

Evaluation of the Effect of Online Project Tracking on Project Success in Non-Governmental Organisations in Zambia.

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Abstract

social projects worldwide aim at alleviating hunger, poverty, diseases while improving access to clean water, quality education and health services. Project management has been used as a tool to deliver on the social needs of developing countries. This research endeavoured to evaluate the effect of online project tracking on the success of social projects. The international Journal of Project Management (2018) states that projects are often over budget, over time, or worse they fail to deliver on their immediate objectives. Zambia today is faced with the challenge that despite studies showing the importance of the critical success factors for projects, projects are still failing to succeed in the social sector. Literature on projects implemented in Zambia revealed that well-funded donor projects have failed to deliver and bring about the intended project impact. The general objective of this study was to evaluate the effect of online project tracking on project success in NGO's in Zambia. A descriptive research design was used in this study as it allowed to describe the effect of online project tracking on project success in Zambian NGO's. The quota sampling approach was used in drawing the sample. The research had two stratum, NGO's dealing in Water, Sanitation and Health, and NGO's dealing in Poverty reduction and Community development. The

sampling frame was obtained from the Nexus Commonwealth Network Zambia NGO listing and the Non-Governmental Gender Organisations' Coordinating Council (NGOCC) NGOs and CBOs listing. The sample size was 50 subjects with a proposed 25 from each stratum. The data analysis revealed that 20 percent of the sampled NGOs were currently using online project tracking, and that the more experienced the Project Manager, the higher the chances (33 percent) that they had used an online project tracking software. The data analysis established that there was a gap in the training of project managers because their training did not include online project tracking skills. The research recommended that NGO's in Zambia implementing projects in the social sector consider investing in online project tracking, as this would improve project planning, implementation, monitoring and evaluation. Universities and Colleges offering project management training at different levels should consider including online project tracking in their curricula. The Government should consider establishment of the Zambia Institute of Project Management to control implementation of social projects. Future research should look at comparing online project tracking to traditional project tracking success rate.

Keywords—Project Management, Online Project Tracking, Non-Governmental Organisation, Project Success.

I. INTRODUCTION

The research aimed at evaluating the effect of online project tracking on the success of projects in Non-Governmental Organisations (NGO') in Zambia.

It is important to understand the background to project management before introducing the concept of online project tracking. Project Management techniques date way back to the 1950's, which is estimated to be the beginning of what we call now modern project management. The birth of project management techniques was brought about when two mathematical project-scheduling models were developed according to Barron and Barron (2011). The first mathematical scheduling model being Program Evaluation and Review Technique (PERT) which was developed by Booz Allen and Hamilton as a United States Navy's Polaris missile submarine program which analysed the tasks involved in completing a project and the time it would take to complete a project. The second mathematical model was the Critical Path Method (CPM) developed by DuPont and Remington Rand Corporation for managing plant maintenance and it basically determined the schedule flexibility of a project postulates Barron and Barron (2011).

The last two decades have seen a rapid technological advancement which has made the Information Technology (IT) Industry to be incorporated in project management solutions to supplement the two fundamental models from the 1950's. It is true that modern project management systems deliver innovative solutions that have the latest tools, techniques and systems imbedded in the different project management software.

According to the PMBOK (2013) project management is the application of knowledge, skills, tools and techniques to project activities to meet the project requirements. In this sense project management can relatively be compared to putting a series of actions in a sequence or orderly manner allowing for the best end result to be obtained. The

PMBOK (2013) further states that a project is accomplished through the application and integration of the 47 logically grouped project management processes that form the five process groups. The five process groups according to the PMBOK (2013) include initiating, planning, executing, monitoring and control, and project closing.

Online Project Tracking covers all the five process groups even though it is intensified during the execution and monitoring and control process groups. Project tracking involves the monitoring of actual implementation of the project tasks as compared to the planned project progress, with collection of key progress metrics such as risks, dependencies and changes in the original plan. Project monitoring basically involves project tracking of the five variables which include schedule, costs, deliverables, quality and benefits. In social projects the highlight is evaluation of the benefit to the intended target beneficiaries, usually referred to as the project impact.

It is therefore worth noting that online project tracking is a way of monitoring project progress using different project management software. Inloox (2018) postulates that online project tracking is a system that assists the project manager to recognise the tasks that are required to complete a project successfully. An online project tracking software is essentially a database that allows the management of information that is inputted as a baseline (planned) to be compared with what is obtaining (actual) during the life cycle of a project.

Online project tracking software comes with an interface that allows interaction between the project manager and the team, in a number of software's it might include the contractors and customers as part of the users of the software. According to Raymond and Bergeron (2008) the project management information system are software packages meant to provide management with the decision-making

support needed in planning, organising and controlling of projects.

The International Journal of Project Management (2018) postulates that 24% of the World's Gross Domestic Product (GDP) USD19 trillion is spent through projects every year as revealed by the World Bank. This is a demonstration that projects are one of the main ways through which countries across the globe deliver development to their populations in the 21st century. It is also worth noting that the International Journal of Project Management (2018) further states that projects are often over budget, over time, or worse they fail to deliver on their immediate objectives or strategic goals.

Zambia has had three national development plans since the early 2000s, which are the Fifth National Development Plan 2006-2010, the Sixth National Development Plan 2011-2015, the Revised Sixth National Development Plan 2013-2016 and the current Seventh National Development Plan 2017-2021. All these medium term development plans are aimed at achieving the vision 2030 of transforming the country from a primary product dependent economy, to a dynamic middle income industrialised country by the year 2030 as stated in the Seventh National Development Plan (7NDP). It is also in the 7NDP that the President of the Republic of Zambia stresses that stakeholders are the pillars in the implementation of the 7NDP. These stakeholders include Non-Governmental and Civil Society Organisations which implement a number of social, health and development projects in Zambia.

It is important thence that these projects must be managed with outmost expertise and financial produce. How these developmental projects are managed determines their success or failure to deliver on the set goals such as poverty reduction, improved access to health services, improved sanitation or the reduction in poverty levels in the country.

A. *Statement of the Problem*

A project that fails to deliver on any of the project deliverables must be considered as a failed project. A project however is considered to work under three main constraints these being cost, time and quality. Social projects in Zambia aim to alleviate hunger, poverty, disease while improving access to clean water, quality education and health services. A number of studies have been carried out to determine the critical success factors which contribute to project success. Kamau and Mohamad (2015) postulate that one of the critical success factors is an effective monitoring and evaluation system. The online project tracking is used to track project implementation and progress as part of an effective monitoring and evaluation system. Online project tracking hence should be considered as one of the critical success factors in project management. Online project tracking requires investment, skills and knowledge for the part of the project manager, project team and project funders. Despite studies showing the importance of the critical success factors, projects are still failing to succeed, making one wonder whether skills, management, politics, and societal support are insufficient in project implementation. According to the International Journal of Project Management (2018) projects are often over budget, over time, or worse they fail to deliver on their immediate objectives or strategic goals. In Zambia today projects that are well funded by donors have failed to deliver and bring about the intended impact to the intended communities. According to the NORAD Evaluation Report (2008) on the projects it funded from 1991 to 2005, evidence indicated that none of the poverty reduction projects had a lasting impact on the livelihoods of the poor Zambians. This background leads us to the problem that Zambia faces today, which is that despite studies showing the importance of the critical success factors in project management, projects are still failing to succeed in the social sector. This research endeavoured to evaluate the effect of online project

tracking on project success as one of the project critical success factors. This research endeavoured to establish whether online project tracking has an effect on project success in the social sector. Project success being not only completion of the project within budget, time and quality but also having the intended impact on the target communities.

B. Objectives

The general objective of this study was to evaluate the effect of online project tracking on project success in NGO's in Zambia. The specific objectives were to determine the levels of online project tracking usage in NGO's in Zambia; to assess the effect of online project tracking on project success in NGO's in Zambia; to investigate the online project tracking software in use in NGO's in Zambia; to establish the perception of Project Managers on online project tracking.

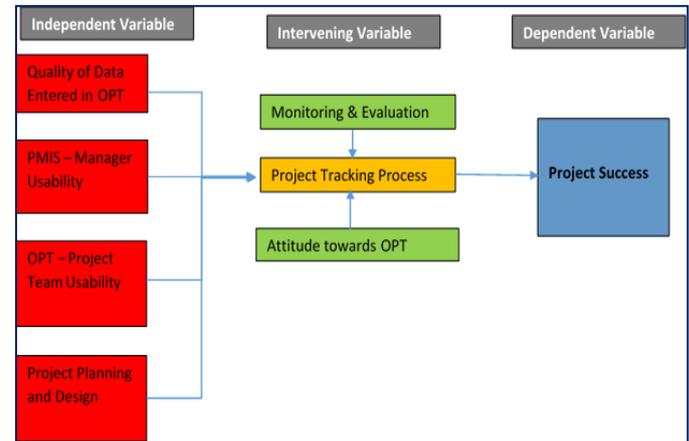
C. Conceptual Framework

In the conceptual framework for this research, the project tracking tools are the independent variables while project success is the dependent variable. It should be stated that for a project to be a success a number of other success factors play important roles. Online project tracking software which is a component of monitoring and evaluation has a directly proportional influence on the success of the project. This implies that if the online project tracking software tools are not utilised, the success of the project is negatively affected and when properly used the success of the project is positively impacted.

It is with this background that the conceptual framework in fig.1.1 has been developed. In fig 1.1, the independent variables are quality of data entered in the Online Project Tracking (OPT), the ability and use of the Project Management Information System (PMIS) by the Project Manager and by their team members, and definitely the project planning and definition as the baseline for project tracking. A project can be tracked if the baseline information on

the schedule (time), cost and expected quality are fed into the OPT against which tracking will be done. It is assumed that with all these in place, the project manager should deliver a successful project.

Figure 1.1. Conceptual Framework of the Study



II. RESEARCH METHODOLOGY

A. Research Design

The research design that was applied is descriptive design. Descriptive research design describes, explains and interprets conditions of the present. This implies that descriptive research examines a phenomenon that is occurring at a specific place and time. In this case the research looked at the use of online project tracking in NGO's in Zambia as a phenomenon worth evaluating. A descriptive research investigates conditions, practices, differences or relations, structures, opinions held, and trends that are evident. McMillan and Schumacher (2010) postulates that this design does not establish the cause-and-effect relationship. When investigating a new area according to McMillan and Schumacher (2010) scientists use descriptive methods to identify the factors that exist and to identify the relationships that exist among the factors.

This research design was appropriate for this study as it allowed to evaluate the effect of online project tracking on project success in Zambia. This design allowed to look at the characteristics of project tracking, parameters of project success and

the influence of project teams on the use of project tracking software. This approach is supposed to further provide an accurate description of what is currently obtaining in the social sector projects in relation to project tracking and project success.

B. Sample Size and Sampling Procedure

The research site for the study was not restricted by geographical boundaries. The study targeted Non-Governmental Organisations in Zambia through their Head Offices mainly located in the capital city, Lusaka. The target population for the study was Non-Governmental Organisations operating in Zambia and undertaking social projects. The inclusion criteria were projects in the Health Sector, Community Development, Poverty Reduction, and Water & Sanitation. The exclusion criteria were all engineering projects including road and infrastructure construction. The study population included Project Portfolio Managers, Project Managers, and Project Team Members for social projects.

According to Cooper and Schindler (2003) sampling is the process of selecting a predetermined number of subjects from a defined population as a representative of that population. In other words, sampling is the process in which a representative part of the population is picked for the purpose of determining the characteristics and parameters of the entire population.

This research used the quota sampling approach. This approach is part of the many non-probability sampling techniques. Quota sampling employs the discretion of the researcher to create different strata from which samples are drawn, these strata are called 'quota controls' and they are picked according to their relevance to the research topic. The research had two strata, firstly NGO's dealing in Water, Sanitation and Health, and secondly NGO's dealing in Poverty reduction and Community development. The total number of NGO's was obtained from the Nexus

Commonwealth Network Zambia NGO listing and the Non-Governmental Gender Organisations' Coordinating Council (NGOCC) NGOs and CBOs listing. The sampling frames were then subjected to simple random sampling to pick the organisations from the two strata.

The sample size was 50 subjects with a proposed 25 from each stratum. The Water, Sanitation and Health strata consisted of 27 participants and 21 was from the Poverty reduction and Community development strata, another 2 were from the corporate work dealing in poverty reduction. Table 2.1 shows the respondents by strata compared to the planned.

Table 2.1. Number of respondents by Strata

Stratum	Description of Strata	Number of Proposed Respondents	Actual Respondents
Strata 1	Water, Sanitation and Health	25	27
Strata 2	Poverty reduction and Community development	25	21
	Other apart from construction		02

The research used questionnaires as data collection tools. The questionnaires were self-administered and had an option of online administration. The questionnaire had an attachment of an introductory letter from the University and a consent form informing the respondents on issues of confidentiality, findings dissemination and data storage.

The questionnaire had five sections. Section A of the questionnaire gathered demographic information about the respondents. Section B collected information on the levels of usage of online project tracking tools in NGO's in Zambia. Section C of the questionnaire presented questions on the effect of online project tracking tools on project success. Section D assessed the online project tracking software currently in use by NGO's. The last Section E of the questionnaire gathered information on Project Managers perceptions on online project tracking tools.

Instrument validity looks at how accurate the data and data collection methods are in a research. According to Drost (2011) validity is concerned with the meaningfulness of the research components, meaning that it is concerned with whether the questions are measuring what they are intended to measure. The research used content validity through approaching Professionals in Research and the Supervisor to review the questionnaire before it was used. Hence the test questions matched the content of the subject which is online project tracking and project success.

To ensure reliability of the questionnaire the researcher tested the instrument (questionnaire) on a project in progress in Lusaka. This process offered the researcher chance to make adjustments to the questionnaire. The research further applied the internal consistency measurement, using the coefficient alpha also referred to as the Cronbach's alpha. The results showed that the coefficient was above .6 which is the acceptable reliability of an instrument for research.

The data collected was entered into excel and the Statistical Package for Social Sciences (SPSS) application for analysis. The collected data was subjected to frequency analysis and has been displayed in frequency charts and tables.

Qualitative data that was gathered through the open-ended questions was analysed using narrative

and thematic approach using Atlas.ti software. Analysing using thematic areas allows the researcher to identify, analyse and report patterns within the data.

Quantitative data on the other hand was analysed using descriptive statistics. The analysis of quantitative data has been presented in form of histograms and frequency tables. The data was subjected to statistical tests to show relationships.

The research was limited by finances to conduct in depth interviews with respondents to the questionnaire to gather more qualitative data. The scope of this paper was limited to the set research objectives due to time constraints.

The nature of social research always entails that many ethical issues are taken into consideration in the manner in which the study is conducted. This includes the methods used in gathering information, the cooperation from would be participants, the protection of respondents from the after effects and how data is going to be used.

According to Jackson (2002) she states that the Belmont Report of 1974 summaries three basic ethical principles relevant to research involving human subjects and include respect for persons, beneficence and justice. The researcher should ensure that the subjects have received full disclosure of the nature of the research, risks, benefits and opportunities with an extended arm to ask questions.

During the research, the following codes of conduct were followed; the respondents' names were not written on the questionnaires and the information which was collected was treated with strict confidentiality and for academic purposes only. Informed consent was obtained from participants. This means that explanations were given to potential research participants on the nature and purpose of the research so that they can choose freely whether or not to participate in the research.

All information gathered during the study was dealt with confidentially and permission from the

participants was obtained for all information to be shared publically or published. There was no deceiving of the participants in that they were informed on the aim, purpose and procedure of the study.

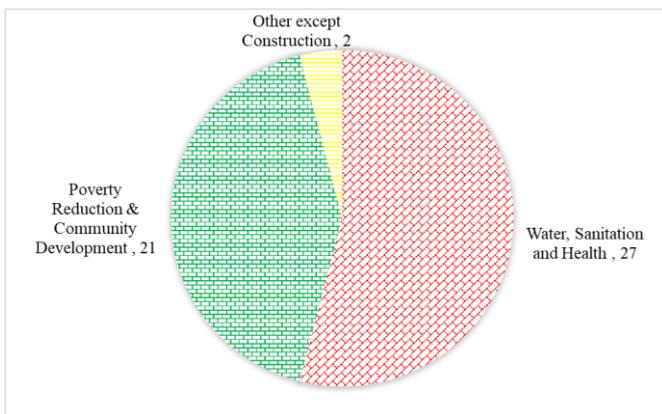
III. RESULTS AND DISCUSSION

A. Results / Research Findings

The results of the research have been divided into two parts, the first part looking at quantitative analysis with statistical tests and the second part looking at qualitative analysis.

The data collected from the target sample shows in Fig 3.1, that the participation in the research was as presented in Fig.3.1, 27 of the participants were from the water, sanitation and health while 21 were from the poverty reduction and community development Community development).

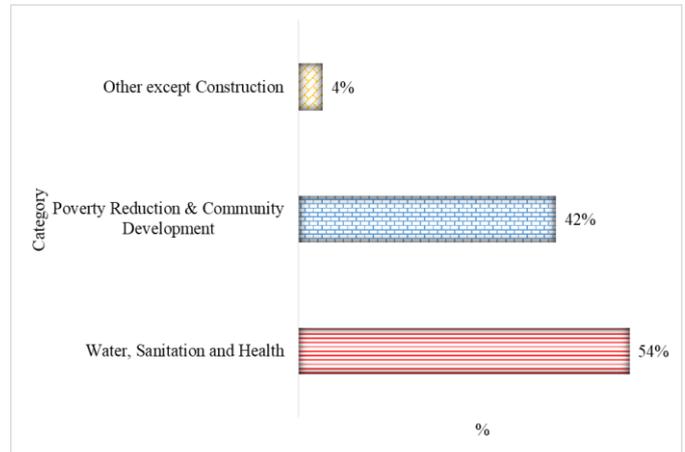
Figure 3.1 Research Respondents



Source: Researcher's Analysis, 2019

The data showed in Fig.3.2 that 54 percent of the respondents were from the first strata (Water, Sanitation and Health) while 42 percent were from the second strata (Poverty reduction and Community Development) and 4 percent from other social sectors apart from construction. The research excluded the construction and engineering sectors.

Figure 3.2. Respondents by Category



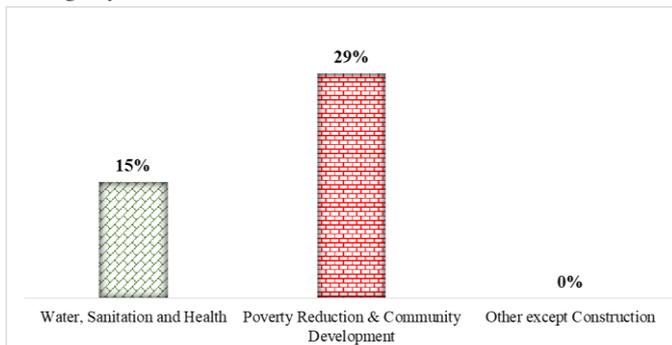
Source: Researcher's Analysis, 2019

B. Quantitive Data Analysis

The research reached a total of 50 respondents working as project managers and project team members in health, water and sanitation, development and community well-being. The research had four specific objectives which the results presentation will follow in this chapter. The quantitative data was collected using the questionnaires which contained Likert scales for quantitative analysis. The qualitative data was collected through structured open-ended questions that were administered to the respondents.

The data collected using the questionnaire was analysed for the levels of usage of Online Project Tracking in the different target organisations. The project managers and project team members were asked if they had head of Online Project Tracking systems and if they were currently using any online project tracking in their organisations for project tracking and monitoring (Fig.3.3 and Fig.3.4). The results indicate 15 percent of the water, sanitation and health project managers and project team members were using online project tracking and 29 percent of the poverty reduction and community development were using online project tracking tools.

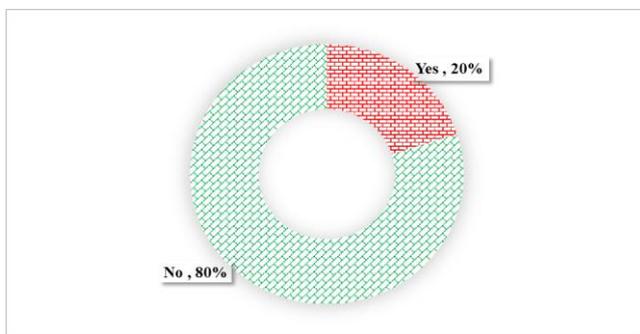
Figure 3.3 Usage of Online Project Tracking by Category



Source: Researcher's Analysis, 2019

The other except construction did not have anyone using online project tracking tools as shown in Fig.3.3. The breakdown is further shown in Fig.3.4 which displays the results as percentages of those that said they were using online project tracking in their workplace with 80 percent claiming that they did not use an online project tracking software while 20 percent claiming they used one. The results in fig.3.4 shows that 80 percent of the respondents were not using any Online Project Tracking in their projects. Even though this percentage shows the number of project managers using the online project tracking software, a number had heard about online project tracking.

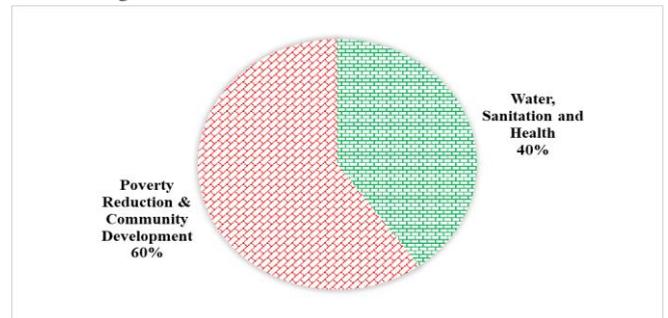
Figure 3.4. Use of Online Project Tracking



Source: Researcher's Analysis, 2019

The 20 percent that uses online project tracking was further analysed and Fig.3.5 shows the categories by strata and the percentages from each stratum that uses online project tracking tools. The data shows 40 percent from the water, sanitation and Health while 60 percent from the poverty reduction and community development sector.

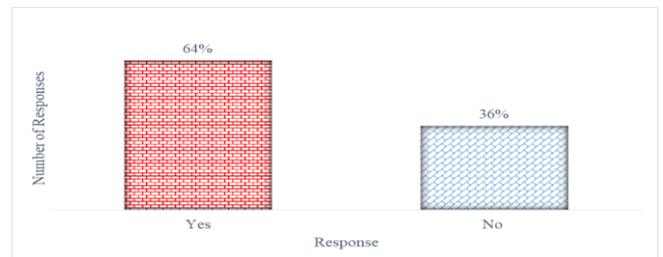
Figure 3.5. Online Pproject Tracking Use by Percentage



Source: Researcher's Analysis, 2019

The data analysis further showed that from the two strata in Fig.3.6, 64 percent had heard about Project Tracking while 36 percent had not.

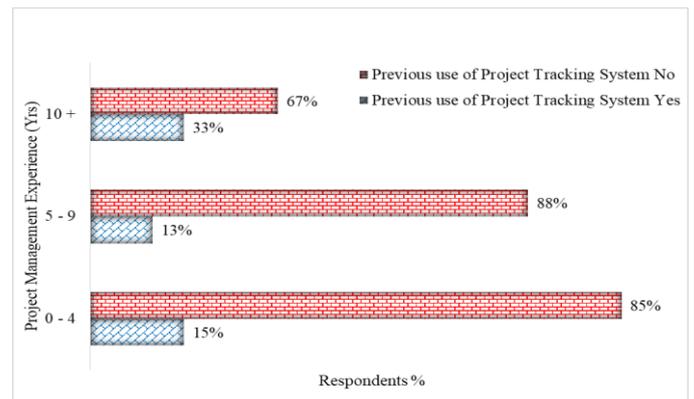
Figure 3.6. Respondent Heard of Online Project Tracking



Source: Researcher's Analysis, 2019

The data in fig. 3.7 show that at 0-4 years' experience 15% of the respondents had used the online project tracking, at 5-9 years' experience 13% had used the online project tracking while at 10 years' plus experience 33% had used the online project tracking in the implementation of their projects.

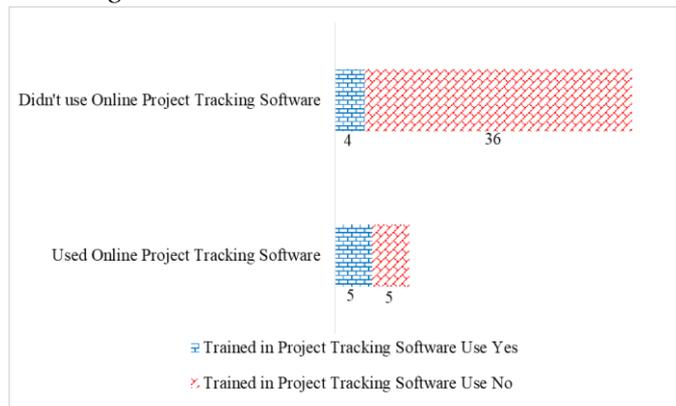
Figure 3.7. Previous use of Online Project Tracking



Source: Researcher's Analysis, 2019

The data further revealed that of the total respondents that used the Online Project Tracking Software (OPTS), 5 (50 percent of the total respondents using the online project tracking software) had actually undergone a formal training of the usage of project tracking software, while the other 5 (50 percent of the total respondents using the online project tracking software) had never done any training in the use of the online project tracking software as depicted in Fig. 3.8.

Figure 3.8 Training and Usage of Online Project Tracking

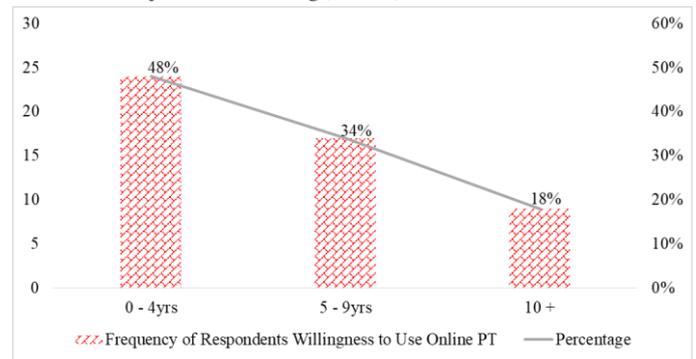


Source: Researcher's Analysis, 2019

The data further showed in fig.3.8 that of those that had been trained in the use of online project tracking skills formally, (4) 44 percent were not using any online software at their workplaces, while (5) 56 percent were using the acquired skills in online project tracking.

The data in fig.3.9 the cross tabulation of project managers (PM) experience and their willingness to use online project tracking. The data analysis demonstrates that the young or new project managers (experience between 0 – 4 years) have a higher chance of using online project management software at 48 percent compared to those with 10+ years' experience at 18 percent.

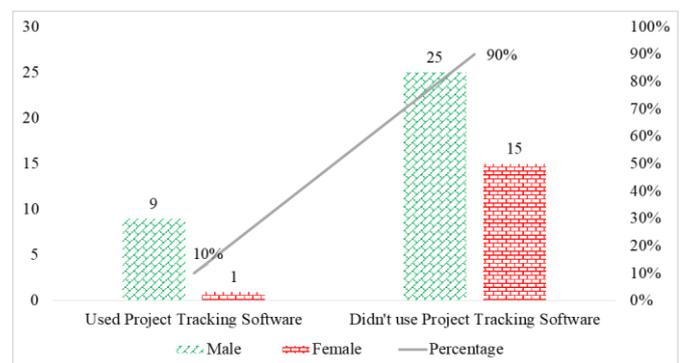
Figure 3.9. PM Experience and Willingness to use Online Project Tracking(OPT).



Source: Researcher's Analysis, 2019

The research looked at the data for any patterns on the gender and online project tracking. The data revealed that 1 (10 percent) of the female project managers who at the time of the research were using any kind of online project tracking software as illustrated in fig.3.10.

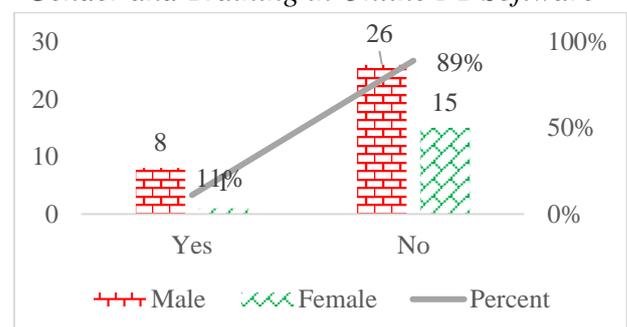
Figure 3.10. Gender and Usage of Online Project



Tracking Software Source: Researcher, 2019

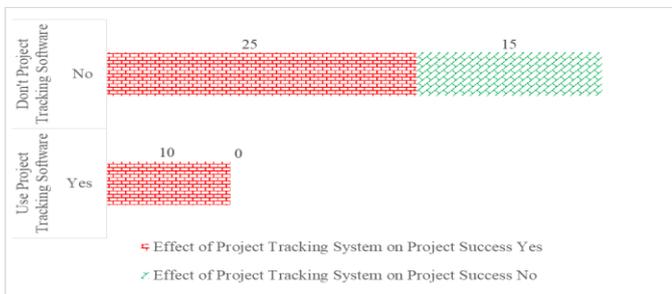
The data analysis further reviews that of the project managers that took part in the research, those trained in online project tracking, 11 percent were female and 89 percent is male.

Gender and Training in Online PT Software



The data collected was analysed to establish the perception of Project Managers on the effect that online Project Tracking would have on project success in NGO's. The results showed that 100 percent of the project managers and project team members that responded to the questionnaire and that are currently using an online Project Tracking tool felt that the online Project Tracking software had an impact on the success of the project. The results further showed that 25 (63 percent) of the respondents that do not use the Online Project Tracking software felt that the software had an effect on the success of the projects as shown in fig.3.10.

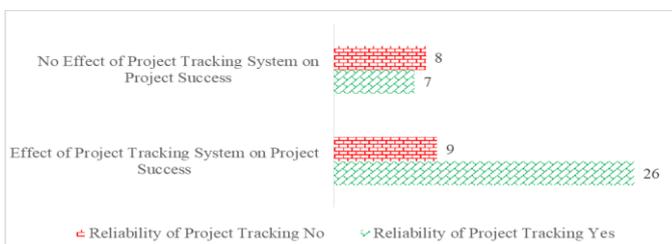
Figure 3.10. Use of Project Tracking Software Vs Effect on Project Success



Source: Researcher's Analysis, 2019

The data analysis revealed further that project managers that thought online project tracking had an effect on project success stood at 35 (70 percent) while those that thought online project tracking had no effect was 15 (30 percent). It is interesting to note that of the project managers that said online project tracking had an effect on project success 26 (74 percent) had high reliability in the online tracking tools while the rest 9 (26 percent) thought online project tracking was not reliable as shown in fig.3.11.

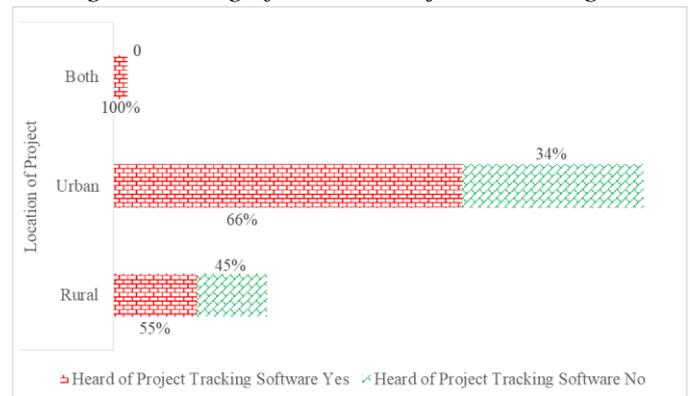
Figure 3.11. Effect of Online Project Tracking on Project Vs Reliability of Project Tracking



Source: Researcher, 2019

The data shows that of the project managers that took part in the research, 22 percent had projects running in the rural areas, 76 percent in the urban areas and 2 percent with projects both in the rural and urban areas. The data in fig.3.12 indicates that when asked if they had heard about online project tracking, 55 percent of those implementing projects in the rural areas confirmed of having heard about online project management while 66 percent of those implementing projects in urban areas also confirmed.

Figure 3.12. Location of the Project and Project Manager Hearing of Online Project Tracking



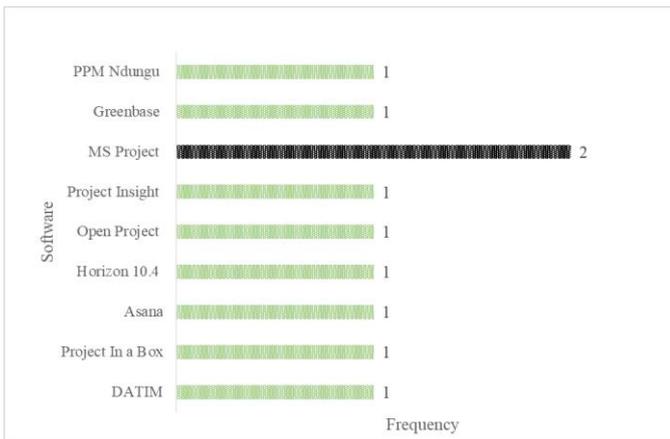
Source: Researcher's Analysis, 2019

C. Qualitative Data Analysis

To analyse the type of online project tracking software that was currently being used by the different organisations, a qualitative approach was used. The approach was to pick all the software that was listed and arranged by theme area.

This objective tried to establish the type of Project Tracking software in use in NGO's in Zambia. The results showed that of the 50 respondents 28 percent knew of an organisation that was currently using online PT in their project management. The research further listed the software currently in use by NGO's in Zambia as shown in fig.3.13.

Figure 3.13. Project Management Software in Use in Zambia



Source: Researcher's Analysis, 2019

The qualitative data from the project managers and team members on their perception of online project tracking. The questions were open ended to allow the respondents give their views on the lack of use of online project tracking and reasons associated to this. The data collected was put into themes.

D. Theme 1- Not taught in Universities and Colleges.

The responses were as follows; "Online project management was not part of the courses that we covered during my post graduate diploma in project management with University X". "I did an international diploma in project management with University Y and we never had any lesson on online project management". "In my degree program we were taught how to schedule projects using the Gantt chart and PERT but nothing relating to online project tracking". "If I was taught the importance of online project tracking at University, I might have recommended to my employer to buy a software but I was never taught". "The best Universities in Zambia do not have online project tracking as part of their curriculum in training project managers both at Degree and Masters Level". Of the 50 respondents, 60 percent gave reasons relating to Institutions offering project management not training them in online project tracking and consequently them not being able to use online

project tracking software in their project implementation.

E. Theme 2- Organisations do not invest in online project tracking software.

The responses were as follows; "I did a short course in online project tracking using MS project with a consultant but my organisation does not see the benefit of investing in project tracking software". "It is expensive to have project management software in social projects which can be monitored using excel as compared to engineering projects". "Top management does not know the benefits of online project management hence they do not make recommendations to buy online project tracking software". Of the 50 respondents, 10 percent said online project tracking was expensive to maintain and run in simple social projects as compared to simple calendars and Gantt Charts.

F. Theme 3- Online project tracking is more demanding compared to other methods.

The responses were as follows; "Online project tracking demands that you enter data at each point of planning and execution which is very demanding". "It is better to use a calendar with a Gantt chart and keep updating the progress". "Not everything should be done online, project briefs are enough to update the entire team on progress". "Online project tracking requires to employee an IT specialist to keep the network running all the time and you just cannot trust technology any more, people can hack the system and give wrong updates". Of the 50 respondents, 10 percent said online project tracking was demanding to maintain as compared to simple calendars and Gantt Charts.

G. Discussions

The foregoing findings on the research show the way online project tracking software has not fully been utilised in the implementation of social projects in Zambia. The study reached a total of 50 respondents with 54 percent from the water,

sanitation and health strata while 42 percent from the poverty reduction and community development strata. The discussion will be centered on these objectives.

The level of usage of online project tracking software in Zambia among the NGO's listed under the Nexus Commonwealth Network Zambia and the Non-Governmental Gender Organisations' Coordinating Council has been established to be at 20 percent. This implies that 80 percent of these listed NGO's in Zambia do not use any online project tracking software in the planning, scheduling, monitoring and evaluation of their projects. The literature that was reviewed from Davison, Mackinnon and Royle (2004) in their study, it was established that in large organisations progress tracking must be communicated efficiently and one way of effective communication is through online based platforms. This research hence submits that without an online project tracking as has been established, during project implementation it may affect the attainment of set targets and goals.

The research established that 64 percent of the Project Managers implementing projects in the listed NGO's had heard about online project tracking software even though they were not using the software. This is a large number of organisations and Project Managers that are relying on either excel or hard copy (calendar planners) to track their project progress. This comes short of the evidence from Ogero (2014) who states that the project monitoring system helped the Project Managers to perform their tasks in a more professional manner resulting in the increased performance of the project. The research by Ogero (2014) concluded that the use of Project Management Information System helped in the improvement of performance of the project while respecting the project constraints of time, budget and quality specifications hence meeting the project objectives and objectives. This however has not been the case with the 80 percent of project managers that participated in the study in Zambia who despite their knowledge on the importance of

online project tracking still choose not to invest in online project tracking software.

The study further reveals that 80 percent of project managers and team members are using physical communication with the project team and stakeholders either through morning meetings to update the entire team on the progress of the project or through weekly or monthly reports which might be demanding and consuming more stationary than required. This also lives room for the project to easily slack and run over time, budget and scope.

Ogero (2014) postulates that the use of Project Management Information Systems helps in the improvement of performance of the project through assisting the Project Managers to perform their tasks in a more professional manner. Having a project being implemented without the project management software might be linked to the NORAD Evaluation Report (2008) on projects it funded from 1991 to 2005 which showed that none of the poverty reduction projects had a lasting impact on the livelihoods of the poor Zambians.

The data further revealed that of the 20 percent that used the online project tracking software, half 10 percent had undergone some formal training in the usage of online project tracking software. The researcher found this to be an oversight by the organisations using the online project tracking software in their project implementation. The organisations should consider formally training the project managers in the use of online project tracking software. The training helps the project managers realise the full potential of the software as compared to job on training. The research further revealed that the training received by the Project Managers was job on training which might not answer all the needs to professionally and sufficiently run the online project tracking software. Project Managers should have a formal training in the use of the software for project tracking. The research also established that in cases where the project does not achieve the intended goal, neither the organisation nor the project manager want to

take the blame but put the blame on the software which should not be the case. The blame might be put on the employing organisations for employing under qualified project managers or the training institutions for not exposing their students to project tracking software that are available on the market.

The research established that the more experience the Project Managers had in project management the higher the chances that they had used the online project tracking software in their implementation of projects. The findings showed that those with experience between 0 – 5 had a 15 percent chance of having had used the online project tracking software while those with 10 years and more had a 33 percent chance of having had used the online project tracking software. These findings show that there might not be a significant change in the use of online project tracking software among the listed NGO's and Project Managers. These findings further show that the NGO sector has over the past 10 years not improved or responded to the technological advancement in project management. This might be looked at from two positions, first being that maybe the project tracking software is too expensive for most of the NGOs or secondly that the sector is not interested in making sure that quality projects are delivered to the target population. It might further mean that NGOs do not have a standard or common understanding of what project success is and what it should look like.

The research further established that the willingness to use online project tracking did not relate to the experience in project management. The more experienced project managers and team members 10 years +, 18 percent thought they would be willing to use the online project tracking software. This however might be related to their age group which was mostly above 40 years. It was also very interesting to note that project managers with 0 – 4 years of experience, 48 percent of these respondents said they were willing to use online project tracking. Again, this might be related to the age group of these project managers mostly in their

20 years and below 30 years, these are the computer generation as usually referred to because of their exposure to technology.

In concluding this objective, the research established that the levels of online project tracking usage in the Nexus and NGOCC listed NGOs in Zambia was very low at 20 percent from the sampled 50 NGOs. This lives a question as to how the rest of the NGOs (80 percent) track their projects objectives, targets, tasks and budget.

The data collected was analysed to establish the effect that online Project Tracking would have on project success in NGO's that were listed. The results showed that 100 percent of the respondents that are currently using an online Project Tracking software felt that the online Project Tracking software had an impact on the success of the project. The results further showed that 63 percent of the respondents that do not use the online Project Tracking software felt that the software had an effect on the success of the projects.

According to Kimmons and Loweree (1989) the larger and more complex the project the greater are the benefits and hence the need to invest in software that is capable of adjusting quickly to the changing project plans during the project execution stage. This complex change and monitoring process is essentially why the Project Management Information System was developed to attain project goals and the implementation of project strategies, the system basically supplies project managers with information on project cost, time frame of the project and the interrelationship of these parameters.

A project is considered a success if it delivers the set goals and objectives within the triple constraints of project management. The triple constraints are time, quality and cost. Meeting the triple constraints means that the projects delivers the objectives with time, budget and with the expected quality of work but this does not necessary mean the project was a success.

The findings from the research show that of the Project Managers that use the online project management software, all of the confirmed that online project tracking software was very important for a successful delivery of the project. The research established that 70 percent of the project managers that participated in the research considered the use of online to have an effect on the success of the project, this is against the background that only 20 percent actually use online project tracking in the management of their projects. It must be noted however that 30 percent of the project managers thought that online project tracking had no bearing on the success of the project.

The results from the statistical tests done on the data revealed that the time to complete a task was reduced when online project tracking was used in project management with a mean score of 3.58 on a scale of 1 to 5 indicating that the project managers felt that the project execution time was reduced. The project managers felt decision making time was reduced due to availability of data from the online project tracking software hence reducing on project execution time. The statistical test further revealed that the use of online project management improved the ability to cost activities as they occurred. This was shown in the mean score of 4.24 on a scale of 1 to 5 indicating a skewness to the right in the data collected from the project managers which means that the project managers felt that their budget implementation was improved by the use of online project tracking in their projects. The data further revealed that the mean score for improvement in the monitoring of activities was 4.36 on a scale of 1 to 5 indicating that the project managers felt that monitoring of project activities was improved highly by the online project tracking of projects.

This research established that Project Managers consider that the use of online project management software contributes to the delivery of a successful project to the stakeholders. The views from the Project Managers was that their organisations

should consider investing in online project tracking software. The project managers further expressed their concerns that Learning Institutions that offered Project Management at different levels did not include online project tracking as part of the curriculum nor did they include a basic introduction to project management software. The project managers hence blamed the low use of online project tracking on the education system more than their employers.

The research found that 10 different software were currently being used in the NGO's that the research reached from the listed NGO's. The most used online project tracking software was Microsoft Project. The other software in use were organisation specific and depended on the amount of money that the organisation was willing to invest in the online project tracking software.

The list of the other software in use is as follows: PPM Ndungu – Locally designed online project management software for the organisation. Greenbase – Locally designed online project management software for the organisation. Project Insight - Project Insight is a project and portfolio management solution for project driven organizations. Open Project - Open Project has project planning and scheduling tools that enable teams to easily define project objectives and specify work to be done related to scope.

The perceptions of Project Managers were collected using the Likert Scale in four areas which included the rate of reduction in the time to complete a task, the rate of reduction in time to make decisions, the rate of improvement of activity costs and the rate of improvement of monitoring activities.

The data collected showed that the mean for rate of improvement of monitoring activities was at 4.36 which means that the data was skewed to the right, showing that a good number Project Managers believed that the rate of monitoring activities would

be improved with the use online project tracking software. The data further reveals that the mean for rate of improvement of activity costs was 4.24 also showing skewed to the right and confirming that Project Managers perception that the online project tracking software would reduce the cost of project implementation.

The data collected further reviewed that the rate of reduction in the time to make decisions on the Likert scale gave a mean of 3.78 indicating that the Project Managers perception was that the decision making process and time were reduced because of using online project tracking.

The qualitative data brought out thought provoking issues relating to how project managers justified the use and lack of use of online project tracking software in their organisations. The data showed that 60 percent of the project managers that the research contacted blamed the Institutions of Higher Learning for their inability to use online project tracking software. This group of project managers claim if only they were taught during their project management training on how to use online project tracking software they would use the software and recommend for its purchase in their organisations.

The second group which was made of 30 percent of the respondents blamed the organisations they worked at for not purchasing online project tracking software. This group of project managers claim that if the organisations had such software they would easily acquire the skills to use the software. The organisations did not see the need to have such complicated software to manage social projects in their organisations.

The third and last group with 10 percent of the respondents claimed that in as much as organisations can buy the software and Universities include online project tracking in their curriculum, use of these software in the social sector projects was just too demanding and time wasting. It is better

to use a calendar with a simple Gantt chart to track the progress of the project. The group further claims the project brief meetings are sufficient to update project team members on the progress of the project.

In Zambia today projects that are well funded by donors have failed to deliver and bring about the intended impact to the target communities. The general objective of this study was to evaluate the effect of online project tracking on project success in NGO's in Zambia. The specific objectives were to determine; the levels of online project tracking usage, effect of online project tracking on project success, online project tracking software in use and establish the perception of Project Managers on online project tracking.

IV. CONCLUSION

The research in conclusion points to the fact that the usage of online project tracking among project managers should be improved in NGO's in Zambia. It has been indicated by other researchers in the construction sector that project online tracking is one of the success factors Ogero (2014). Ogero further postulates that project management information systems are developed to achieve project objectives and goals. This research also affirms that online project tracking improves the effectiveness and efficiency in project implementation of tasks in projects of the social setup. According to Mikko et al (2004) tracking of projects in the construction sector allows for the project manager to make better decisions. The research established that project managers demanded that their training include a course in the use of online project tracking software. This research established that perception of the Project Managers on the use of online project tracking indicates that online project tracking allows for better project planning, scheduling, monitoring, and control. Further the research established that online project tracking improves the attainment of project goals and objectives, reduced time in decision-

making and proper budgeting. The research further noted that the advantages obtainable from project management information system use are not limited to individual performance but also include project performance as a whole. The conclusion drawn is that online project tracking of projects is a critical contributor to project success and it should be used in the implementation of social projects in the health, development and poverty reduction projects. Online project tracking makes a significant contribution to project implementation and control. Online project tracking trainings should be offered to more project managers and make them understand the benefits over the traditional methods of project tracking.

V. RECOMMENDATIONS

This research draws the following recommendations:

That all NGO's in Zambia implementing projects in the social sector should consider investing in online project tracking as it would improve the project planning, implementation, monitoring and evaluation. They are different products on the market that can be used for small to large projects.

That the Zambia Association of Project Management should take advantage of the gap in knowledge on the use of online project tracking software. The Association can train members of their association so that their skills are up to date and their project deliverables are always attained.

That Government should establish the Zambia Institute of Project Management to control and hold accountable individuals implementing social projects when such projects fail. Currently project managers are not accountable to anybody and when projects fail, they simply move on to other projects. This is denying the community of the much needed social development and a waste of resources for the project funders.

It is apparent that Universities and Colleges offering project management training at different

levels have not included online project tracking as part of the curriculum for would be project managers. This research recommends that the starting point for improved delivery of social sector projects is to include training on online project tracking in the curriculum for undergraduate and post graduate students and not leaving acquisition of such knowledge through consulting firms only.

Future research on the subject of online project tracking could look at impact of online project tracking of budget expenditure for social projects and the project beneficiary's perspective of online project tracking. The future research might further look at comparing projects using online project tracking to traditional project tracking with special attention to project success. This would allow for further recommendations to be made on the subject from a more informed point of view as to whether online project tracking really has a bearing on project success.

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