

# Evaluating project manager performance: a case study

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**Abstract:** A project performance is usually distinct as good or poor based only on the capacity of a project team to meet cost, time, and product quality-related criteria. However, a multi-dimensional set of performance measurement including other perspectives beyond that focused on these three dimensions have been developed. These perspectives have led to a redefining of what constitutes success project performance that encompasses individual, project and organizational measures. This paper aims to discuss the performance evaluation from the project manager personal competencies point of view as well as from the organizational perspective. The adopted methodological approach was case study, performed in a Brazilian business unit of a large multinational strategy and technology consulting company. The main conclusions of this qualitative study highlight that the performance measures are prioritized by the company and the individual, considering professional's point of view. The study indicates that the performance measurement system interferes with both organizational guidelines and development of its professionals. In the basis of the indicators prioritized rank by the company and the individual, considering professional's point of view, this paper concludes that the most important are those focused on cost and to the individual measures related to abilities and personal performance stand out.

**Keywords:** project management, competencies, project manager.

## 1. Introduction

With the end of industrial age and beginning of information age, companies had to focus in their intangible patrimony, until now relegated to second plan when not forgotten. This situation made it impossible to adopt of the traditional financial accounting model as the sole performance measurement system once it does not consider the intangible patrimony and competencies, which are critical elements for organizations to achieve success in the current scenery. However, as Kaplan and Norton (1996) pointed out, this respectable financial accounting model is still being used by some companies as major base for performance measurement.

Within the project management scope, the distinction between good or poor project performance is based on project team's meeting cost, time and product/service quality related criteria, which has been described by some researchers as the iron triangle of project management (BRYDE; BROWN, 2004).

Poor project performance typically causes cost and schedule overruns; however there are other factors that also influence project performance (MOHAMED apud BRYDE; BROWN, 2004). These factors can be lack of skills, experience and skills, constant changes on the project requirements, lack of communication and others.

Over time other performance measures have been developed, not only related to cost, time and product/service quality related criteria. These measures helped to redefine what constitutes good and poor project performance.

The project scope involves, for example, perspective of different groups of people involved, behavioral characteristics and project manager attributes such as motivating, team building, negotiating, communication, decision making. From the macro-social aspect, it can be mentioned organizational structures, work environment and cross-functional team participants.

Nevertheless, the three dimensions of iron triangle are still seen as the path to reach good performance in most type of projects (BRYDE; BROWN, 2004).

Even on project management scope, despite the existence of performance and success indicators, they are usually left to second plan, being monitored in an isolated way through time and cost indicators (CARNEIRO, 2005).

In this context, a performance measurement system must consider various aspects creating by this, the alliance between finance criteria and the intangible patrimony.

This review highlights the need to verify if this enlarged view over performance measurement system is really being

adopted or if financial focus keeps on being the basis to evaluate project performance.

This paper seeks to understand practices of performance measurement systems and how they are addressed in the project management scope. In order to analyze the adoption of these systems on organization scope, the adopted methodological approach was case study, performed in a Brazilian business unit of a large multinational strategy and technology consulting company, and the case selection criteria were: the relevance of project management on strategic scope and the existence of specific investments on the development of a project management area. Data collection technique involved interviews at different hierarchical levels, focusing the following major points: which are the indicators most used by organizations to evaluate project manager's performance, and which indicators are prioritized by the company and the individual, considering professional's point of view.

This paper has five sections. Section 2 presents a synthesis of performance measurement systems theoretical discussion, followed by PMS analysis on project management scope. Section 3 presents methodological approach adopted in the field research followed by results analysis of case study in section 4. Finally section 5 brings paper conclusions.

## 2. Literature review

### 2.1. Performance measurement systems (PMS)

The performance measurement systems emerged from the need of the organizations to quantify efficiency and effectiveness of their actions.

Financial measures were extensively used by companies as performance indicators, however, in the early 80's the increased complexity of organizations and the markets in which they compete turn it no longer appropriate to use financial measures as the sole criteria to measure an organization performance (KENNERLY; NEELY, 2002).

Kaplan and Norton (1996) pointed out the deficiency of financial performance measures to reflect changes in competitive circumstances and strategies of modern organizations. Although profits continue to be the main object, it's considered an insufficient performance measure, once measures shall reflect what organizations must manage in order to profit (BRUNS, 1998 apud KENNERLY; NEELY, 2002).

Therefore, between 1980's and 1990's, a big interest in the development of multidimensional performance measurement systems emerged. New frameworks were created, such as the performance measurement matrix of Keegan et al. (1989), Cross and Lynch (1988-1989) SMART pyramid that integrates performance through organizations hierarchy, the results and determinants framework of

Fitzgerald et al. (1991) and Kaplan and Norton's Balanced Scorecard, mentioned in Kennerly and Neely (2002).

As found in the literature by Neely and Bourne (2003), performance measurement refers to the use of a set of multidimensional performance measures. Multidimensional because they include financial and non financial performance measures and internal and external performance measures. When both are included, performance measurement quantifies what has been achieved and identifies which metrics were used in predicting future.

The actions to decide what to measure, how to measure, when start to measure, which are the targets to be achieved have great influence on individuals and groups within organizations, this way becoming a combined part of organization control and planning, so these actions must be developed in alignment with corporate strategy.

Performance measurement systems have also been used to evaluate the impact of the organization actions and its performance on customer satisfaction and local community.

This paper will consider the following definitions of Performance Measurement Systems (PMS):

- "1) individual measures that quantify the efficiency and effectiveness of actions; 2) a set of measures that combine to assess the performance of an organization as a whole; and 3) a supporting infrastructure that enables data to be acquired, collated, sorted, analyzed, interpreted and disseminated" (KENNERLY; NEELY, 2000).
- Performance measurement can be defined as the process of quantifying the efficiency and effectiveness of action.

A performance measure can be defined as a metric used to quantify the efficiency and/or effectiveness of an action.

A performance measurement system can be defined as the set of metrics used to quantify both efficiency and effectiveness of actions."(NEELY et al. (1995) apud BOURNE; NEELY (2003))

As already mentioned, there are several performance management systems available in the literature, however, for this article, the main objective is to identify performance management system approach in the Project Management area, which are discussed in the following section.

### 2.2. PMS in project management area

Performance measures are also used in the context of Program Management, such as in software development, CMM and CMM-I models, that use indicators to evaluate results and to monitor progress. The OPM3 - *Organizational Project Management Maturity Model* from PMI also adopts performance indicators to measure the results of good

organizational practices in the management of project and programs portfolio.

In 1998, PMI® (Project Management Institute) recognizing the need of professional development for project managers, sponsored the efforts to develop the PMCD Framework (Project Manager Competency Development), based on the PMC project (Project Manager Competency).

The PMCD Framework is based on the assumption that competencies have direct impact on performance. It defines Project Manager (PM) major competencies dimensions and distinguishes the competencies with greater chances to impact PM performance.

This Framework has been designed and developed to incorporate the three dimensions of competence (PMI, 2002):

- Project Management Knowledge Competencies - considers what individual project managers bring to a project or project-related activity through their knowledge and understanding of project management;
- Project Management Performance Competencies - considers what individual project managers are able to demonstrate in their ability to successfully manage the project or complete project-related activities; and
- Personal Competencies - the core personality characteristics underlying a person's capability to carry out a project or project activity.

Its generic nature was created to ensure that the individual's project management competence can be disseminated across organization and industries.

Through the identification of performance criteria per area of knowledge and process group, the PMCD Framework helps describing the necessary knowledge, performance and behavior of a competent project manager.

For an employer, the PMCD Framework gives a "framework" of the skills, knowledge, understanding, and behavior required by project managers, in order to fulfill their project manager role within the organization. For a project manager practitioner or as a member of a project team, the PMCD Framework helps to identify the areas in which an individual is already competent (and can prove it), and those where further development or experience is needed. For an advisor of an organization, the PMCD Framework provides a powerful tool to help screen and analyze the existing skills within the organization and to discover any gaps that may need to be addressed.

Two types of indicators are used to measure performance and progress of a project during its realization, as well as the final measure of a project product, one is performance indicator (KPI = Key Performance Indicators) and the other is success indicator (KSI = Key Success Indicators), as shown in Figure 1 (CARNEIRO, 2005).

PMCD Framework performance criteria are structured in tables, units and competence cluster (Table 1)

The indicators are used as a tool that enables to follow progress, measure performance and evaluate actions and results. They are facts or evidences that indicate something, signs, numbers, data, opinions or perceptions which anticipate and measure condition changes or specific situations.

They can be quantitative based in quantity or qualitative, based on people's opinion or perception about a product or

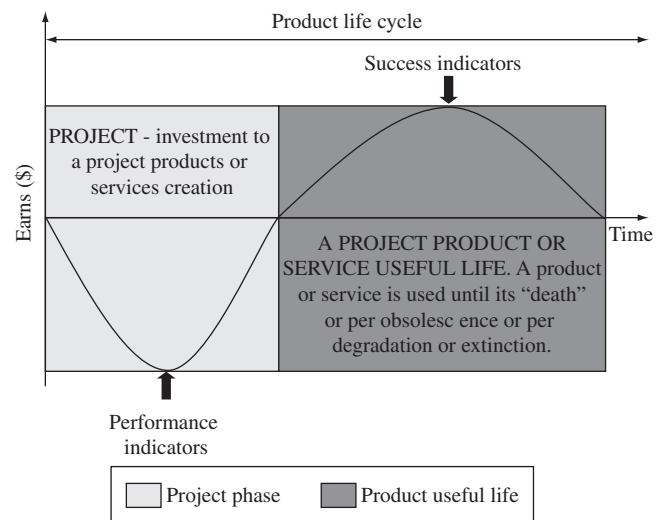


Figure 1. Types of indicators (CARNEIRO, 2005).

Table 1. Project integration management: closing (PMI, 2002).

_1 Unit of competence - project integration management	
_1.5 Competency cluster: closing	
Elements	Performance criteria
_1.5.1 Conduct project closure as regard to integration	Document lessons learned from project integration, including causes of activities which require corrective action, reasons for selecting certain corrective actions, and classification of changes for subsequent analysis.
Examples of assessment guidelines	
<b>Knowledge competencies</b>	
Demonstrate a knowledge and understanding of:	
<ul style="list-style-type: none"> <li>• The inputs to project knowledge as regard to project integration processes;</li> <li>• The tools and techniques utilized for project closure;</li> <li>• The outputs of project closure as regard to project integration processes;</li> </ul>	
<b>Performance competencies</b>	
Demonstrate ability to develop:	
<ul style="list-style-type: none"> <li>• Lessons learned.</li> </ul>	

service. In the case of a customer service center, an example of the first indicator type would be the number of calls not answered in xx seconds per period. For the quantitative type an example would be a customer satisfaction survey about service quality.

Some indicators measure activities instead of results, such as training hours that indicate only how many hours were spent in class but it's not able to say that something has or has not been learned, or if performance has improved due to the training. Activity measures indicate that resources have been used and they can be important if used with other data (KAYDOS, 1998).

### 3. Field research design

To this paper an exploratory research was elaborated with qualitative approach carried out in a sole organization.

Criteria used in the type of organization selection were: the importance of project management to the organization and the existence of specific investments on project managers' development. In the view of the criteria adopted it was chosen to carry out this study in a consulting company.

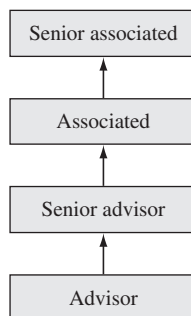
Data were collected through individual interviews with four professionals of different hierarchical levels, one senior associated, one associated and two advisors.

Interviewees are allocated in the organization's flowchart as show in Figure 2

As a consulting company, all interviewees handle projects.

The interview was composed by a questionnaire with five questions, as following:

- What are the project management performance measures adopted by the organization?
- How often do assessments take place?
- Which are the most important measures considering the organization point of view?
- Which are the most significant measures considering the personal point of view?
- Is there a defined career plan to the project manager?



**Figure 2.** Interviewees by positions in the organization's flowchart.

## 4. Field research results

The organization selected is a global strategy and technology consulting company. It provides services to the world's leading corporations, government and other public agencies emerging growth and institutions. Its major areas of expertise are strategy, organization, operations, systems and technology. With more than seventeen thousand employees in six continents, the company has annual sales of over 3.3 billion.

This section summarizes the answers per questions.

### 4.1. Project management performance measures

The company adopts several performance indicators in both project performance and project manager performance, which encompass qualitative indicators, called soft indicators and quantitative indicators (hard). The measures mentioned by the interviewees are the following:

- Profitability - revenue and cost;
- Success indicator, considering that success has been mentioned as being the translation of customers expectations;
- Term indicators;
- Cost indicators;
- Expected quality of product and service;
- External quality (customer satisfaction);
- Project usual duration;
- Company's self-promotion actions;
- Billability indicator - Employee percentage of standard hours available (usually 40 hours per week) that would have effectively been charged to the customer;
- Profitability per business unit;
- Project management competencies:
  - Analytical competence;
  - Ability to add value to the customer (customer perceived value);
  - Collaborative;
  - Join activities that add value to the organization;
  - Built of institutional, registered knowledge that can be used by others; and
  - Ability to develop relationships (with external and internal customers).

Firstly, the project manager assessment occurs six months after hiring then annually.

According to interviewees, the organization prioritizes the measures shown in Table 2. By the other hand, the main measures highlighted by the interviewees from a personal perspective are presented in Table 3

### 4.2. Project manager career

In terms of hierarchy, the process follows structure shown in Figure 2. Promotions occur in cycles of three years



**Table 2.** Project integration management: Closing (PMI, 2002).

Hierarchical level	Performance measure
Senior associated	Profitability
Associated	Customer satisfaction
Advisor (interviewee 1)	Company billing Projects profitability Market Share
Advisor (interviewee 2)	Relationship with team and company Analytical competence

**Table 3.** Project integration management: Closing (PMI, 2002).

Hierarchical level	Performance measure
Senior associated	Rate and personal ranking Billability indicator
Associated	Amount of effort put forth to satisfy customer. Customer return (project goals may be achieved, but customer may decide not to buy new services, so project performance is considered bad).
Advisor (interviewee 1)	Analytical ability Communication competence Pro-activity
Advisor (interviewee 2)	Personal performance

and there are incentives such as academic specialization abroad. As employee competences raises, they are allocated to more complex and specific projects.

Individual performance measurement takes place every year and each employee is evaluated by a committee of twenty persons. These persons hold higher hierarchical positions as to the person being evaluated.

Projects have proper indicators and there are company's general indicators (business unit).

## 5. Conclusion

The organization selected for this study showed to have a performance measurement system with clear and defined rules and its importance is recognized by organization and employees.

The results gathered through the performance measurement system interfere not only on organization's goals but also on employee's development.

One of the interviewee mentioned that company's capital is human capital, so company's performance is determined by the quality of its employees. This concept indicates company's interest in having a structured and attractive career plan for their project managers.

Considering the indicators prioritized by the company and employees, based on the employee's point of view (questions 3 and 4), it was concluded that indicators focused on cost stand out were most mentioned by the company, whereas measures related to personal competence and performance were the most mentioned by the employees.

Nevertheless this study is based on the evaluation of just one organization, so results obtained can not be generalized. It is suggested that this research takes place in other organizations and sectors to obtain a possible tendency.

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