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Research Paper Human Resource Management



A Study On Performance Appraisal of Employees in Health Care Industry in a Private Multi-Speciality Organization

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ABSTRACT

Organizations are run and steered by people. It is through people that goals are set and objectives realized. The performance of an organization is thus dependent upon the sum total of the performance of its members. According to Peter Drucker, 'an organization is like a tune; it is not constituted by individual sounds but by their syntheses. The success of an organization will therefore depend on its ability to measure accurately the performance of its members and use it objectively to optimize them as a vital resource.

Keywords : Potential, Assessment, Promotion, Employee Effectiveness and Work Standard

INTRODUCTION:

In recent years, the term "Performance Appraisal" is considered as an important aspect of developmental function by various organizations. Performance appraisal is the process of collecting, analyzing and evaluating data related to the job behavior and the results of the individual employee. The focus of performance appraisal is measuring the actual performance of the employee and also the future impact of the employee's career. It explains what an employee does exactly, as it is the heart of personnel management and reflects the management's interest in the progress of the employees, besides also focusing on how performance appraisal is turning towards career development depending on the discussions with the superiors.

To appraise is to assess the worth or value. In the context of an industrial organization, performance appraisal is a systematic evaluation of personnel by supervisors or those familiar with their performance. In other words, performance appraisal is a systematic and objective way of judging the relative worth or ability of an employee in performing his task.

Thus, performance appraisal is a systematic way of judging the relative worth of an employee in performing his task. It helps identify employees who are performing their tasks well and also those who are not and the reasons for such poor performance.

METHODS OF PERFORMANCE APPRAISAL

A more widely used classification of appraisal methods in to two categories, traditional methods and modern methods, is given by Strauss and Sayles. While traditional methods lay emphasis on the rating of the individual's personality traits, such as initiative, dependability, drive, creativity, integrity, intelligence, leadership potential, etc. Modern methods place more emphasis on the evaluation of work results i.e. job achievements than the personal traits. Modern methods tend to be more objective and worthwhile. The various methods can shown in a table as under,

TRADITIONAL METHODS

1. Ranking method:

It is the oldest and simplest formal systematic method of performance appraisal in which one employee is compared with all others for the purpose of placing them in a simple rank order of worth. The employees are ranked from the highest to the lowest or from the best to the worst.

TABLE 2: Methods of Performance Appraisal

TRADITIONAL METHODS	MODERN METHODS
1. Ranking method 2. Paired comparison 3. Grading 4. Forced distribution method 5. Forced choice method 6. Checklist method 7. Critical incidents method 8. Graphic scale method 9. Essay method 10. Field review method 11. Confidential report	1. Management By Objective (MBO) 2. Behaviorally Anchored Rating Scales (BARS) 3. 360 – degree appraisal 4. Cost accounting method

Each method can be described as follows.

2. Paired comparison:

In this method, each employee is compared with other employees on one-on-one basis, usually based on one trait only. The evaluator is provided with a bunch of slips each containing a pair of names; the rater puts a tick mark against the employee whom he considers the better of the two. The number of times this employee is compared as better with others determines his or her final ranking.

3. Grading method:

In this method, certain categories of worth are established in advance and carefully defined. There can be three categories established for employees: outstanding, satisfactory, and unsatisfactory. There can be more than three grades. Employee performance is compared with grade definitions. The employee is, then, allocated to the grade that best describes his or her performance.

4. Forced distribution method:

This method was evolved by Tiffen to eliminate the central tendency of rating of most of the employees at a higher end of the scale. The method assumes that employee performance level confirms to a normal statistical distribution i.e. 10, 20, 40, 20 and 10 percent. This is useful for rating a large number of employees' job performance and promotability. It tends to eliminate or reduce bias.

5. Forced-choice method:
The forced-choice method is developed by J.P.Guilford. It contains a series of groups of statements and evaluator rates how effectively a statement describes each individual being evaluated. Common method of forced-choice method contains two statements, both positive and negative.

6. Check-list method:
The basic purpose of utilizing check-list method is to ease the evaluation burden upon the rater. In this method, a series of statements i.e. questions with their answers in 'yes' or 'no' are prepared by the HR department. The check list is then presented to the rater to tick appropriate answers relevant to the appraise. Each question carries a weightage in relationship to their importance. When the check-list is completed, it is sent to the HR department to prepare the final scores.

7. Critical incidents method:
In this method, the rater focuses his or her attention on those key or critical behaviors that make the difference between performing a job in a noteworthy manner (effectively or ineffectively). There are three steps involved in appraising employees using this method. First, a list of noteworthy (good or bad) on-the-job behavior of specific incidents is prepared. Second, a group of experts then assigns weightage or score to these incidents, depending upon their degree of desirability to perform a job. Third, finally a check-list indicating incidents that describe workers as 'good' or 'bad' is constructed. Then, the check-list is given to the rater for evaluating the workers.

MODERN METHODS

1. Management By Objective (MBO):
The concept of MBO as was conceived by Drucker, can be described as a "process whereby the superior and subordinate managers of an organization jointly identify its common goals, define each individual's major areas of responsibility in terms of results expected of him and use these measures as guides for operating the unit and assessing the contributions of each of its members". In other words, stripped to its essentials, MBO requires the manager to get specific measurable goals with each employee and then periodically discuss his or her progress toward these goals. An actual MBO program consists of four stages. They are goal setting, setting of performance standards, comparison and periodic review.

2. Behaviorally Anchored Rating Scales (BARS):
BARS are descriptions of various degrees of behavior with regard to a specific performance dimension. It combines the benefits of narratives, critical incidents, and quantified ratings by anchoring a quantified scale with specific behavioral examples of good or poor performance. Developing BARS typically involves five steps. They are generating critical incidents, developing performance dimensions, reallocating incidents, scaling incidents and developing final BARS instrument.

3. Assessment centers:
In business field, assessment centers are mainly used for evaluating executive or supervisory potential. By definition, an assessment center is a central location where managers come together to participate in well-designed simulated exercises. They are assessed by senior managers supplemented by the psychologists and the HR specialists for 2-3 days. Assessees are asked to participate in in-basket exercises, work groups, simulations, and role playing which are essential for successful performance of actual job. Having recorded the assessee's behavior the raters meet to discuss their pooled information and observation and based on it they give their assessment about the assesee. At the end of the process, feedback in terms of strengths and weaknesses is also provided to the assesees.

4. 360-degree appraisal:
Yet another method used to appraise the employee's performance is 360-degree appraisal. This method was first developed and formally used by General Electric Company of USA in 1992. Under 360-degree appraisal, performance information such as employee's skills, abilities and behaviors is collected "all around" an employee i.e. from his/her supervisors, subordinates, peers and even customers and clients. In other words, in 360-degree feedback appraisal system, an employee is appraised by his supervisor, subordinates, peers, and customers with whom he interacts in the course of his job performance.

5. Cost accounting method:
This method evaluates an employee's performance from the monetary benefits the employee yields to his/her organization. This is ascertained by establishing a relationship between the cost involved in retaining the employee, and the benefits an organization derives from him. While evaluating an employee's performance under this method, the following factors are also taken into consideration.

1. Unit wise average value of production or service.
2. Quality of product produced or service rendered.
3. Overhead cost incurred.
4. Accidents, damages, errors, spoilage, wastage caused through unusual wear and tear.
5. Human relationship with others.
6. Cost of the time supervisor spent in appraising the employee.

CHALLENGES OF PERFORMANCE APPRAISAL
With the increased significance of performance appraisal, challenges confronting the system are mounting. Following are the challenges of performance appraisal.

- Assessment of self-managed teams.
- Create a culture of excellence that inspires every employee to improve and lend him or herself to be assessed.
- Align organizational objectives to individual aspirations.
- Clear growth paths for talented individuals.
- Provide new challenges to rejuvenate careers that have reached the plateau stage.
- Forge a partnership with people for managing their careers.
- Empower employees to make decisions without the fear of failing.
- Embed teamwork in all operational processes.
- Debureaucratise the organization structure for ease of flow of information.

CONCLUSION
Performance appraisal is an ongoing exercise not a "one shot" function which is concerned with developing the potential of the employees in order to provide maximum satisfaction to all the players. It provides employees with the training and developmental opportunity to perform better, helping them to keep up with the changes at the workplace. Nowadays, with increased competition, organizations face many challenges. So, organizations must understand the importance of human resource and constantly focus on improving its performance, which will result in the overall improvement in the organization's performance. It acts as the central pillar, which is directly related to the organizational performance and has a direct impact on it. It tells employees what they have to do and how well they have to do it. With effective feedback, employees can see their progress which motivates them to reach their performance goals successfully. So, performance appraisal is the strength, which affects organizational performance and helps employees to overcome the problems faced while performing their tasks.

REFERENCES

1. Biswajeet Pattanayak, "Human Resource Management", Second Edition, | Eastern Economy Edition, | pp 114-116. | | 2. Dr SS Khanka, "Human Resource Management", Text and Cases, | S Chand & Company Ltd, | pp 343-359. | 3. HRM Review, The ICFAI University Press, | January 2010, Vol.X, Issue I, | pp 49-53. | 4. HRM Review, The ICFAI University Press, | September 2010, Vol.X, Issue IX, | pp 24-30. | | 5. HRM Review, The ICFAI University Press, | April 2009, Vol.IX, Issue IV, | pp 49-52. | | 6. HRM Review, The ICFAI University Press, | December 2009, Vol.IX, Issue XII, | pp 58-62. | | 7. K Aswathappa, "Human Resource Management", Text and Cases, Fifth Edition, | The McGraw Hill Companies, | pp 270. | | 8. Personnel Today, National Institute of Personnel Management, | July-Septemebr 2006, Vol.XXVII, No.2, | pp 6-11. | | 9. Robert L.Mathis & John H Jackson, "Human Resource Management", Tenth Edition, | Thomson South Western, | pp 359-361.

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