EFFICACY OF PROJECT MANAGEMENT LIFE CYCLE IN ACHIEVING PROJECT SUCCESS: A CASE OF SELECTED NON-GOVERNMENTAL ORGANIZATION PROJECTS IN CHIPATA DISTRICT, ZAMBIA

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Abstract

A project management life cycle is the series of phases that a project passes through from its initiation to its closure. The phases are: Project Initiation; Project Planning; Project Execution; Project Monitoring and Control; and Project Closure. The project management life cycle provides the basic framework for managing the project. However, the project life cycle is not documented within a methodology to ensure realization of benefits for the undertaken projects. To this effect, the project management life cycle cannot be determined or shaped by the unique aspects of the organization, industry, or technology employed. As such, it becomes difficult to handle over the project to the permanent operations as well as referring project success to the baselines. The general objective of the study was to establish the efficacy of the project management life cycle circle on project success by answering the general research question on: How efficacy was the project management life cycle on project success? Pragmatism was the philosophical view that underpinned the study and informed the mixed research method approach used. The convergent parallel strategy of the mixed research methods approach was used. Target population was active projects and the sample size was 38 Managers from active Non-Governmental Organizations that were selected by using purposive sampling method. A self administered questionnaire that had both open ended question (qualitative) and closed question (quantitative) was used to collect data. Qualitative data was analyzed by using the inductive process of building from the data to broad themes and then to interpretation. Quantitative data was analysed by using descriptive statistics. The findings were that the project management life cycle was implemented in achieving project success. Further, there were factors that affected the project management cycle to achieving project success. Subsequently, the project team had knowledge of the project management life cycle in achieving project success. The study concluded that the project management life cycle contributed positively to achieving project

Key Words: Project, Project Management Life Cycle, Project Success,

Introduction

A project management life cycle is the series of phases that a project passes through from its initiation to its closure (Abdulla, & Al-Hashimi, 2019; Al-Hajj & Zraunig, 2018). The phases are: Project Initiation; Project Planning; Project Execution; Project Monitoring and Control; and Project Closure (Banda, 2019; Majeed, 2019; Cheng *et al.*, 2017). The phases are generally sequential. While every project has a definite start and a definite end, the specific deliverables and activities that take place in between vary widely with the project (Chaves *et al.*, 2016; Arafa, 2015; Carvalho *et al.*, 2015). The project management life cycle provides the basic framework for managing the project, regardless of the specific work involved (Baloyi, 2016; Hyvari, 2016; Kamau, & Mohamed, 2015).

Since projects are temporary in nature, the success of the project should be measured in terms of completing the project within the constraints of scope, time, cost, quality, resources, and risk (Naeem *et al.*, 2018; Martina, & Pavel, 2016; Solis-Carcano *et al.*, 2015). The project management life cycle provides the basic framework for managing the project (Shah, & Patel, 2018; Dermirkesen & Ozorhon, 2017; Badewi, 2015). However, the project life cycle is not documented within a methodology to ensure realization of benefits for the undertaken projects (Suresh, & Sivakumar, 2019; Rabia, 2018; Chilongo, & Mbetwa, 2017; Jacobs, 2017; Mladen, & Mariela, 2017; Muszynska, 2016). To this effect, the project management life cycle cannot be determined or shaped by the unique aspects of the organization, industry, or technology employed (Ngomi, 2017; Rosli, 2017; Beleiu *et al.*, 2016; Jugdev, & Muller, 2015). As such, it becomes difficult to handle over the project to the permanent operations as well as referring project success to the baselines (Laird, 2016; Bjarnason, 2015; Nibyiza, 2015). It is against this background that the study sought to establish the efficacy of the project management life cycle circle on project success. The outline of the study comprises the introduction, research methodology, findings and discussion, and conclusion.

Methodology

The general objective of the study was to establish the efficacy of the project management life cycle circle in achieving project success by answering the general research question on: How efficacy was the project management life cycle on project success? Pragmatism was the

philosophical view that underpinned the study and informed the mixed research method approach used. The convergent parallel strategy of the mixed research methods approach was used. The total population was active projects and the sample size was 38 Managers from active Non-Governmental Organizations that were selected by using purposive sampling method. A self administered questionnaire that had both open ended question (qualitative) and closed question (quantitative) was used to collect data. Qualitative data was analyzed by using the inductive process of building from the data to broad themes and then to interpretation. Quantitative data was analysed by using descriptive statistics.

Findings and Discussion

The findings and discussion are based on the research questions that provide answers on: The implementation of the project management life cycle in achieving project success; Factors that affect the project management life cycle in achieving project success; and Project teams' knowledge in understanding the application of project management life cycle in achieving project success. The outline of the findings and discussion is presented in three sections namely A, B, and C.

SECTION A

How was project management life cycle implemented in achieving project success?

In order to provide the answer to the first research question, opinion was sought from the respondents and the results are indicated in the following Tables

Project Initiation Stage Implementation

As shown in Table 4, the majority of the respondents, 100% were in agreement with the implementation of the project initiation stage of the project management life cycle. This stage involves those processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase.

Table 4: Project Initiation stage implementation

		Frequency	Percent	Valid Percent
Valid	Agree	24	63.2	63.2
	Strongly Agree	14	36.8	36.8
	Total	38	100.0	100.0

Source: Field Data

Project Planning stage Implementation

As presented in Table 5, the majority of the respondents, 97.3% indicated implementation of the project planning stage of the project management life cycle while the minority, 2.6% were neutral. Project planning stage involves those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project wish to realize.

Table 5: Project Planning stage implementation

		Frequency	Percent	Valid Percent
Valid	Neutral	1	2.6	2.6
	Agree	20	52.6	52.6
	Strongly Agree	17	44.7	44.7
	Total	38	100.0	100.0

Source: Field Data

Project Execution stage implementation

As indicated in Table 6, the majority of the respondents, 92.1% were in agreement that project execution stage of the project management life cycle was implemented while 7.9% were neutral. This stage involves processes performed to complete the work defined in the project management plan to satisfy the project specifications.

Table 6. Project Execution stage implementation

		Frequency	Percent	Valid Percent
Valid	Neutral	3	7.9	7.9
	Agree	17	44.7	44.7
	Strongly Agree	18	47.4	47.4
	Total	38	100.0	100.0

Source: Filed Data

Project Monitoring and Control Stage Implementation

Table 7 indicates that the majority of the respondents, 97.4% were in agreement on the implementation of the project monitoring and control stage of the project management life cycle while the minority, 2.6% were neutral. Project monitoring and control stage includes tracking, reviewing, and regulating the progress and performance of the project; identifying any areas in which changes to the plan are required; and initiate the corresponding changes.

Table 7: Project Monitoring and Control stage implementation

		Frequency	Percent	Valid Percent
Valid	Neutral	1	2.6	2.6
	Agree	21	55.3	55.3
	Strongly Agree	16	42.1	42.1
	Total	38	100.0	100.0

Source: Field Data

Project Closure stage implementation

Table 8 presents that the majority of the respondents, 92.1% were in agreement on the implementation of the project closure stage of the project management life cycle while 7.9% opted to remain neutral. This stage involves finalizing all activities across the Project Management life cycle to formally close the project or phase. Further, it verifies that the defined processes are completed within all of the process groups to close the project or a project phase, as appropriate, and formally establishes that the project or project phase is complete.

Table 8: Project Closure stage implementation

	- mart stage - P				
		Frequency	Percent	Valid Percent	
Valid	Neutral	3	7.9	7.9	
	Agree	12	31.6	31.6	
	Strongly	23	60.5	60.5	
	Agree				
	Total	38	100.0	100.0	

Source: Field Data

SECTION B

What were the actors that affect project management life cycle in achieving project success?

In order to provide the answer to the second research question, opinion was sought from the respondents and the results are indicated in the following Tables.

Factors Affecting Project Initiation Stage

As shown in Table 9, the majority of the respondents, 89.5% indicate that there were factors that affected the project initiation stage while the minority, 2.6% disagreed and 7.9% remained

neutral. The study revealed that the factors included lack of funding, lack of leadership, inefficiency, lack of accountability and inadequate feasibility studies.

Table 9: Factors affecting Project Initiation stage

		Frequency	Percent	Valid Percent
Valid	Disagree	1	2.6	2.6
	Neutral	3	7.9	7.9
	Agree	16	42.1	42.1
	Strongly	18	47.4	47.4
	Agree			
	Total	38	100.0	100.0

.Source: Field Data

Factors Affecting Project Planning Stage

The majority of the respondents, 89.5% were in agreement that there were factors that affected the project planning stage of the project management life cycle while 5.3% disagreed and 5.3% were neutral as indicated in Table 10. The study reveled that the factors were failure to plan for Project Scope management, Project Time Management; Project Cost Management; Project Quality Management; Project Human Resource Management; Project Communications Management; Project Risk Management; Project Procurement Management; and Project Stakeholder Management.

Table 10: Factors affecting Project planning stage

		Frequency	Percent	Valid Percent
Valid	Disagree	2	5.3	5.3
	Neutral	2	5.3	5.3
	Agree	13	34.2	34.2
	Strongly	21	55.3	55.3
	Agree			
	Total	38	100.0	100.0

Source: Field Data

Factors affecting Project Execution stage

The majority of the respondents, 86.9% were in agreement on the existence of the factors affecting execution stage of the project management life cycle while 7.9% disagreed and 5.3% were neutral as presented in Table 11. The study revealed that the factors were resistance to

change from project team and project beneficiaries, changes to expected activity durations, changes in resource productivity and availability, and unanticipated risks.

Table 11: Factors affecting Project Execution stage

		Frequency	Percent	Valid Percent
Valid	Disagree	3	7.9	7.9
	Neutral	2	5.3	5.3
	Agree	12	31.6	31.6
	Strongly	21	55.3	55.3
	Agree			
	Total	38	100.0	100.0

Source: Field Data

Factors affecting Project Monitoring and Control

As indicated in Table 12, the majority of the respondents, 94.7% were in agreement that there were factors that affected the project monitoring and control stage of the project management life cycle while the minority, 2.6 strongly disagreed and 2.6% were neutral. The study revealed that the factors include: identifying areas in which changes are required and initiating the corresponding changes; controlling changes and recommending corrective or preventive action in anticipation of possible problems; monitoring the ongoing project activities against the project management plan and the project performance measurement baseline; and Influencing the factors that could circumvent integrated change control or configuration management so only approved changes are implemented.

Table 12: Factors affecting Project Monitoring and Control

		Frequency	Percent	Valid Percent
Valid	Strongly Disagree	1	2.6	2.6
	Neutral	1	2.6	2.6
	Agree	20	52.6	52.6
	Strongly Agree	16	42.1	42.1
	Total	38	100.0	100.0

Source: Field Data

Factors affecting Project Closure stage

As shown in Table 13, the majority of the respondents, 89.5% indicated that there were factors that affected the project closure stage while 10.5% disagreed. The study revealed that factors were deficient monitoring and controlling system, lack of record keeping and exclusion of external stakeholders to participate in project management activities

Table 13: Factors affecting Project Closure stage

		Frequency	Percent	Valid Percent
Valid	Disagree	4	10.5	10.5
	Agree	23	60.5	60.5
	Strongly Agree	11	28.9	28.9
	Total	38	100.0	100.0

Source: Field Data

SECTION C

How was project team knowledge on project management life cycle in achieving project success?

In order to provide the answer to the third research question, opinion was sought from the respondents and the results are indicated in the following Tables.

Project Team Participation at the Project Initiation stage

Table 14 indicates that the majority of the respondents, 97.4% were in agreement that the project team participated at the project initiation stage of the project management life cycle while the minority, 2.6% disagreed. Since projects are temporary in nature, the success of the project should be measured in terms of completing the project within the constraints of scope, time, cost, quality, resources, and risk as approved between the project managers and senior management

Table 14: Project Team participation at the Project Initiation stage

		Frequency	Percent	Valid Percent
Valid	Disagree	1	2.6	2.6
	Agree	17	44.7	44.7
	Strongly Agree	20	52.6	52.6
	Total	38	100.0	100.0

Source: Field Data

Project Team Participation at the Project Planning Stage

Table 15 shows that the majority of the respondents, 85.5% indicated that the project team participated at the planning stage of the project management life cycle while 5.3% disagreed and 5.3% were neutral. The study revealed that project governance is an oversight function that is aligned with the organization's governance model and that encompasses the project management life cycle. Project governance framework provides the project manager and team with structure, processes, decision-making models and tools for managing the project, while supporting and controlling the project for successful delivery.

Table 15: Project Team participation at the Project Planning stage

		Frequency	Percent	Valid Percent
Valid	Disagree	2	5.3	5.3
	Neutral	2	5.3	5.3
	Agree	15	39.5	39.5
	Strongly Agree	19	50.0	50.0
	Total	38	100.0	100.0

Source: Field Data

Project Team Participation at the Project Execution Stage

Table 16 presents that the majority of the respondents, 92.1% were in agreement that the project team participated at the project execution stage of the project management life cycle while the minority, 2.6 disagreed and 5.3% remained neutral. The study revealed that the project team is responsible and accountable for setting realistic and achievable boundaries for the project and to accomplish the project within the approved baselines.

Table 16: Project Team participation at the Project Execution stage

	<u> </u>	I		
		Frequency	Percent	Valid Percent
Valid	Disagree	1	2.6	2.6
	Neutral	2	5.3	5.3
	Agree	17	44.7	44.7
	Strongly Agree	18	47.4	47.4
	Total	38	100.0	100.0

Source: Filed Data

Table 17 indicates that the majority of the respondents, 97.4% were in agreement that the project team participated at the project monitoring and control stages of the project management life cycle while the minority, 2.6% were neutral. The project team is responsible to monitor and control project work; perform integrated change control; validate scope; control scope; control schedule; control costs; control quality; control communications; control risks; control procurements; and control stakeholder engagement

Table 17: Project Team participate in Project Monitoring and Control stage

		<u>, </u>		
		Frequency	Percent	Valid Percent
Valid	Neutral	1	2.6	2.6
	Agree	15	39.5	39.5
	Strongly Agree	22	57.9	57.9
	Total	38	100.0	100.0

Source: Field Data

Team Participation at Project Closure stage

Table 18 presents that the majority of the respondents, 97.4% indicated that the project team participated at the closure stage of the project management life cycle while the minority, 2.6% opted to remain neutral. The project team should also formally establish the premature closure of the project. Prematurely closed projects may include aborted projects, cancelled projects, and projects having a critical situation. In specific cases, when some contracts cannot be formally closed or some activities are to be transferred to other organizational units, specific hand-over procedures may be arranged and finalized.

Table 18: Project Team participation at Project Closure stage

		Frequency	Percent	Valid Percent
Valid	Neutral	1	2.6	2.6
	Agree	18	47.4	47.4
	Strongly Agree	19	50.0	50.0
	Total	38	100.0	100.0

Source: field Data

GRAPHICAL SUMMARY OF FINDINGS

Implementation of Project Management Life Cycle in achieving Project Success



Figure 1 Source: Field Data

Factors Affecting Project Management Life Cycle in achieving Project Success

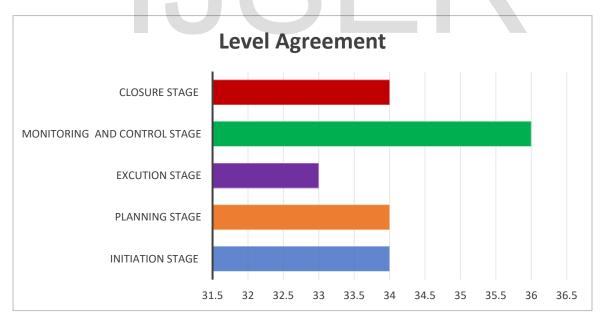


Figure 2 Source: Field Data

Project Team participation in Implementing Project Management Life Cycle to achieving Project Success.

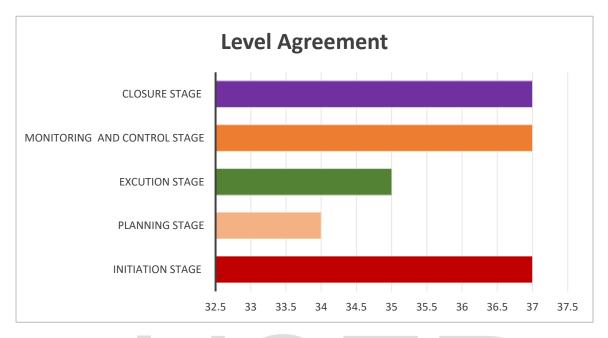


Figure 3 Source: Field Data

Conclusion

The study concluded that there was implementation of project initiation, project planning, project execution, project monitoring, and project closure stages of the project management life cycle in achieving project success. Further, there were factors that affected project initiation, project planning, project execution, project monitoring, and project closure stages of the project management life cycle in achieving project success. Subsequently, the project team participated at the stages of project initiation, project planning, project execution, project monitoring, and project closure of the project management life cycle in achieving project success.

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