

Effectiveness of Performance Management Systems in the Indian Construction sector

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Abstract

The purpose of this exploratory research is to better understand how performance management systems work in the Indian construction industry¹. The research sample included 138 workers from three major Indian construction companies. To further understand the characteristics that led to the success of PMS in Indian construction enterprises, researchers used factor analysis and the chi-square test. The findings demonstrated that participants had a good grasp of PMS systems and how they interacted with HR subsystems (Training & Development and Pay & Rewards). 'Understanding appraisee standpoint, impartiality in evaluation, and frequent review' were three of the study's major worry areas. Recommendations have been made to increase the efficiency of PMS in Indian construction firms.

Keywords: construction, feedback, Indian, PMS, performance.

Introduction

Throughout the past several decades, India's construction industry has risen tremendously and has been recognised critical to the country's economic and social progress. The construction industry is expected to increase between 8 and 10 percent annually, making it the second-largest behind agriculture. According to Doloi, Iyer, and Rentala (2012), this industry has grown rapidly in the last five years, creating 31.46 million jobs (2008-2009) and having the potential to create an additional 2.5 million jobs in the coming years. However, the industry's high level of sophistication, inconsistent performance, inconsistent quality, and dearth of talented workers remain major concerns for the industry. In terms of work performance in this area, India has the worst schedule overrun (55%).

It's the real deal. Among the 951 infrastructure projects reviewed by the Ministry of Statistics and Project Implementation (MOSPI), 309 projects had cost overruns and 474 projects were behind schedule.

Indian construction studies have tended to be either technical or financial, with the bulk of them focused on the technical factors that influence project outcomes and the financial factors that contribute to budgetary overruns or underruns. It's very uncommon for building and infrastructure projects, which contribute significantly to GDP and provide employment for the

workforce, to be delayed or lose money because of a lack of research into the people or "human resources" that drive development in this area. Studies on the Indian construction industry seldom include human resource management, or how to make the most use of workers and maximise their potential for long-term success. As far as human resource management goes, this business seems to be in its infancy; it lacks both organisation and long-term employment in static manufacturing industries.

The lack of research on HR practises in the Indian construction industry prompted this study. Some of the most significant delays in Indian building projects may be traced back to human factors, according to Doloi, Iyer, and Rentala, (2012). (lack of commitment; lack of communication; lack of clarity; improper planning and co-ordination etc). If these factors can be resolved, it is important to know if Indian construction projects have standard practises that give clear project outline, improve project co-ordination, and effectively manage project communication; thus, enhancing performance both for individual and organisation at the same time It is the authors' belief that this insight may be obtained in part by studying how Indian organisations define Individual Performance Management Systems.

This will enable the researchers explain and relate how individual performance elements might effectorganisational aspects, in this case project factors leading to total delays and losses. Thus, this research aims to get a better understanding of performance management systems in the context of the Indian construction industry . There is a lack of research on individual performance management in this industry both worldwide and in India. In the majority of studies, researchers have focused on project performance and the elements that determine whether a project succeeds or fails (see Turner and Muller, 2003; Huemann, Keegan and Turner, 2007; Tabassi and Bakar, 2009; Doloi, Iyer and Rentala, 2012). It was felt that, given the scarcity of research on project-oriented construction companies' use of performance management systems (PMS), the researchers should use previous studies across generic industries to better understand the significance of PMS for India's construction industry.

Indian Construction sector: Brief background

The global economy is heavily reliant on the building sector. Second only to agriculture, India's construction industry has a wide-ranging impact on the economy, and its stature is multi-dimensional. The industry employs roughly 33 million people, including indirect jobs, because to its labor-intensive nature. Approximately 70% of these workers are working in the infrastructure sector, while the remaining 30% are employed in the real estate sector. Cement, steel, brick, wood, and construction materials are all reliant on the industry.

The building trades. To put it another way, the sector's network of backward and forward connections enables a multiplier impact on other sectors of the economy when the sector spends more money. The industry is essential to the broader economy's ability to produce. After two years of steady economic growth, the construction sector slowed down in 2012. Due to the longer gestation periods of the projects, financial institutions were more hesitant about supporting projects in the industry, making project financing more challenging.

There are both organised and unorganised participants in every sub-sector of the construction business, from construction personnel to supervisors to contractors and suppliers of materials. Being a labor-intensive business means that at different stages of the project, a lack of qualified workers and the absence of certain essential skill sets may lead to a rise in costs, delays, and a loss of trust in project owners. Furthermore, the ineffectiveness of labour planning leads to project execution difficulties.

The Indian government has implemented several progressive reforms and steps to maximise the industry's potential and fulfil rising demand. Public-private partnerships have seen an increase in government activities since they were recognised as an industry in 2000. In the construction business, a large amount of productive potential has gone untapped due to a lack of awareness of best practises in HRM. Human resources are vital, yet a substantial portion of the workforce is short-term. Traditional methods of HR are now being used without comprehending the complexities and nature of the industry, resulting in a paradoxical scenario.

A Critical Analysis of the Literature

Measurement of output, whether individual or organisational, is often referred to as performance in common usage. It was once assumed that the responsibility for performance lay only with individuals, therefore the attention was shifted to assessing individuals and understanding characteristics of their good and bad performance outputs. Individual-centric performance evaluation became more prevalent after 1970, and the term "Performance Management" was coined to describe how individuals and organisations work together to achieve high performance outcomes at both the individual and organisational levels. This has led to improved organisational efficiency.

Individual and team performance may be improved by a structured approach to performance management, which is what it is. By analysing and controlling performance in accordance with agreed-upon objectives, standards, and competence criteria, it is a way of achieving improved outcomes (Armstrong 2006, pg 495). It is the goal of PMS to assist people and organisations better understand how high performance systems evolve and are managed for greater efficiency and productivity in the workplace as a whole.

For example, according to Fletcher (1993), "The real concept of performance management is associated with an approach to establishing and maintaining a shared vision of the purpose and aims of the organisation, helping each employee to understand and recognise their part in contributing to them, and in so doing, manage the performance of individuals and the organisation".

As a part of a Performance Management System (PMS), you must have an understanding of the framework for performance: (objectives, roles and standards of performance)
Planning for performance development on both an individual and organisational level is essential. Performance output assessment and ongoing evaluation at all levels
Providing constructive criticism and encouragement

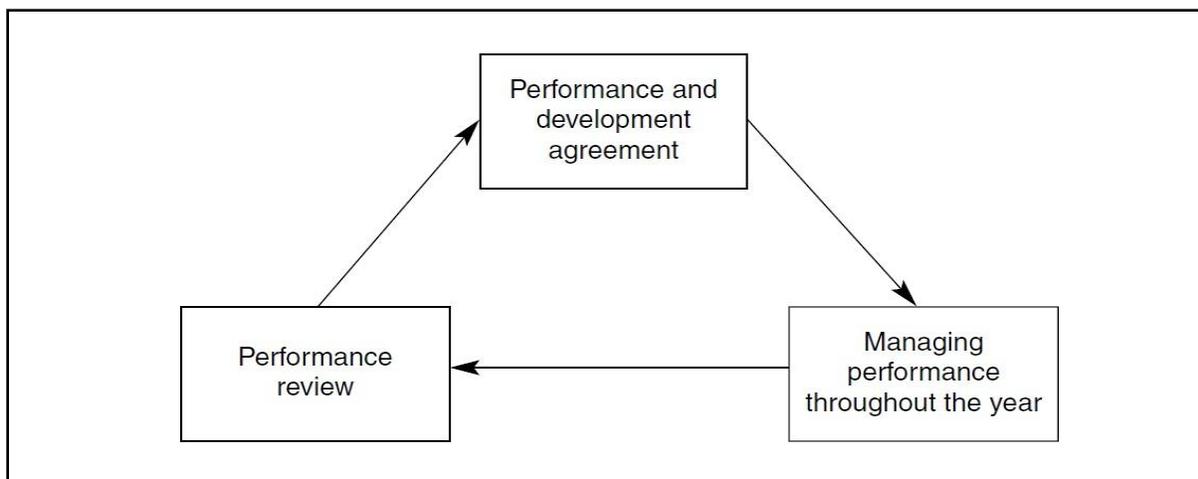


Fig1.1: The Performance Management Framework

(Source: Armstrong, 2006: p504)

The post-liberalization period has been the primary subject of literature reviews in connection to understanding Indian workforce management practises; examining the

Indian manner of managing human resources across a broad range of Indian business. Many studies have attempted to answer the following questions: What does human resource management mean to businesses in India? How does it help Indian firms compete with multinationals that have emerged since liberalisation? And how does this particular discipline help Indian firms cope with competition from multinationals that have emerged since liberalisation? (Amba-Rao, 1994, 2000; Budhwar et al., 1997, 2001, 2003, 2004).

Working relationships in India have historically been characterised by a large power distance, reflecting respect and deference to one's superiors (Rai, 2012). When the decision-making process is centralised, workers have less opportunity to stay up to speed on many elements of management. This is characteristic of Indian management, as Mendonca and Kanungo (1990) pointed out. In Indian companies, similar opinions on leadership and supervisory approaches have been documented by (Kakar, 1971; Sinha, 1990; Virmani and Guptan, 1991). These studies stress a distinct viewpoint on staff management by Indian supervisors via an awareness of Indian work cultures and values. Paternalistic management practises in India make it difficult for managers to implement objective and strict performance appraisal methods (Rai, 2012). They prefer to use an ad-hoc approach of performance evaluation that is more personal and relationship-oriented than objective and scientifically quantifiable. As a result of the tension between their professional and social roles, they show a superficial dedication to the process of performance evaluation and the genuine worth of their subordinates (Rai, 2012). A comparative study of 116 Indian enterprises, including public, private, and MNC/JV firms, was conducted by Amba-Rao et al. (2000) in an attempt to better understand Indian Performance Appraisal methods. The research found that Indian managers' perceptions of the performance evaluation process were influenced by their culture and beliefs. While many businesses undertake yearly performance evaluations, the level of impartiality and assessment parameters vary. It's a formality for public sector companies because of their strict standards and commitment to law; the emphasis is on learning about growth opportunities rather than appraising an individual's value and worth. To better comprehend an employee's performance, an organised and formal conversation process is used.

less opportunities for the individual to assess his present performance or identify potential areas for growth (Rai, 2012). A lack of trust in performance assessment as a complete evaluation instrument is reinforced by seniority and service-based pay cumulation systems throughout Indian public sectors. In a book chapter, Sadananda (2009) describes the results of an investigation of the Performance Management System at NALCO

(National Aluminium Company Limited- A Navratana PSU2). PMS is based on Management by Objectives and is a yearly activity for both executives and non-executives of the firm, according to the findings of this research. Using essential PA procedures like Assessment Centers to objectively analyse several assessment factors was found to be lacking in the study. However, despite NALCO's use of "Coaching and Mentoring for employee development", the program has not been applied to great success, and polled workers still believe that it is more of a formality than a real developmental endeavour. The private sector and multinational corporations and joint ventures (MNCs) are compelled, in order to remain competitive, to look at the objective side of performance evaluation and to relate it to competitive pay practises and complete staff development activities. Managers in these companies are more willing to talk openly with their employees and truly try to understand the reasons for performance discrepancies, as well as difficulties connected to a lack of enough resources. Because they are more fair and neutral during assessment, they ensure that the line between meritorious and mediocre performance is clearly demarcated (Rai, 2012).

Through a case study of 10 Indian manufacturing organisations, Rao, (2007) demonstrates the usefulness of performance assessment systems in the Indian manufacturing industry.

Bhiwani Textiles, Staple Fibres, Chemical Industries, Grasim Cements, Jayashree Textiles, Birla NGK Insulators, Indian Aluminium Industries Ltd., Essel Mining Industries, Hi-tech Carbon Industries, and Management Services Cell are some of the other companies in this group.. Individual goal setting, connection to organisational success, and communication by superiors are not recognised as potentially serious exercises in performance planning in all companies evaluated, resulting in role uncertainty and lack of effort. It's easy to tell the difference between the two.

The difference between "knowing what to do" and "doing it." Employees have no way to voice their concerns or have their complaints heard, and as a result, the procedure is still nothing more than a formality. A lot of attention is paid to the rating metrics rather than the actual performance of a worker. Additionally, there is no clear correlation between objective evaluations and training requirements for individual employees in the development part of performance evaluations.

Rationale and objectives of the study

Construction project settings are thought to be considerably distinct from those seen in other industrial and production contexts. The unpredictable nature of this sector in comparison to more staid ones sets it apart (Loosemore et al., 2003). Thus, building projects are characterised by short-lived teams of workers who are

then dissolved and sent elsewhere in the company.. (Atkins and Gilbert, 2003). Projects include a variety of labour tasks over a certain time period with a specific goal in mind (Turner and Muller, 2003). Individuals in charge of performance in such a short-term contact have a particularly difficult task (Turner and Muller, 2003).

Studying performance management and its efficacy in India has been restricted to a few studies (Amba Rao et al, 2000; Budhwar et al 1997, 2001, 2003, 2004; Rao, 2007; Sadananda, 2009). Most studies have been general in nature, focusing on a wide range of Indian sectors to see whether Indian managers are aware of the concept of Performance Management and if they are inclined to use it. Several studies have been conducted because of the widespread belief that Indian managers are culturally value-oriented and hence unable to follow standard practises of employee assessment or provide direct feedback to their workers. When it comes to the connection between a supervisor and a subordinate in an Indian workplace, Sinha (1984) talks about 'sneh' (affection) and 'shraddha' (respect). According to him, employees (subordinates) respect the supervisor's paternal image, therefore they do all in their power to save him from losing face. Indian culture, which places a high value on avoiding ambiguity, may explain why managers and subordinates exhibit these qualities, with workers preferring personal connections over contractual ones and relying on the leader for direction in order to do the task assigned (Sinha, 1984).

There were limits to the authors' study about the knowledge of Performance Management Systems in the Indian construction industry over the course of their literature assessment. In part, this may be attributed to changes in technology, finances, and development procedures, which have made the building industry ever-more unpredictable. A discipline and effective instrument for managing people in the Indian construction business has yet to be explored, where the procedures of managing people are yet in their infancy. Despite the fact that a large amount of research has been done, the researchers

It was necessary to change the emphasis from general Indian enterprises to a sector where people management practises are still not clearly defined, nor are they implemented in a structured and systemic manner.

As a follow-up study to Amba Rao et al., 2000 and Rao, 2007, the authors looked at the element of Performance Management and its efficacy for a dynamic and changeable sector. In the construction industry, it was critical to determine whether or not performance management tools that appear suitable to static

production sectors really had any use. Research has shown that PMS may be an effective management tool in Project-based Construction enterprises throughout the world, but these studies have not gone into detail (see Loosemore et al., 2003; Turner and Muller, 2003). It was necessary to find out whether this holds true in India as well. The research will be broken into two parts.

Only the following questions will be addressed in Phase I of the research:-

In the Indian construction industry, what does the term "PMS" mean to managers and employees?

2. How is the efficiency of the PMS system in Indian construction businesses affected by elements such as performance system, performance planning, management support and performance feedback/review?

What role do human resources functions like training and development and compensation and benefits play in Indian construction enterprises using PMS data?

How do Indian construction industry managers see PMS activities and processes?

Project Management System (PMS) development for the Indian construction industry will be completed in Phase II. The dynamic character of the business is taken into account. It is the writers' goal to educate people

perform Phase II of this study as part of future research objectives, which are not covered by this publication at this time.

It is hypothesised that the success of the PMS system is influenced by aspects such as performance system comprehension, performance planning, managerial support, and performance feedback/review.

Human resources departments like Training & Development and Compensation & Benefits are intertwined in Indian-origin construction enterprises, according to Hypothesis 2.

Indian construction business managers see PMS as a management tool rather than a development tool, according to hypothesis 3.

Method

Participants

In the construction industry, executives and managers were the focus of this study. 80% of overall business in the industry is generated by three large construction businesses in India, each with a turnover of more than 1000 crores. Appraisees and supervisors/managers who assessed workers were the focus of the research (Appraisers). The goal was to see whether the appraisee's perspective varied from the appraiser's, and if so, whether or not the appraiser's perspective on PMS changes drastically when he or she is simultaneously acting in the role of appraisee.

The interviews with managers and supervisors were documented in writing form and transcribed to the best of the authors' comprehension for analysis as part of a qualitative research project.

In order to have a clearer picture of the construction industry's working population, it was decided to gather data on the respondents' age, employment level, and number of years of work experience. An investigation into whether or whether these elements influenced people's opinions was essential.

According to age, the majority of respondents (67) were between the ages of 31 and 40 years, with 50 respondents between the ages of 21 and 30 and 21 between the ages of 41 and 50, indicating that the bulk of answers were from members of Generations X and Y3

However, only two answers were obtained from Senior Management; this remains a source of concern because it was difficult to obtain responses from Senior Management through questionnaire format; therefore, the researchers recommended that Senior Management employees be interviewed personally in order to obtain personalised responses from those employees. Subsequent sections go into more depth on this.

One respondent, with only one year of work experience, was the lone outlier among the survey's 67 respondents who reported having 2 years to 10 years of professional experience. Another 63 respondents reported having 11 years to 20 years of professional experience, while 7 respondents reported having more than 21 years of professional experience. Because the survey participants had enough work experience to comprehend the concept of

Performance Management, their ideas and perspectives on its efficacy have weight in the present environment.

Measures and Procedures

The research began with the creation of a questionnaire that was suited for the ever-changing character of the Indian construction industry. Because this research was exclusively aimed at the construction industry, prior studies by Amba Rao et al. (2000) and Rao A.S. (2007) on PMS across Indian industries were solely utilised as references for the present study's questionnaire.

It was divided into six sections that examined various aspects of performance management systems, viz. performance management systems factors (understanding the system and its parameters), performance work plan and its factors, feedback and review factors, performance improvement factors, reward and recognition factors, and managerial/supervisory support factors. This questionnaire was divided into six sections. There was a five-point Likert scale on the questionnaire that ranged from 1 (strongly disagree) to 5 (strongly agree).

The questionnaire was sent via email and printed copies were made available to responders who could be contacted at the company's headquarters. Due to the nature of this business, which is project-specific, most of the personnel are distributed throughout the nation at various sites with inadequate online connection, resulting in the underutilization of web or email questionnaires in this sector. An effort was made to gather as many replies from the targeted group as possible, and the results showed that 145 questionnaires were filled out completely. After removing a few half-completed questions, the total number of completed questionnaires was 138. Quantitative research was conducted on the questionnaire data using Business analytics.

SPSS version 11 is the programme used. Detailed information on the data collection, analysis, and findings is provided in the following chapters.

With the use of the Cronbach alpha test in SPSS version 11, we verified the validity and reliability of our survey instrument. As a reference, below are the Cronbach alpha test findings for each sub-section of the questionnaires as well as a few example questions.

Table1.1

PMSQuestionnaire(Samplequestions)	CronbachAlpha Values
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1.PerformanceManagementSystemfactors	0.77
TheCompanyclearlycommunicatesorganizationalobjectivesandpurposeof Performance Management System(PMS) toall employees	
Teamandindividualobjectivesarealignedwith business objectivesandstrategyoftheorganization	
Managers/supervisorsareaccountableforeffective implementationof PMS	
2.Performanceplanningvariables	0.66
Performance goals aremutuallydevelopedand haspecific time frames.(WellwrittenKRA/goals)	
Managersconsiderviewsofappraisee'sduringgoalsetting processformakingbestuseofappraisee'sskillsandabilities	
3.Performancefeedbackandreview factors	0.70
Feedbackisgivenonaperiodicalbasistohelpappraisee'swork uponimprovingperformance(ex-quarterly/bi-annualbasis)	
Managersgivehonestperformancefeedbackduringreview	
4.Performanceimprovementfactors	0.52
Outcomes of performance review are linked to HR-subsystems(likerewards andtraining&development)to help improve employeeperformance	

Managers consider PMS as an administrative tool rather than a developmental tool	
5. Reward and recognition factors	0.80
PMS establishes a clear connection between performance and rewards.	
High potential employees are retained through rewards linked to PMS	
6. Managerial support factors	0.74
Managers use a supportive approach in the performance review process	
Managers consider that performance feedback is helpful in improving subordinate's performance	
Senior management is concerned about human capital and uses PMS for enhancing employee productivity	
Overall Reliability of the instrument	0.91

A score of 0.91 on the instrument's overall reliability scale indicates that the instrument developed for research purposes provided results that were very consistent with the study's goals. According to the reliability scale of 0.52, a particular item related to using PMS for Performance improvement indicates that the responses for this particular factor seem to be varied, which may be attributable to the factor of PMS being used as an administrative tool rather than as a developmental tool across major construction firms in India.

Discussion of the findings and conclusions

"Principal Component Analysis" with varimax rotation at eigen value 1 was used to perform an exploratory component analysis for "Effectiveness of PMS" in Indian construction enterprises. Most of the variables had a factor value of 0.60 to 0.80, suggesting that the

majority of respondents regarded them to be essential and crucial. While Q7 ("PMS enables organisations and departments to identify underperformers") yielded a factor value of 0.59, which indicates that respondents differed on this specific item, meaning that most respondents did not feel PMS can assist identify underperformers. Samples taken from various construction businesses, whose PMS rules and procedures may be implemented differently, might potentially account for the discrepancy. Managers perform objective performance evaluations, as shown by the factor value of 0.82 assigned to Q28, which shows that respondents place a high value on this item under the supervisory support component of the PMS questionnaire. Managerial objective reviews are an essential part of PMS, and methods to reduce "subjectivity" and "human error" in the process have been studied extensively. Respondents in this poll rated this aspect as very essential because they feel that this item impacts their judgement in a fair and objective manner.

Thus, it has a significant influence on the development and stability of their particular companies.

In order to better understand how PMS works in Indian construction enterprises, the study's descriptive components had to be examined and interpreted first.

"KRA's are clearly communicated by superiors to ensure that employees understand departmental business plans" and "PMS is viewed as a formidable tool for managing how work gets done and how effective each individual is performing" were some examples of questions that were asked in the first major factor of the study (Effectiveness). Despite the majority of employees agreeing that this criterion is clearly understood, the views of employees and managers regarding the integration of employee and team goals with organisational goals, or on managers trying to seek staff views while setting Performance parameters, differed significantly. "Superiors consider the views of appraisees in goal setting" was the lowest mean at 3.35, while "Effective implementation of PMS improves company performance" was the highest mean at 3.35 in Q10,

A score of 4.54 indicates that workers are aware of the PMS aspects and feel that their proper application may assist enhance the long-term performance of the organization's. Employees strongly believe that senior management team support is necessary for effective implementation of PMS and accountability for its practical deployment and functioning also rests with the concerned senior management team, according to the scale's Q2 („Senior management is accountable for effective implementation of PMS).

The second element examined characteristics that aided appraisers and appraisees in formulating objectives and measuring progress toward those goals (Performance planning).

The mean values in this section also varied, with the majority of respondents expressing either neutrality or disapproval of the findings. This indicates that employees have a lower understanding of how their performance will be measured in objective terms, with most believing that this particular aspect has more subjectivity as organisations (herein construction firms) lack objective variables for performance measurement under their PMS (Q13, "Employees are clear about how their performance will be measured").

Performance feedback and review, as well as the quality of the feedback, were examined in the third element, which looked at workers' ability to access and use performance feedback for self-improvement (Performance feedback and review). With a mean value of 3.20, the answers showed that the majority believed that feedback was not offered on a regular basis (Q14). Employees were given feedback on a yearly basis rather than on a quarterly or biannual basis to address concerns of continuous performance improvement, as a result of this aspect.

It was critical to consider employee views on the use of PMS data for employee development and to connect PMS data to HR subsystems like Pay & Rewards and Training & Development. The fourth aspect was a critical consideration. While other items in this category had mean values ranging from 3.5 to 4.0, Q17, which addressed this feature, had a higher mean of 4.04; the other items in this factor had mean values between 3.5 and 4.0.

3.6 to 3.8 indicates strong support from respondents for the use of report card data for training needs analysis and tying it to pay & benefits.

High potential personnel are kept with PMS-linked incentives (Mean 4.00 on Q24).

As the study's final factor, managerial support received the majority of affirmative responses, implying that their organisations' PMS processes do not adhere well to this aspect, with the lowest mean at 3.22 in the factor item group, suggesting that this aspect is not well adhered to in their respective organisations' PMS processes. While this item received a higher factor analysis score (0.82), the mean of responses (0.83) indicates that while respondents place greater importance on this factor in their Managerial support factor, they believe that the process of "objectivity" is not followed by their Managers when conducting Individual performance reviews under PMS, despite the higher factor analysis score.

The data were subjected to the Chi-square test for Goodness-of-fit in order to verify the hypothesis.

It is hypothesised that the success of the PMS system is influenced by aspects such as performance system comprehension, performance planning, managerial support, and

performance feedback/review.

Table1.2

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Chi-Square	37.628	41	39.791	22.87	26.606	34.492	58.896	18.511	30.179	141.48
df	3	3	3	3	3	3	3	3	3	3
Asymp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Sig.										
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	Q11	Q12	Q13	Q14	Q15	Q16	Q26	Q27	Q28	Q29	Q30
Chi-Square	14.059	20.727	7.375	2.131	47.2	45.761	46.754	47.333	7.212	49.758	22
df	3	3	3	3	3	3	3	3	3	3	3
Asymp.											
Sig.	0.003	0.000	0.061	0.546	0.000	0.000	0.000	0.000	0.065	0.000	0.000

Q13 (Performance planning factor), Q14 (Performance review factor), and Q28 (Managerial support factor) are all highly significant (p0.001) in affecting the efficacy of PMS in Indian construction industry enterprises, with the exception of Q28 (Managerial support factor). With the aforementioned elements removed, Hyp 1 is now widely accepted. Human resources departments like Training & Development and Compensation & Benefits are intertwined in Indian-origin construction enterprises, according to Hypothesis 2.

Table1.3

	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
Chi-Square	37.471	37.652	17.706	53.706	19.163	45.333	13.224	38.353	54.358
df	3	3	3	3	3	3	3	3	3
Asymp.Sig.	0.000	0.000	0.001	0.000	0.000	0.000	0.004	0.000	0.000

Because all three components had significant ($p < 0.005$) or very significant ($p < 0.005$) chi-square values at $df=3$, it suggests that respondents are in agreement about the need of linking performance management systems like training and development and pay and incentives to HR subsystems. Thus, Hyp 2 has been deemed to be acceptable.

Indian construction business managers see PMS as a management tool rather than a development tool, according to hypothesis 3.

Q21, one of the instrument's items, was used to examine this specific hypothesis. $P < 0.001$ indicates that respondents support the idea that PMS is more of an administrative tool than a tool for development, as shown by the study's chi-square value of 19.61, $df=3$, and ($p < 0.001$).

Conclusion

In this research, we focused on a sector that is rapidly changing and short-term-oriented in nature. This research aims to provide light on the challenges of Performance Management in a sector where groups of people work together for brief periods of time before being dissolved and reassigned elsewhere in the business (Atkins and Gilbert, 2003). With its non-permanent nature and distributed workforce, this industry has faced a number of major issues. By Doloi and colleagues (2012), the Indian construction industry has been afflicted by a number of issues, including poor planning, lack of coordination, and a lack of clarity and process stability. As a consequence of the industry's fast development in the previous five years and the need for a large number of workers, HR procedures have only just begun to mature, and there is a great deal of room for improvement in this area.

Appraisers and appraisees were found to have a good understanding of PMS in their organisations, which could be attributed to the fact that the sample was drawn from three of the largest and most dominant players in the Indian construction sector, which have already established HR systems and processes at the ground level. PMS is a powerful tool for managers and supervisors who work with workers on an individual level, but the research also revealed that for the system to be successful, managers and supervisors must have a firm grasp of the PMS system at the individual level. However, managers/supervisors responsible for the PMS were found to lack impartiality in the evaluation process and also lacked to offer frequent feedback to assess, allowing the employee to improve his/her performance levels. This was seen to be a significant problem by the respondents. The survey found that the majority of respondents had a decent comprehension of the performance planning, review, and feedback process, but the bulk of their worries focused on the managerial components of "understanding the appraisee's viewpoint."

The terms "objectivity in review" and "periodic review" are used interchangeably here. The majority of respondents believe that PMS is an useful tool for managing staff development and compensation, and they confirm PMS practises related to both training and pay. However, they disagree on how PMS should be implemented in the specific situation. Managers and supervisors tend to regard the PMS as an administrative tool for record keeping reasons rather than using its capacity for holistic staff development during the implementation period, according to the respondents.

Qualitative interviews with chosen managers and supervisors, as well as a representative sample of workers, confirm the quantitative study's findings. People's replies to questions on PMS improvement and efficacy elicited a wide range of viewpoints.

revealing their thoughts and opinions on the efficacy of PMS. For your convenience, below are some examples of verbatim replies.

Employees should be recognised for their great achievements on a regular basis by management.

'Reviewing staff performance and achieving goals on a monthly basis' is what this means.

All aspects of a project team's performance should be taken into account when evaluating them for a project-based evaluation.

Implementation of the following in the Indian construction industry, according to the findings, will greatly enhance PMS effectiveness:-

PMS training programmes are tailored for mid level managers and supervisors/team leaders who are in charge of its successful implementation. PMS' potential, efficacy, and long-term impact in an organisational environment must be made clear to this group.

For efficient implementation of the PMS, senior management must assume responsibility for training and infrequent meetings with ground-level personnel (at Project sites) in order to understand their concerns and lack of adherence to the PMS..

To be effective, PMS in the Indian construction industry must move from an annual mechanism to a bi-annual/quarterly one, rather than the current annual mechanism, which defeats the very purpose of providing feedback due to the long time lag between when work is actually done and when a review is initiated. (A bi-annual system exists in several of the tested companies, but its ground-level implementation lacks sophistication.)

As a result, it seems that PMS is being utilised more as an administration tool than as a tool for growth by those who have tried it.

It is necessary for PMS to provide objective metrics relating to either Job families or Job levels in the various companies. Using the Hay's model of objective job evaluation, which links each job parameter to its corresponding performance parameter during the goal-setting process under PMS, and linking performance review and achievements to

employee development need and and incentive systems for employee motivation and retention, this exercise can be a precursor to this exercise

The PMS goal-setting process should begin with a cross-functional alignment of inter-departmental functional objectives, followed by the establishment of links with organisational goals to allow departments to coordinate their efforts.

The dynamic nature of the workforce in this industry necessitates an understanding of project location-based issues while outlining performance parameters, as each geographic location may present performance challenges for project employees that undermine the establishment of standard performance parameters across Projects. As Project Managers are the initial point of contact for the project-based workforce, they play an important role in helping the PMS identify and incorporate project-based performance concerns. This means that the PMS will be more flexible and resilient. "One size fits all" does not apply to Project Based Construction businesses, as localised issues/interpretations may have a negative impact on the system's efficacy. Creating a system that embraces the dynamic character of this business while yet delivering an objective and progressive viewpoint would be necessary.

Limitations

It is possible that the greater levels of PMS comprehension shown in this sample are related to superior HR procedures already in place at the companies studied. This research was done on a small population of Construction industry workers from significant corporations in this sector. However, findings may differ if small and medium-sized businesses (SMEs) or contracting enterprises, which deal with temporary workers, are included in this category. It is possible that the length of time a project manager has worked in the company may have an affect on their ability to do their job effectively. Because the study's sample included only full-time workers from the construction businesses tested, this particular research topic is currently not included in the present analysis.

References

- Amba-Rao, S. C. Petrick, J. A., Gupta, J. N. D. & Von der Embse, T. J. (2000). Comparative performance appraisal practices & management values among foreign & domestic firms in India. *International Journal of Human*

- Resource Management, 11(1), 60-89.
- Armstrong, M. (2006). *A Handbook of Human Resource Management*, 10th ed. London: Kogan Page.
- Atkins, S., & Gilbert, G. (2003). The role of induction and training in team effectiveness. *Project Management Journal*, 34(2), 44–52.
- Budhwar P. & Khatri N. (2001), A comparative study of HR practices in Britain & India, *International Journal of Human Resource Management* 12(5), 800–826.
- Budhwar P. (2003). Employment Relations in India. *Employee Relations*, 25(2), 132-148.
- Budhwar, P. & Baruch, Y. (2003). Career Management practices in India, an empirical study. *The International Journal of Manpower*, 24(6), 699-719.
- Budhwar, P. & Boyne, G. (2004). Human resource management in the Indian public & private sectors, an empirical comparison. *The International Journal of Human Resource Management*, 15(2), 346-370.
- Doloi H.; Sawhney A.; Iyer K.C. & Rental S. (2012). Analysing factors affecting delays in Indian construction projects. *International Journal of Project Management*, 30(4), 479-489.
- Fletcher, C. (1993). *Appraisal: Routes to improved performance*. Institute of Personnel Management, London.
- Huemann, M.; Keegan, A. & Turner, J.R. (2007). Human resource management in the project-oriented company: A review. *International Journal of Project Management*, 25(1), 315-323.
- Kakar, S. (1971). *Authority Patterns & Subordinate Behavior in Indian Organizations*. *Administrative Science Quarterly*, 16(3), 298-307.
- Loosemore, M.; Dainty, A.R.J. & Lingard, H. (2003). *Human Resource Management in Construction Projects. Strategic and Operational Approaches*. London: Spon Press.
- Rai, S. (2012). Human Resource Management & Labour Relations in the Indian Industrial sector. in Jürgen's U. (eds), *Human Resource Management & Labour Relations in the BRICs*, Volkswagen Aktiengesellschaft, AutoUni—Schriftenreihe, Berlin: Logos Verlag.

Rao,A.S.(2007).Effectivenessofperformancemanagementsystems,anempiricalstudyin Indiancompanies. The International Journal of Human Resource Management, 18(10), 1812-

1840.Sadananda,P.(2009).PerformanceManagementSystemonDevelopmentofHR– AstudyofNALCO.In:G.Jegadeesan(Ed.),IndustrialsectorinIndia(HRIssuesandPractices).
Hyderabad:ICFAIUniversityPress,119-

141.Singh,J.P.(1990).ManagerialCulture&Work-relatedValues inIndia.Organization Studies, 11(1),75-101.

Singh,A.K.(2005).HRDpracticesandphilosophyofmanagementinIndianOrganizations.

Vikalpa,30(2),71-79.

Sinha J.B.P, (1984). A Model of Effective Leadership Styles in India. International Studies of Management&Organizations, 14(2-3), 86-98.

Som, A. (2006). Bracing MNC Competition through Innovative HRM practices– The way aheadforIndianFirms.ThunderbirdInternationalReview,48(2),207-237.Som,A.(2008).Innovativehumanresourcemanagement&corporateperformanceinthecontextofeconomicliberalizationinIndia.TheInternationalJournal ofHumanResourceManagement,19(7), 1278-1297.

Tabassi, A.A. & Bakar. A.A.H. (2009). Training, motivation, and performance: The case of humanresource management in construction projects in Mashhad, Iran. International Journal ofProjectManagement, 27(1), 471-480.

Turner,J.R.,&Muller,R.(2003).Onthenatureoftheprojectasatemporaryorganization.

InternationalJournalofProjectManagement,21(1),1–8.

Virmani,B. &Guptan,S.(1991).IndianManagement.NewDelhi:VisionBook.