who will be responsible for carrying out the plan's tasks should be informed or consulted during its preparation (Simister, 2015). However, studies done on involvement of stakeholders in M&E plans have been limited to identifying the level involvement, without touching on its influence in project performance.

Human resource capacity in monitoring and evaluation and sustainability of health project

Capacity can be understood as the ability of people, organizations and society as a whole to manage their affairs successfully (OECD, 2006). M&E activities utilize the capacities of many people such as staff, beneficiaries and volunteers who are not M&E experts (Chaplowe, 2008). It is critical that capacity building and development of various people involved in M&E is planned and carried out on a regular basis for successful implementation of M&E work. As noted by UNDP (2009), there is the need to take a more holistic view in identifying and addressing the capacities needed to monitor and evaluate the results being pursued.

Partnerships in M&E system and sustainability of health project

Monitoring and evaluation (M&E) can aid in the development of multi-stakeholder collaborations (MSPs). M&E can help with learning and decision-making, holding partners accountable, and reviewing how partnerships are working and how they may achieve more long-term results. With the growing emphasis on participatory methods to development, it has become clear that monitoring and evaluation (M&E) should be participatory as well (World Bank, 2016), in order to improve the quality of data. According to Garbutt (2013), having a comprehensive M&E system is useless if your partners are unable to collect data that gives the knowledge you require.

Communication in monitoring and evaluation to sustainability of health project

The Essential Influence of Communications provides that eye-opening insight. Further research on the importance of effective communications uncovers that a startling 56 percent is at risk due to ineffective communication. Despite this risk, many organizations admit that they are currently not placing adequate importance on effectively communicating critical project information, especially when explaining the business benefits of strategic initiatives to stakeholders at all levels of a project. Organizations cannot execute strategic initiatives unless they can effectively communicate their strategic alignment and business benefits. PMI's Pulse communications research found out that effective communications lead to more successful projects, allowing organizations to become high performers completing an average of 80 percent of projects on time, on budget and meeting original goals. These organizations risk times fewer dollars than their low-performing counterparts. The report also focuses on communications challenges that prevent organizations from accomplishing more successful projects (Kimweli, 2013).

Project Sustainability

Sustainability can be defined as the persistence of benefits after main donor aid has been withdrawn in the context of donor-funded programs. To ensure a continued influx of benefits, the concept of sustainable benefits does not necessarily imply the continuance of project-funded activities, but rather the adoption of new structures, community ownership, and support from locally available resources (Kalamuzi & Mbabazi, 2016).

2.2. Theoretical Framework

The theories that underlie this study include the theory of change, Resource allocation theory and the stakeholder theory, results-based management theory and organization learning theory which are discussed below in details.

Theory of Change

Theory of Change was developed by Weiss (1995), a theory of change explains how the activities undertaken by an intervention (such as a project, program or policy) contribute to a chain of results that lead to the intended or observed impacts. A theory of change is often developed during the planning stage but can also be useful for monitoring and evaluation. The M & E practices are the basic inputs when utilized well equates to the processing of the inputs and eventually give measurable output.

The theory of change also helped the researcher to understand to what extent M&E partnership, M&E work plan process determine sustainability at the research area. By knowing this critical the change of the projects information, it enables the researcher to measure the Babyl project results and compare them against the original intent, in order to detect the relative change. Therefore, this study put into consideration the theory of change as the researcher assessed the sustainability of various projects in the study area, mainly by looking on the expected results and the change it has influenced.

Resource allocation theory

Hackman was the first to propose the resource allocation hypothesis (1985). According to the notion, a unit's importance in an organization's workflow is more important than its importance in the organization's mission. As a result, while allocating resources, the mission takes precedence over work flow. The allocation of resources for any function in an entity is pegged on relevance to those in authority. Resources are considered scarce; therefore, in an organization rationality of choice influences what function will be funded. In most cases, project managers with the help of middle level management are responsible for choices in allocating resources in projects (Bower, 2017).

Monitoring and evaluation practice is a function that requires both physical and human resources necessary to run its operations. Across NGOs, the practice of M&E is still new and viewed as it plays a peripheral role in management of projects. Despite advocacy and stringent measures placed by project funders, reallocation of resources commonly affects budgets for M&E. The concept of resource allocation is relevant to M&E, as it requires financing of staff compensation, capacity building for project staff and allocation of funds for conduct of routine M&E activities that are periodically work planned.

Stakeholder Theory

The proponent of this theory was Freeman (1984). A stakeholder according to this theorist is referred to as any group or individual who can be affected or is affected by the achievement of the organization's objectives. The Stakeholder theory addresses morals and values in managing an organization. Project stakeholders are individuals and/or organizations who actively participate in the project or whose interests are likely to be affected by the execution of the project or by successful project completion (PMI, 2004).

The most discernible correlation is between this theory and the independent variable three (partnerships in M&E) since partners are one type of stakeholder. The theory is consistent with the dependent variable when it explains the trade-offs between the objective of profit maximization

(economic sustainability) and corporate social responsibility (this correlates with society acceptance).

Results Based Management Theory

The Results-based management (RBM) theory started with the Australian government in the mid-1980s; the theory became increasingly important in the 1990s spearheaded by the Organization for Economic Co-operation and Development (OECD). This theory as the name suggests is results oriented. The Results RBM is one of the strategies in management. All the ground actors, supporting directly or indirectly towards the achievement of specified development results, make sure that their processes, products along with output contribute to the attainment of sustainable results (Crawford and Bryce, 2013). RBM based on clearly defined responsibility. It defines the ultimate results and at the same time requires monitoring as well as self-assessment of progress to sustainable results, including recording performance (UNDP, 2012).

RBM provides elements for project monitoring performance, this are linked to the variables in the current study such as M&E planning process, M&E for capacity building, M&E partnership are key elements directly linked to the RBM theory. These elements result to sustainable change.

Organization learning Theory

The study is as well underpinned in organization learning theory which was developed by Argyris and Schon (1978). They asserted the need for organization to learn so as to enhance performance. The need for learning is also emphasized by a growing body of literature linking organizational performance with their ability to learn in complex and unpredictable environments (Senge, 2015).

Babyl projects in their attempt to moderate sustainability have enhanced the stakeholders' ability to learn through M&E practices by increasing M&E budget support, collecting relevant data, enhancing capacity to conduct M&E activities, utilization of M&E data, and usage of M&E results to enhance decision making. This study seeks to establish the moderating assessment of monitoring and evaluation practices on the relationship between community participation and sustainability of digital health project in Rwanda.

2.3 Empirical review

Tache (2011), carried out a study called developing an integrated Monitoring and Evaluation flow for Sustainable Investment Projects in Romania. The objective of the study was to develop a general integrated flow, encompassing both a project monitoring system and also a project evaluation system for the investment projects involving economic objectives, as well as cross-cutting social and environmental targets. The whole approach was being presented as a flowchart, which highlights the intimate relationship between the monitoring and evaluation processes, and provides a formal framework for performing a logical monitoring and evaluation process, taking into account simultaneously the economic, social and environmental perspectives, within an investment project. The study used critical analysis and found that both the estimated advantages and the disadvantages of such a managerial tool, opening new perspectives for developing further improved models and systems. The findings revealed that Monitoring and Evaluation affects positively the sustainability of the projects in Romania.

Njeri and Omwenga (2019), conducted the study on the assessment of monitoring and evaluation practices on sustainable projects – A case study of the national aids control council. The study adopted a descriptive study to collect data from all the 90 respondents sampled using structured questionnaires. Data collected was analyzed using Quantitative data analysis including descriptive and inferential statistics. Deductions were then made of the influence of M&E on project sustainability from the results of the study. The results indicated a strong correlation between all of the independent variable's M&E organizational factors, Human Capacity for M&E, Partnerships in M&E and Communication in M&E; and project sustainability. However, according to the findings, organizations have yet to develop adequate Human Capacity in M&E. The R Squared value for all the variables was 0.769 indicating that the study results explained 76.9% of the total variation in Project Sustainability which can be attributed to unit change in the four independent variables. The study recommended that organizations need to enhance their human capacity for M&E by improving their

recruitment policies for M&E through research into the appropriate skills requirements by benchmarking on industrial leaders.

Njeru and Luketero (2018), studied on the assessment of monitoring and evaluation strategies on performance of medical camp projects in hospitals in Kenya: A case of Embu North Sub County. The study objectives were to determine the influence of skills of monitoring and evaluation team, stakeholder involvement; resource allocation and monitoring and evaluation systems on performance of medical camp projects in hospitals. The researcher used a sample size of 167 respondents, from that sample size 159 filled in and submitted the questionnaires making a response rate of 95% while 8 respondents never filled the questionnaires making a response rate of 5%. The 159 respondents consisted of 61 key stakeholders and 98 patients. The study findings were patients highly rated the services provided by medical camps in Embu as of very high quality this implies that the performance of medical camp is good since it satisfies its target group. Based on the first variable which was skills of monitoring and evaluation 55(90%) stated that skills of M&E team influenced performance at a very great extent. Based on the second variable which was stakeholder involvement 42(69%) stated that stakeholder involvement influenced performance at a very great extent. Based on the fourth variable which was adoption of monitoring and evaluation systems 37(61%) respondents stated monitoring and evaluation systems was very effective on performance of medical camp while 15(25%) stated it was effective.

Nalinya (2017), studied on the assessment of monitoring and evaluation systems on performance of non-governmental projects in Kenya, a case of maternal health projects in Bungoma South Sub-County, Kenya. The study sought to determine the assessment of monitoring and evaluation systems on performance of non-governmental based maternal health projects in Bungoma South Sub-County, Kenya. A descriptive survey design and correlation design was employed. With a target population of 101 respondents, a census was conducted on all respondents involved in implementation of maternal health projects from three non-governmental organizations (Ace Africa (Kenya), Save The Children (Bungoma), and Community Research in Environmental and Development Initiatives). Data was collected through questionnaires and analyzed using descriptive statistics. The study concluded that M&E plans influence performance of the projects as shown by a fairly strong correlation of 0.607. Although human resource capacity in monitoring and evaluation is key in performance of the projects, a moderate correlation coefficient of 0.530 established implies low M&E expertise in the organizations. The study also showed monitoring and evaluation information system influences performance of the projects. However, with a correlation coefficient of 0.533, there is room for improving the current information systems to in the three organizations to make them more efficient. This was shown by a correlation coefficient of -0.489. In overall, it was therefore concluded that monitoring and evaluation systems influence performance of the projects.

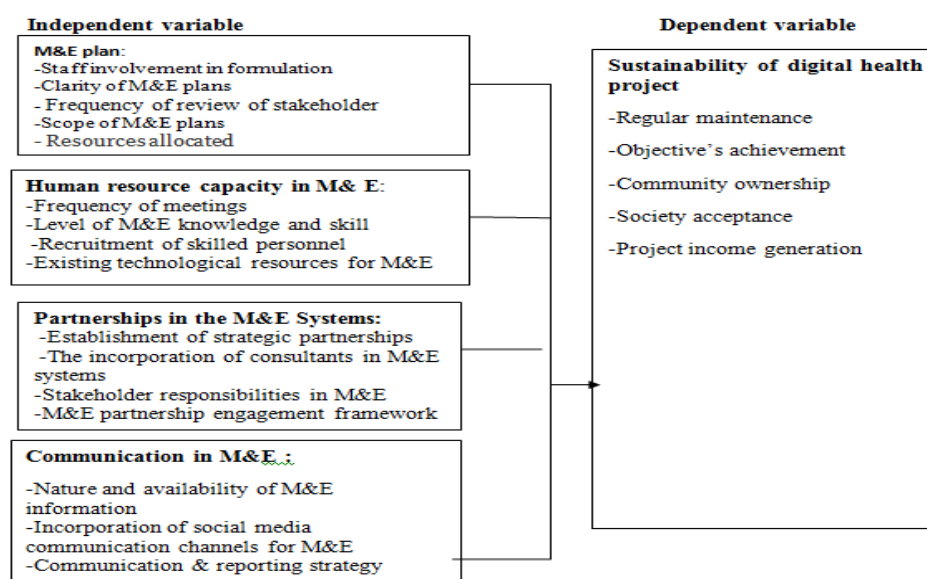
Tuyiramywe & Mulyungi (2017), studied on the contribution of stakeholder's involvement in monitoring and evaluation planning in promoting the Funded Project Sustainability; A Case of Rwanda Health System Strengthening Project (RSSP). The general objective of the study was to assess the contribution of stakeholder's involvement in M&E planning in promoting sustainability of funded projects. Descriptive survey was used; the target population sample of the study was 109 respondents (M&E specialist & officers project Manager, partners, Beneficiaries, project's employees. This study used both primary data and secondary data, where questionnaire was used for data collection. The study used descriptive and inferential statistics as method of data analysis. The findings revealed that stakeholders' contribution, Stakeholder's participation and Stakeholders' communication contribute the project sustainability, where ($R=0.953$). The conclusion drawn from the study is that stakeholders' involvement in various forms promoted project sustainability.

Kwizera (2018), studied on monitoring and Evaluation and Sustainability of Health Projects in Rwanda: A case study of sustainable Health Enterprise Project in Kimironko Sector Gasabo District in Kigali, Rwanda. The purpose of this research was to find the impact of project monitoring and evaluation on project sustainability in Rwanda. The researcher adopted both descriptive and analytical research design based on quantitative and qualitative data while the population of the research was 72 employees of Sustainable Health Enterprise project. The sample size was 61 employees of the project selected using simple random sampling technique. For data collection, the

researcher used questionnaires and interviews for primary data while documentary review was used for secondary data. The researcher found out that monitoring and evaluation carried out in sustainable health enterprise is contribution a lot to the project sustainability, the project is sustainable because all the contents of monitoring and evaluation lead to sustainability, the project carries out monitoring and evaluation after a short period of time and is therefore capable of checking and rectifying all the challenges that may affect sustainability of the project.

2.4 Conceptual Framework

The conceptual framework means the parts of a building or an object that support its weight and shape. It also means a set of beliefs, ideas, or rules used as the basis for making judgments and decisions. This research deals with two variables: the independent variables (Planning Process in M &E, Human resource capacity in M & E, partnerships in the M&E Systems and Communication in M&E) and dependent variables is project sustainability in terms of regular maintenance, objectives achievement, community project ownership, and society acceptance financial sustainability. The connection between the dependent and the independent variable can be summarized in figure 1 below.



Source: Researcher compilation's, 2021

Figure 1: Conceptual Framework

2.5 Research Gap

The past studies done on the effect of monitoring and evaluation practices including such M&E plan, M&E Building and M&E tools on sustainability of project in different countries such as, Netherlands, Romania, Nigeria, Kenya and only few were conducted in other sectors of Rwanda, but the health sector was not attempted.

The study done by Tache (2011), has methodological gap where only used interview where to use qualitative data is not possible to provide statistics evidence about the assessment of monitoring and evaluation on sustainable Investment Projects. Hence, the current study will use quantitative research design to describe and provide statistics inferential on how monitoring and evaluation practices such as Planning Process in M &E, Human resource capacity in M & E, partnerships in the M&E Systems and Communication in M&E influence project sustainability.

The study done by Kwizera (2018) and Tuyiramywe & Mulyungi (2017), has conceptual gap where did not describe the contribution made by M&E systems in ensuring Sustainability of those projects basing on key sustainability indicators like regular maintenance, objective's achievement, community ownership and society acceptance. Therefore, this study is expected to fill that gap, but more specifically on sustainability of Babyl project by incorporate indicator missed in the previous studies.

Nalinya (2017), Njeri & Omwenga (2019), and Njeru and Luketero (2018), had contextual gap where focus on health project in general but not specifically on digital health project where the context of digital health project is differed to others. Hence, the current study will fill the gap by focusing on the assessment of monitoring and evaluation systems to sustainability of digital health projects with reference of Babyl project in Rwandan context. For that reason, this research work is going to concentrate on effect of monitoring and evaluation practices on sustainability of health project in Rwanda by focusing on how (Planning Process in M & E, Human resource capacity in M& E, partnerships in the M&E Systems and Communication in M&E) affect sustainability of health project with Babyl project in terms of regular maintenance, community project ownership and project income generation in order to fill the gap in the literature review.

3. RESEARCH METHODOLOGY

The chapter focuses on the methodology that was used in operationalization of this research project. It involved the collection, measurement and analysis of research data. The chapter identified the procedures and techniques that were used. The subsections presented the research design, the target population, sampling frame and sample size, data collection methods, analysis and presentation.

3.1 Research Design

The study based on the nature of this study, the main research design that used is quantitative research design where the researcher examines the various variables such M&E practices and sustainability of Babyl project while including numbers as well as statistics in a project to analyze its findings. Quantitative Research design can be divided into the following 2 major types of research designs which is descriptive research design and correlational research design.

In descriptive Research Design, the research explains/describes the variable under the study such as Planning Process in M & E, Human resource capacity in M& E, partnerships in the M&E Systems and Communication in M&E and also the level of sustainability of Babyl project in depth in their research materials. This type of research design is purely on a theoretical basis where the individual collects data, analyses, prepares and then presents it in an understandable manner.

In correlational Research Design, the researcher establishes a relationship between two connected variables in the research project. Further, it also completely non-experimental in nature and the variables are dependent on each other.

3.2 Target Population

Based on the nature of this study, the population of this study is heterogeneity which is 1,548 stakeholders of Babyl project composed by 1,005 clients and 543 employees of Babyl project in Rwanda whom they include project directors, coordinators, project field officer's, Doctors, project marketing staff, Project finance specialists, District managers, Agents in call center, Agents on health centers, HR and Nurses.

3.3 Sample Size and sampling technique

Since, total population is 1,548 stakeholders of Babyl project which is great than 100, the researcher used Yamane (1967) provides a simplified formula to calculate sample sizes. This formula was used to calculate the sample size to be questionable in the research.

$$n = \frac{N}{1 + N(e)^2}$$

Where: n= the sample size,

N= the sample frame and

e= the margin of error (5%).

Sample size for employees of Babyl project in Rwanda was calculated as follow:

$$n = \frac{543}{1 + 543 (0.05)^2} = \frac{543}{2.3575} = 230.3287 \approx 230$$

Sample size for beneficiaries of Babyl project in Rwanda was calculated as follow:

$$n = \frac{1,005}{1 + 1,005 (0.05)^2} = \frac{1,005}{3.5125} = 286.121 \approx 286$$

Table 1: Sample size

Babyl project team	Population size	Sample size
Total employees	543	230
Beneficiaries (Clients)	1,005	286
Total sample size	1,548	516

Source: Researcher design, 2021

The researcher used stratified sampling techniques for selecting 516 participants from 1548 stakeholders Babyl project based on its categories including project directors, coordinators, project field officer's, Doctors, project marketing staff, Project finance specialists, District managers, Agents in call center, Agents on health centers, HR and Nurses.

3.4 Data Collection instruments

The study was incorporated the use of various tools in the process of data collection in a bid to come up with sound, concrete and credible research findings. The researcher therefore amalgamated the use of questionnaire, interviews and documentary analysis in the process of collecting primary data.

Questionnaire: The questionnaire was the main tool. Prior to the actual utilization of the survey instrument, a series of consultation was made to finalize the questionnaire. Regarding the study objectives (or variables) the questions were on a five-point Likert scale and also opened ended questions to elicit more answers and generate qualitative data. The research designed questionnaires for stakeholders of Babyl project to address research objectives.

Documentation review: In this study the documents (books, journals and web site sources) were used in order to get more information.

3.5 Data Analysis

This study employed a descriptive statistical method for representing and summarizing of the bio data and inferential statistics such as correlation analysis and multiple linear regression model by using software program SPSS for Windows (Version 23.0)

Descriptive statistics: Descriptive statistics were used to describe the basic features of the data in the study in the tendencies and then replicated in tabular manner. It involved use of percentages, frequencies, mean and standard deviation.

Correlation analysis: Correlation analysis was developed to measure the strength and closeness of the relationship between each independent variable to dependent variable which is the relationship between M&E practices and sustainability of Babyl project in Rwanda.

Multiple linear regressions: A multiple regression model was used to test the significance of the effect of the independent variables on the dependent variable. Based on other models that have been used to test the health is significant influence of planning process in M &E, Human resource capacity in M& E, partnerships in the M&E Systems and Communication in M&E on sustainability of Babyl project, the present study adopted the following model:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e$$

Where: Y = Sustainability of Babyl project, $\{\beta_i; i=1,2,3 \text{ and } 4\}$ = The coefficients representing the various independent variables. β_0 = the Y intercept

$\{X_i; i=1,2,3 \text{ and } 4\}$ = Values of the various independent (covariates) variables.

e = the error term which is assumed to be normally distributed with mean zero and constant variance,

Y =Sustainability of Babyl project,

X₁= M&E planning process;

X₂ = Human resource capacity in M&E;

X₃= Partnerships in the M&E Systems;

X₄ = Communication in M&E

4. PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

This chapter is a presentation of the research findings gained from field responses and data. The interpretation uses frequency tables, percentages, mean and standard deviation to present data. This chapter presents data analysis and interpretation of the research findings based on the research objectives. Out of 516 questionnaires which had been administered to project staff and beneficiaries of Babyl project, all of them were returned for analysis. This translates to 100 percent return rate of the respondents.

4.1 Descriptive statistics results

The study mainly intended to assess the role of monitoring and evaluation on the sustainability of Babyl project. In this section, the study presented descriptive statistics for sustainability of Babyl project, Planning Process in M &E, Human resource capacity in M& E, partnerships in the M&E Systems and Communication in M&E. The findings are presented in a five-point Likert scale where SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree, F=Frequency, T=Total, M=Mean and STD=Standard Deviation. This section presented was analyzed by using descriptive statistics such as frequency, percentage, mean and standard deviation. The assumption was made on the basis of higher the score the more important are the variables as evaluative criteria. Interpretation of mean and standard deviation were interpreted as follow: Mean between 1.00-1.80 implies that very low mean (i.e., the fact does not appear), Mean between 1.81-2.60 implies that low mean (i.e., the fact appears less), Mean between 2.61-3.40 implies that moderate mean (i.e., the fact appears moderate), Mean between 3.41-4.20 implies that high mean (i.e., the fact appears more) and mean between 4.20-5.00 implies that Very high mean (i.e., strong evidence of the existence of the fact. Standard deviation less or equal 0.5($\sigma \leq 0.5$) implies that homogeneity otherwise heterogeneity. The findings for each variable are presented in the respective sections.

Table 2: M&E plan process and sustainability of Babyl project

	SD		D		N		A		SA		Mean	St. dev
	fi	%	fi	%	fi	%	fi	%	Fi	%		
M&E plan is linked to overall project plan and organizational strategy	2	.4	42	8.1	19	3.7	99	19.2	354	68.6	4.47	.93
The project M&E plan is comprehensive i.e., outlines project goals, strategy, logic models, risk matrix, monitoring plan, dissemination plan	2	.4	15	2.9	2	.4	53	10.3	444	86.0	4.79	.63
The M&E plan outlines steps for further strengthening of M&E system	4	.8	21	4.1	5	1.0	61	11.8	425	82.4	4.71	.75
At the project initial stage, the project allocates funds for monitoring and evaluation	13	2.5	18	3.5	99	19.2	98	19.0	288	55.8	4.22	1.03
The planning process is well detailed and utilized	4	.8	6	1.2	2	.4	264	51.2	240	46.5	4.41	.64
The planning process helps to estimate the cost of the required resource for M and E	8	1.6	36	7.0	14	2.7	65	12.6	393	76.2	4.55	.95

The planning process support decision making during project implementation	2	.4	121	23.4	84	16.3	45	8.7	264	51.2	3.87	1.28
The M&E work plan is linked to the annual project plan and detailed implementation plan	28	5.4	78	15.1	44	8.5	16	3.1	350	67.8	4.13	1.36
Project stakeholders are involved in design, development and review of M&E plan	2	.4	34	6.6	30	5.8	40	7.8	410	79.5	4.59	.90
The M&E plan is accessible to project team and field-based staff for reference	34	6.6	57	11.0	34	6.6	21	4.1	370	71.7	4.23	1.33
Resources both physical, human and financial are committed for the implementation of the M&E work plan	2	.4	8	1.6	2	.4	57	11.0	447	86.6	4.82	.54
Overall											4.44	.44

Source: Field data, October 2021

In respect to M&E plan process , the findings in the table 2 revealed that 0.4% of respondents strongly disagreed, 8.1% of respondents disagreed and 3.7% of respondents were neutral while 19.2% of respondents agreed and the majority 68.6% of respondents strongly agreed that M&E plan is linked to overall project plan and organizational strategy with very high mean score of 4.47 and standard deviation of 0.93 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 2 revealed that 0.4% of respondents strongly disagreed, 2.9% of respondents disagreed and 0.4% of respondents were neutral while 10.3% of respondents agreed and the majority 86% of respondents strongly agreed that the project M&E plan is comprehensive i.e. outlines project goals, strategy, logic models, risk matrix, monitoring plan, dissemination plan with very high mean score of 4.79 and standard deviation of 0.63 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 2 revealed that 0.8% of respondents strongly disagreed, 4.1% of respondents disagreed and 1% of respondents were neutral whereas 11.8% of respondents agreed and the majority 82.4% of respondents strongly agreed that the M&E plan outlines steps for further strengthening of M&E system with very high mean score of 4.71 and standard deviation of 0.75 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 2 revealed that 2.5% of respondents strongly disagreed, 3.5% of respondents disagreed and 19.2% of respondents were neutral whereas 19% of respondents agreed and the majority 55.8% of respondents strongly agreed that at the project initial stage the project allocate funds for monitoring and evaluation with high mean score of 4.22 and standard deviation of 1.03 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 2 revealed that 0.8% of respondents strongly disagreed, 1.2% of respondents disagreed and 0.4% of respondents were neutral whereas 46.5% of respondents strongly agreed and the majority 51.2% of respondents agreed that the planning process is well detailed and utilized with very high mean score of 4.41 and standard deviation of 0.64 which implies that there is strong evidence of existing fact and heterogeneity responses. The study also found that the monitoring and evaluation team have developed a Plans for dissemination and use of information and that there is a monitoring and evaluation plan which is up to date. This is in line with Golini and Landoni (2013) who argued that the monitoring team should have the necessary basic information obtained through sufficient investigation and surveys to adequate project monitoring throughout the project lifecycle and in-depth evaluation exercise. Where all the above

factors are considered, development projects such as health projects tend to have strong links between sectoral planning and project identification, feasibility and formulation, and between project preparation/project appraisal and project implementation.

The findings in the table 2 revealed that 76.2% of respondents strongly agreed that the planning process helps to estimate the cost of the required resource for monitoring and evaluation as shown by very high mean score of 4.55 and standard deviation of 0.95 which implies that there is strong evidence of existing fact and heterogeneity responses; 51.2% of respondents strongly agreed that the planning process support decision making during project implementation as shown by very high mean score of 3.87 and standard deviation of 1.28 which implies that the fact appear more and heterogeneity responses and 67.8% of respondents strongly agreed that the M&E work plan is linked to the annual project plan and detailed implementation plan as shown by very high mean score of 4.13 and standard deviation of 1.36 which implies that the fact appear more and heterogeneity responses.

The findings in the table 2 revealed that 0.4% of respondents strongly disagreed, 6.6% of respondents disagreed and 5.8% of respondents were neutral whereas 7.8% of respondents agreed and the majority 79.5% of respondents strongly agreed that project stakeholders are involved in design, development and review of M&E plan as shown by very high mean score of 4.59 and standard deviation of 0.90 which implies that there is strong evidence of existing fact and heterogeneity responses. The findings in the table 2 revealed that 6.6% of respondents strongly disagreed, 11% of respondents disagreed and 6.6% of respondents were neutral whereas 4.1% of respondents agreed and the majority 71.7% of respondents strongly agreed that the M&E plan is accessible to project team and field-based staff for reference as shown by very high mean score of 4.23 and standard deviation of 1.33 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 2 revealed that 0.4% of respondents strongly disagreed, 1.6% of respondents disagreed and 0.4% of respondents were neutral whereas 11% of respondents agreed and the majority 86.6% of respondents strongly agreed that resources both physical, human and financial are committed for the implementation of the M&E work plan as shown by very high mean score of 4.85 and standard deviation of 0.5 which implies that there is strong evidence of existing fact and homogeneity responses.

Briefly, the overall mean of respondents on the statements regarding to M&E plan process in Babyl was at very high extent with the average mean of 4.44, which is interpreted as a high mean, and the standard deviation of 0.44, which implies that there is strong evidence of existing of fact and heterogeneity response that Babyl project has effective M&E plan process to influence the sustainability of its project. The study established that M&E Planning ensures effective tracking of progress of the projects. This concurs with Kalali, Ali and Davod (2011) who noted that M&E plan and technology infrastructure would involve advocating for the need for M&E, assessing strategic information needs (including planning for M&E utilization dissemination), achieving consensus and commitment among stakeholders, particularly on indicators and reporting structure & tools, developing mechanism for M&E plan review, and preparing document for final approval. Moreover, the study found that the M&E planning includes description of the projects covering both the problem statement and framework(s) and the up-to-date monitoring and evaluation plan indicates persons responsible for each activity, including any M&E-related roles for the program/technical staff and implementing partners. These findings correspond to Hermano, López-Paredes, Martín-Cruz and Pajares (2012) provided planning as plausible explanation for the success of development projects that they are able to meet set targets due to effective planning. The process of M&E planning and implementation is able to resolve inherent challenges ranging from conceptual differences about the projects if there are well thought out and capture proper technical and economic considerations.

Table 3: Human resource capacity in M&E to sustainability of Babyl project

	SD		D		N		A		SA		Mean	St. dev
	fi	%	fi	%	fi	%	fi	%	Fi	%		
Babyl project has an acceptable level of M&E knowledge and skill among its staff	5	1.0	39	7.6	26	5.0	26	5.0	420	81.4	4.58	.96
Babyl project has recruited adequate skilled personnel in M&E	4	.8	40	7.8	28	5.4	51	9.9	393	76.2	4.53	.96
Babyl project has established an accurate method of determining the human resource needs for M&E	4	.8	31	6.0	30	5.8	59	11.4	392	76.0	4.56	.90
The existing technological resources for M&E are adequate	5	1.0	28	5.4	28	5.4	55	10.7	400	77.5	4.58	.89
Project staff are trained in order to equip them with technical expertise necessary to carry out M and E	21	4.1	42	8.1	23	4.5	85	16.5	345	66.9	4.34	1.14
The project has adequate and skilled employee charged with role of steering M&E activities	10	1.9	38	7.4	24	4.7	92	17.8	352	68.2	4.43	1.01
The project identifies skilled personnel to carry out the monitoring and evaluation functions	17	3.3	26	5.0	18	3.5	76	14.7	379	73.4	4.50	1.01
Project training need analysis is done to ensure the right skills are acquired to manage the M and E activities.	78	15.1	34	6.6	50	9.7	47	9.1	307	59.5	3.91	1.52
There is supervision, training and coaching for M&E focal persons	97	18.8	60	11.6	11	2.1	31	6.0	317	61.4	3.80	1.66
Periodically staffs need assessment for M&E are conducted to inform subsequent capacity building programs	40	7.8	30	5.8	8	1.6	63	12.2	375	72.7	4.36	1.24
Overall											4.36	.50

Source: Field data, October 2021

The findings from the table 3, show that 1% of respondent strongly disagreed, 7.6% of respondents disagreed and 5% of respondents were neutral whereas 5% of respondents agreed and the majority 81.4% of respondents strongly agreed that Babyl project has an acceptable level of M&E knowledge and skill among its staff as shown with very high mean score of 4.58 and standard deviation of 0.96 which implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 0.8% of respondent strongly disagreed, 7.8% of respondents disagreed and 5.4% of respondents were neutral whereas 9.3% of respondents agreed and the majority 76.2% of respondents strongly agreed that Babyl project has recruited adequate skilled personnel in M&E as shown with very high mean score of 4.53 and standard deviation of 0.96 which

implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 0.8% of respondent strongly disagreed, 6% of respondents disagreed and 5.8% of respondents were neutral whereas 11.4% of respondents agreed and the majority 76% of respondents strongly agreed that Babyl project has established an accurate method of determining the human resource needs for M&E as shown with very high mean score of 4.56 and standard deviation of 0.90 which implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 1% of respondent strongly disagreed, 5.4% of respondents disagreed and 5.4% of respondents were neutral whereas 10.7% of respondents agreed and the majority 77.5% of respondents strongly agreed that the existing technological resources for M&E are adequate as shown with very high mean score of 4.58 and standard deviation of 0.89 which implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 4.1% of respondent strongly disagreed, 8.1% of respondents disagreed and 4.5% of respondents were neutral whereas 16.5% of respondents agreed and the majority 66.9% of respondents strongly agreed that project staff are trained in order to equip them with technical expertise necessary to carry out M and E as shown with very high mean score of 4.34 and standard deviation of 1.14 which implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 1.9% of respondent strongly disagreed, 7.4% of respondents disagreed and 4.7% of respondents were neutral whereas 17.8% of respondents agreed and the majority 68.2% of respondents strongly agreed that the project has adequate and skilled employee charged with role of steering M&E activities as shown with very high mean score of 4.43 and standard deviation of 1.01 which implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 3.3% of respondent strongly disagreed, 5% of respondents disagreed and 3.5% of respondents were neutral whereas 14.7% of respondents agreed and the majority 73.4% of respondents strongly agreed that the project identifies skilled personnel to carry out the monitoring and evaluation functions as shown with high mean score of 4.50 and standard deviation of 1.01 which implies that the fact appear more and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 15.1% of respondent strongly disagreed, 6.6% of respondents disagreed and 9.1% of respondents were neutral whereas 9.1% of respondents agreed and the majority 59.5% of respondents strongly agreed that project training need analysis is done to ensure the right skills are acquired to manage the M and E activities as shown with high mean score of 3.91 and standard deviation of 1.52 which implies that the fact appear more and large deviation from the mean(heterogeneity) responses. Zvoushe and Gideon (2013), found that, there is low human capacity in use of evaluation findings from previous programs while its evaluation approaches have a disturbing skew towards the quantitative. Such overly quantitative approaches carry the risk of sidelining the impact of contextual factors in development programs and projects.

The findings from the table 3, show that 18.8% of respondent strongly disagreed, 11.6% of respondents disagreed and 2.1% of respondents were neutral whereas 6% of respondents agreed and the majority 61.4% of respondents strongly agreed that there is supervision, training and coaching for M&E focal persons as shown with high mean score of 3.80 and standard deviation of 1.66 which implies that the fact appear moderate and large deviation from the mean(heterogeneity) responses.

The findings from the table 3, show that 7.8% of respondent strongly disagreed, 5.8% of respondents disagreed and 1.6% of respondents were neutral whereas 12.2% of respondents agreed and the majority 72.7% of respondents strongly agreed that periodically staffs need assessment for M&E are conducted to inform subsequent capacity building programs as shown with very high mean score of 4.36 and standard deviation of 1.24 which implies that there is strong evidence of existing fact and large deviation from the mean(heterogeneity) responses.

Briefly, the overall mean of respondents on the statements regarding to Human resource capacity in M&E in Babyl was at high extent with the average mean of 4.36, which is interpreted as a high mean, and the standard deviation of 0.50, which implies that there is strong evidence of existing of fact and homogeneity response that human resource capacity in M&E used by Babyl project was at high extent in relation to sustainability of Babyl project. The success and sustainability of a digital health intervention is highly influenced by the context in which it is implemented. In low-resource settings, it is particularly important to work closely with local stakeholders from the very beginning of the design process to ensure interventions are acceptable and appropriate and that the relevant local funders and institutions will continue to support interventions if they are shown to be effective. In high-income settings, digital health may have exacerbated existing disparities in health care provisions, with those who can afford it paying for premium telemedicine consultations and remote monitoring services. However, digital health also has the potential to reduce health inequities – but only if systems are explicitly designed to address issues of equity that are prevalent in low-resource contexts. In countries with under-developed training institutions, it is necessary for digital health projects to include building local capacity in implementation planning so that local teams can take ownership following the initial development stages. In low-resource settings, where sophisticated clinical trial infrastructure would be difficult and expensive to establish, evaluations must necessarily be pragmatic and should make use of available routine data sources such as open-source national health information systems and electronic medical records where possible.

The study found that technical experts are employed to run the respective areas in the projects, that that project staff are trained in order to equip them with skills necessary to carry out M&E. This is in line with Turner (2011) who argued that M & E practical training is important in capacity building of personnel because it helps with the interaction and management of the M & E systems. M & E training starts with the understanding of the M&E Theory and ensuring that the team understands the linkages between the project Theory of change and the results framework as well as associated indicators.

The study also found that the skills and competence of the staff helps them to participate effectively in Monitoring and evaluation. This concurs with Rossi (2012) who noted unbalanced utilization of monitoring and evaluation personnel where they mainly assign tasks other than monitoring and evaluation. This creates extra burden for them to concentrate on project M & E related work. Time then becomes a challenge for them to manage the entire process completely and advocate widely for its use leading to ineffective monitoring and evaluation. Moreover, the study found that the level of education is considered in selection and recruitment of staff into M&E team and that the staff have adequate experience in monitoring and evaluation. These findings are in line with Uitto (2010) who argued that employing an M & E practice that is effective requires management to selectively appoint the right skills, enhance the capacities by further developing the skill on a regular basis. The training needs assessment should be accurate, monitored and executed diligently by the team responsible for the human capital management. Project research skills in project management encourage the team to have base data for the human capital skill retention, development and enhancement.

Table 4: Partnerships in the M&E system to sustainability of Babyl project

	SD		D		N		A		SA		Mean	St. dev
	Fi	%	fi	%	fi	%	fi	%	Fi	%		
Babyl project has established strategic partnerships that have aided in the efforts of attaining project sustainability	18	3.5	61	11.8	27	5.2	42	8.1	368	71.3	4.32	1.21

Babyl project has put in place M&E consultants who have helped in improving project sustainability	30	5.8	41	7.9	16	3.1	63	12.2	366	70.9	4.34	1.21
Babyl project has been able to develop an accurate mechanism for determining stakeholder responsibilities in M&E	52	10.1	234	45.3	108	20.9	21	4.1	101	19.6	2.78	1.28
The M&E partnership engagement framework at Babyl project has aided in improving project sustainability	93	18.0	33	6.4	21	4.1	36	7.0	333	64.5	3.94	1.60
Stakeholder analysis is done to ensure all the stakeholders are involved in project monitoring	72	14.0	61	11.8	9	1.7	44	8.5	330	64.0	3.97	1.55
Stakeholder's feedback is well captured and analyzed for implementation	32	6.2	75	14.5	2	.4	32	6.2	375	72.7	4.25	1.35
There is visible support and commitment by management towards the project performance.	19	3.7	25	4.8	5	1.0	63	12.2	404	78.3	4.57	1.00
Management involvement enhances the credibility of the evaluation process and ensures increased acceptance of the findings	22	4.3	34	6.6	38	7.4	71	13.8	351	68.0	4.35	1.13
Overall											4.07	.64

Source: Field data, October 2021

The findings in the table 4 revealed that 3.5% of respondents strongly disagreed, 11.8% of respondents disagreed and 5.2% of respondents were neutral while 8.1% of respondents agreed and the majority 71.3% of respondents strongly agreed that Babyl project has established strategic partnerships that have aided in the efforts of attaining project sustainability with very high mean score of 4.32 and standard deviation of 1.21 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 4 revealed that 5.8% of respondents strongly disagreed, 7.9% of respondents disagreed and 3.1% of respondents were neutral while 12.2% of respondents agreed and the majority 70.9% of respondents strongly agreed that Babyl project has put in place M&E consultants who have helped in improving project sustainability with very high mean score of 4.34 and standard deviation of 1.21 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 4 revealed that 4.1% of respondents agreed, 19.6% of respondents strongly agreed and 20.9% of respondents were neutral while 10.1% of respondents strongly disagreed and the majority 45.3% of respondents disagreed that Babyl project has been able to develop an accurate mechanism for determining stakeholder responsibilities in M&E with moderate mean score of 2.27 and standard deviation of 1.28 which implies that the fact appear moderate and heterogeneity responses.

The findings in the table 4 revealed that 18% of respondents strongly disagreed, 6.4% of respondents disagreed and 4.1% of respondents were neutral while 7% of respondents agreed and the majority 64.5% of respondents strongly agreed that the M&E partnership engagement framework at Babyl project has aided in improving project sustainability with high mean score of 3.94 and standard deviation of 1.60 which implies that the fact appear more and heterogeneity responses.

responses. Mobile phones are argued to be critical tools for communication for everyone, especially those with limited access to other forms of information or technology.

The findings in the table 4 revealed that 64% of respondents strongly agreed that stakeholder analysis is done to ensure all the stakeholders are involved in project monitoring with high mean score of 3.97 and standard deviation of 1.55 which implies that the fact appear more and heterogeneity responses and also 72.7% of respondents strongly agreed that stakeholders feedback is well captured and analyzed for implementation with very high mean score of 4.25 and standard deviation of 1.35 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 4 revealed that 3.7% of respondents strongly disagreed, 4.8% of respondents disagreed and 1% of respondents were neutral while 12.2% of respondents agreed and the majority 78.3% of respondents strongly agreed that there is visible support and commitment by management towards the project performance with very high mean score of 4.57 and standard deviation of 1.00 which implies that there is strong evidence of existing fact and heterogeneity responses.

The findings in the table 4 revealed that 4.3% of respondents strongly disagreed, 6.6% of respondents disagreed and 7.4% of respondents were neutral while 13.8% of respondents agreed and the majority 68% of respondents strongly agreed that management involvement enhances the credibility of the evaluation process and ensures increased acceptance of the findings with very high mean score of 4.35 and standard deviation of 1.13 which implies that there is strong evidence of existing fact and heterogeneity responses.

Briefly, the overall mean of respondents on the statements regarding to partnerships in the M&E system in Babyl was at high extent with the average mean of 4.07, which is interpreted as a high mean, and the standard deviation of 0.64, which implies that there is strong evidence of existing of fact and heterogeneity response that partnerships in the M&E system used by Babyl project was at high extent in relation to sustainability of Babyl project. From the above research findings show that to carry out the tasks, the project partners must set up a management structure and appoint a project manager whose main task is to manage the project effectively. The project plan establishes the scope, aims, objectives, and method that will be used for the project, as well as the way in which the project activities will be performed, the roles and responsibilities of those involved, and the time and cost estimates. It can thus serve as a basis for the project manager and project team to monitor the project's progress and to make decisions. These findings are in the line with Tuyiramy and Mulyungi(2017)., found that Digital interventions have significant potential to benefit groups who are not accessing or are not able to access traditional (face-to-face clinic-oriented) health services or health information. It is important to maintain an open dialog to establish and share institutional knowledge about the process of digital intervention adaptation and implementation.

Table 5: Communication in M& E to sustainability of health project

	SD		D		N		A		SA		Mean	St. dev
	Fi	%	fi	%	fi	%	fi	%	Fi	%		
Babyl project has put in place appropriate periods during which project implementation occurs and this has improved the organization's push for project sustainability	11	2.1	29	5.6	28	5.4	98	19.0	350	67.8	4.45	.98
The nature and availability of M&E information has influenced Babyl project 's push for project sustainability	20	3.9	33	6.4	21	4.1	20	3.9	422	81.8	4.53	1.09

The incorporation of social media communication channels has improved the organization's efforts of attaining project sustainability	14	2.7	61	11.8	7	1.4	53	10.3	381	73.8	4.41	1.14
Babyl project has put in place appropriate communication and reporting strategies	10	1.9	24	4.7	0	.0	49	9.5	433	83.9	4.69	.85
Communication strategy is developed to address the flow of information	9	1.7	40	7.8	5	1.0	45	8.7	417	80.8	4.59	.97
Management participation helps produce effective communication to meet the project objectives.	2	.4	16	3.1	14	2.7	125	24.2	359	69.6	4.59	.73
Overall											4.54	.54

Source: Field data, October 2021

The study sought to determine how various forms of communication in M& E affect sustainability of Babyl project. The study findings on Table 5 revealed that 67.8% of respondents agreed (mean= 4.45: std dev = 0.98) that Babyl project has put in place appropriate periods during which project implementation occurs and this has improved the organization's push for project sustainability which implies that the fact appear more and heterogeneity responses; 81.8% of respondents agreed (mean= 4.53: std dev = 1.09) that the nature and availability of M&E information has influenced Babyl project 's push for project sustainability which implies that there is strong evidence of existing fact and heterogeneity responses; 73.8% of respondents strongly agreed that the incorporation of social media communication channels has improved the organization's efforts of attaining project sustainability with very high mean score of 4.41 and St. Dev= 1.14) which implies that that there is strong evidence of existing fact and heterogeneity responses;

Moreover 83.9% of respondents strongly agreed that Babyl project has put in place appropriate communication and reporting strategies with very high mean score of 4.69 and St. Dev= 0.85) which implies that that there is strong evidence of existing fact and heterogeneity responses; 80.8% of respondents strongly agreed that communication strategy is developed to address the flow of information with very high mean score of 4.59 and St. Dev= 0.97) which implies that that the fact appear more and heterogeneity responses and 69.6% of respondents strongly agreed that management participation helps produce effective communication to meet the project objectives with very high mean score of 4.59 and St. Dev= 0.73) which implies that that there is strong evidence of existing fact and heterogeneity responses.

Briefly, the overall mean of respondents on the statements regarding to communication in M& E system in Babyl was at high extent with the average mean of 4.54, which is interpreted as a high mean, and the standard deviation of 0.54, which implies that there is strong evidence of existing of fact and heterogeneity response that communication in M& E system used by Babyl project was at high extent in relation to sustainability of Babyl project. These findings were same as those of Bray (2010), who reports there is increasingly awareness of up-to-date information about communication advocacy as a way of ensuring return on their investment. Engaging in good communication strategies in the enterprises outlines programmatic outcomes on women agricultural projects. In support of the study findings, Chao and Kavadias (2008), elucidated that low performers can clearly benefit from improving their communications which will in turn enable them to realize successful projects. Moreover, Crawford and Bryce (2018) noted that high performers are able to optimize outcomes by relaying information to project teams frequently and effectively.

4.2 Inferential statistics

Inferential statistics such as correlation and regression analyses were performed and conducted to show the existing relationships between dependent and independent variables of the study. Since

the analyses were specific to each and every variable in the data set; they were first preceded by model fitness test to indicate the overall contribution of the independent variables on the dependent variable.

Table 6: Correlations analysis

		X ₁	X ₂	X ₃	X ₄	Y
M&E plan process (x1)	Pearson Correlation	1				
Human resource capacity in M&E(x2)	Pearson Correlation	.437**	1			
Partnerships in the M&E system(x3)	Pearson Correlation	.460**	.211**	1		
Communication in M& E (x4)	Pearson Correlation	.414**	.468**	.300**	1	
Sustainability of BABYL project(Y)	Pearson Correlation	.523**	.592**	.396**	.706**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

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

Source: Field data, October 2021

The finding in table 6 indicates that the correlation between M&E plan process and sustainability of BABYL project was 0.523** with a corresponding p value of 0.000 <0.01 level of significant. The correlation coefficient was therefore significant and positive implying that if M&E plan process and elements increase the sustainability of Babyl project.

Table 7 shows that there is a significant moderate positive relationship exists between human resource capacity in M&E and sustainability of Babyl project at ($r = 0.592^{**}$, p-value 0.000<0.01), which implies that an increase of human resource capacity in M&E leading to an increase of Sustainability of Babyl project.

Table 7 shows that there is a significant weak positive relationship exists between partnerships in the M&E system and sustainability of Babyl project at ($r = 0.396^{**}$, p-value 0.000<0.01), which implies that an increase of partnerships in the M&E system leading to an increase of Sustainability of Babyl project.

The finding in table 7 indicates that there is high significant correlation between communication advocacy and sustainability of Babyl project at $r = 0.706^{**}$ with a corresponding p value of 0.000<0.01 level of significant. The correlation coefficient was therefore significant and positive implying that if communication advocacy elements increase sustainability of BABYL project. The findings concur with Chen (2008), findings who also revealed that effective communication strategies influence the sustainability of women based agricultural projects.

Table 7: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.016	.129		7.852	0.000
	M&E plan process	0.134	.031	.144	4.295	0.000
	Human resource capacity in M&E	0.228	.026	.279	8.710	0.000
	Partnerships in the M&E system	0.081	.020	.127	4.131	0.000
	Communication in M& E	0.360	.024	.477	14.921	0.000

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	Partnerships in the M&E system	0.081	.020	.127	4.131	0.000
	Communication in M& E	0.360	.024	.477	14.921	0.000

a. Dependent Variable: Sustainability of Babyl project

Source: Field data, October 2021

From the research findings, the following values were obtained; $\beta_0 = 1.016$, $\beta_1 = 0.134$, $\beta_2 = 0.228$, $\beta_3 = 0.081$ and $\beta_4 = 0.360$. The regression model can therefore be expressed as follows:

. The regression model can therefore be expressed as follows:

$$\text{Sustainability of Babyl project} = 1.016 + 0.134X_1 + 0.228X_2 + 0.081X_3 + 0.360X_4$$

The regression equation above has established that taking all factors into account (communication in M& E, partnerships in the M&E system, human resource capacity in M&E and M&E plan process) constant at zero. Sustainability of Babyl project will be 1.016.

The regression results revealed that M&E plan process has significance positive influence on sustainability of Babyl project as indicated by $\beta_1 = 0.134$, $p\text{-value} = 0.000 < 0.05$, $t = 4.295$. This implies that taking all other independent variables at zero, a unit increase in M&E plan process would lead to 0.134 increase in the sustainability of Babyl project. Therefore, the study rejected the null hypotheses that stated that there is no significant influence of M&E plan process on sustainability of Babyl project. These findings are in agreement with James (2001) on program evaluation standards that evaluation planning budget could certainly be more carefully estimated and actual expenditure on the evaluation more carefully monitored. This then supports the cause for donors' keen interest with the budgetary allocation. The findings showed that M&E has separate budgetary allocation in agreement with Chaplowe (2008) but the funds were not sufficient to carry out planned activities. The amount allocated was not between 5-10% of the projects budget and the funds were not used specifically for M&E activities as Kelly and Magongo (2004) recommends.

The regression results revealed that human resource capacity in M&E has significance positive influence on sustainability of Babyl project as indicated by $\beta_2 = 0.228$, $p\text{-value} = 0.000 < 0.05$, $t = 8.710$. This implies that taking all other independent variables at zero, a unit increase in human resource capacity in M&E would lead to 0.228 increase in the sustainability of Babyl project. Therefore, the study rejected the null hypotheses that stated that there is no significant influence of human resource capacity in M&E on sustainability of Babyl project. These results were consistent with Njeri and Omwenga(2019), found that human capacity for M&E had significant influence on the sustainable projects at national aids control council and also were supported by those of Opano *et al.* (2015), who reported that it is noted that the effective sustainability of women based agricultural projects require personnel with the required knowledge and expertise skills.

The regression results revealed that partnerships in the M&E system have significance positive influence on sustainability of Babyl project as indicated by $\beta_3 = 0.081$, $p\text{-value} = 0.000 < 0.05$, $t = 4.131$. This implies that taking all other independent variables at zero, a unit increase in partnerships in the M&E system would lead to 0.081 increase in the sustainability of Babyl project. Therefore, the study rejected the null hypotheses that stated that there is no significant influence of partnerships in the M&E system on sustainability of Babyl project

The regression results revealed that communication in M& E has significance positive influence on sustainability of Babyl project as indicated by $\beta_4 = 0.360$, $p\text{-value} = 0.000 < 0.05$, $t = 14.921$. This implies that taking all other independent variables at zero, a unit increase in communication in M& E would lead to 0.360 increase in the sustainability of Babyl project. Therefore, the study rejected the null hypotheses that stated that there is no significant influence of communication in M& E on sustainability of Babyl project. These findings were Similarly to Milton (2003) argued that PMO directors and senior project leaders need to take ownership and better communicate the strategic and business benefits to realize more successful projects.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study concluded that monitoring and evaluation planning affects sustainability of Babyl project significantly. The study revealed that M&E Planning ensures effective tracking of progress of the projects and that there is a monitoring and evaluation plan which is up to date. In addition, the study deduced that the M&E planning includes description of the projects covering both the problem statement and framework(s) and the up-to-date monitoring and evaluation plan indicates persons responsible for each activity, including any M&E-related roles for the program/technical staff and implementing partners.

It was concluded that staff capacity influence sustainability of Babyl project significantly. The study deduced that technical experts are employed to run the respective areas in the projects, that that project staff are trained in order to equip them with skills necessary to carry out M&E and that that the skills and competence of the staff helps them to participate effectively in Monitoring and evaluation. Moreover, the study found that the level of education is considered in selection and recruitment of staff into M&E team. Moreover, M & E human capacity is essential in attaining the sustainability of women based agricultural projects. Sustainability of Babyl project is attained when training has been made on monitoring and evaluation use and implementation. The ministry of health officials together with management of sustainability of Babyl project from training programs on M& E.

The study concluded that partnerships in the M&E Systems affect sustainability of Babyl project significantly. The study has established that partnerships in M&E through stakeholder review meetings to be provided with information on the progress of work regarding projects and programs. Meanwhile effective participation of stakeholders in M&E of projects and programs can improve transparency, accountability, project and program sustainability and ensure positive community level stakeholder attitude to projects. This can be achieved by increasing the level of participation of key stakeholders beyond information giving and consultation.

Clearly, M&E communication advocacy positively influences the sustainability of women based agricultural projects. The findings show that women based agricultural projects that are high performers are without doubt effective communicators. Placing adequate importance on effectively communicating critical project information enables the agricultural projects that are women based to accomplish projects with the required timeframe while at the same time properly utilizing the project resources. The results suggest M&E communication advocacy is a critical component in attaining project sustainability of women based agricultural projects. All the indicators of communication in M&E appropriate periods during which project implementation occurs, the nature and availability of M&E information, appropriate communication and reporting strategies, and social media communication are crucial for the determination of project sustainability.

5.2 Recommendations

The study recommends that all relevant stakeholders' interests' impact and influence should be enhanced in planning. As a result, it is utmost important have a monitoring plan that is set based on acceptable best practices in order to provide 'evidence based' project outcomes. Employees need to be well trained on selective monitoring planning practices and network diagrams and frameworks need to be made use of scheduling organization projects.

The study recommended that organizations need to enhance their human capacity for M&E by improving their recruitment policies for M&E through research into the appropriate skills requirements by benchmarking on industrial leaders.

The researcher further recommends that the government of the Republic of Rwanda should help the Government project to know the benefits of monitoring and evaluation.

The study recommends that the Babyl project should enhance effective feedback in order to improving development policies, programs and practices by providing policymakers with the relevant evaluation information for making informed decisions.

5.3 Suggestion for further researchers

The study determined that more research needs to conduct on the linkage between M&E and project sustainability since the vast majority of work on M&E has been situated on other dependent variables. Additionally, the subject of M&E has attracted more institutional researchers than individual ones which illustrated a gap that needs to be addressed through the encouragement of more individual and independent researchers to get scholarships to address this subject.

The study recommend that a further study should be carried out to determine challenges affecting training of project teams during monitoring and evaluation and find out whether training of project teams enhance project monitoring and evaluation. The researcher suggested that in future researchers should look into other factors necessary for the sustainability of projects. Researchers in future should look into other areas through which performance of projects can be enhanced other than through leadership elements.

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