Critical Thinking in Project Management

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Table of Contents

Abstract

The adage is as old as time itself; "you should practice what you preach." This paper looks at

critical thinking in project management through the review of a scholarly article titled, "Do

project managers practice what they preach, and does it matter to project success?" We will

review this article through the application of critical thinking processes, as well as the Project

Management Body of Knowledge Guide to determine whether or not the author's conclusions

and assumptions are correct. This paper brings to light questions that were overlooked or

perhaps given less light considering the issue at hand. Also, personal reflection supports the

need for further research and development of corrective measures.

Keywords: Project management; project management principles; business objectives;

communication

Critical Thinking in Project Management

Introduction

This paper is an exercise in the application of critical thinking skills to analyze and evaluate a scholarly journal article. For this essay, the article of choice is "Do project managers practice what they preach, and does it matter to project success?", Published in the International Journal of Project Management 28(7) (2010) by Karen E. Papke-Shields, Catherin Beise, and Jing Quan. The foundation of this article is that organizations increasingly use projects to achieve business objectives but report that results often fall short of goals in spite of the formal standards and training to improve project performance and outcomes (Papke-Shields, Beise, & Quan, 2010, p. 650).

Before we begin, we should first review the understanding of critical thinking and the skills involved. "Critical thinking involves the use of a group of interconnected skills to analyze, creatively integrate, and evaluate what you read and hear" (Reichenbach, 2000, Chapter 2). Critical thinking involves more than a technical or standard understanding of something; it involves thinking creatively and challenging common assumptions (Ferris, 2014, para. 1). Critical thinking rests on basic reasoning, which falls into two categories: Inductive Reasoning and Deductive Reasoning (Caputo, 2014, p. 1). Regardless of the method employed, critical thinking seeks to get to the bottom of an issue until the cause has been identified. Only then, can management be confident they have chosen the correct course of action or made the proper assumption?

Article Summary

This article starts with the understanding that, in spite of some formal standards available to support effective project management, project results are falling short of their goal to support

organizational business objectives. In a KPMG Global IT Project Management survey, 600

organizations across 22 countries reported increased utilization of projects, project complexity,

and cost (Papke-Shields et al., 2010, p. 650). Project Management (PM) and the associated

practices were created to prevent this result from occurring, so it is only natural to assume that

PM practices are either not occurring, or are not being efficiently applied. So, are project

managers practicing what they preach? Due to insufficient research to explain these phenomena,

the authors set out to determine why projects continue to fall short of their objectives by

reviewing PM critical success factors, methods, and PM practices, through the use of surveys,

questions, and historical research.

Research

Papke-Shields et al., (2010) focused their study on PM practices and project success.

Project success varies depending on whom you ask. Organizations claim that project success is

falling short of organizational objectives, but which ones? In addition to PM practices, the study

took into consideration organizational and external environmental influence on practices and

outcomes. Are customer's happy, but the project failed to deliver financially? Perhaps the

project performed financially, but customer satisfaction has dropped and is negatively impacting

continued business? Papke-Shields et al., (2010) began their research by identifying three

distinct questions:

1. What practices within the formal PM standards are being used by practitioners and is

    there a variance in the extent of use of different practices?

2. Does the use of PM standards vary with the context in which the project exists?

3. Is there a relationship between the use of PM standards and project success?

To answer these questions, the authors used A Guide to the Project Management Body of Knowledge (PMBOK Guide) (Fourth Ed.) to develop a set of metrics based on the initiating, planning, executing, and controlling process groups. Also, they visited the concept of Critical Success Factors (CSF's) and their impact on overall project success.

Critical Success Factors (CSF)

Critical success factors (CSF) are those factors, variables, activities, or conditions having the most impact on a projects' success. There is a lot of factors which contribute to a projects' success, but CSF's are those items essential to meeting project objectives. Project managers continue to focus on areas related to time, scope, and cost due to the ease with which each can be measured and monitored. Further data revealed that industry and organization standards have crept into projects based on sheer repetition of work and organization constraints. The addition of these organization norms has all but excluded critical factors related to human resources and risk as these areas are difficult to quantify and track.

Papke-Shields et al., (2010) reviewed 63 publications addressing critical success factors and identified 19 repeated CSFs. Among the 19 repeated factors were factors related to clear objectives, management support, strong project plan, and good communication practices. The result, critical success factors can be directly linked to project success.

Critical Success Factor (CSF) Analysis

In (Spalek, 2005) the author surveyed 82 Project Managers having at least five years' experience. The authors gave each project manager a three-part questionnaire. Part one contained a list of ranking factors from -3 to +3, with -3 equaling a strong influence for project failure and a +3 equaling a strong influence for success. The second part contained questions to determine the level of knowledge and experience, and the source of that knowledge and

experience. The third part was to collect information concerning completed project type, budget, and time. Survey results showed that those project managers with formal training, experience, and an understanding of factors surrounding project success were more likely to achieve organizational success than those who derived their formal training within the organization alone.

In my opinion, Karen E. Papke-Shields, Catherin Beise, and Jing Quan's research of critical success factors and the interrelation between critical factors and project performance supported. Studies continue to support a positive relationship between the presence of critical success factors and project performance (Papke-Shields et al., 2010, p. 651).

Survey

A survey, commissioned by Papke-Shields et al., (2010), asked six local project managers whether or not they understood any of the fifty-eight PM concepts listed within the survey. From the list of fifty-eight PM concepts, each of the project managers responded to their level of understanding and utilization. Based on their feedback, the authors removed six of the original concepts due to a lack of familiarity. As a result, the development of the final survey was reduced to fifty-two concepts, and distributed to a large eastern regional PMI chapter, through a link on their chapter website. Following the distribution, approximately 10%, or 142 responses were received (Papke-Shields et al., 2010, p. 654).

Survey Analysis

The initial problem is to verify whether or not project managers practice what they preach, and does it matter to project success. A direct correlation between PM practices and project success exists. If this relationship indeed exists, then failure to utilize PM process leads

to project failure. The more significant question should be, "what are they preaching?" It is

alarming that the survey was willing to delete six of the PM concepts before presenting that

information to the eastern PMI chapter. In my opinion, the lack of familiarity with the six

deleted concepts only solidifies my belief that project managers are developing a set of norms

based on their understanding and usage of familiar concepts. The ability to turn these

shortcomings around rests with leadership at all levels, especially project management.

Results

      Survey results covered a broad spectrum of industry, as well as project scope, cost, and

duration. Relevant to the research is the determination whether or not specific PM practices

were in use, the context of the PM practices in use, and PM practice usage versus actual project

success. The first analysis result involved the evaluation of which PM practices based on

knowledge areas (i.e., scope, time, integration). Each area was scored based on each practice

and average usage. The second analysis looked at each PM practice in more detail to gain a

better understanding of the practice and its relationship to overall project success.

      PM Practice Usage

      The survey results indicate a higher application of usage in the knowledge areas of time,

scope, and cost. Each of these knowledge areas supports the iron triangle and is more easily

quantified than areas related to communication, quality, and risk. Moderate usage of integration,

human resources, and procurement was noted as well. Papke-Shields et al., (2010) took their

findings and compared them to published results from other research and discovered that their

conclusions tended to reflect the same pattern of usage, although there were significant

differences in the conclusions surrounding Human Resource (HR) practices. The development

of modern PM standards and the development of PM education and training has increased the

areas of project staff assignments, the use of roles and responsibilities, and the responsibility

assignment matrix (Papke-Shields et al., 2010, p. 656).

Context and PM Practice Usage

The context in which each PM practice was analyzed based on industry, organization

size, and project cost. The use of regression analysis made it possible for to quantify each factor

and determine that little to no variation exists based on industry and organization size.

Interestingly enough, the most significant variation occurred based on project size and within the

aspects related to project size, such as time, cost, procurement, quality, and risk. The greater the

project size, the greater the variation that can occur with each of these project aspects. In

addition to these project size aspects, an increase in the use of integration and scope was also

evident.

PM Practice Usage and Project Success

The correlation between PM practice usage and project success is not a matter of opinion

but fact. Empirical evidence supports the correlation between PM practices and project success.

In support of continued PM standards, international organizations continue to advocate the use of

form PM standards (Papke-Shields et al., 2010, p. 659). PM practices other than those

knowledge areas associated with triple constraints are also associated with project success.

While not easily quantifiable, evidence also shows that practices related to scope, integration,

risk, communications, and human resources are also yielding their dimensions of success.

- Formalizing and integrating a change control process helps provide scope control and
  improved communications. Use of this practice helps control scope creep, schedule, and
  cost.

- Human Resource (HR) practices associated with defining organizational structure and responsibilities help maintain project budget and schedule. Understanding "who" is responsible for "what" makes it possible to streamline communications and prevent needless project delay.

- Development of clearly defined project deliverables helps define project objectives. Focus on each objective prevents the creation of unnecessary changes, additions, and cost. Each delivers serves as a focal point for procurement and risk management. Success occurs one step at a time, and each defined objective serves as a step towards that end.

Final Analysis

The central argument of this selected article surrounds the question concerning project managers practicing what they preach, and how that may or may not matter to project success. The authors successfully provided research and supporting documentation to substantiate their conclusion that project managers do practice what they preach and that PM practices do matter to project success. The issue, to me, still involves the problem that projects are still falling short of organizational objectives in spite of the author's findings. So the real question, is why?

Central to the issue is the topic of project managers practicing what they preach. The authors touched briefly upon how project managers receive their training. Some received their training based upon PMI's PMBOK Guide, and others through other standards or organizational practices. While PM standards do exist, there is no requirement to have the training to these standards, or have a certification to these standards to secure a position as a project manager. If organizational support of PM principles and practices falls short of where it should be, then it is only logical that projects continue to fall short of goals and fail to support business objectives.

I attended a local PMI chapter meeting September 18ᵗʰ and took the opportunity to ask local project managers the questions, "do project managers practice what they preach?" I was astounded that they all answered "no." When I inquired as to why they unanimously responded that organizations project management the way they see fit. This response, while possibly biased, does indicate an issue exists beyond whether or not PM's practice what they preach, or how traditional PM practices matter to project success. The larger issue seems to be how to get organizations to embrace the PM practices and support those principles intended to improve project success.

Conclusion

Project management practices have been developed and shown to provide a means to ensure project success. The authors of this article did an excellent job analyzing their questions at hand and substantiating their findings through surveys and previous research. Project management does practice what they preach, but must all get on one page so that they are preaching the same material. They must also continue to develop their knowledge and abilities through the development of professions development plans. Organizations must look beyond their cultural and project management norms and embrace those ideas and principles intended to aid them in completing their projects and attaining their business objectives. Further studies are also necessary to help ensure focus is placed on the benefits and shortcomings of organizational project management and to help provide a pathway to resolution.

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