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Ndayitegeye Rafiki *et al*, Cognizance Journal of Multidisciplinary Studies, Vol.3, Issue.11, November 2023, pg. 19-38
(An Open Accessible, Multidisciplinary, Fully Refereed and Peer Reviewed Journal)
ISSN: 0976-7797
Impact Factor: 4.843
Index Copernicus Value (ICV) = 76.35

Influence of Utilization of Management Information System on Project Monitoring and Evaluation: A Case Study of Survivors Fund, Rwanda

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DOI: 10.47760/cognizance.2023.v03i11.003

Abstract:
The study examined how the utilization of Management Information Systems influences monitoring and evaluation in an organization, by taking into account the Survivors Fund in Rwanda as a case study. The study analyzed the effectiveness and efficiency of the MIS, report, services, hardware, software, and process factors that influence the effectiveness and efficiency of Monitoring and Evaluation at SURF, Rwanda. The target population included 293 beneficiaries, 8 Field officers, 1 ICT Manager, and 1 Project Manager. Data was collected through questionnaires, interview guides, and secondary documented literature.The Multiple Regression Analysis showed a strong positive correlation between the independent variables (flexibility of the system, regular employee training on MIS infrastructure, adequate edit, balance, and internal control checks) and the dependent variable (timely results and feedback). The coefficient of determination (r2) was 1, indicating that 100% of the total variation in Y could be explained by the stochastic multiple regression equation model. The study also found a positive correlation between the independent variables (system use of hardware, compatibility with other standards appliances and software, completeness, clarity, organization of documentation, app providers' accessibility, quality product support) and the dependent variable (economic use of M&E resources). The coefficient of determination (r2) was 0.200, suggesting that 20% of the total variation in Y could be explained by the model, while the remaining 80% was due to unexplained factors. The study recommends Survivors Fund, Rwanda to check with the system provider and update the system with a consistent interface and compatibility with various devices. Additionally, the system should provide machine utilization reports.
Keywords: MIS, Project Monitoring, Project Evaluation, Survivors Fund, Rwanda

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1.0 Introduction

According to Rodolfo (2014) organizations make heavy investment for unnecessary systems and will not be able to use them in an effective manner due to the valuation of technology over the process. Information technology does not create the best information systems that facilitate organization to operate more successfully. The author stresses that information should be considered as strategic resource and preserved in the same way persons, financial and physical resource are preserved. Throughout data management, the decision making process could be ungraded in order to learn and create new knowledge.

Similarly, Riis *et al,* (2017) reiterate that Project management information system is a set of procedures, equipment and other resources for collecting, analyzing, storing, and reporting information that describes monitoring and evaluation. These information systems are mostly used to plan and coordinate medium to high complex projects. Project managers have traditionally used these systems to support the creation of sophisticated plans, including scheduling, resource management and project cost accounting (Johnson & Liberatore, 2018). Additionally, individual projects and project portfolio as well were enabled by sophisticated systems.

Likewise, Project staff, outside organizations and the donor form opinions and make decisions based on the information reported by the project as a most visible part (Musingafi, 2015). A project therefore should strive for timely, comprehensive and understandable reporting mechanisms and formats. PMIS fundamentally manages the flow of information between upper and lower management as well as the other stakeholders working on the project which finally results to minimize the allocation of time, money and man-hours spent to complete a project (Rogers, 2014).

The Survivors Fund (SURF) was funded by Kayitesi Belwitt OBE, a British citizen originated from Rwanda. This woman lost more than 50 family members during genocide and started the first genocide survivor's organization in Rwanda operating within the Ministry of Rehabilitation since 1994. In 1995, the founder started to assist survivors through her fund known as Survivors Fund (SURF) registered in the United Kingdom as charity organization number 1065705. Survivors Fund (SURF) endures to reconstruct the life of genocide survivors. SURF is autonomous and flexible in providing responses to survivors. It reconstruct the ability of local partners to empower their programs of operation (Survivors Fund, 2011).

1.0.1 Organizational Structure of Survivors Fund, Rwanda

SURF Rwanda is headed by the Director of Program who is subordinated by Legal Advisor, Director of Finance, Director of ICT and Director of Operations. The Legal Advisor is responsible for legal issues regarding the organization representation

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within the country. The Director of Finance is responsible for finance department that embeds the cashier and Accountant Officers. The Director of Operations is responsible for managing both project Monitoring &Evaluation and income generating activities. The Director of ICT is responsible of both managing and following up activities done by webmaster and MIS officer.

1.0.2 Management Information System at Survivors Fund, Rwanda

The hardware used at Survivors Fund, Rwanda is composed of networked tools such as modems, server machine, smart phones of Android version 2.1 and higher and laptops that respectively help to connect to the internet, controlling the system, collecting data and allocating the person and storing data. Survivors Fund, Rwanda uses wireless network of mesh topology that help to access internet and remotely monitoring a work at the field using fieldwork Software version 1.2.6 that embeds Geographical Information System (GIS) application for determining location, such as Global Positioning System (GPS) location, network location, or cell location. In addition, Field work software serves at reporting automatically the allocation and situation at the field. The operating system used at Survivors Fund, Rwanda within computer is of kind Windows 7 and Windows 8 which are compatible with the previously mentioned software (Mugabo, 2015).

Field Work software was established in 2012 in order to provide responses to challenges encountered by information collectors during 2011 hunger in Somalia (Kriesi, 2013). The charitable organizations provide responses through the use of several approach to register beneficiaries, following shipments, monitoring the enhancement of nutrition and following up the trends in prices. These activities did not utilize mobile technology and existing available information were poor quality. Lack of information delayed program, established inadequacies and financial burden for living. Fieldwork's Goal was to enable the transaction for digital information gathering in the advancement and charitable sector and thereby improving the efficacy and adequacy of development and humanitarian actions all over the world. The application uses one or more features on the device for determining location, such Global Positioning System (GPS) location, Network location, or cell location (Kriesi, 2013).

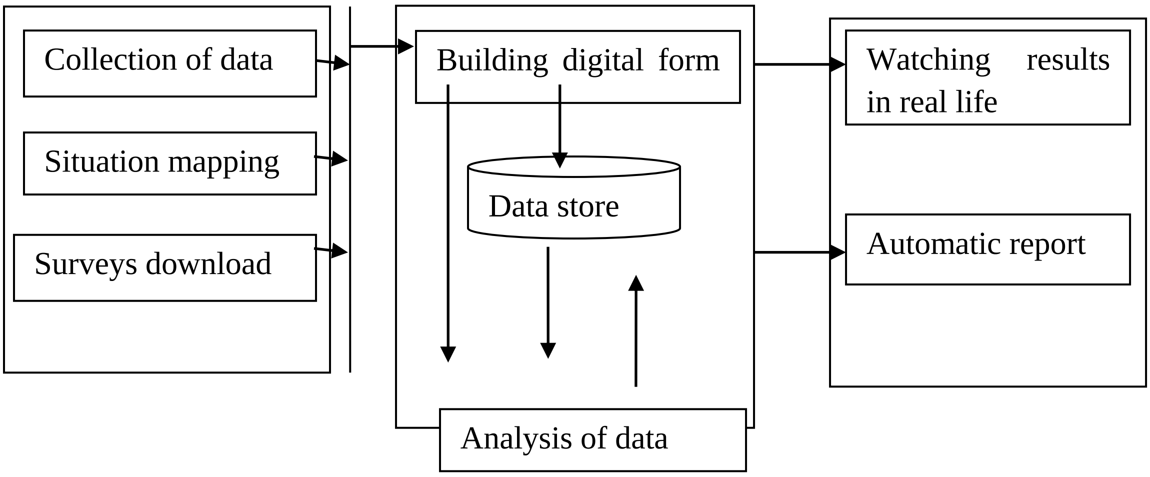

Figure 1 Project monitoring and evaluation information system at Survivors Fund
Source: (Survivors Fund, 2015)

The user-configurable, online information management platform assisted by robust electronic data gathering instruments might ameliorate the quality of data and share as well as program accountability and success in world development sector. This platform may decrease the terminated execution and management of several elements (database servers, transmission protocols and privacy arrangements) and enable researchers to spend their time and money on the progression of projects and impact assessments (Kipf *et al.*, 2016). According to Abramova and Kovriga (2020), cognitive mapping of complex and ill-structured situations are acknowledged to carry out the validity of end results of both cognitive complexity of studied problem conditions and owing to characteristics of modern cognitive map languages. The confirmation of cognitive maps is recommended as the means to manage human induced risks with the main objective explained as the early detection and obstructive risks in order to validate the expected outcomes of the modeling and direct errors. The monitoring and evaluation information system at Survivors Fund, Rwanda is made by input, process and output. Functions within inputting system are collection of data; situation mapping and surveys download to accumulate an enormous amount of information on the beneficiaries' status and impact of the ongoing project including challenges (Abramova & Covriga, 2020). Functions within processing system are digitalized form of collected data, storing of data and analysis of data. The outputting system is made by watching results automatic report. Moreover, parts of the whole system are interconnected in order to facilitate transformation of data into information (Amrit, Hillegersberg & Diest, 2013). Once at field, the system itself acquires geographical data in order to locate the beneficiary, the field staff may download surveys from the system and set questions relying on project purpose, objectives and indicators. Information gathered are transformed into digital form and can be stored in the form of data base whereby the system can itself make the analysis of data (António, Gabriela, & João, 2015). After all, results are automatically displayed with generation of automatic report (Survivors Fund, Rwanda, 2015).

1.2 Problem Statement

Levinson et al. (2019) suggest that monitoring data is entered into management information systems (MIS), which provide easy-to-use tracking of project activities, budgets, and personnel. This data provides important indicators to identify problems, operational issues, and areas for improvement to enhance project performance. Consistent monitoring allows for identification of areas of concern and the establishment of correcting indicators, increasing project performance chances. Khan (2013) in Pakistan emphasizes the importance of developing technology for the progress of monitoring and evaluation systems. This can involve articulating the MIS, defining clear objectives, and creating a vision for transforming manual systems into electronic systems. Studies by Mettler and Winter (2015) and Wong & Singh (2013) emphasize the need for MIS to answer process questions, provide real-time feedback for decision-making, and answer questions about intermediate results and progress against work plans. However, there are challenges faced by users in Rwanda's Survivors Fund, Rwanda, who struggle with the Field Work application due to their lack of understanding. Issues include creating questionnaires for evaluation, uploading photos, slow system response time, and not recording all activities in the M&E department. Many studies have focused on the effectiveness of MIS usage in project monitoring and evaluation, but there is a lack of research in this area. This research aims to study the effect of MIS usage on project monitoring and evaluation using the Survivors Fund as a case study.

1.3 Research Objective

The study examined how usage of management information system affects project monitoring and evaluation within Survivors Fund, Rwanda.

2.0. Literature Review

2.1 Theoretical Review

2.1.1 Management Information System (MIS)

Management Information System means the integration of person and machine f for the provision of information to assist processes, management and decision making actions in the organization. It gives the adequate and timely information which are

very important in stimulating decision making processes and organizational plan, follow up and working occupation that are very adequate conducted. This system is related to data processing into information that would be disseminated to different departments in the organization to take adequate actions (Grogan *et al*, 2013).
Management of Information Systems explain two systems that emphasis on internal events, affording information for the short term plan with the decision support system (DSS) that utilized internal information from TPS and MIS but also information from external source. However, decision support system had great analytical power than other system levels, incorporating model instruments, aggregating and analyzing instruments and supporting what if scenarios (Schlindwein & Ison, 2014). According to Schlindwein and Ison (2014), the composition of management information system into database management system, information system, research system, intelligence system and environment system. Moreover, Schlindwein and Ison (2014) stated combination of hardware, software, infrastructure and skilled human resources to stimulate the plan, the follow up, monitoring and evaluation, administration and taking decisions in organization as components of Information System. Database management is gathering project that is able for storing, changing and extracting information from database. Intelligent system is the system that minds conditions and learning for each working conditions, connecting the sensitivity that are related to environment with system thinking. A research system is helpful to the identification of key management issues, the exploration of different sides concerning with issues and taking appropriate course of action alternatives for issues (Schlindwein & Ison, 2014).

2.1.2 Models for Information System Analysis and Development

Achieving the contribution of system development, the number of various conditions get up with the necessity of understanding how to stimulate course of actions on model, strategy and technological advancement. The user is getting skills and knowledge, the utilization of Information technology and its application in managing business. The issue of achieving the expected results of necessary information is answered by safeguarding database at back end. There are different system where their analysis may be very important (Srima, Wannapiroon and Nilsiik, 2015). Details of waterfall approach different but two things persist consistent, there boxes going from left downward to the right and there are arrow linking each its successor.
Requirements analysis: The first stage in system information is requirement analysis due to its capacity to include the collection of information related to customer's expectation and explain in clear concepts the issue that the product is expect to be resolved. Analytical step involve the acceptance of customers business context and

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challenges, functions the product would be achieved. The degree of success would enter to and external system it would be friendly. Methods adopted to get this appreciative involve interviews of customers and shopping lists of software characteristics were adopted to get to this. Findings from this analysis is taken in a formal and specific prerequisites which assists the resource to the next step (Bassil, 2012).

Design: It is the second which is related to the definition of hardware and software architecture, components, modules, interfaces, and data to satisfy the specified requirements. This includes the definition of hardware and software architecture, specifying the success and security measurements, data design storage container and challenges. This is the step at which the user edge is resolved like problem related to how the system is navigated with accessibility. The outcome of this stage is one or more stipulation which utilized in the next step of information (Cohen *et al.*, 2010).

Implementation: The third step comprises the construction as a per the design specification advanced in the previous stage. This stage is realized by a development team comprises of programmers, interfaces designers and other specialists adopting instruments such as compliers and media editors. The outcome of this step is one or more product elements, building based on a coding standard and debugged determined before, testing and integrating the satisfaction of the system construct requirements. For projects including a large team, version control is proposed to trach adjustment of the code tree and revert to previous snapshots in case of problems (Srima, Wannapiroon & Nilsook, 2015).

Testing: Testing is the four stages, where individual components and incorporated the entire methodological confirmed to certify that they is no error and fully fulfill the requirements pinpointed in the first step. The quality assurance team argue that test case to assess if the product fully or partially fulfill the requirements pinpointed in the first step. Three types of testing typically take place. Unit testing of individual code modules; system testing of the incorporated product, acceptance testing, clearly carried out by or on behalf of the customer. Defects whether established are logged and feedback and comments given to the execution team to facilitate rectification of error.

At this step the documentation of the product include the planned user manual, revised and published (Bassil, 2012). Installation: It is the fifth step that appears once the product was tested and certified as fitting for the use and including the preparation of the system or product for installation and user at the customer site. Delivery can take place through internet or physical media and the deliverable is tagged with a formal revision number to stimulate updates at later date (Cohen *et al.*, 2010).

Maintenance: The sixth stage appears after installation and including modification of the system or individual component to alter attributes and characteristics or improving the performance. The aforementioned modifications come from change requests introduced by the customer or defected uncovered during live use of the system. Furthermore, every change done to the product during maintenance cycle is recorded and reviewed a new product release is achieved to facilitate customer to obtain benefit of the upgraded (cohen *et al.*, 2010).

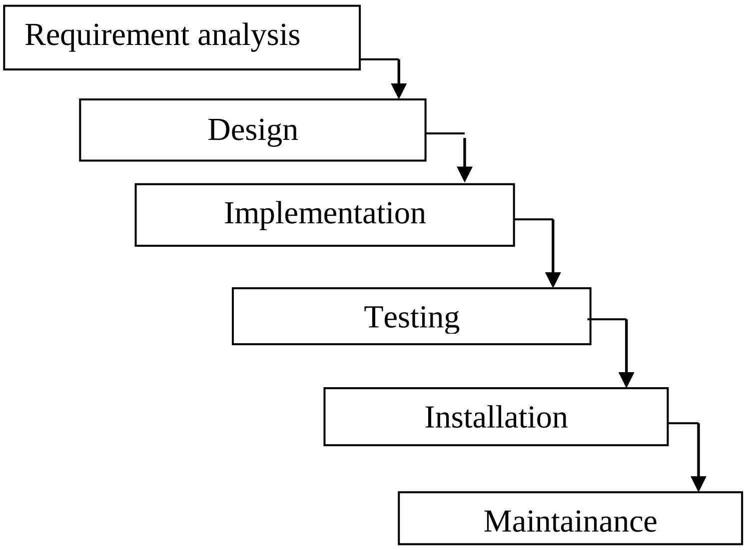

Figure 2 Waterfall Model of System Development and Analysis,
Source: (Bassil, 2012

Rapid Application Development (RAD) Model

This term has been explained in 1970s and was introduced by James Martin in 1990s. This scholar had the opinion that existing life models are too rigid to allow a fast project development, there is a need for a framework that could account for fast provision while still maintaining high quality standards. It is grounded on the principle that step by step structured life cycles inevitably entails delays and errors urging the expectation for alternative approach (Cohen *et al.*, 2010). This problem is more important as the business is becoming competitive and information technology necessitated to safeguard it. RAD presents itself as a very plausive solution majorly prior to deadlines and critical Swiftness of software development. RAD encompasses a set of instruments and guidance that stimulate shirt-term deployment, within a predetermined timeframe (Agarwal *et al.*, 2000)

According to Vaghela (2015), RAD as incremental model, its components or functions are developed in parallel as if there mini projects. The development of RAD Model is time boxed. Vaghela (2015) breaks RAD models into steps such as

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business modeling by which data flow is determined between different business functions, information modeling by which data collected is utilized to explain information objects that are necessary for business, process modeling by which information objects described are changed in order to fulfill the business information flow to attain some specific business objectives.
Application generation by which automated instruments are utilized to change the process model into actual system and codes and finally testing and turnover to test new components and all the interfaces.

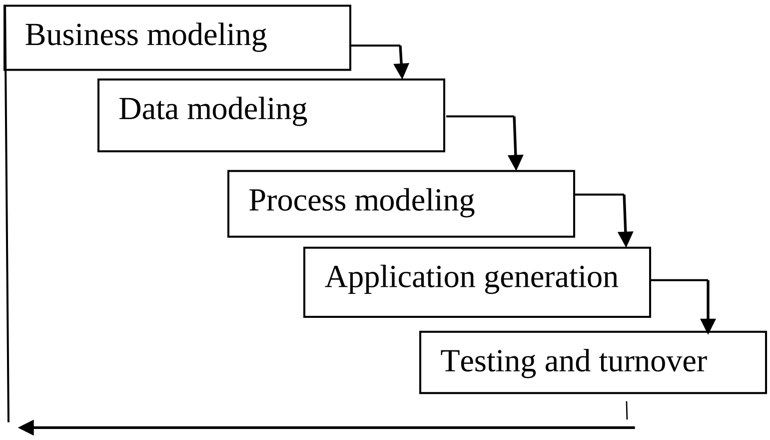

Figure 3 Rapid Application Development (RAD) Model
Source: Vaghela, (2015).

Prototype Model
Prototype model is software development that involves both user and the developer. Developers interview the user and develop an initial system utilizing a Database Management System (DBMS). Users work with prototype and may suggest changes. (Larman & Basili, 2020). According to Thulasee *et al.* (2019), in prototype model, the user us provided a look and feel of the system using a prototype. The prototype for the system to be advanced is constructed, tested and reworked as important. Prototype process is very important for dynamic environment where requirements changes. The process starts with collecting major functional requirements. This is followed by a quick design lead to the development of a prototype. The prototype is then evaluated by the users, the developers rework on the prototype until the users and customers are satisfied. The prototype is constructed as per the client requirements. Instead of freezing the requirement before a design or cod could be processed. The aim of a prototype is to permit users to assess proposals for designing the eventual product attempting them out rather than possessing the

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interpretation and evaluation of the design relying on the decryption. The prototype has various benefits including the software designer and developer may get comments and feedbacks from users in project. Customer could make a comparison considering the construct of the software. (Kumar *et al*., 2013). Figure 2.3 illustrates the steps used in prototype development model:

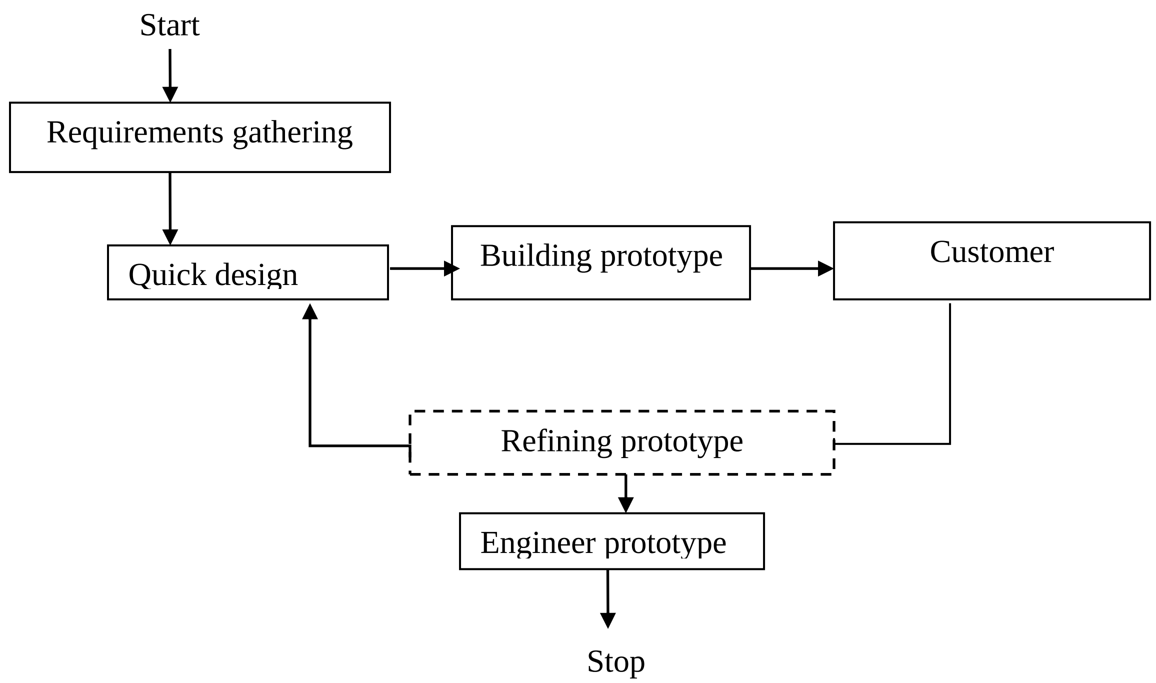

Figure 4. The Prototype System Development Model
Source: Kumar *et al*., (2013).

The prototype is accessible than system development life cycle as users' wishes and wills are satisfied, the prototype is flexible, from the beginning utilizing instruments and DBMS error free code, the prototype supports in user interaction. However, prototype has constraints like no predefined targets and incapability of analyst.

2.1.3 Theories of information system usage

User involvement

The user involvement is defined as the participation in the process of system development through a representation of target user group (Ives and Olson, 2015). Most of studies demonstrate that if workers had an opportunity to take part into the execution of a system, it improves the acceptance of users and they easily use the system (Baronas and Louis, 2017; Barki and Harwitck, 2017, Doll and Torkzadesh, 2018 and Swanson, 2019). Furthermore, there is a significant correlation between user involvement and the success of project execution which is assessed by actual utilization (Danet, 2016). Furthermore, Hunton and Beeler (2017) recommend that the performance of system execution is related to the impression of responsibility and ownership towards project by workers.

Technology Acceptance Model (TAM)
Davis (2019) defined the user behavior towards a system that was executed by several organizations (Lu *et al.*, 2013). Workers utilize various types of systems to fulfill their responsibility in their organizations. The change of the previous systems renders workers to abandon the use of new systems. In this regards, technology acceptance is a crucial element to introduce new workers' behavior towards new technologies. However, for the purpose of stating TAM model and explaining. Davis (2019) relying on the perception ease of using terms as factors of attitudes towards the use, intent to use and actual utilization (Radner and Rothschild, 2015). Therefore the perceived usefulness is explained as the level to which an individual has faith in using a specific system could improve his or her success and perceived ease of using the system (Davis, 2019).

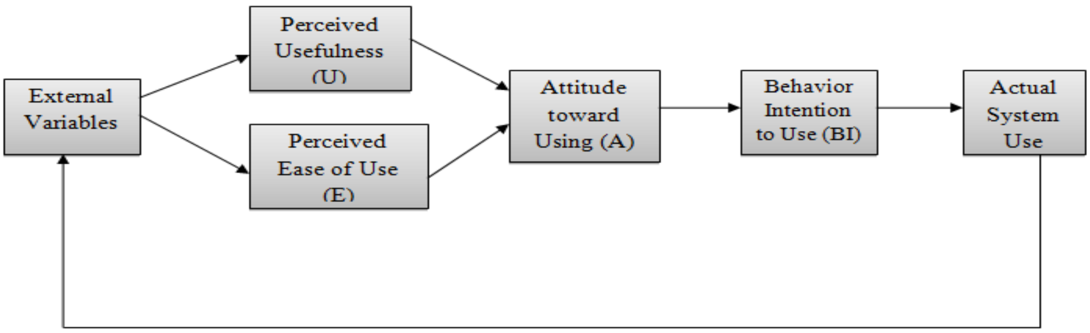

Figure 1 Technology Acceptance Model 1
Source: Davis et al. (2019)

From Figure 2.5, TAM states cognitive beliefs as having two components: Perceived usefulness and perceived ease of usage. Based on TAM, one's actual use of technology system is stimulated by user's attitudes and purpose. TAM suggested that external determinants influence the system use. In case of Survivors Fund, The TAM model explains how beneficiaries and Staff on field adopt and use the ICT to input data into system using mobile phones.

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Technology Acceptance Model 2 (TAM2)

It was very crucial for communication with technology and admitting and predicting the acceptance of systems by the user (Vankatesh and Davis, 2019). Most of studies in Davis (2019) evidenced that TAM advanced by Vankatesh and Davis (2019) as Technology Acceptance Model 2 (TAM2). TAM 2 argue that individual purpose of using technology is influenced by two elements. These are the Perceived usefulness coming from the faith in people's job success would enhance when a technology is adopted, and another element is perceived ease of use which incorporates the attitudes that there is a lack of expectation to attempt hard to learn this technology (Vankatesh and Dvis, 2019).

The above elements are influenced by two terms as processes of social effects (Subjective norm voluntariness and image) and cognitive instrument processes (job relevance, findings demonstrability and perceived ease of use) (Vankatesh, 2019).

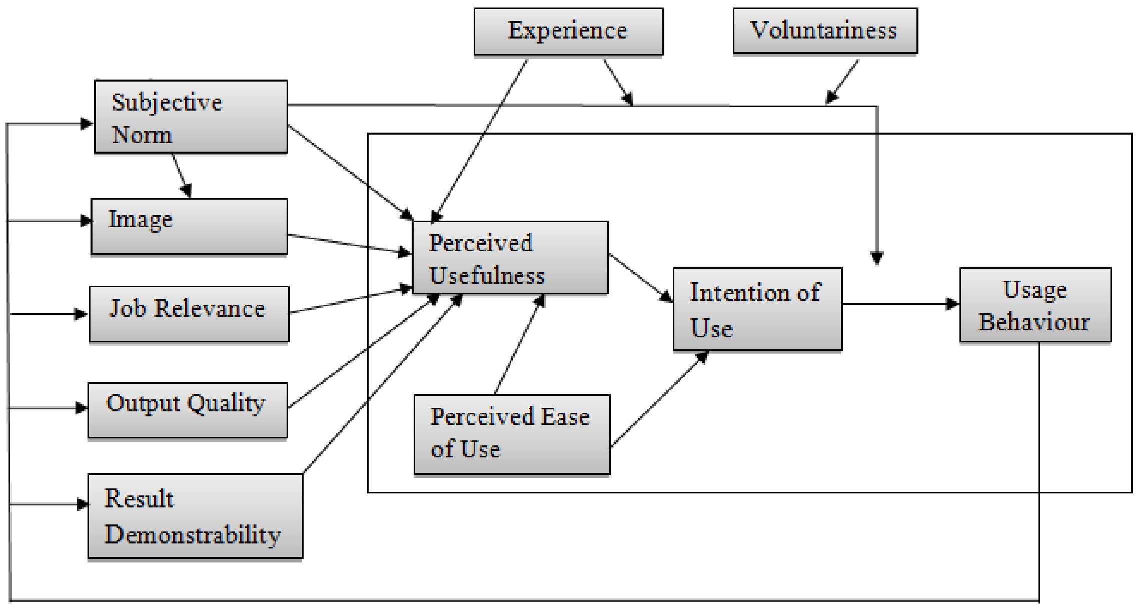

Figure 2 Technology Acceptance Model 2 (TAM 2)
Source: Vekantesh & Davis (2019)

Davis (2019) contended that the impact of subjective norms on behavior to utilize would be neglected since indicators of subjective norms are not taken into consideration in TAM. In an attempt to extend TAM, TAM2 (Venkatesh and Davis, 2019) reviewed these measurements. As it has been proposed in TAM2, the subjective norm, one of the social influence indicators, is related to the perceived social pressure to accomplish or not succeed the attitude and beliefs (Aixen, 2017). It is keen to identify the impact of the society on the willingness of the user toward the

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use of data system for having awareness, explanation and prediction of system utilization and acceptance behavior (Malhotra and Galletta, 2019). Alshare and Kwan (2015), discovered the subjective norm as positive elements in influencing students in high learning institution and universities to accept the use of e-learning. Unfortunately, a research undertaken by Ndubusu (2016) indicated that subjective norm is negatively correlated with university student's behavior of using e-learning approach. The inconsistency could be resolved through the structural equation modeling (SEM) which demonstrates spacious effects and indirect impacts as well as direct effects (Sobel, 2017).

3.0 Methodology

The Study examined how the utilization of Management Information Systems influences monitoring and evaluation in an organization, by taking into account the Survivors Fund in Rwanda as a case study. Effectiveness and efficiency of Management Information System, report and services produced by the MIS at Survivors Fund, Rwanda and Hardware, Software and process were examined as factors that influence the effectiveness and efficiency of Monitoring and Evaluation at SURF, Rwanda. The target population for this study includes 293 beneficiaries, 8 Field officers. 1 ICT Manager and 1 Project Manager. Yamane and Stratified random sampling formula were used to calculate a sample size of 172 sampled respondents. Data was collected through questionnaires and interview guides, whereas relevant secondary documented literature helped in getting secondary data. After gathering information, data was analyzed using a Statistical Package for Social Sciences (SPSS) version 21.0.

4.0 Findings and Discussions

Findings were interpreted using a combination of five likert scales (Strongly agree: 5, agree: 4, Not sure: 3, disagree: 2 and strongly disagree: 1), the weighed mean and Standard Deviation. Data from the questionnaire and the interview guide with the project team and beneficiaries were analyzed to have concrete information on the influence of the MIS usage on the monitoring and evaluation at Survivors Fund, Rwanda.

4.1 The effectiveness and Efficiency of the MIS usage at SURF, Rwanda

The table 1 shows the extent to which analyzed data on how users agree or disagree with the statements concerning the effectiveness and efficiency of the MIS usage at SURF, Rwanda.

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Table 1: The Effectiveness of Efficiency of MIS at SURF, Rwanda

Effectiveness and efficiency of the MIS usage at Survivors Fund	N	5	4	3	2	1	W. Mean	Std.
The system is user-friendly, i.e it is easy to install, easy to update, easy to navigate, pleasant, easy to remove, easy to troubleshoot, doesn't need third party, effective error handling (P2Q1)	6	4 (66.7%)	1 (16.7%)	0 (0%)	1 (16.7)	0 (0%)	4.33	1.211
The system enables quick data collection and enables editing (P2Q2)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The system is able to summarize findings (P2Q3)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The system is flexible (facilitates the adjustment and correction of errors adequately) (P2Q4)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
Survivors Fund offers regular trainings to employees about how to use management information system infrastructures (P2Q5)	6	5 (83.3%)	0 (0%)	0 (0%)	0 (0%)	1 (16.7)	4.33	1.633
Information is treated and accumulated in a consistent and similar manner (P2Q6)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The information obtains adequate edit, balance and internal control checks (P2Q7)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The system produces pertinent information in a summarized form (P2Q8)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000

Source: primary data

(SD<0.5 or close to zero- Respondents' responses crowded around the weighted mean),

(SD>0.5: Respondents' responses dispersed on the responses)

From Table 1, findings revealed that 4 out of 6 of respondents strongly agreed, 1 out of 6 agreed and 1 out of 6 disagree that the system at SURF, Rwanda is user friendly i.e it is easy to install, easy to update, easy to navigate, pleasant, easy to remove, easy to troubleshoot, doesn't need third party, effective error handling.

According to table, it was indicated that 6 out of 6 respondents strongly agree that the system at SURFO, Rwanda enables quick data collection and editing. The system is able to summarize findings. The system is flexible. The information of the system is consistently accumulated and treated in a similar manner. The information obtains edit, balance and internal control checks. The system produces pertinent information in a summarized form.

Table 4.5 presented that 6 out of 6 respondents strongly agree that that SURF, Rwanda provide regular training on the use of the system.

4.2 The effectiveness and efficiency of project monitoring and evaluation within Survivors Fund, Rwanda

The table 1 presents the results on the effectiveness and efficiency of project monitoring and evaluation within Survivors Fund, Rwanda.

Table 2: Effectiveness and efficiency of project monitoring and evaluation at SURF, Rwanda

The effectiveness and efficiency of project monitoring and evaluation within SURF, Rwanda	N	5	4	3	2	1	W. Mean	Std.
Findings from M&E are relevant and useful (P3Q1)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
Activities of the M&E are carried out within schedule P3Q2	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The cost of M&E activities is always within the budget (P3Q3)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
Feedback from M&E are timely (P3Q4)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
M&E resources are economically utilized (P3Q5)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The Expected outcomes of the M&E are largely achieved (P3Q6)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The M&E responsibilities and duties are clearly outlined (P3Q7)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408

Source: primary data

(SD<0.5 or close to zero- Respondents' responses crowded around the weighted mean),

(SD>0.5: Respondents' responses dispersed on the responses)

ISSN: 0976-7797
Impact Factor: 4.843
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Table 2 shows that 6 out of 6 respondents strongly agree that findings from M&E are relevant and useful. The M&E responsibilities and duties are clearly outlined. The excepted M&E outcomes are largely achieved. The M&E resources are economically utilized. Results and feedback from M&E are timely. The M&E activities are carried out within budget and schedule.

4.3 Types of services and report produced by the MIS at SURF, Rwanda

The table 3 summarizes data collected on the services and reports produced by the Management Information System at Survivors Fund, Rwanda.

Table 3: Services and report produced by the MIS at SURF, Rwanda

Services and report produced by the MIS at SURF, Rwanda	N	5	4	3	2	1	W. Mean	Std.
The system allows users to write and edit in the application (P4Q1)	170	103 (60.6%)	67 (39.4%)	0 (0%)	0 (0%)	0 (0%)	4.61	.490
The system allow the user to submit a report automatically (P4Q2)	170	103 (60.6%)	67 (39.4%)	0 (0%)	0 (0%)	0 (0%)	4.61	.490 +
The system provides geographical data to locate the device (P4Q3)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The system can record videos and audios from beneficiaries (P4Q4)	170	106 (62.4%)	64 (37.6%)	0 (0%)	0 (0%)	0 (0%)	4.62	.486
The system is able to provide report in a statistical form (P4Q5)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The system provides machine utilization report (P4Q6)	6	1 (16.7%)	0 (0%)	0 (0%)	5 (83.3%)	0 (0%)	4.50	1.225
The system provides format for activity and budgeting plan (P4Q7)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The System provides a room to comment and to produce a customized report (P4Q8)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The system provides daily and Monthly reports (P4Q9)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000

Source: primary data

(SD<0.5 or close to zero- Respondents' responses crowded around the weighted mean),

(SD>0.5: Respondents' responses dispersed on the responses)

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From Table 3, findings revealed that 103 out of 170 respondents strongly agreed and 67 out of 170 respondents agreed that the system at SURF, Rwanda allows the users to write and edit in the application and submit report automatically. In Table 4.7, findings presented 107 out of 170 respondents strongly agree and 64 out of 170 respondents agree that the system can record videos and audios from beneficiaries. Findings from Table 4.7 showed that 1 out of 6 respondents strongly agree and 5 out of 6 disagree that the system provides machine utilization report. The Table 4.7 depicted 6 out of 6 respondents strongly agree that the system is able to provide report in a statistical form. The system provides format for activity and budgeting plan. The system provides daily and Monthly reports. From Table 4.7 results presented that 5 out of 6 respondents strongly agreed and 1 out of 6 agreed that the System provides a room to comment and to produce a customized report. Findings from Table 4.7 proved that 5 out of 6 respondents strongly agree and 1 out of 6 respondents agree that the system provides geographical data to locate the device.

4.2.4 Hardware, Software and process of the Management Information system at Survivors Fund, Rwanda

Table 4 shows distribution of results on the hardware, software and process of the management information system at SURF, Rwanda.

Table 4: Hardware, Software and Process of the MIS at SURF, Rwanda

Hardware, Software and process of the MIS at SURF, Rwanda	N	5	4	3	2	1	W. Mean	Std.
The system uses Hardware such as Personal computers and laptops for office activity, Server machines for networking and connectivity and smart phones for online data collection (P5Q1)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The Hardware is compatible with other standards appliances and software. (P5Q2)	6	5 (83.3%)	1 (16.7%)	0 (0%)	0 (0%)	0 (0%)	4.83	.408
The hardware of the system keeps the software driver support (P5Q3)	6	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5.00	.000
The application of the system is compatible with the hardware and hold a consistent interface (P5Q4)	6	0 (0%)	1 (16.7%)	1 (16.7%)	4 (66.7%)	0 (0%)	2.50	.837

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(An Open Accessible, Multidisciplinary, Fully Refereed and Peer Reviewed Journal)
ISSN: 0976-7797
Impact Factor: 4.843
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The application of the system allow the completeness, clarity and organization of documentation (P5Q5)	6	3 (50%)	2 (33.3%)	1 (16.7%)	0 (0%)	0 (0%)	4.33	.816
The app providers are accessible and provide quality product support (P5Q6)	6	4 (67.7%)	2 (33.3%)	0 (0%)	0 (0%)	0 (0%)	4.67	.516

Source: primary data

(SD<0.5 or close to zero- Respondents' responses crowded around the weighted mean),
(SD>0.5: Respondents' responses dispersed on the responses)
Table 4 shows that 5 out of 6 respondents strongly agreed and 1 out 6 respondents agreed that the system uses Hardware such as Personal computers and laptops for office activity, Server machines for networking and connectivity and smart phones for online data collection. The Hardware is compatible with other standards appliances and software.
Findings from Table 4.8 shows that 6 out of 6 respondents strongly agree that the Hardware of the System keeps the Software drivers Support. In Table 4.8, it is showed that 1 out 6 respondents agreed, 1 out of 6 kept himself neutral and 4 out of 6 disagreed that the application of the system is compatible with the hardware and hold a consistent interface.
Table 4.8 depicted that 3 out of 6 respondents strongly agreed, 2 out of 6 agreed and 1 out of 6 is neutral on the fact that the application of the system at SURF, Rwanda allows the completeness, clarity and organization of documentation. Findings in Table 4.8 showed that 4 out of 6 respondents strongly agreed and 2 out of 6 agreed that the app providers are available and provide quality product support.

4.2.5 Multiple Regression Analysis

Multiple Regression analysis was used to predict the value of a variable based on the value of two or more variables. The predicted variable is called Dependent Variable while the independent Variable is used to predict the value of the dependent variable. The Multiple Linear Regression attempted to model the relationship between dependent and independent variables by fitting a linear equation to observed data.

$$Y=b_0 + b_1X_1 + b_2X_2 + \ldots\ldots + b_kX_k + \varepsilon \qquad (4.1)$$

Independent Variable: X_k and Coefficient b_k. Unknown factor: ε, and Dependent Variable: Y. The Regression Coefficient b_k is also called the partial regression

ISSN: 0976-7797
Impact Factor: 4.843
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coefficient because it represents the contribution of X_k to the response variable Y after being adjusted to other predictor variables (Chatterjee and Hadi, 2016).
Assume that Y=Effectiveness and Efficiency of Monitoring and Evaluation (Dependent Variables) and X as the Effectiveness and efficiency of the Management Information systems (Independent variables). By using the Statistical Package of the Social Science for models with dependent variable Feedbacks from M&E are timely (P3Q4), the following variables are constants: The system enables quick data collection and enables editing (P2Q2), The system is able to summarize findings (P2Q3), Information is treated and accumulated in a consistent and similar manner (P2Q6) and The system produces pertinent information in a summarized form (P2Q8). Therefore, they were deleted from the analysis. The system is user-friendly. The system is flexible. Survivors Fund offers regular trainings to employees about how to use management information system infrastructures. The information obtains adequate edit, balance and internal control checks are independents variables. Table 4.9 shows the multiple regression Analysis model.

5.0 Conclusion

The study was carried out and the major findings were as revealed the following: The study found that the management Information system usage at SURF, Rwanda, and the project monitoring and evaluation are effective and efficient. However, concerning the hardware, Software and process used at SURF, Rwanda, and the study found that there is incompatibility of the application of the system with some devices and inconsistent interface. Additionally, there was a problem that the system does not provide machine utilization report.

6. Recommendation

It is recommended to SURF, Rwanda to work with the system provider to update the system that embeds consistent interface and the system that is compatible with variety of devices. Moreover, the system should be able to provide machine utilization report.

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