



**MONITORING AND EVALUATION PRACTICES AND IMPLEMENTATION OF INFORMATION TECHNOLOGY PROJECTS IN TIER ONE COMMERCIAL BANKS IN NAIROBI CITY COUNTY, KENYA**

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**ABSTRACT**

The concept of project monitoring and evaluation (M&E) has continued to evolve in the last decades which has reflected the paradigm shift as pertains to how projects are managed. The general objective of the study was to determine the effects of monitoring and evaluation practices on implementation of information technology projects in tier one commercial banks in Nairobi City County, Kenya. The specific objectives were to examine the effect of budgeting and monitoring and evaluation staff capacity building on implementation of information technology projects in tier one commercial banks in Nairobi City County, Kenya. The study employed a descriptive research design. The study targeted 307 IT projects, and the project team members were the unit of observation. Stratified random sampling technique was used to sample of 174 respondents determined using Yamane formula. Questionnaires were used to collect data. A pilot was conducted with 17 respondents. Construct and content validity were used. Cronbach's coefficient alpha was used to test validity. Data was collected through drop and pick method. Data was analyzed using SPSS Version 28. Both descriptive and inferential statistics will be use. Data was tabulated. Construct validity was demonstrated with average variance extracted (AVE) values exceeding the threshold of 0.5 for all variables. The overall combined scale reliability was 0.838 across 31 items, underscoring the robustness of the instrument. These findings confirm that the questionnaire is both valid and reliable, making it a suitable tool for the main study. Findings show that; a strong significant relationship between M&E budgeting and implementation of IT projects in banking sector is ( $r= 0.725$ ,  $p\text{-value}= 0.000$ ), and a strong significant relationship between monitoring and evaluation staff capacity building and implementation of IT projects in banking sector is ( $r= 0.501$ ,  $p\text{-value}= 0.000$ ). The study recommends that there should be appropriate and timely budget allocation for M&E information communication projects in the banks. The banks should set a budget to evaluate the cost of projects M&E as well as involve budgeting professionals in ascertaining the most appropriate budget allocations and disbursements during IT projects. The project managers should be allocated a competent team leader that will utilize their expertise in directing the project to ensure the project is successfully delivered to its owners.

**Key Words:** Monitoring and Evaluation Practices, Implementation of Information Technology Projects, Tier One Commercial Banks, Budgeting, Monitoring and Evaluation Staff Capacity Building

## Background of the Study

Monitoring and evaluation, which is a crucial phase of the project cycle, has been used globally as a tool in project management. Monitoring involves continuous assessment of a project or program with respect to already planned or predefined schedule. Such essential tool offers continuous feedback on the implementation of the project or the program while identifying the successes and potential problems that help in decision making for the project or program managers. Monitoring assesses the different stages of the result levels of a project or a program (Biwott, Egesah, & Ngeywo, 2017).

Monitoring and evaluation complement project management practices by integrating the tracking of activities and ongoing data collection through regular feedback loops into the project implementation cycle. Monitoring and evaluation when carried out correctly and at the right time and place are two of the most important aspects of ensuring the success of many projects. Unfortunately, these two although known to many project developers tend to be given little priority and as a result they are done simply for the sake of fulfilling the requirements of most funding agencies without the intention of using them as a mechanism of ensuring the success of the projects (Irfan, Khan, & Hassan, 2021).

One importance aspect of ensuring success in management of project is ensuring quality is achieved in the entire process (Kerzner, 2018). This can be attained through identification and elimination of facets that lead to poor project performance through the process of Monitoring and Evaluation. As a result, the past decades have seen monitoring and evaluation practices becoming mainstay and major processes for both government and private enterprises. The entities have refined and utilized the practices in comprehension of issues outside their control, but which have a substantial bearing on their survival and success within their contained resources and competencies for fostering their competitive positions (Larson, & Gray, 2015).

## Statement of the Problem

The banking business relies heavily on information technology (IT) to build relationships with its stakeholders and remain competitive through a wide range of new products. Despite this reliance, the successful implementation of IT projects in the Kenyan banking sector remains a significant challenge. Starting an IT project in banking is complex and fraught with a high failure rate. For instance, Arumugam (2017) likens major initiatives such as replacing the core banking system to changing an airplane's engine while it is in flight, highlighting the difficulty and risk involved.

According to a report by the Kenya Bankers Association (KBA, 2022), over 60% of IT projects in the banking sector fail to meet their targeted goals due to ineffective monitoring and evaluation (M&E) practices, resulting in projects being delivered over budget, behind schedule, and with compromised quality and performance. This is consistent with findings by Okong'o (2022), who reported that 56% of commercial banks in Nairobi City County, Kenya have experienced more than two failed IT projects, primarily due to the inability to meet originally set targets, and failures to complete projects on time and within budget.

Mukhongo (2020) identified several factors contributing to the failure of M&E practices in commercial banks, including misuse of resources, poor planning, conflicts of interest, and poor communication. As a result, many banks fail to meet stakeholders' needs despite having M&E practices in place. Karingithi (2018) estimated that 25% of crucial banking system changes fail without any outcomes, and 50% do not achieve anticipated objectives, with costs and implementation times often doubling or tripling. Further statistics highlight the severity of the issue. According to a study by PWC (2021), only 35% of IT projects in the banking sector globally are considered fully successful. In Kenya, the situation is even more dire, with less than 30% of IT projects being completed successfully (Central Bank of Kenya, 2021). The

same study indicates that ineffective M&E practices contribute to more than 50% of project failures in the banking sector.

Empirical studies have highlighted the significant impact of monitoring and evaluation (M&E) activities on project implementation across various sectors. Murugi (2020) found that M&E activities greatly influence the successful implementation of NGO projects in Kenya. Similarly, Adugna (2021) reported that in the banking sector, proper planning and team capacity building, disbursing finances for M&E, clarity of M&E tools and schedules, and routinely gathering and analyzing M&E information all contribute to enhanced project implementation. Additionally, Kinyua and Njoroge (2021) found that effective M&E practices enable project managers to achieve health project goals in Nyeri County. Despite these findings, there is a notable gap in the literature regarding the effects of M&E practices on the implementation of information technology projects specifically within commercial banks in Nairobi City County, Kenya. This study sought to fill this gap by establishing the effects of M&E practices on the implementation of IT projects among commercial banks in Nairobi City County, Kenya, aiming to provide insights and strategies to improve project success rates in this critical sector.

## **Objectives of the Study**

### **General Objective**

To determine the effects of monitoring and evaluation practices on implementation of information technology projects in tier one commercial banks in Nairobi City County, Kenya

### **Specific Objectives**

The study was guided by the following specific objectives.

- i. To establish the effect of monitoring and evaluation budgeting implementation of information technology projects in tier one commercial banks in Nairobi City County, Kenya.
- ii. To establish the effect of monitoring and evaluation staff capacity building on implementation of information technology projects in tier one commercial banks in Nairobi City County, Kenya.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Resource Allocation Theory**

The resource allocation theory was created by Hackman (1985). According to the theory, a unit's importance in an organization's workflow is primarily related to the mission of the organization. While assigning resources, task is prioritised over workflow. Any function inside an organization receives resources based on their importance to individuals in positions of leadership. Given that resources are finite; an organization's rationality of choice affects which function will receive funding. The majority of the time, project managers make decisions regarding how to allocate resources inside projects with the assistance of middle-level management (Bower, 2017).

Physical and human resources are needed for monitoring and evaluation practice in order to run its operations. M&E is still a relatively new technique in NGOs, and it is thought to have only a little impact on project management. Budgets for M&E are frequently impacted by resource reallocation, despite campaigning and strict controls implemented by project funders. The idea of resource allocation is pertinent to M&E since it necessitates funding for employee compensation, staff capacity building, and allocating cash for the execution of routine M&E tasks that are periodically scheduled labour.

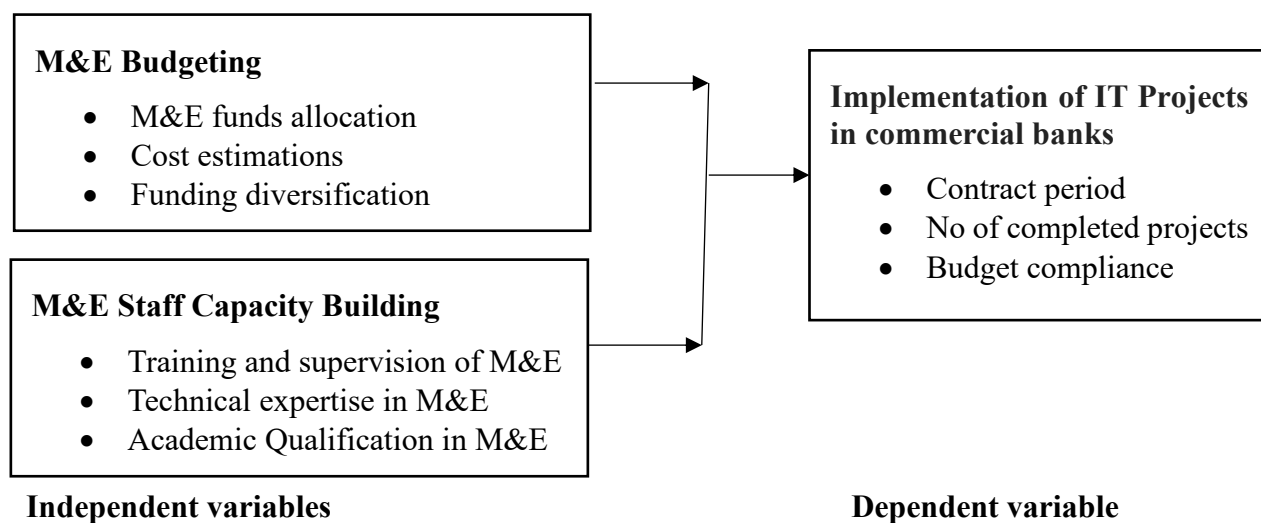
#### **Human Capital Theory**

The term human capital (HC) was developed by (Schultz, 1961). HC focuses on the knowhow and capabilities of the staff working in project. According to Howard, Richard, and Fermin

(2013), human capital is the project team productivity, and their potential in project implementation. Staff potential is essential since it shows that they may develop their abilities and skills over time. Human capital is directly valuable in the production process since it helps to deal with ever changing environment which the staff must adopt. Monitoring and evaluation is a dynamic activity that necessitates a constantly changing set of abilities from those who practice it. The theory assumes that training is targeted toward the staff through change management to increase the organization's production levels, therefore recouping the training expenditure. Any project manager who prioritizes project team capacity building is more likely to increase its mastery of their obligations, functions, and responsibilities, consequently boosting M&E main functions. This is important for project team members to know the results to report on and what is required to enable proper monitoring and reporting that translates into the quality of project desired.

### Conceptual Framework

A conceptual framework presents the major variables, factors, or concepts that have been or must be investigated in the research graphically (Miles, Huberman, & Saldana, 2013). The conceptual framework in Figure 2.1 demonstrates how the study variables. The independent variables are M&E budgeting and staff capacity building. The dependent variable is Information Technology implementation in the banks. These variables and relationships are presented in Figure 2.1.



**Figure 2. 1: Conceptual Framework**

### Monitoring and Evaluation Budget

The process of budgetary allocation involves deciding which revenues will be used to accomplish certain M & E goals and objectives. Budgetary or fiscal allocation refers to the supply of financial resources to support the monitoring and evaluation activities of a program or project (Caffrey & Munro, 2017). It is crucial for the successful implementation of M & E to allocate clear and sufficient financial resources. Therefore, it is crucial to use the right budgeting techniques when allocating enough money for M & E. The project's scale and intricacy must be taken into account by the researcher.

Monitoring and evaluation budgeting addresses several concerns such as the effectiveness of the project in meeting objectives and targets. It addresses the efficiency of the project or budget and whether it is being implemented efficiently. It also addresses the impact and the relevance of the budget to the project. The monitoring and evaluation budget looks at the objectives and targets including input, output, outcomes, activity, and impacts. Budgeting attains operation

efficiency, fiscal discipline, and allocative efficiency. A well-thought M&E can address shortcomings that come with budgeting (Kateryna, Chentsov, Oleksandr, & Vitaliy, 2020).

### **M&E Staff Capacity Building**

Capacity building is described as the process of strengthening and developing abilities, skills, resources, and processes that communities and organizations need to survive in the world. It involves performing tasks to change attitudes and mindsets. Staff capacity building ensures that managers get the best from their employees by addressing employee work performance challenges. It ensures that there is coaching and consultation to facilitate leadership capacity (Frey, 2018). Rahmawati and Suwaji (2022) state that capacity building is facilitated by providing necessary training on resilience in conducting effective operations. Capacity building ensures the creation of clear descriptions that facilitate effective hiring and clarify work responsibilities. Effective capacity building in Monitoring and Evaluation encompasses a multifaceted approach that includes training, knowledge transfer, organizational strengthening, resource allocation, data quality assurance, continuous learning, and robust monitoring and evaluation. These key components work together to empower professionals and organizations in the M&E sector, enabling them to harness the full potential of data-driven decision-making and ultimately drive improved program performance and outcomes. Understanding these components is vital for anyone seeking to enhance their capacity in M&E.

Practical M&E training is essential for increasing human capability since it assists in the interactions and management of M&E systems. M&E training begins with an understanding of M&E theory and establishing that the team understands the links between the project theory of change and the results framework, and the indicators that go along with it (Rossi, 2022). Staff technical knowledge on M&E will influence the planning, data handling, the quality of data and reporting which will subsequently affect decision making by the Governments. This makes staff technical expertise an integral variable in the study. Wu (2019) recommends training project teams to reduce delays and enhance optimal use of resources, such as assigning complex tasks like traffic management to trained workers with the assistance of novice workers.

### **Empirical Literature**

#### **Monitoring and Evaluation Budget and Project Implementation**

Klaus- Rosinka and Iwko (2021) assessed the role of stakeholder management in project success and sustainability in Poland. The researcher adopted a qualitative research design on 50 respondents. Findings established a low maturity level in construction companies handling project stakeholders. There was also a lack of stakeholder management plans that could aid the project's success. Shaukat et al. (2022) evaluated relationship between project engagement and project success in Pakistan. Results revealed that project budgeting positively impacts project success.

The efficiency of M&E systems in Ethiopian agricultural development initiatives was evaluated by Wolde (2019). The sample was 88 respondents. The results showed that beneficiaries were not adequately involved in M&E processes and that budget for M&E was improperly allocated. The report advised involving M & E staff in project planning, budgeting, and capacity building. M&E procedures on effectiveness of NGOs projects in Rwanda were evaluated by Murorunkwere and Munene (2022). The study's conclusions showed that the level of M&E budgeting had an effect on the project outcome.

Additionally, Agutu (2015) assessed the elements that affect the application of M&E systems in school diet programs in Nairobi County. The study's conclusions showed that implementation of M&E programs is moderately influenced by budget and financing allocation. Additionally, efficient financial management guarantees optimum resource allocation for M&E activities and customer satisfaction with service delivery. The study also suggested that firms create an M&E department in order to improve service delivery. Kithinji,

Gakuu, and Kidombo (2017) sought to ascertain the relationship between allocating adequate M&E funds and project results among community-oriented groups in Meru County, Kenya. The researchers found a link between resource allocation and high M & E outcomes. In essence, the scholars used the M & E outcomes more as resources were allotted to projects.

Mbogo and Mirara (2022) set out to look into how financial allocation affected the monitoring and evaluation of project planning for humanitarian aid. A descriptive survey was used in this investigation. In a survey of 46 International Rescue Committee staff, information was gathered via questionnaires. The findings showed that funds disbursement for M&E activities had a favourable influence on the formulation of humanitarian project plans. In Kenya's Uasin Gishu County, Omolo (2016) assessed effect of M&E approach on physical infrastructure projects. A descriptive research approach and a sample size of 162 participants were used in the study. Survey's results showed that a sizable proportion of stakeholders had an impact on decision-making, tendering, and budgeting.

### **M&E Staff Capacity Building and Project Implementation**

Isiaka et al. (2019) assessed Tertiary Education Trust Fund intervention on academic staff capacity building at Lagos State University, Nigeria. The study adopted the descriptive survey research design on 196 respondents. The findings of the study revealed that the fund intervention for academic staff capacity building was important. The study recommended that donor agencies and philanthropic individuals should be actively engaged in funding and supporting education projects to empower staff capacity building. Appiah (2020) examined the impact of monitoring and evaluation on learning and performance in the Kwadaso district in Ghana. The study used qualitative and quantitative on 87 teachers and head teachers and 485 pupils. The study established that there was a lack of training facilities for teachers and head teachers to equip them with skills to manage monitoring and evaluation. The study recommended that schools should prepare a well-planned budget to cater to M & E in schools.

Mzengia (2021) examined the practices and challenges of the Monitoring and Evaluation system in the local NGOs in Addis Ababa, Ethiopia. The study implemented a descriptive design with a qualitative approach on 12 respondents. The findings of the study showcased that the M&E practice of the NGOs is hindered by the absence of sufficient and skilled M&E expertise, absence of capacity-building training, and non-involvement of stakeholders.

Kaberia (2019) evaluated the performance of projects linked to Faith-based organizations in Meru North. The study used a descriptive research design with a sample of 186 respondents. The study found that technical experts are hired to monitor projects, and project staff is trained with the skills necessary to carry out M&E. The study recommended that organizations should consider stakeholders' influence and impact during the planning. The study recommended that adequate training be implemented on the staff to enable effective monitoring and evaluation.

Gatimu, Gakuu, and Ndiritu (2021) sought to establish the relationship between monitoring and evaluation practices and performance of County Maternal Health programmes in Kenya. The study adopted a descriptive survey research design. To obtain 282 respondents, stratified random sampling was used. A self-administered structured questionnaire was the study's research instrument. Findings showed that capacity building for M&E have a statistically significant impact on the performance of Kenya's County Maternal Health Programs. The study suggested that human resources issues such as workers charged with monitoring and evaluation ought to have technical capabilities, and roles and duties of monitoring and evaluation personnel should be outlined at the start of project

Ngigi (2020) examined the effects of monitoring and evaluation practices on project implementation in ACTED Kenya organization. Primary data was collected using a structured questionnaire. Results showed that capacity building and information dissemination affects project implementation in ACTED Kenya. The study showed that capacity building is a great determinant in project implementation in ACTED Kenya, it is a social process that builds the

organization's future objectives and has enforced development of NGOs projects in Kenya. Capacity building has also led the staff to acquire specific skills and has brought international development where the contents of the trainings in regard to the effectiveness of successful implementation of projects in ACTED Kenya.

Wambua (2019) sought to investigate the effect of Monitoring and Evaluation Practices on performance of county funded education projects in Makueni County. The research design used is descriptive survey. The study targeted 31 county funded education projects in Makueni County. A semi-structured questionnaire was used to collect primary data. Findings showed that availability of skilled personnel is vital for performance of county education funded projects. Number of times training of staff on new developments in M&E the better the performance of the project. Achievements of goals is highly depended on trainings and know how on how to monitor and evaluate a project. The findings also showed a positive correlation between M&E training and Project performance.

### **RESEARCH METHODOLOGY**

A descriptive research design was used for this study. According to Central Bank of Kenya [CBK] (2024), there are a total of 10 tier one commercial banks in Nairobi, Kenya. These banks therefore formed the unit of analysis. From data collected from the banks, there are a total of 506 information technology projects carried out by 10 Tier one commercial banks. Therefore, the unit of observation was 307 respondents who were drawn from the projects. This study adopted Yamane (1967) simplified formula to calculate the sample size. Using this formula, a sample of 174 respondents selected. The selected sample represented 56.7% of the target population. Project team members were the selected responders. The study employed a stratified random sample technique where the strata are the various departments. As a result, 174 respondents took part in the study.

The researcher collected primary data using a questionnaire containing both structured and unstructured questions. Data was analyzed using Statistical Packages for Social Sciences (SPSS Version 28). Analysis is a closely connected action carried out to summarize the information gathered and arrange it in a way that provides answers to the queries (Cuschieri, 2021). Quantitative data was analyzed using descriptive and inferential analysis methods. The descriptive analysis also includes averages, frequencies, and percentages. Correlation and regression analysis was used to determine relationship between study variables.

### **RESEARCH FINDINGS AND DISCUSSIONS**

A total of 157 responders were chosen from the banks IT project team. After questionnaires were handed out, 128 of them were completed, amounting to a 81.5% reply rate. Daniel (2022) states that replies with a percentage of 50% are suitable for reporting and analysis, 60% is excellent, and 70% and higher is noteworthy. Aydın and Artar (2021) claim that while conducting cross-sectional studies of survey design at the individual level, a 50% response rate is suitable. Because of this, the study's response rate was enough for analyzing and interpreting it.

#### **Descriptive Statistics**

This segment describes descriptive statistics outcomes of reactions on monitoring and evaluation practices. They were segmented to consist of budgeting and monitoring and evaluation staff capacity building. Questionnaire items were measured on a 5-point Likert type scale, ranging from 1 = Strongly Disagree; 2 = Disagree; NS=Not Sure; 4 = Agree; 5= Strongly Agree. Reactions were analyzed using mean scores and standard deviation. The mean was interpreted as 1 = 1.00-1.80; 2 = 1.81-2.60; 3 = 2.61-3.20; 4 = 3.21-4.20; 5= 4.21-5.00. A standard deviation value of less than 2 was suitable meaning responses were closely clustered around the mean.

## Monitoring and Evaluation Budgeting

The first objective aimed at establishing the effect of monitoring and evaluation budgeting implementation of information technology projects in commercial banks in Nairobi City County, Kenya. Respondents were asked to tick on the extent to which they agree/disagree with statements related to monitoring and evaluation budgeting. Findings are presented in Table 4.5.

**Table 1: Monitoring and Evaluation Budgeting**

*Key: SD=Strongly disagree, D=Disagree, NS=Not Sure, A=Agree, SA= Strongly agree, M=Mean, Std dev.=Standard Deviation*

| Statements   | SD<br>% | D<br>% | N<br>% | A<br>% | SA<br>% | M           | Std.         |
|--|---------|--------|--------|--------|---------|-------------|--------------|
| Project budgets typically include a clear and sufficient allocation for M&E activities.                        | 61.7    | 25.0   | 1.6    | 4.7    | 7.0     | 1.70        | 1.173        |
| Most of the time, money for M &E is used for the intended purpose.   | 4.7     | 1.6    | 6.3    | 42.2   | 45.3    | 4.22        | 0.980        |
| When planning for projects, a reasonable M&E estimation is typically made.                                     | 5.5     | 14.1   | 3.1    | 36.7   | 40.6    | 4.07        | 1.224        |
| The actual budget deviates significantly from the predicted budget.  | 4.7     | 2.3    | 5.5    | 9.4    | 78.1    | 4.54        | 1.034        |
| For M&E procedures, a separate budget line has been set aside.   | 5.5     | 12.5   | 5.5    | 32.8   | 43.8    | 3.97        | 1.223        |
| The monitoring and assessment unit's budgeting decisions are made independently.                               | 9.4     | 8.6    | 1.6    | 7.8    | 72.7    | 3.74        | 1.370        |
| The success of the project has been attributed to M&E's performance in terms of budget, schedule, and quality. | 11.7    | 21.9   | 1.6    | 3.9    | 60.9    | 3.80        | 1.593        |
| <b>Average</b>   |         |        |        |        |         | <b>3.72</b> | <b>1.228</b> |

**N=128**

Findings show that the project budgets do not include a clear and sufficient allocation for M&E activities (M=1.70, Std.=1.173). This is supported by 61.7% of respondents who strongly disagreed with the statement implying the resources allocated for M&E are inadequate. Most of the time, money for M&E is used for the intended purpose (M=4.22, Std.=0.980). This is supported by 45.3% of respondents who strongly agreed with the statement implying M&E resources are used effectively and there may be less chances of project funds embezzlement. A reasonable M&E estimation is typically made when planning for projects, (M=4.07, Std.=1.224). This is supported by 340.6% of respondents who strongly agreed with the statement indicating that there is realistic estimation of M&E costs. Although the budget is estimated, the estimates are not accurate since the actual budget deviates significantly from the predicted budget (M=4.54, Std.=1.034). This is supported by 78.1% of respondents who strongly agreed with the statement. A separate budget line has been set aside for M&E procedures (M=3.97, Std.=1.223). This is supported by 43.8% of respondents who strongly agreed with the statement implying the banks allocates a budget for M&E.

The monitoring and assessment unit's budgeting decisions are made independently (M=3.74, Std.=1.370). This is supported by 72.7% of respondents who strongly agreed with the statement implying the M&E team make budgeting decisions independently which implies that the team is at liberty to make decisions on budgetary allocation for M&E. The success of the project has been attributed to M&E's performance in terms of budget, schedule, and quality (M=3.80, Std.=1.593). This is supported by 60.9% of respondents who strongly agreed with the statement implying budgeting is a key determinant of M&E success. The average mean of



3.72 and standard deviation of 1.228 show that majority of the respondents agreed with the statements on M&E budgeting in bank IT projects. Results are in consistent with Wolde (2019) that budget for M&E was improperly allocated. Mbogo and Mirara (2022) showed that funds disbursement for M&E activities had a favourable influence on the formulation of humanitarian project plans.

### Monitoring and evaluation staff capacity building

To establish the effect of monitoring and evaluation staff capacity building on implementation of information technology projects in commercial banks in Nairobi City County, Kenya. Respondents were asked to tick on the extent to which they agree/disagree with statements related to monitoring and evaluation staff capacity building. Findings are presented in Table 2.

**Table 2: Monitoring and Evaluation Staff Capacity Building**

*Key: SD=Strongly disagree, D=Disagree, NS=Not Sure, A=Agree, SA= Strongly agree, M=Mean, Std dev.=Standard Deviation*

| Statements   | SD<br>% | D<br>% | N<br>% | A<br>% | SA<br>% | M           | Std.         |
|--|---------|--------|--------|--------|---------|-------------|--------------|
| Staff capacity needs assessments are conducted to make sure that correct skills are gained to manage M&E activities. | 60.2    | 10.9   | 3.1    | 10.9   | 14.8    | 2.09        | 1.554        |
| Project staff are trained in order to equip them with technical expertise necessary to carry out M and E             | 19.5    | 56.3   | 1.6    | 14.8   | 7.8     | 1.95        | 1.497        |
| The project identifies skilled personnel to carry out the monitoring and evaluation functions                        | 13.3    | 3.9    | 6.3    | 32.0   | 44.5    | 3.91        | 1.366        |
| Object training on specific areas of M&E is important in ensuring attainment of the expected project outcomes        | 7.8     | 10.2   | 5.5    | 31.3   | 45.3    | 3.96        | 1.276        |
| M&E staff are regularly trained on emerging M&E trends   | 39.1    | 35.9   | 7.0    | 10.9   | 7.0     | 1.82        | 1.497        |
| Job allocation and designation is done based on Evaluators' academic and professional qualifications.                | 26.6    | 7.0    | 3.1    | 4.7    | 58.6    | 3.62        | 1.780        |
| The M&E staff deliver accurate and reliable monitoring and evaluation staff  | 17.2    | 1.6    | 10.2   | 21.8   | 49.2    | 3.25        | 1.191        |
| <b>Average</b>   |         |        |        |        |         | <b>3.51</b> | <b>1.452</b> |

**N=128**

Findings show that staff capacity needs assessments are rarely conducted (M=2.09, Std.=1.554). This is supported by 60.2% of respondents who strongly disagreed indicating that the project managers rarely conduct training needs assessment for the M&E staff and may therefore not acknowledge the training needs gaps the M&E staff. Project staff are rarely trained in order to equip them with technical expertise necessary to carry out M and E (M=1.95, Std.=1.497). This is supported by 56.3 % of respondents who disagreed implying that the M&E staff are rarely conducted. The project identifies skilled personnel to carry out the monitoring and evaluation functions (M=3.91, Std.=1.366). This is supported by 44.5% of respondents who strongly agreed implying that the projects managers evaluate the skills of the identified monitoring and evaluation staff. Object training on specific areas of M&E is important in ensuring attainment of the expected project outcomes (M=3.96, Std.=1.276). This is supported by 45.3% of respondents who strongly agreed that M&E is important in project implementation. M&E staff are rarely trained on emerging M&E trends (M=1.82, Std.=1.497). This is supported by 39.1% of respondents who strongly disagreed indicating that the staff may not have adequate knowledge on current M&E practices. Job allocation and designation is

done based on Evaluators' academic and professional qualifications (M=3.62, Std.=1.780). This is supported by 58.6% of respondents who strongly agreed implying that the staff are allocated roles based on their knowledge and skills. The M&E staff deliver accurate and reliable monitoring and evaluation staff (M=3.25, Std.=1.191). This is supported by 49.2% of respondents who strongly disagreed that the M&E staff deliver accurate M&E reports.

The average mean of 3.51 and standard deviation of 1.452 show that majority of the respondents agreed with the statements on monitoring and evaluation staff capacity building in bank IT projects. Results are in consistent with Mzengia (2021) that the M&E practice is hindered by the absence of sufficient and skilled M&E expertise, absence of capacity-building training, and non-involvement of stakeholders. Wambua (2019) that availability of skilled personnel is vital for performance of county education funded projects. Number of times training of staff on new developments in M&E the better the performance of the project

### Implementation of Information Technology Projects

Respondents were asked to tick on the extent to which they agree/disagree with statements related to implementation of Information Technology Projects. Findings are presented in Table 3.

**Table 3: Implementation of Information Technology Projects**

*Key: SD=Strongly disagree, D=Disagree, NS=Not Sure, A=Agree, SA= Strongly agree, M=Mean, Std dev.=Standard Deviation*

| Statements  | SD<br>% | D<br>% | N<br>% | A<br>% | SA<br>% | M           | Std.         |
|---|---------|--------|--------|--------|---------|-------------|--------------|
| Projects have met specific organizational objectives                        | 20.3    | 1.6    | 3.9    | 7.8    | 66.4    | 3.98        | 1.617        |
| All project stakeholders acknowledged the results in a satisfactory manner. | 9.4     | 3.1    | 10.2   | 32.0   | 45.3    | 4.01        | 1.239        |
| The projects were delivered on time   | 63.3    | 1.6    | 6.3    | 18.8   | 10.2    | 2.11        | 1.538        |
| The project was delivered within set budget                                 | 24.2    | 20.3   | 37.5   | 7.8    | 10.2    | 2.59        | 1.226        |
| <b>Average</b>  |         |        |        |        |         | <b>3.17</b> | <b>1.405</b> |

**N=128**

Findings show that majority of the IT projects met specific organizational objectives (M=3.98, Std.=1.617). This is supported by 66.4% of respondents who strongly agreed with the statement which indicates that the project objectives are met. All project stakeholders acknowledged the results in a satisfactory manner (M=4.01, Std.=1.239). This is supported by 45.3% of respondents who strongly agreed with the statement which implies that the projects meet stakeholder expectations. The projects were not delivered on time (M=2.11, Std.=1.538). This is supported by 63.3% of respondents who strongly disagreed with the statement implying that projects are not delivered within set timeliness. In addition, the projects are not delivered within set budget (M=2.59, Std.=1.226). This is supported by 37.5% of respondents who disagreed with the statement which indicates that the projects surpass the planned projects. The average mean of 3.17 and standard deviation of 1.405 show that majority of the respondents were neutral on project implementation. This means that some projects are implemented successfully while others fail. Findings are in support of Kenya Bankers Association (KBA, 2022) that over 60% of IT projects in the banking sector fail to meet their targeted goals resulting in projects being delivered over budget, behind schedule, and with compromised quality and performance. Okong'o (2022) also reported that 56% of commercial banks in Nairobi City County, Kenya have experienced more than two failed IT projects, primarily due to the inability to meet originally set targets, and failures to complete projects on time and within budget.

## Correlation Analysis

The correlation analysis was conducted to examine the relationships between the dependent variable (performance of IT projects in banking sector in Kenya) and the independent variables ( budgeting and monitoring and evaluation staff capacity building). The Pearson correlation coefficients between these variables are presented in Table 4 below. According to Gray et al (2012), the strength of the relationship is interpreted as weak if the coefficient is between  $\pm 0.1$  and  $\pm 0.29$ , moderate if it is between  $\pm 0.3$  and  $\pm 0.49$ , and strong if it is  $\pm 0.5$  or above.

**Table 4: Coefficient of Correlation**

| Variables               |                     | Project Implementation | Budgeting | Staff capacity building |
|-------------------------|---------------------|------------------------|-----------|-------------------------|
| Project Implementation  | Pearson Correlation | 1                      |           |                         |
|                         | Sig. (2-tailed)     |                        |           |                         |
|                         | N                   | 128                    |           |                         |
| Budgeting               | Pearson Correlation | .725**                 | 1         |                         |
|                         | Sig. (2-tailed)     | .000                   |           |                         |
|                         | N                   | 128                    | 128       |                         |
| Staff capacity building | Pearson Correlation | .501*                  | .048      | 1                       |
|                         | Sig. (2-tailed)     | .001                   | .594      |                         |
|                         | N                   | 128                    | 128       | 128                     |

\*\* . Correlation is significant at the 0.05 level (2-tailed).

The Pearson correlation coefficient between M&E budgeting and implementation of IT projects in banking sector is ( $r = 0.725$ ,  $p\text{-value} = 0.000$ ). This indicates a strong positive and statistically significant relationship between the variables. The strong correlation suggests that as the effectiveness of M&E budgeting increases, so does implementation of IT projects in banking sector. Findings concur with Shaukat et al. (2022) that project budgeting positively impacts project success.

The Pearson correlation coefficient between monitoring and evaluation staff capacity building and implementation of IT projects in banking sector is ( $r = 0.501$ ,  $p\text{-value} = 0.000$ ). This indicates a strong positive and statistically significant relationship between these two variables. The strong correlation suggests that as the effectiveness of monitoring and evaluation staff capacity building increases, so does the performance of IT projects in banking sector. Results are in agreement with Gatimu, Gakuu, and Ndiritu (2021) that Capacity building for M&E have a statistically significant impact on the performance of projects.

## Regression Analysis

This research used multivariate regression analysis to determine the relationship between the independent variables (budgeting and monitoring and evaluation staff capacity building) and the dependent variable (implementation of IT projects in banking sector in Kenya).

**Table 5: Regression Coefficients**

| Model   | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|---|-----------------------------|------------|---------------------------|--------|------|
|   | B                           | Std. Error | Beta                      |        |      |
| Constant/Y Intercept                              | 1.704                       | .337       |                           | 5.050  | .000 |
| M&E budgeting                                     | .783                        | .045       | .707                      | 17.488 | .000 |
| Monitoring and evaluation staff capacity building | .497                        | .039       | .409                      | 10.185 | .000 |

M&E budgeting show a statistically significant positive coefficient ( $\beta = .783$ ,  $\text{sig} = .000$ ), indicating that a unit change in M&E budgeting would result to changes in implementation of IT projects in the banks. M&E budgeting has the greatest effect on implementation of IT

projects in the banks at 70.7% (std Beta = .707). The findings concur with Kithinji, Gakuu, and Kidombo (2017) found a link between resource allocation and high M&E outcomes.

Monitoring and evaluation staff capacity building show a statistically significant positive coefficient ( $\beta = .497$ , sig = .000), indicating that a unit change in monitoring and evaluation staff capacity building would result to changes in implementation of IT projects in the banks. Monitoring and evaluation staff capacity building has the second greatest effect on implementation of IT projects in the banks at 40.9% (std Beta = .409). The findings are in agreement with Wambua (2019) that there is a significant relation between M&E training and Project performance.

The regression equation derived from the analysis is as follows:

Performance of IT projects = 1.704 + 0.783 M&E budgeting + 0.497 Monitoring and evaluation staff capacity building

### **Conclusions**

M&E budgeting significantly predicts successful implementation of information technology projects in commercial banks in Nairobi City County. The financial resources for M&E practices are inadequate that limit effective M&E of IT projects. The project M&E experience budget overruns which could imply that the project manager incur extra costs that were not considered during M&E planning. This is because of poor budget approximation of monitoring and evaluation practices. There is transparency in funds allocation for every M&E practice which ensures that the funds are channelled to intended activity. However, the projects experience budget .

Highly competent and qualified personnel are as a result of intensive in-service training on various monitoring and evaluation functions. Adequately skilled human resource capacity in M&E is an important component of project quality. Although the banks have suitable M&E, the project staff are not well trained on how to use the monitoring and evaluation staff capacity building. The tools may hence be used inappropriately leading to erroneous M&E reports. The baseline data helps track progress and forms the basis for monitoring and evaluation. The means of verification proves the extent of progress reported against each performance indicator at output and outcome level. Thus, the information from M&E result inform decision making processes, increase organizational knowledge repository, helps account for the resources used, improve practice through learning, improve project performance as well as help identify and manage risks.

### **Recommendations of the Study**

There should be appropriate and timely budget allocation for M&E information communication projects in the banks. The banks should set a budget to evaluate the cost of projects M&E as well as involve budgeting professionals in ascertaining the most appropriate budget allocations and disbursements during IT projects M&E. Similarly, it is important that the M&E function receives special budgetary allocations to ensure continuous M&E of IT projects. The organizations should allocate adequate funds for miscellaneous and adopt systems that would help them make proper approximations of the M&E budget. This will ensure that the M&E practices do not experience budget overruns which may lead to abandonment. By allocating sufficient resources to M&E activities and ensuring adherence to the allocated budget, banks can effectively track progress, identify challenges, and make timely adjustments to enhance project outcomes.

The M&E staff should have the M&E skills and knowledge as well as undergo in-service training to keep them updated in the field. The projects should be allocated a competent team leader that will utilize their expertise in directing the project to ensure the project is successfully delivered to its owners. Training should be offered to the project team to ensure that they carry out the M&E practices effectively. The training should particularly focus on use of monitoring and evaluation systems to enable real time sharing of data during baseline surveys and other

evaluations. The project manager should also facilitate the teams' benchmarking to successful IT projects to learn the best M&E practices that enhance successful project implementation.

### Areas for Further Studies

A similar study involving commercial banks in tier two and tier three

A study on effect of monitoring and evaluation on implementation of other projects in the banking sector since this study was limited to IT projects only

A study to determine other other monitoring and evaluation practices that were not included in the study but contribute to 19.2% of implementation of IT projects in banking sector in Kenya.

### REFERENCES

- Agutu, H. (2015). *Factors Influencing Implementation of Monitoring aEvaluation of School Feeding Programs By Service Providers In Kenya. A case of Langata sub-county* (Unpublished thesis). University of Nairobi, Nairobi, Kenya.
- Akbari, S., Khanzadi, M., & Gholamian, M. R. (2018). The impact of contractors' attributes on construction project success: A post-construction evaluation. *International Journal of Project Management*, 31(2), 313-322.
- Ali, H. M. (2016). *Impact of Customer Satisfaction on Performance Of Sudanese Construction Companies* (Doctoral dissertation, Sudan University of Science and Technology).
- Appiah, I. K. (2020). *Assessing the Impact of Monitoring and Evaluation on Learning and Performance of Pupils in Junior High Schools. A Case Study of Junior High Schools in Kwadaso Circuit, Ashanti Region* (Doctoral Dissertation).
- Beluhu, R. D. (2021). The Effect of Monitoring and Evaluation Framework on Development Project in Education Bureau in Somali Regional State in Case of Jig-jiga Branch. *International Journal of Economics and Management Systems*, 6.
- Boateng, A., Ameyaw, C., & Mensah, S. (2022). Assessment of systematic risk management practices on building construction projects in Ghana. *International Journal of Construction Management*, 22(16), 3128-3136
- Caffrey, L., & Munro, E. (2017). A systems approach to policy evaluation. *Evaluation*, 23(4), 463-478.
- Chege, F. M., Bowa, O. (2020). Monitoring and evaluation and project performance in Kenya: the case of non-governmental organisations implementing education projects in Nairobi County. *International Academic Journal of Information Sciences and Project Management*, 3(6), 312-337
- Cserháti, G., & Szabó, L. (2014). The relationship between success criteria and success factors in organisational event projects. *International journal of project management*, 32(4), 613-624
- Gathege, W. & Yusuf, M. (2019). Influence of Monitoring and Evaluation on Sustainability of Women Based Agricultural Projects. A Case of Joywo Uasin Gishu County. *International Journal of Management and Commerce Innovations*, 7(1) 250-259
- Gatimu, J. Gakuu, C. & Ndiritu, A. (2021). Monitoring And Evaluation Practices And Performance Of County Maternal Health Programmes. *European Scientific Journal*, ESJ, 17(37), 39-68.
- Gebeyehu, M. (2018). *Regular Project Monitoring for Project Success: The Case of Input Voucher System Project in Ethiopia*. Unpublished Masters Thesis, Addis Ababa University
- Gido, J., Clements, J., & Clements, J. (2014). *Successful project management*. Boston, MA: Cengage Learning
- Giles, H., & Smith, P. M. (1979). Accommodation theory: Optimum levels of convergence. In H. Giles & R. N. St. Clair (Eds.), *Language and social psychology* (pp. 45-65). Oxford, UK: Basil Blackwell.
- Hassan, A. T. (2019). *The Effect of Monitoring and Evaluation on Organization Performance: A Case Study of the United Nations High Commissioner for Refugees in Mogadishu, Somalia*. Unpublished Masters Thesis. Kampala International University

- Holvoet, N., & Inberg, L. (2015). Diagnostic Review of the Monitoring and Evaluation System of Uganda's Education Sector: Selected Findings and Discussion. *Journal of Education and Training*, 2(1), 134–154
- Irfan, M., Khan, S. & Hassan, N (2021). Role of Project Planning and Project Manager Competencies on Public Sector Project Success. *Sustainability*, 13(1421)
- McCoy, D., & Kinyua, K. (2015). Allocating scarce resources strategically-an evaluation and discussion of the global fund's pattern of disbursements. *PLoS one*, 7(5), e34749.
- Meredith, J. R., & Mantel Jr, S. J. (2011). *Project management: a managerial approach*. River Street, Hoboken, NJ: John Wiley & Sons.
- Mue, P.W. (2016). *Influence of Monitoring and Evaluation Strategies on Internet Banking Performance: A Case of Investment & Mortgages Bank, Kenyatta Avenue, Nairobi, Kenya*. Unpublished Masters Thesis. University of Nairobi.
- Ngigi, M.(2020). *Effects of Monitoring And Evaluation Practices on Project Implementation In Acted Kenya*. Unpublished Thesis, Africa Nazarene University
- Nisa, Z. U. (2015). Impact of project performance Measurement System on Project success. *International Journal of science, basic and applied Research*, 22(2), 289-315
- Njama, A. W. (2015). *Determinants of effectiveness of a monitoring and evaluation system for projects: a case of AMREF Kenya WASH programme (Doctoral dissertation, University of Nairobi)*
- Paru, B. (2020). *The role of monitoring and evaluation system in promoting performance of Non-Governmental Organizations in Juba County, South Sudan*. Unpublished Masters' Thesis. Mount Kenya University
- Phiri, B. (2015). *Influence of monitoring and evaluation on project performance: A Case of African Virtual University, Kenya*. Unpublished master's thesis, University of Nairobi, Kenya
- Pollitt, C., & Bouckaert, G. (2017). *Public management reform: a comparative analysis-into the age of austerity*. Oxford, United Kingdom: Oxford University Press.
- Serrador, P., & Turner, J. R. (2014). The relationship between project success and project efficiency. *Procedia-Social and Behavioral Sciences*, 119 (1), 75-84.
- Wanyoike, D. & Waithera, L.S. (2015). Influence of project monitoring and Evaluation on performance of youth Funded Agribusiness Projects in Bahati sub- Country, Nakuru, Kenya. *Journal of Economic, Commerce and Managements*, 3(11), 2348-0386
- Wolde, E. (2019). The Effectiveness of Monitoring and Evaluation Systems: The Case of Non-Governmental Organizations Implementing Agricultural Development Projects in Ethiopia.
- Wu, X., Wenyi Zhao, T. M., & Yang, Z. (2019). Improving the Efficiency of Highway Construction Project Management Using Lean Management. *Sustainability*, 11-13