

Impact of Project Management Methodologies on Project Success Rates: A Study on Foreign Aided Organizations Working In Educational Sector of Nepal

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Abstract

This study explores the impact of Project Management Methodologies (PMMs) on project success among the foreign aided organizations of Nepal, working in the field of education but not limiting their work area only to educational sector. The study assessed different methodologies implemented by project organizations and explored its strengths and weaknesses. With the adoption of mixed research method (quantitative and qualitative), the objective to gain deeper insight on the subject matter was fulfilled. Total 300 respondents were part of the study for quantitative section and 16 for qualitative analysis. Additionally, a pilot test was conducted for 15% of the sample size to test the relevance of the study.

The study revealed that comprehensive, supplemented, and applied PMMs have significant relationship with project success. Analysis from the received responses showed that one unit of change in relevant element (tools, techniques, processes, knowledge areas, capability profiles) of comprehensive PMM has 62.6% impact on project success. Likewise, supplemented PMMs have 58.4% impact and applied PMMs have 51.8% impact on project success on one unit of change.

Keywords: Project Management Methodologies, Project Success, Project organization, Nepal.

1 INTRODUCTION

1.1 Background

All the organizations work with limited resource to fulfil the need of growth of an organization. Regardless of any work initiated, certain costs are always associated with it whether monetary or non-monetary cost. When the required result is received, the spent resources are of worth. But when the desired results are not achieved, it becomes resources loss to the organization. Thus, as every organization has a motive to manage the resources, the field of project management also deals with the resource management and growth of the business. This growth should ensure value adding feature to the organization (Grisales & Lopez, 2011). However, no strict guidelines on managing resources are present but it entirely depends upon the working modality and required outcome of the organization and its projects. Every project and project staff needs to deal with the positive as well negative side of the project and needs to be handled according to the working environment. Nevertheless, all projects are aimed to grow the value of work by organizations and its ultimate contribution towards goal of the organization.

Managing project and its requirement was seen from the mid-50s with the rise in industries at the western side of the world. The sudden rise in the services and required actions needed plans and schedules to make work efficient and smooth. Therefore, to support the needs of growing business environment, the project models like Critical Path Method (CPM) for evaluating the actual time needs to complete the task and Program Evaluation and Review Techniques (PERT) to evaluate tasks involved were developed (Nilsson & Rothen, 2016). Evolving from the mid-50s, project management is becoming a separate field of study and is developing with relevant theories to work on. Despite being a separate discipline, fewer literatures are present in this field of study.

Gaining much popularity, project management has been introduced in a newer approach as general management (Adams, 2016). The need to plan, implement, and control the activities in today's growing organization has lifted the need of project management much more than before. Project management is also considered as a field that tests and enhances the ability of project managers. This is because

organization these days functions at strict schedule and managed team members, which often challenge management and technical skills of the project managers and the team (Adams, 2016). As the way of organizational functioning is changing, so are the approaches from traditional to modern. Coping with the sudden environmental change (internal or external) and limited resources (especially time) have made modern approach of project management challenging.

Over the years, research in project management and its methodologies has introduced various frameworks that organization can rely upon for its project success. Among such studies include relationship between methods and success as well. However, the results have been contradicting according to project situation and sectors. Regardless of the differences, it is evident that criteria to measure the success needs to be pre-determined before actual implementation phase (Thapa & Shrestha, 2018). Similarly, research in project success has introduced various factors – factors are elements that are applied during project cycle – and those factors are still in the evolution phase. With the help of these developed methodologies and factors, organization can plan, implement, and control the activities to improve organizational performance.

1.2 Purpose of Study

There are different ways to implement the project and various methods associated with it. Whenever any company selects methodology, it has the aim to influence project performance positively and to increase probability of project success. The major challenge to any organization is at the time of methodology selection. As only right method enhances effective project implementation, selection procedure is vital. However, although organization selects proper method, barriers can still occur during implementation phase.

The major purpose of this paper is to analyze the implemented project methodologies of different organizations that work in sector of education of Nepal. Similarly, the studied organization must be project oriented and foreign aided. The study is initiated by studying project methodologies and project success. Theoretical study on the methodologies adopted by the organizations will be conducted and strength, weakness will be provided at the end. Similarly, the thesis also aims at investigating positive or negative impact of methodology on project success.

With the help of this study, organizations can relate to managing projects and it can be taken as a reference point on tools and methods of managing projects. Apart from this, this study can provide information on the issues that can be dealt by organizations with dealing with projects. Moreover, as the context of this paper is quite new in Nepal's context, its ideas can be utilized to bring influential change in the organization. As the study closely related with that of Nepal, it holds more weighs among the organizations operating in Nepal. The paper can be viewed when organizations would want to move forward by increasing probability of success rate. Finally, it can be helpful to future research papers in project management field.

1.3 Problem Statement

It is a common phenomenon that projects or works that are initiated deal with failure even before actual implementation. The failure before the implementing phase not only bring demotivation among employees but organization also face loss in resources especially time resource. Some studies also reveal that above 70 percent of projects are not even implemented and are cancelled during the planning phase (Horning, 2018). This does not mean that most of the projects fail but the reason of the increased failure needs to be identified. The reasons could be management problem, resource utilization, or inefficiency of project team as well. Some other reasons for lacking behind can due to ineffective skills of management or unmanaged resource utilization. Despite any of lacking factors, failure does not look good for the value of organization.

Methodologies of project management are used by organizations according to their favorability i.e. can use standard method or the flexibility one. The standard methods were developed starting from 1950s, which are at the phase of evolution. Similarly, researches show that most of the organization prefers customized method as was found to serve the organization and work area well (Abdulla & Al-Hashimi, 2019). In addition, literatures also present a view that right choice of project methodology can result to project success (Joslin & Muller, 2016). Although these results are present, there are no exact guidelines

to select the best methodology to work on. This gap has resulted confusion among project organizations as to which method to select and which one to let go. This is the global scenario of project management. In case of Nepal, hardly any research on project area has been initiated. The started researches are also in the field of natural science and not purely on social science. As Nepal is at the earlier stage of project management, and is heading towards project handling, many professionals lack excess to reference on selection, implementation, and control of project along with its relevant stakeholders. The only way professional's takeover the project is by their long-earned experiences and built skills (Horning, 2018). However, only experience cannot be relied on for task completion but strong knowledge base also supports during some activity completion.

1.4 Objectives

The major objective of this paper is to explore methods of project management and its effect but some of the specific and targeted objectives to achieve through this study is as follows:

- To assess impact of project management methodologies on project success rate among foreign aided organization of Nepal working in educational sector.
- To examine different project management methodologies used in foreign aided organization working in educational sector of Nepal.
- To explore strengths and weaknesses of each methodology.

1.5 Research Questions

In order to lead the study properly and to achieve possible answers to the challenges faced by project organization, some research question has been formulated. The purpose of these questions is to narrow down the study area of research. To align this paper with its listed objectives, some research questions have been developed that are as follows:

- What is the impact of project management methodologies on project success rates among foreign aided organization of Nepal?
- What are the different project management methodologies used in foreign aided organization of Nepal?
- What are the possible strengths and weaknesses of each methodology?

1.6 Scope & Significance

Nepal has many organizations that work on project basis operating in areas like health, education, agriculture, infrastructure, and also Information Technology (IT). As all sectors is not possible to be included in the single paper, only educational sector organization receiving fund from foreign agencies has been included. In addition, this paper excludes projects that are of short-term nature i.e. less than a year. However, this study has core importance on development organizations with its techniques of project management. Most importantly, the paper holds emphasis on the long-term projects with organizations established in Kathmandu valley.

1.7 Limitation

Although the purpose of the thesis is clear by creating research questions and confined scope some drawbacks still exists. Some of the limitations for the study are as follows:

- Only the organizations of Kathmandu valley that are contributing in educational field are taken into consideration due to limited time availability
- Only the staff with experience in project handling or leading has been selected. Employees with no mentioned experience have not been part of the study.
- Due to pandemic situation of COVID-19, the paper had to rely only on online respondents.

1.8 Expected Deliverables

Although the thesis aims to study impact of methodologies adopted by organizations and its relationship with project success, some outcome to be achieved at the end of this study can be highlighted as follows:

- The result of PMMs should be mapped with project success after collection of ideas from participating respondents.

- Paper should explore methodologies adopted by different project organization of Nepal involved in educational sector but not limiting specifically to education.
- Strength and weakness of methodologies in general view should be known.

2 LITERATURE REVIEW

2.1 Project Management Methodology

Project management evolved from just a concept to entire new discipline over the few decades. The gradual need to expand business from local to global scenario and to gain competitive advantage supported project management to boom. Concentration on a single tool and method was slowly replaced by various tools and techniques together. However, the change in use of these terms – method and methodology – has brought disparity in its understanding. Method is used to imply a single tool to handle a situation whereas methodology is combination of various methods together for a situation (Abdulla & Al-Hashimi, 2019).

Project Management Methodology (PMM) is guiding principles that can be customized according to the need of situation that includes tools, techniques, modes, or approaches to reach a goal (Nilsson & Rothen, 2016). According to Project Management Institute, PMMs are collection of methods, process, approaches, and impactful practices that are applied in successful operation of a project (Špundak, 2014). Similarly, some definitions also state that PMM is any underlying principle that project team refer to while completing the project successfully. Extending this definition to knowledge base, PMM is also defined as set of knowledge on methods, tools, approaches aligned with knowledge of managing all these into a positive outcome of a project (Špundak, 2014). Based on the above definitions, although different, idea of PMM revolves around proper use of the techniques and resources that ensure positive project outcome.

Initially, government agencies took a step in developing PMMs to develop effective planning, budgeting, and quality. Since then, organizations either customize project methodologies according to their need or else adopt any standard PMM relevant to the organization (Joslin & Muller, 2016). The literatures for PMMs also do not clarify that whether standard or customize method are more reliable for project success rate. Despite the use of any relevant methodology, the major purpose behind use of PMM is to create higher rate of project success. However, just applying right methodology does not guarantee success but needs to be backed up by proper budget handling, resource and time management (Pace, 2019). On the other hand, if PMM does not guarantee success, it can neither claim that project failure is due to poor selection of right PMM.

Although various methodologies exist, exact use of a method can be difficult to decide. As project can be a subjective matter wherein no two projects circumstances are same, a methodology suitable for all sectors and situation also does not exist (Pace, 2019). Not only the situation but context of organization also affect which method best suits the company. Moreover, as the discipline of project management is still at the growing phase, newer ideas are emerging and replacing older ones. Among the developed methodologies, some have been practiced greatly like PMBOK (Project Management Body of Knowledge), PRINCE2 (Projects in Controlled Environment), IPMA methodology, etc. (Wells, 2012). Although the methods have lot in common, end outcome can depend upon how effectively the organization has implemented those methodologies. Similar with the context regarding use and adoption of different project methods, a study analysis revealed that some techniques and tools are adopted highly like logical framework and sharing progress report whereas tools like critical path method and work breakdown structure are much neglected (Golini, et al., 2015).

3 RESEARCH DESIGN AND METHODOLOGY

3.1 Research Philosophy

The study is organized to explore more about the working processes of the project-oriented organizations. It is also expected that organizations have their own unique way of operation. So, this makes the study subjective in nature. However, as PMMs are also studied some part of the study is also quantitative. So, considering the nature of the study, two kinds of business philosophies have

been taken they are: philosophies of Pragmatism and Interpretivism.

3.1.1 Philosophy of Pragmatism

The main idea of this philosophy is to address the research problem of any paper, a reliable method needs to be used. The method used should promote accurate result and desired outcome (Kaushik & Walsh, 2019).

This paper takes into consideration the ideas and knowledge of project staff, starting officer level. As partly philosophical in the nature, pragmatism philosophical view is supported by this paper.

3.1.2 Philosophy of Interpretivism

The philosophy of Interpretivism states that views and ideas of different individuals need to be respected. Here, it is assumed that criteria for evaluating right from wrong exists but is based upon area of importance to the idea sharing personnel (Thomas, 2017).

As this paper focuses on different organization having their own way of working, each idea needs to be respected. Without providing the strict method for organizational effectiveness, as this paper interprets method of all and then reach to the conclusion, the idea of interpretivism philosophy also holds in this study.

3.2 Research Framework

The research could be conducted through various methods and different approaches as analyzed from literatures. Some relevant research was conducted by taking a moderating factor whereas some were based on cross-country evaluation. Regardless of positive side of all these researches, following is the research framework for the study.

The study takes education sector foreign aided agencies of Kathmandu valley to study impact of PMMs on PS where PMMs is the independent and PS is dependent variable. These both variables have their own dimensions to be tested through questionnaire and interviews. The result is presented to evaluate the hypothesis and lastly, conclusion from the study is provided.

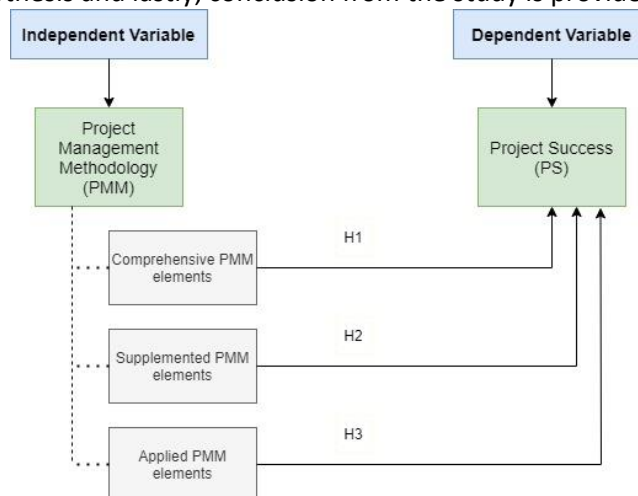


Figure 1: Research Framework

3.3 Research Approach

During the phase of writing a paper, researcher is often required to produce theory that helps to provide clear picture of the real-world practice. The proposed theories are required to match the reality and if newly developed should be according to reality. Either way, connection with the real environment is necessary. To achieve these goals, there are three approaches to follow: Deductive, Inductive and Abductive approach (Nilsson & Rothen, 2016).

The study follows deductive approach to validate the theory that is undertaken. Deductive approach is also considered top-down approach where a theory is reasoned with the listed hypothesis, followed by observations and conclusion (Dr. Burney & Saleem, 2008). As the approach moves from theory to conclusion, it is transforming from idea that is more general to a specific one. As the proposed theory is not provided without any validation, they can be open to criticisms. It can be likely that readers may

find other theories more relevant (Woiceshyn & Daellenbach, 2018). In order to provide the proposed theory a stronger support to avoid criticisms, deductive approach is selected.

Similar with the approach is this paper where the contingency theory and project excellence model is considered as a support for the paper and hypothesis to be tested are listed. The paper has three hypotheses to understand regarding PMMs and project success. Similarly, professionals are taken as respondents in the study to test hypothesis and reach to the conclusion. Thus, this study is more inclined towards deductive approach of research.

4 DATA ANALYSIS AND FINDINGS OF RESEARCH

4.1 Pilot Testing

Pilot test is a small-scale feasibility study conducted before the actual research begins to analyze its validity (In, 2017). Pilot test is initiated prior to the main study replicating the procedures thought for the detailed study.

In this paper, pilot test was conducted among 15% of sample size i.e. 45 for pilot test. The statistical tool applied for main study is reflected in the pilot test to analyze the validity of Table 1: Information of Last Project for Pilot Test, adopted from (Abdulla & Al-Hashimi, 2019)

The above table shows the information of last project of pilot test respondents where R&D had more individuals with 33.3% followed by education (28.9%). The project complexity was recorded medium (71.1%) while urgency was high with 71.1%. Similarly, duration of project with more than 5 years was highest (66.7%) and peak project value was recorded high for USD 10-99 million with 51.1% response rate.

Table 1: Pilot Testing

Particulars	N	%	Particulars	N	%
Field of Last Project			Project Complexity		
Construction	1	2.2	Low	1	2.2
R&D	15	33.3	Medium	32	71.1
IT	-	-	High	12	26.7
Education	13	28.9	Project Urgency		
Healthcare	12	26.7	Low	-	0
Others	4	8.9	Medium	13	28.9
Project Value			High	32	71.1
Under \$100,000	2	4.4	Project Duration		
\$100,000 to \$999,999	2	4.4	1 to 3 years	3	6.7
\$1,000,000 to \$9,999,999	8	17.8	3 to 5 years	12	26.7
\$10,000,000 to \$99,999,999	23	51.1	More than 5 years	30	66.7
Above \$99,999,999	10	22.2			

4.1.1 Variable Distribution

The table shows various descriptive statistical measures to study pilot test. The mean for independent variable PMM comprehensive and applied is more which shows the central value of distribution. Likewise, skewness value of all three independent variables ranges between -1 to +1 signifying normal distribution of data set. However, heavy kurtosis value of project success shows that it is not normally distributed and data response is heavier at one side but three PMM is negatively skewed having elongated left tail.

Table 2: Descriptive Variable Distribution for Pilot Test

Statistics

		Project_Succ ess	Proj_Mgmt_C om	Proj_Mgmt_S upp	Proj_Mgmt_A pp
N	Valid	45	45	45	45
	Missing	0	0	0	0
Mean		76.6667	20.2889	19.9333	20.1778
Median		77.0000	21.0000	21.0000	21.0000
Mode		78.00	21.00 ^a	22.00	22.00
Std. Deviation		4.32225	2.01835	2.34908	2.26925
Variance		18.682	4.074	5.518	5.149
Skewness		-1.110	-.502	-.324	-.120
Std. Error of Skewness		.354	.354	.354	.354
Kurtosis		3.112	-.665	-1.093	-1.378
Std. Error of Kurtosis		.695	.695	.695	.695

a. Multiple modes exist. The smallest value is shown

4.1.2 Correlation

Correlation test was carried out to test the relationship of dependent variable with each independent variable.

Table 3: Correlation Project Success and PMM-Comprehensive_Pilot test

Correlations

		Project_Succ ess	Proj_Mgmt_C om
Project_Success	Pearson Correlation	1	.303
	Sig. (2-tailed)		.043
	N	45	45
Proj_Mgmt_Com	Pearson Correlation	.303	1
	Sig. (2-tailed)	.043	
	N	45	45

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

Table 4: Correlation Project Success and PMM-Supplemented_Pilot test

Correlations

		Project_Succ ess	Proj_Mgmt_S upp
Project_Success	Pearson Correlation	1	.563**
	Sig. (2-tailed)		.000
	N	45	45
Proj_Mgmt_Supp	Pearson Correlation	.563**	1
	Sig. (2-tailed)	.000	
	N	45	45

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

Table 5: Correlation Project Success and PMM-Applied_Pilot test

Correlations

		Project_Succ ess	Proj_Mgmt_A pp
Project_Success	Pearson Correlation	1	.393**
	Sig. (2-tailed)		.008
	N	45	45
Proj_Mgmt_App	Pearson Correlation	.393**	1
	Sig. (2-tailed)	.008	
	N	45	45

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

The above tables show correlation among the variables of the study. The degree of relationship is measured by analyzing the value of significance whether it is less than 0.05 or the correlation value is

measured if it lies between -1 to +1. Here, all three independent variables have significance value less than 0.05 (0.043, 0.000, 0.008 all is less than 0.05). Also, the correlation value is positive. Therefore, dependent and independent variables have positive relationship. However, PMM-comprehensive and applied have weak positive relationship as its correlation value is less than 0.5 i.e. 0.303, 0.393, and PMM-supplemented has strong positive relationship as its value is more than 0.5 i.e. 0.563. Therefore, null hypothesis can be rejected, accepting alternative hypothesis.

5 Discussion

5.1. Overview

This study focuses on the impact of PMM on project success where these two variables were categorized as dependent (project success) and independent (with further three categories-comprehensive, supplemented, applied elements) variables. To map out the relationship among the determined hypothesis, data was collected from the project organizations of Nepal and processed through SPSS. The SPSS results have been presented in chapter 4, and reached to the conclusion that all three independent variables have relationship with project success. This means that PMM can increase the probability of project success in project-oriented organizations.

Likewise, the paper also focused on qualitative study of PMMs and project success for which the professionals with higher experiences were interviewed and summarized information has been provided in chapter four. The interviews conducted also revealed that PMM does have impact on project success.

5.1.1 Discussion on Findings

RQ 1: What is the impact of project management methodologies on project success rates among foreign aided organization of Nepal?

The first question of the study revolved around PS and project management with its methodologies. The focus on PMM had an aim to map out if there exists relationship among methodologies and project success. For this, data was collected and statistical techniques were applied to reach the conclusion.

The result for PMM and project success was evaluated with the help of SPSS and methods like correlation and regression. The data distribution and reliability were tested by normality and Cronbach's Alpha test respectively. The result of correlation was positive i.e. $r = 0.313, 0.315, 0.278$ for PMM-comprehensive, supplemented, applied respectively. This showed that PMM-supplemented (0.315/31.5%) had slightly higher impact on project success than other two elements. All three variables had 0.000 significance value and as a result, H1 was selected for all. Similar to correlation, regression analysis also concluded that the relationship is positive i.e. $\beta = 0.626, 0.584, 0.518$ for PMM-comprehensive, supplemented, applied respectively. Contradicting to result of correlation, regression analysis concluded that PMM-comprehensive (0.626/62.6%) has more impact on project success than other variables with p-value 0.000. Therefore, the pre-determined hypothesis where PMM-comprehensive, supplemented, applied have relationship with project success was selected.

The results are contradicting to the paper of 2019 where it was showed that there is relationship with supplemented PMM and project success (Abdulla & Al-Hashimi, 2019). However, this paper inclines with that of 2015 where it concluded that PMMs (comprehensive, supplemented, applied) have impact with project success (Joslin & Müller, 2015). The study revealed that PMM applied have 22.3% relationship with project success whereas this paper concludes applied PMM has 27.8% relationship. Likewise, (Abdulla & Al-Hashimi, 2019), a study in Bahrain showed that one unit of change in project success leads to 22.2% change in comprehensive PMM whereas, this paper on Nepal reflected 62.6% change in comprehensive PMM with one unit change in project success.

Therefore, the major findings here are:

- There exists relationship between PMMs and project success to ensure smoothness of work undertaken.
- The impact can vary according to working sector or geographic region but the ultimate though on PMMs revolves around the same idea i.e. project success.

RQ 2: What are the different project management methodologies used in foreign aided organization

of Nepal?

The study has aimed project organizations of Kathmandu valley that are involved in educational project, which are funded by different countries. These organizations not only work in the field of education but have other core business areas/sectors as well. Although all eight organizations have their own way of implementing projects, they do share common working process mostly in connection with PMI with planning, executing, monitoring, and controlling.

In general, interview with project professionals revealed that organizations are mostly concerned with what the work should be and how should it be operated. From these questions, project organizations have built some methods to accomplish their task. Common method was that of planning, scheduling, executing, and not missing out evaluation. However, priorities of organizations in the working methodology are different. Some have an initial method of demand survey whereas some directly request for proposal of projects. Some organization has a method of collaborative technique with federal government whereas some only require collaboration from local government. It was analyzed that not all organization has international methodology adoption however; it was found that the methodologies do evolve according to situation and time to improved version. This flexible nature in PMMs can help organization to adapt to newer techniques and approaches and shows that infant these organizations are open to change and are ready to upgrade the working modality when necessary.

The finding of evolvement and adaptation inclines with the study of Joslin and Muller where it was mentioned that flexibility is necessary to fit in the project environment (Joslin & Muller, 2016). This study has also found that among different methodologies used, communication and coordination is key to project success. In addition, different organizations have also prioritized use of proper tools and techniques along with human resource. This conclusion is also supported by the idea of (Nanthagopan, et al., 2018). Likewise, the interview sessions also mentioned that documentation is compulsory part of evaluation step. Without completion of documentation, organizations cannot declare projects as completed so this can be time consuming and tedious. Similar idea is also presented in a study of barriers in PMMs where it is mentioned that more hierarchy and approval from each on the documentation can be one of the most efficiency declining activity (Terlizzi, et al., 2016). Thus, it can be concluded that different methodologies have different impact on project success but it all comes down to how reliable the method is to the organization. Some major findings are:

- Although different updated methods of project management have been developed, organizations prefer the one that is simple yet effective.
- Perception on PMMs and project success varies but it was found that organizations prefer flexible methods that can be altered according to situation and that are more result-oriented.

RQ 3: What are the possible strengths and weaknesses of each methodology?

From the findings so far, it is seen that PMMs have impact on PS whether it is small or noticeable one. The methodologies that organization adapt to can have some positive implication or some negative as well. In order to evaluate the working methodology and its positive, negative points, each respondent of qualitative section was asked with the question of the mentioned research question.

The summarized table in chapter 4 shows that different organization uses separate methodology but the basic idea on project implementation is similar. However, the professionals did mention on the strength and weaknesses of their implemented methodologies. Most of the organization mentioned that the basic project process of planning, executing, evaluation is the preferred one. The reason behind this was due to simple process and familiarity among larger number of people. They stressed on the strength that no “extra time” is spent on any fresh staff to explain the project method. Had it been other kinds of methodologies, much time and effort would be wasted simply on understanding the modality. Similarly, another common strength mentioned for in-house methodologies was that it would be “situation friendly”. Due to change in situation of business environment and situations in project implementation, the customized methodologies would allow the organization to alter their working method as favorable to them. However, the major weakness mentioned was that of “professionalism”. As customized PMM would be in favor, sometimes this strength could turn into

weakness because of frequent changes in the working style inside the organization. Frequent changes bring lack of professionalism and decline the effectiveness of work when evaluated at the end of project phase.

This paper analyzes that organizations have strength in PMM when it has some level of impact on PS. Moreover, project success can also be influenced if PMMs are concerned about efficiency and effectiveness of project staff. The concept of effectiveness and efficiency as a strength of customized PMM is also supported by the study of (Serrador & Turner, 2015). However, organizations are free to choose any methodology they prefer (internationally recognized or customized), but the findings of this paper show more emphasis on customized PMMs and project success. Some findings can be summarized as:

- The organizations find customized methodology preferable than strict following of international methods. So, the major strength was flexibility and effectiveness as in-house methods were relatively simple and staff understood the process in less time.
- Weakness of such methodology was found to be flexibility itself. Frequent and sometimes unwanted changes in the process could create confusion among the staff declining efficiency.

5.2. Implication of Study

When an organization follows certain method of completing the task, major importance is kept on the processes applied to achieve the end-result. Organization needs to certain on what method to apply for what kind of work so that result is not compromised. Specifically, project-oriented organizations – those having start and end period for task – needs to consider the selection of method deliberately.

The findings from this study can help the organization for selection of method suitable for their project environment. The study can be useful to all kinds of project-oriented organization because project managers seek those methodologies that increase the probability of success variables. Likewise, the organizations that seek to change their working method but lack evidence whether such method is reliable enough can get information from this paper and its result to make proper decisions. Moreover, project professionals can get an idea on various methodology variables that have lower impact when seen individually but create synergy effect when grouped together to aim for project success. In general, this study can be a reference area for various organizations covering different industries of Nepal that seek to achieve project success using management methodologies.

5.3. Conclusion

The major aim of this study was to analyze whether there exists relationship between PMMs and PS rates. To support the obtained results of this analysis, different methodologies, and its strength, weaknesses were explored along with pilot test. From theoretical review of project management area in global context, to analysis of project method in local context has been achieved in this paper. Through this exploration, the paper not only presents the idea of respondent organization but also summarizes the knowledge gained in the process.

After the exploration on the subject matter, ideas of project professionals were collected through questionnaire and interview sessions. Due to pandemic issue, the targeted population sample could not be achieved but the study has reasonable number of participants to generate a result. The data were mapped and result was analyzed through correlation and regression analysis through which, the study found relationship of PMMs with project success. Likewise, perception of professionals was also considered with higher experience in the field. The interview sessions were also in the favor of same result i.e. existence of relation on PMM and project success.

Lastly, from the entire study, it can be concluded that:

- PMMs and project success have significant and positive relationship. Project staff was of idea that proper utilization of tools, techniques, knowledge, capacity, and processes can contribute towards project efficiency, positive impact of project, and overall benefit to organization.
- Project organization of Nepal, specifically foreign aided organization in the field of education prefers simple yet reliable method to handle the project. Project managers do not want strict processes but rather are of opinion that method needs to be adjusted according to the situations it faces.

- As implication of method can bring different result to different work area, selection of PMM that best suits the organization needs to be selected rather than on the basis of its popularity.

5.4. Recommendation

Based on the result and exploration of literature for this paper, following are some recommendations:

- Project managers are recommended to apply the listed comprehensive set of PMM elements (tools, techniques, processes, capabilities, knowledge) to their organization to gain better chance of project success.
- Organizations can have written statement for project success so that specific path for goal can be created and each member can contribute to the written goal without confusion.
- The companies can also establish project management office/unit solely with the purpose of standardizing the methodology processes and knowledge.
- In future, this kind of study can be done comparing methods of industries like banking, educational institute, construction, government sectors, etc. If wider study area is required, organizations among various countries can be compared to get idea on management methodologies.

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