

# Performance Management System in Construction

Priyanka Ambadas Vadnal

Pursuing M.E. Construction & Management Engineering,  
D.Y. Patil college of engineering, Akurdi, Pune  
vadnalpriyanka@gmail.com

Smita Pataskar

Assistant Professor, Department of Civil Engineering  
D. Y. Patil college of engineering, Akurdi, Pune.  
pgcivilcm@gmail.com

**ABSTRACT-** This paper displays an audit of writing of execution management in construction industry with the point of planning best practice into construction. Activities are sorted out to fulfill complex undertakings that can't be taken care of by single people yet by multidisciplinary groups in the construction business. Extend achievement relies on how well the personnel can function viably to fulfill targets inside degree, cost and quality imperatives. Project Managers and Engineers are depended with the undertaking of coordinating the disciplinary and the between authoritative endeavors under changing condition for fruitful achievement of the predetermined destinations. They operate independently with the only aim of achieving the specified goals within optimum available resources. They assume total responsibilities and accountability for the success or failure of the project. Hence, there is the need for performance management as a system for managing and integrating organizational and employee performance. In this paper, knowledge on performance management is obtained and a study on its various measurement methods is done. A survey will be set up by recognizing the essential parts of the venture which the staff ought to know for playing out his work effectively.

**Keywords-** Performance Management system(PMS), Performance Measurement, Balanced scorecard method, Last planner system.

## I. INTRODUCTION

The construction industry has been accused of being wasteful, inefficient and ineffective. The construction industry has long been recognized as having problems in its structure, particularly with fragmentation that has hindered its performance. The construction of highways and infrastructure has received a tremendous boost with the country poised to make incredibly huge investments in construction sector in the next 10 years. A large numbers of projects with cost size ranging from hundreds to thousand crores are being executed in the country. Competitive pressures from within the industry, as well as external aspects like political, economic and other considerations are forcing the industry to re-examine and improve its operating strategies.

### A. Performance Management

Performance management is a procedure by which managers and employees cooperate to arrange, screen and survey a

worker's work destinations and general commitment to the association. Something beyond a yearly execution audit, execution administration is the persistent procedure of setting targets, evaluating progress and giving on-going instructing and input to guarantee that workers are meeting their destinations and profession objectives.

### B. Performance Measurement

Performance measurement is the general gathering and revealing of data about the sources of info, productivity and adequacy of the development ventures. Organizations utilize execution estimation to judge their venture exhibitions, both as far as the monetary and non-money related viewpoints and to thoroughly analyze the execution with others, keeping in mind the end goal to enhance program productivity and viability in their associations. Additionally, estimations are expected to tract, figure, and at last control those factors that are vital to the accomplishment of a venture.

### C. Benefits of Performance Measurement

In general, performance measurements have been used by companies to:

1. Evaluate – Performance measurement of program outputs and outcomes provides important information on current program status and how much progress is being made towards program goals. Thus, performance measurement of an organization is a way to make an assessment and comparison with other companies.
2. Control – Processes can only be controlled from the moment the company is able to define their performance standards. Performance measurement is used in the recognition of problems, which is identified when a particular indicator shows a deviation from the established pattern.
3. View – Measurements are used to establish the initial diagnosis before implementing interventions for improving company's processes. They aim to identify strengths and weaknesses or dysfunctions, from which priorities are given to the implementation of improvement actions.
4. Motivate – Measures can be utilized as a part of an extremely successful route by including and spurring

individuals for consistent change, giving people a criticism all alone execution.

5. Promote – Performance measures can be used to validate success, justify additional resources, and earn customers, stakeholders, staff loyalty by showing results and win recognition inside and outside the organization.
6. Celebrate – Celebration is imperative since it persuades, advances, enlists and enhances execution since it inspires individuals to enhance facilitate in the following year, quarter, or month. Festivity enhances execution since it conveys consideration regarding the organization, and in this way advances its fitness..
7. Systematic – Benchmarking is not a random method of collecting information, it is a systematic, structured step by step process that aim to evaluate the market working practices. The outputs of this process allow companies to compare their products, services and methods of working with organizations representing best practices.
8. Continuous – Benchmarking is an improvement process that must be continuous to be truly effective. It can't be developed once and then neglected, thinking that the task is completed. It must be a continuous process, since the practices are continually changing.
9. Evaluation – The immediate objective of benchmarking is to evaluate a process and hence, necessarily, measurements are essential and constituent parts of this process.
10. Products, Services and Processes – Benchmarking can be applied to all business aspects. It can be applied to products and basic services, to the process to get those products and to all processes, methods and practices that constitute the support to reach the customer effectively.

#### D. Performance Management System in general

Performance management is a progressing procedure of correspondence between a boss and a representative that happens consistently, in support of achieving the vital targets of the association. The motivation behind an execution administration framework is to survey and guarantee that the worker is doing their obligations which they are utilized to do in a powerful and attractive way, which is adding to the general business objectives. Within each association, Performance Management is a basic issue affecting the various parts of Human Resources administration. It adds to the ID, improvement and maintenance of high-potential representatives and key patrons. The current economic environment is characterized by downsizing, mergers and acquisitions, and cost-cutting through consolidation and centralization measures. Performance Management can strongly influence these corporate events and can mean the difference between their success and failure.

In a nutshell, performance can be defined as the evaluation of employee contributions to the business strategy. Measuring performance should be consistent, i.e. measured in accordance with a single set of principles and rules. However, Conveying the importance of measuring individual performance can only be achieved if senior management sets the example, As a result, performance management may also be considered as a strong link in a company's corporate culture, via the impact and behaviour it generates. Defining objectives and evaluating achievements over a given period requires communication between each employee, their direct manager and also a higher-ranked manager. There is significant value in discussing, negotiating and commenting on such performance objectives. Evaluation sessions where performance is reviewed may be scheduled to tie in with a specific business cycle, such as at the end of a mission or project this process helps managers to sharpen their "coaching" abilities by forcing them to identify problems as early as possible. Short review cycles enable corrective actions to be taken, priorities to be changed and even crisis situations to be avoided.

Performance Management Systems incorporate following aspects:-

1. Understanding of the Performance framework (objectives, roles and standards of performance).
2. Planning for performance improvement both at individual and organizational level.
3. Assessment and continuous review of performance output at all levels.
4. Constructive feedback and support.

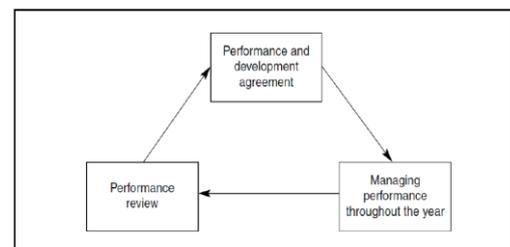


Fig 1: The Performance Management Framework  
(Source: Armstrong, 2006: p504)

## II. METHODOLOGY

### A. Performance Management Process

An effective performance management system includes the following components:

- 1) Performance Planning- Performance planning is the main significant segment of any execution administration prepares which frames the premise of execution examinations. Execution arranging is mutually done by the evaluate and furthermore the appraiser in the start of an execution session. Amid this period, the workers choose the objectives and the key execution ranges which can be performed over a year inside the execution spending plan. That is finished after a common assertion between the detailing officer and the worker.

- 2) Performance Appraisal and Reviewing-  
The appraisals are typically performed twice in a year in an association as mid audits and yearly surveys which is held toward the finish of the money related year. In this procedure, the assess first offers the self-topped off evaluations in the self-examination shape and furthermore portrays his/her accomplishments over a timeframe in quantifiable terms. After the self-evaluation, the last appraisals are given by the appraiser to the quantifiable and quantifiable accomplishments of the representative being assessed. The whole procedure of survey looks for a dynamic investment of both the worker and the appraiser for investigating the reasons for provisos in the execution and how it can be overcome.
- 3) Feedback on the Performance followed by personal counseling and performance facilitation-  
Feedback and directing is given a considerable measure of significance in the execution administration handle. This is the phase in which the worker gains mindfulness from the appraiser about the ranges of enhancements and furthermore data on whether the representative is contributing the normal levels of execution or not. The worker gets an open and an exceptionally straightforward input and alongside this the preparation and improvement needs of the representative is likewise distinguished. The appraiser receives all the conceivable strides to guarantee that the representative meets the normal results for an association through compelling individual advising and direction, tutoring and speaking to the worker in preparing programs which build up the abilities and enhance the general profitability.
- 4) Rewarding good performance-  
This is an exceptionally fundamental part as it will decide the work inspiration of a worker. Amid this stage, a worker is freely perceived for good execution and is compensated. This stage is exceptionally delicate for a representative as this may affect the confidence and accomplishment introduction. Any commitments properly perceived by an association helps a worker in adapting up to the disappointments effectively and fulfills the requirement for warmth.
- 5) Performance Improvement Plans-  
In this stage, crisp arrangement of objectives are built up for a representative and new due date is accommodated achieving those destinations. The representative is unmistakably imparted about the territories in which the worker is relied upon to enhance and a stipulated due date is additionally allocated inside which the worker must demonstrate this change. This arrangement is together created by the evaluate and the appraiser and is commonly affirmed.
- 6) Potential Appraisal-  
Potential examination frames a reason for both horizontal and vertical development of workers. By

executing competency mapping and different evaluation strategies, potential examination is performed. Potential evaluation gives significant contributions to progression arranging and employment Rotation.

*B. Performance Measurement Methods*

1. Balanced Scorecard Method

The Balanced Score Card (BSC) is an execution administration framework which fuses four fundamental estimation classifications (viewpoints) each of which with an extensive variety of potential sub-measures. It was conceived by Harvard business college teacher Robert Kaplan and Renaissance Solutions president David Norton. The fundamental contrast with customary ways to deal with execution estimation is that it incorporates a scope of "driving and slacking" markers – client point of view, inner/business procedures, learning and development, and money related - to assess whether a business is pushing toward its vital objectives. Undoubtedly, the BSC accentuates that with a specific end goal to oversee methodology; an association must quantify its execution through execution pointers subsequent to dissecting its operations in an iterative way. The BSC perceives that the money related measures are slacking pointers and in this manner the aftereffect of the other three driving markers. At the end of the day the main pointers manage issues that will in the end effect on the monetary execution, yet vitally, before they have had sufficient energy to have any impact.

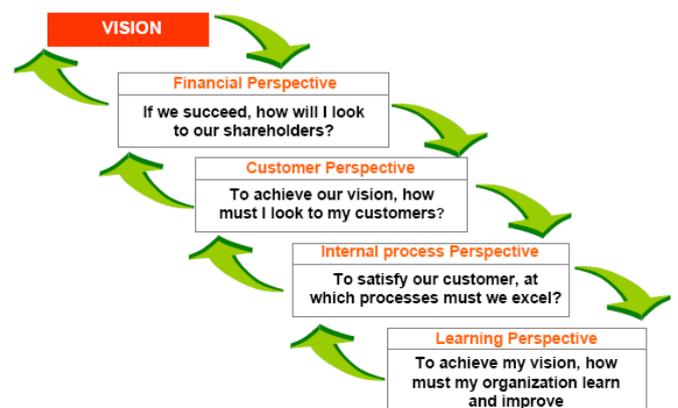


Fig. 2 The four Perspectives of balanced scorecard  
Source: www.akssupprt.com

2. Last Planner System

The Last Planner System (LPS) for generation control has been actualized in development ventures with fluctuating levels of progress, to build the dependability of arranging, enhance generation execution, and make an anticipated work process. Through the LPS strategy, extend groups resolve to finish allocated undertakings in a given week. Some lean development specialists allude to rate arranges finish (PPC) as a metric for responsibility unwavering quality. PPC esteem does not gauge the level of usage of a work process (productivity). Rather it quantifies creation arranging adequacy and work process unwavering quality.

At every week by week meeting, time is given to learn and comprehend why certain assignments were not finished as arranged in the earlier week, before making another week by week plan to be executed. The uncompleted arrangements are contemplated and broke down to decide the obstructions and underlying drivers that influenced the execution procedure.

**III. ANALYSIS**

A poll study was directed on 25 development representatives who incorporate specialists, fashioners, organizers, extend supervisor and so on. The graph speaks to the reaction of the five most critical inquiries identified with PMS.

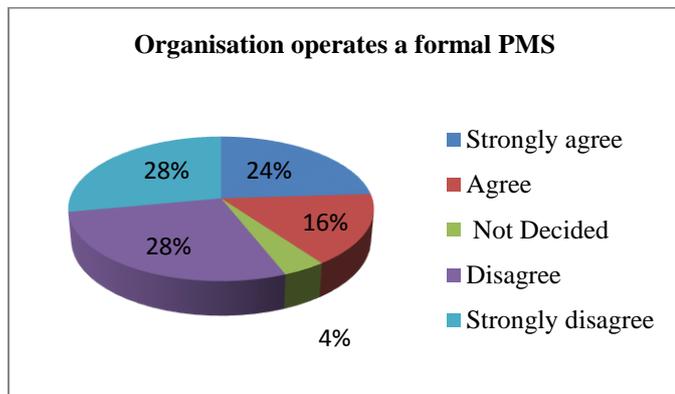


Chart 1. Response on working of PMS

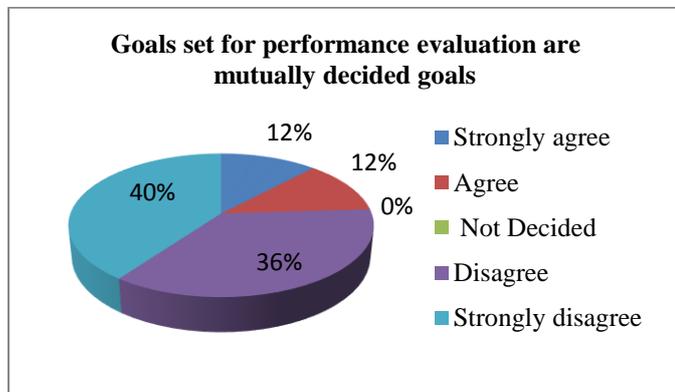


Chart 2. Response on Process of PMS

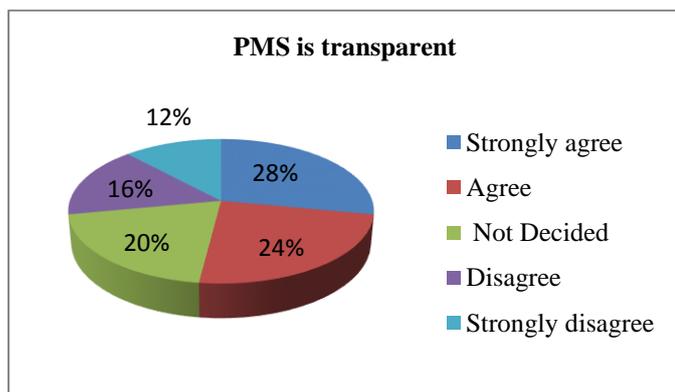


Chart 3. Response on Transparency of PMS

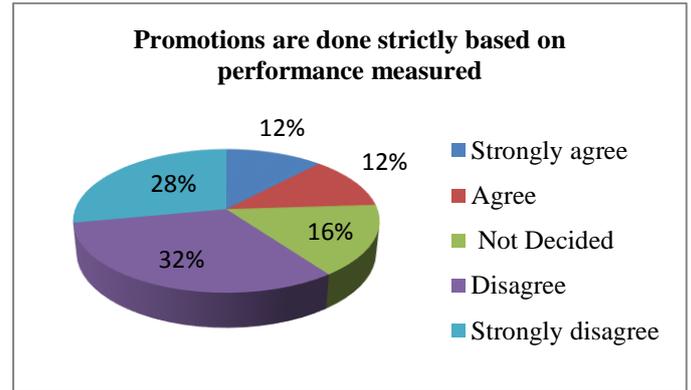


Chart 4. Response outcome of PMS

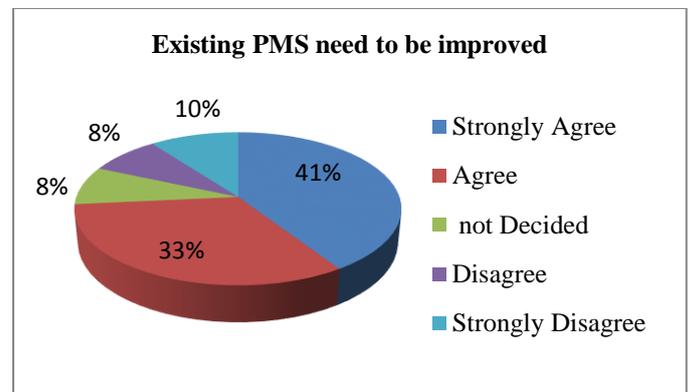


Chart 5. Response on improvement of PMS

**IV. RESULT**

From the study it is uncovered that the 40% of workers feel that the current PMS ought to be enhanced so as to get most extreme profitability.

**V. CONCLUSION**

All through the most recent two decades various ventures, essentially producing, have acquainted new strategies and procedures with move customary ideal models keeping in mind the end goal to enhance their execution. This has prompted the formation of new rationalities, for example, simultaneous designing/development, lean creation or development and numerous others, for example, JIT, TQM, and TPM and so on. Most of the methods have its own advantages and drawbacks. For an effective performance the organizations should give more importance to the non-financial measures than the financial. If done so it will indirectly reflect the improvement in the financial performance of the organization. The various methods have given significance to the non-financial measures. Additionally works of the postulation includes planning of poll in light of the different parts of a venture according to specified in the techniques and an overview will be done in different organizations to check the related learning of the faculty towards those viewpoints. Having learning on these viewpoints will in a roundabout way reflect in their execution.

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