Global Scientific JOURNALS

GSJ: Volume 8, Issue 7, July 2020, Online: ISSN 2320-9186
www.globalscientificjournal.com

# LINKING PROJECT MANAGEMENT PERFORMANCE AND PROJECT SUCCESS BY EXPLORING THE VALUE OF PROJECT MANAGEMENT.

Naveed Ahmad[1]

[1]Master Student at, Iqra National University, Peshawar

uetian405@yahoo.com

## *Abstract*

*The literature on Project Management (PM) shows that, in spite of advancement in PM processes, tools and systems, project success has not significantly improved. This problem raises questions about the value and effectiveness of PM and PM systems. This paper reports a research study which tests the relationship between PM performance and project success drawing from empirical data on PM professionals working in Pakistanproject-based organizations.*

*Multi-dimensional frameworks are validated and used in this study to measure PM performance and project success. A total of 45 completed questionnaires were analyzed. Bi-variate correlation and multiple regression tests found a positive influence of PM performance and its contributing variables on project success. Additionally, new variable relationships that have not previously been identified are explored between individual variables of PM performance and project success.*

**Keywords**: *Project management performance; Project success; PMPA framework.*

# 1. INTRODUCTION

Project management (PM) has developed into a subject discipline alongside other management functions such as operations, information technology, or finance and the research literature in this discipline is growing [1]. Organizations are increasingly using PM as a tool to increase their productivity [2]. The popularity of PM methodologies is confirmed by a partial longitudinal study conducted bythat reports a significant increase in 2011 from 2002 in the use of PM methodologies and tools within PM professionals [3]. However, there is still limited research evidence that links PM performance with the value resulting from investment in PM.

To Understanding the project management professional, there success depend upon the following framework.

## 1.1. Project Success

Projects differ in size, uniqueness and complexity, thus the criteria for measuring success vary from project to project making it unlikely that a universal set of project success criteria will be agreed [4]. Individuals and stakeholders often will interpret project success in different ways [5]. Furthermore, viewpoints about performance also vary across industries [6],study which focuses on the evolution of the project success literature over the last decade neatly summarise this issue by asserting that it is a multi-dimensional and networked construct. They assert that perceptions of success and the relative importance of success dimensions differ ‘by individual personality, nationality, project type, and contract type’ (p. 768). Consequently, a number of alternative frameworks are available for measuring project success [7].Recommend measuring: the success in the implementation process; the perceived value of the project; and client satisfaction with the result. In the context of the defence industry,propose measuring project success across four dimensions of: meeting design and planning goals; customer benefits; benefit to the developing organisation; and benefit to the defence and national infrastructure. group project success by the use of micro and macro criteria. Whereas, divides project success into three categories: doing the process right; getting the system right and getting the benefits right.

### 1.2. Project Management Performance

Traditional PM systems which exclusively pursue the success criteria of cost, time, quality and meeting technical requirements have become considered ineffective [8]. A common approach is to focus on multiple stakeholders' expectations. This has led to a new set of difficulties in developing models for measuring performance because stakeholders' needs are often difficult to manage and measure [9], and there is sometimes resistance to going beyond the traditional criteria due to commercial pressures [10]. These difficulties have resulted in limited literature on more holistic performance assessment frameworks for project environments. It is evident in the literature that TQM and PM are two key management approaches implemented in organizations for achieving continuous improvement and organizational success. A positive correlation has been found between TQM practices and organizationalperformance, Similarly PM is found to be an effective tool for achieving the strategic objectives of organizations, managing organizational change [11], and systematic planning, execution and control of activities. Similarly, linked TQM and PM practices proposing a model based on the EFQM model called the 'Project Management Performance Assessment (PMPA)'. Instead of the nine criteria used in the EFQM model the PMPA model consists of five enablers of high PM performance; PM leadership, PM staff, PM policy and strategy, PM partnerships and resources and project life cycle management process. The final area in the PMPA is PM Key Performance Indicators (KPIs), which are the practices by which actual achievement is measured.

### 1.3. PM Performance and its relationship with Project Success

The PM literature argues that there is a positive relationshipbetween PM Performance and Project Success claim that Project Success is dependent on appreciation of theimportance of PM [12]. They further emphasise that this role mustbe considered in terms of the wider organisational strategy andlong-term expectations. From the above discussion it has beenargued that Project Success and PM Performance are distinctyet inter-related concepts and a positive relationship betweenthem is sought. So, it is proposed that:

**Proposition 1**. There is a positive influence of Project Management Performance on Project Success [13].

**Hypothesis 1. H1**

There is a positive statistical relationship between PM Performance and Project Success.

Adopting the PMPA framework, the second proposition of this study explores the relationships of PM Performance variables with Project Success.

**Proposition 2.** The variables of the PM Performance construct have a positive influence on Project Success construct.

The following hypotheses will be tested to test the relevance of this proposition;

**Hypothesis 2. H2**

There is a statistically significant positive relationship between PM Leadership and Project Success.

**Hypothesis 3. H3**

There is a statistically significant positive relationship between PM Staff and Project Success.

**Hypothesis 4. H4**

There is a statistically significant relationship positive between PM Policy and Strategy and Project Success.

**Hypothesis 5. H5**

There is a statistically significant positive relationship between PM Partnerships and Resources and Project Success.

**Hypothesis 6. H6**

There is a statistically significant positive relationship between PM Project Lifecycle Management Processes and Project Success.

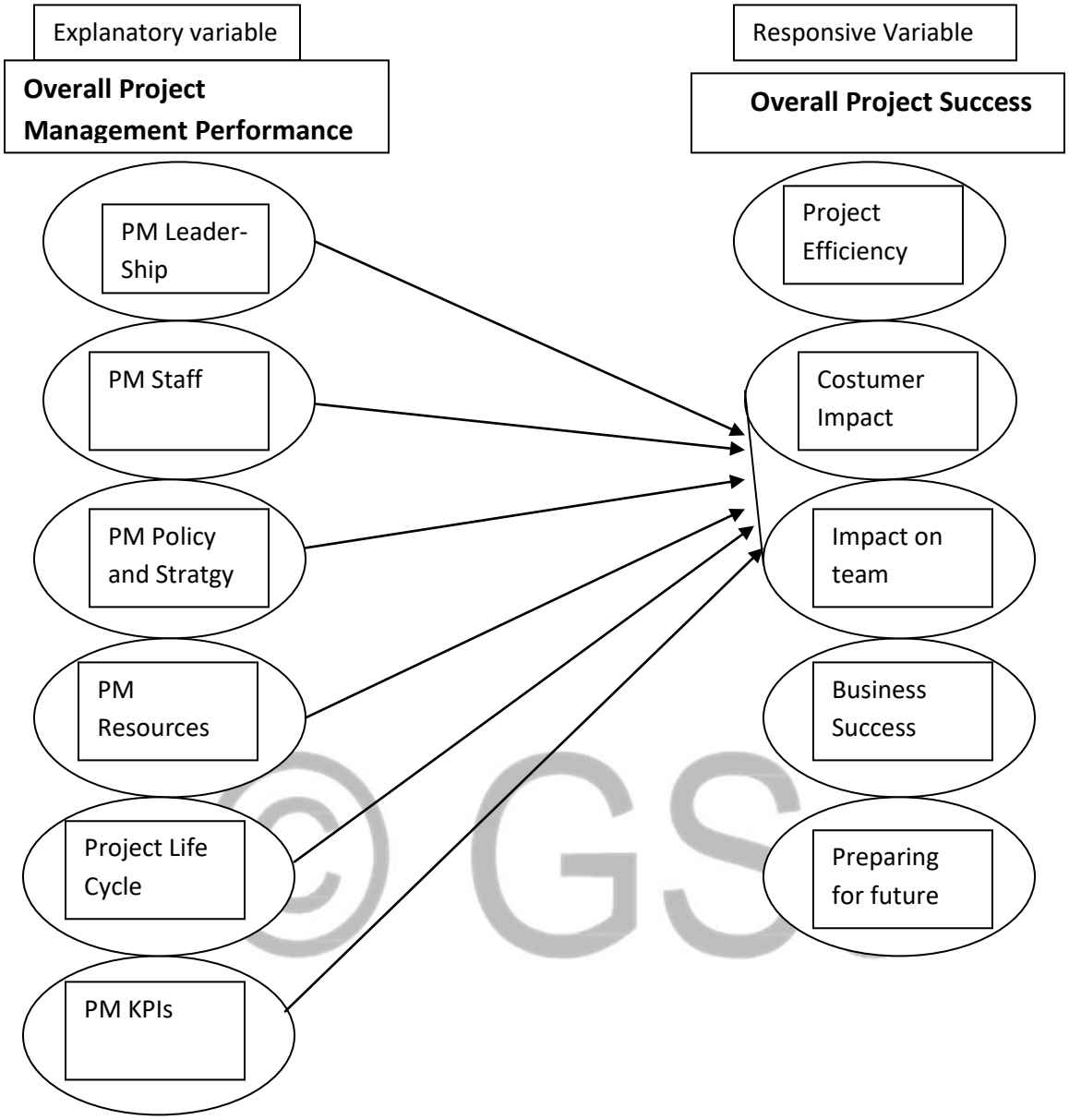


**Figure 1.1:**Graphical representation of study hypotheses.

## 2. LITERATURE REVIEW

The literature suggests that multiple benefits can be achieved from having a mature PM system in place and that PM is more effective than traditional functional management, but limited quantifiable evidence is available on these benefits [14]. The Project Management Institute (PMI) conducted an in-depth study spanning 4 years and involving 65 case study organizations from 14 countries to find what value PM delivers to organizations[15]. The PMI study confirmed the value of PM but indicated that value is dependent on culture,

implementation 'fit' with organization needs and raised questions about the sustainability of value generation. This study concludes that PM creates tangible and intangible benefits.This result is supported by many other researchers but the value is defined differently from one study to another. There is also some evidence that the value sought from a high performing PM system is associated with the success of projects [16].

The link between PM performance and project success is hard to model involving complex constructs often with insufficient accuracy and detail leading to findings that are fragmented and incomplete [17]. The complexity of the issue is substantiated by the modelling effort made by linking Building Project Management (BPM) to construction project success outputs of time, cost and quality, which surprisingly showed no beneficial effect of BPM upon cost and time delivery and indicated a negative relationship between BPM and the delivered quality.

These findings raise questions about the value of PM as well as the appropriateness of the models used to measure the constructs of PM and Project Success. This lack of clarity on appropriate models and the need to comprehend more the value of PM forms the basis of our research study. A number of studies investigate the nature of the term 'Project Success'. Some conceptualize it as a uni-dimensional construct concerned with meeting budget, time and quality [18]. Whereas others consider project success a complex, multi-dimensional concept encompassing many more attributes [19]. Despite attempts in the PM literature to define project success and to assess it meaningfully many studies conclude that numerous projects do not meet their objectives and some fail altogether therefore, there is a continuing need to identify the factors that positively influence project success. Some researchers have focused on identifying Critical Success Factors (CSFs), their research has provided a list of potential factors that assist with understanding the phenomenon of project success. However, a major limitation is that it is difficult to categories and reduce the factors to a manageable number Though some CSF's do stand out in this long list of potential factors, there is only limited agreement among authors on critical factors and their individual influence on Project Success. Hence, these studies have not yet identified a compelling model of the CSFs. Based on an extensive review of the project success literature, concluded that a clear definition of project successdoes not exist and there is a need to develop meaningful andmeasurable constructs of project success. They indicated that

theresearch theorizing CSFs is not sufficient in meeting this objective.Just like project success, researchers have modelled PM inmany ways to determine how best to enhance PM performance.Interestingly, many of the CSFs that are identified in studies areactually the PM practices applied during project execution.However, the limitations of using CSFs for modelling, as discussed
above, limit the applications of these models. Other studies have focused on PM Maturity models based on a PM Body of Knowledge (PMBOKs).

## 3. MEHODOLOGY:

To achieve the study objectives, the following methodology is adopted.

### a. Questionnaire design

A structured on-line questionnaire survey method was selected to assess relationships between Project Success and PM Performance. The items to measure Project Success and PM Performance were adapted from peer reviewed publications in the PM research area. The first section obtained descriptive data about respondents and their organisations. The next section dealt with PM Performance and asked respondents to agree or disagree with the given statements within the context of the PM practices in their organisations. In section three, data was elicited about Project Success in the context of a projectrecently completed within the organization

### b. Internal and external validity

Both internal and external validity were considered. Since selection of the initial measurement items was based on a review of the theoretical and empirical literature, it is important to assess internal validity. A pilot questionnaire test was undertaken. Five potential participants were requested via email or face-to-face (at work) to complete a questionnaire and to present a critique of the questions. Some of the changes suggested by the participants in the pilot survey were incorporated in the final questionnaire. The revised questionnaire comprised 26 items divided in 10 questions within 2 sections.

### c. Study sample

A web-link for the on-line questionnaire was sent to PM professionals working in Pakistan organizations via email. The researcher requested the recipients to forward the web-link to other colleagues in their organization working with projects. The theoretical sampling frame comprised approximately 150 PM professionals.

The calculated traditional response rate in this case was 10.3% however, it should be considered as an understated representation since in the snowball approach to sampling, used in this survey, a traditional response rate cannot be accurately calculated.

## 4. RESULT AND CONCLUSION:

The Conclusion of this Research paper can be summarized as

- Impact on Project Team is the single-most-variance-explained Project Success variable by the majority (4 out of 6) of Project Performance variables. The same result was earlier found during correlation of Project Success variables with Project Performance variables indicating that the Impact on Project Team has the highest correlation with each variable of Project Performance. The results show the importance of the Impact on Project Team variable for PM practitioners. Project performance can have a major impact on project teams. The perception of a successful project motivates the team and increases team member engagement and commitment to the project as well as to the team itself.
- An organisation's future success (represented by Preparing for Future) is greatly impacted by lifecycle management processes and systems implemented in the organisation as shown by the results. This provides empirical evidence of the long-term benefits that an organization can achieve by investing in the lifecycle management processes and systems within the organization
- PM KPIs seem to have the most wide-ranging impact across the different variables of Project Success. It has the highest correlation with Impact on Project Teams,

followed by Project Efficiency, Preparing for Future and Business Success, in the same rank order. Therefore, it is concluded that having a formal management system for developing, managing and updating KPIs formally in an organisation can directly impact on Team Performance and Project Efficiency.

## 5. RECOMMENDATION:

Based on the outcomes of the study it is strongly recommended to

- This study is limited to the context of the Pakistan and therefore the results may only be considered valid in this particular context. Future research can collect data from other geographical locations to see whether the findings are replicated and to explore the influence of national culture on the relationship between PM Performance and Project Success.
- Due to time constraints and the sampling of data over many organisations, cross-sectional methods were used in this study. A longitudinal design would be beneficial particularly if theresearch is focused on a particular sector or organisation.
- The questionnaire is only administered in English and therefore, native English speakers might have had an advantage over non-native English speakers who are more likely to experience difficulty in understanding complex use of language or idiom.
- It is acknowledged that other factors influence Project Success besides PM Performance. Indeed 45% of variance (as shown by the best fit model from multiple regression analysis) is explained by the PM Performance construct whereas 55% variance remains unexplained. Prior work also suggests that Project Success perceptions are influenced by various other factors relating to the project environment.

## 6. REFRENCES

[1]. Atkinson, R., 1999. Project management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. International Journal of Project Management 17, 337–342.

[2]. Avots, I., 1969. Why does project management fail? California Management Review 12 (1), 77–82 (pre-1986).

[3]. Barad, M., Raz, T., 2000. Contribution of quality management tools and practices to project management performance. International Journal of Quality & Reliability Management 17 (4/5), 571–583.

[4]. Belassi, W., Tukel, O.I., 1996. A new framework for determining criticalsuccess/failure factors in projects. International Journal of Project Management 14 (3), 141–151.

[5]. Besner, C., Hobbs, B., 2006. The perceived value and potential contribution of project management practices to project success. Project Management Journal 37 (3), 37–48.

[6]. Boehm, B.W., Ross, R., 1989. Theory-W software project management: principles and examples. IEEE Transactions on Software Engineering 15 (7), 902–916.

[7]. Bourne, M., Mills, J., Wilcox, M., Neely, A., Platts, K., 2000. Designing, implementing and updating performance measurement systems. International Journal of Operations &Production Management 20 (7), 754–771.

[8]. Broetzmann, S.M., Kemp, J., Rossano,M.,Marwaha, J., 1995. Customer satisfaction — lip service or management tool? Managing Service Quality 5, 13–18.

[9]. Bryde, D.J., 2005. Methods of determining different perspectives of project success. British Journal of Management 16, 119–131.

[10]. Bryde, D.J., 2008. Perceptions of the impact of project sponsorship practices on project success. International Journal of Project Management 26 (8), 800–809.

[11]. Chan, A.P.C., Chan, A.P.L., 2004. Key performance indicators for measuring construction success. Benchmarking: An International Journal 11 (2), 203–221.

[12]. Chan, A.P.C., Chan, D.W.M., Ho, K.S.K., 2003. Partnering in construction: critical study of problems for implementation. Journal of Management in Engineering 19 (3), 126 135.

[13]. Choi, T.Y., Eboch, K., 1998. The TQM paradox: relations among TQM practices, plant performance, and customer satisfaction. Journal of Operations Management 17, 59–75.

[14]. Christenson, D., Walker, D.H.T., 2004. Understanding the role of "vision" in project success. Engineering Management Review 32 (4), 57–73.

[15]. Cicmil, S., Hodgson, D., 2006. New possibilities for project management theory: a critical engagement. Project Management Journal 37 (3), 111–122.

[16]. Cleland, D.I., Ireland, L.R., 2006. Project Management: Strategic Design and Implementation, 5th ed. McGraw-Hill, New York.

[17]. Cooke-Davies, T., 2002. The "real" success factors on projects. International Journal of Project Management 20, 185–190.

[18]. Cooke-Davies, T.J., 2004. Consistently doing the right projects and doing them right—what metrics do you need. [Online]. [Accessed 10 June 2011]. Available at: http://www.humansystems.net/papers/success-metricsPMI. pdf.

[19]. Cooke-Davies, T.J., Arzymanow, A., 2003. The maturity of project management.