Exploration of performance appraisal Strategy based on Big data and enterprise Development investigate

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Abstract. In recent years, the reform of the power system structure has gone deeper and deeper, and the national reform goals of "legal basis, separation of government and enterprise, subject regulation, fair trade, reasonable price and effective supervision" are also being implemented step by step. In the process of the rapid development of the system architecture of electric power enterprises, many private enterprises have also joined in the complicated market competition. The challenge of power grid status also means that it is necessary to carry out internal exploration to effectively meet the market competition.

As a kind of evaluation system used in enterprises, performance appraisal has many different levels of significance. Performance appraisal should be able to provide the basic strength for the vigorous development of the enterprise, create a fair, open and vibrant competitive environment, and provide guidance for the learning, work and development of employees. In the traditional practice of performance appraisal in the past, the appraisal system is often regarded as a relatively independent design unit, which is generally decoued from many background elements in the enterprise, such as the strategic objectives of the enterprise, the internal culture of the enterprise, the individual learning and development direction of the employee, and the attitude and guidance of the enterprise manager. However, under the background of current market reform, the important relationship between these factors and performance appraisal is being recognized more and more. In this context, this paper tries to explore the key points of performance appraisal strategies with big data technology as the main axis and enterprise development goals as the guidance.

Keywords: Enterprise development; Big data; Performance appraisal.

1. Key issues of performance appraisal

1.1 Design of short-time and long-time assessment cycles

Fandray believes that human resource management should combine employee performance appraisal with employee motivation. By assessing the performance of the employee's job responsibilities over a period of time, the employee is then matched with appropriate incentives, such as job changes, variable pay increases or decreases, or training. Through the combination of employee performance appraisal and employee motivation, it can promote the effective implementation of enterprise management system and the healthy development of enterprises. KPIs-The Metrics That Drive Performance Management [J]. Dim Review, 2017). Employees can also form self-motivated psychology (Fandray. KPIs-The Metrics That Drive Performance Management [J]. Dim Review, 2017). In order to stimulate employees' current work activities, it is very straightforward to focus on the concluding nature of employees' work activities rather than on work processes and job expectations. The advantage of this approach is that each employee is likely to pay more attention to short-term results, which can have a strong positive effect in some mechanical positions. The problem with this approach is that the outcome rather than the process approach may ignore many external factors independent of the individual, such as the length of time on the job may be only a formality, or the results may vary depending on time, location, and
equipment conditions. In addition, more importantly, the extra attention to immediate results will inevitably ignore some content that requires longer planning, accumulation and design. The most common examples are the learning and replacement of new technologies, more complex management structure changes and even the upgrading of employees' learning and growth routes and work experience.

Therefore, the periodic design of performance appraisal must be able to meet at least two needs, which is not only the pursuit of the present brief and the development needs of the long-term design content.

The decisive factor of the assessment cycle is the nature of the assessment index and the corresponding assessment rate of the assessment index. The nature of the assessment index refers to the assessment content of different posts should be designated according to these two points of assessment cycle. Too long or too short appraisal cycle may affect the content effect of performance appraisal at different levels.

Once the assessment criteria are determined and put into operation, the assessment that represents the actual business level of the employees will be produced. During the assessment, the employees will also learn from the experience, and at the same time, they may take the initiative to think about other ways and attitudes to achieve real performance according to the criteria, and then choose whether to adopt the previous way or improve it. Once the length of the assessment cycle exceeds a certain threshold, the "recency effect" will be the first problem. Employees cannot quickly get feedback on their own work from the assessment results, which may cause employees to fail to maintain a benign development rhythm, correct errors or change strategies in time. In the long run, this may cause problems to pile up, always correcting past problems and reducing the realistic alignment of employee performance with job requirements. In addition, the time of performance appraisal is also one of the factors affecting the implementation of appraisal standards. Too long a period may lead to the result of performance appraisal failing to show the seriousness of management strategies, and employees' attention to performance appraisal will decline accordingly.

On the other hand, if the performance appraisal cycle is too short, it is easy to increase the working pressure of employees. To some extent, the performance appraisal itself has the necessity to provide competition, because the market environment itself tends to accelerate competition, and the enterprise naturally needs to provide some stress to catch up with the pace, which is very easy to evolve into the pressure source of employees in the short-cycle appraisal. However, employees are often in a tense work state, which is actually not conducive to the normal performance of employees in the work. In addition to increasing the pressure of employees, frequent assessment and summary are also easy to make the enterprise's focus shift and increase management costs (Lu Intelligent. Develop four elements of the assessment cycle. International Journal of Management, 2006(02): 76-77.)

Therefore, scientific and reasonable assessment cycle division is particularly important. The assessment cycle can be combined with the following categories:

(1) Monthly assessment

Monthly assessment is usually associated with monthly salary and performance bonus. The advantage of this approach is that it can motivate employees' good performance behavior and strengthen their work enthusiasm through real-time feedback of their performance in actual earnings. Most of the time, the monthly assessment adopts the quantitative assessment method to establish measurable evaluation standards for the attendance time and work completion of employees. Generally, it is necessary to monitor the completion of daily work. Another major advantage of monthly assessment is the timeliness of feedback. If necessary, difficulties in current work can be checked or the direction of work in the next stage can be adjusted or changed according to the content of monthly assessment.
(2) Quarterly assessment

Quarterly assessment is more combined with performance analysis to give full play to the effect. On the one hand, the quarterly assessment cycle is moderate.

It can effectively reduce the workload of the management system and decision-making pressure. On the other hand, as more information is collected and the trend can be observed, a more accurate judgment can be made on the assessment content according to the results of quarterly assessment, and more accurate data support can be provided for performance analysis.

(3) Annual assessment

Annual assessment is usually a reflection of the breadth of performance evaluation, some indicators with a long statistical cycle

Or the enterprise's long-term planning can adopt this assessment model. In addition, annual assessment plays a summarizing role rather than a monitoring role in preventing and employees within the enterprise. It can be regarded as an evaluation result of the overall working attitude, ability and result of employees' living organization, which is more likely to affect the overall working mode of employees in the next stage or play a role in the improvement of working style. Annual assessment is a relatively comprehensive cycle design method. Combining the first two cycle designs on different posts and indicators can achieve an overall and detailed detection effect from both process and result.

1.2 Design of individual and group assessment objects

In order to motivate employees' work behaviors, enterprises tend to place excessive emphasis on individual employees' work plans and results in performance strategies. This mode will lead to the decline of employees' organizational behavior ability and cooperation enthusiasm, and may affect the functional cooperation between departments in the long run. However, in the group and organizational performance appraisal design, it is easy to appear that the individual enthusiasm is not strong, and even eat the big pot. Bernardino proposed that performance appraisal should be a whole-person and holistic incentive method that can carry a boat or fail the boat (Bernardino. Crunchy KPIs [J]. New Zealand Management, 2015.) Need to follow a certain balance, with both organizational and personal development characteristics.

The following are the elements of the performance system, which can be divided into different categories according to the different dimensions of the evaluation object, evaluation period and evaluation method. Performance evaluation involves professional functional teams, grass-roots organizations, professionals, general functional personnel, etc., who undertake different responsibilities (Huang Hui, Shao Bo. Research on the implementation of Classified Quantitative performance assessment of power supply enterprises. Enterprise Management, 2017(S1): 338-339).

(1) Organize assessment

Organizational assessment refers to the assessment of the team, department and unit, organized by the superior leader of the assessment subject or the leadership at the same level of the company. The so-called evaluation of organizational performance is that the operator uses a certain index system to make a comprehensive evaluation of the overall management effect of the organization. Effective evaluation and evaluation can reveal an organization's operational capacity, profitability and social contribution, provide information for operators and stakeholders, and point out the direction for improving organizational performance.

(2) Personal assessment

Individual assessment is the evaluation of professional and general function personnel by the management of an organization. The evaluation is based on the employee's position, ability and
performance. Through information collection to develop reasonable assessment standards, scientific assessment and evaluation of employees. The assessors are mainly performance managers (such as department heads or team leaders), whose main purpose is to explore and effectively utilize the abilities of employees, and make fair evaluation of employees' work records and work analysis. Generally speaking, after the completion of assessment, employees should be given performance feedback according to the results of organizational assessment and internal assessment, and the final assessment results of employees should be linked with incentive factors such as salary rewards.

2. Performance appraisal strategies in the context of big data

With the continuous development and innovation of the Internet, social industries follow the trend to enter the application field of big data. Algorithms can be used to find data and classification methods of behavior patterns and thinking routes in different industries. The wide use of network technology facilitates the acquisition of data, but in order to use such data scientifically, it must be supervised and used by human beings - after all, big data is just a tool for human beings to control resources and grasp information trends. On this basis, how to make more effective use of technical support related to big data to ensure the external competitiveness of enterprises and the efficiency of internal functional structure becomes the key. Further down to the setting of performance appraisal, some preparations are necessary.

First of all, the ability to process data is a must, so that the data collected can be quickly collated and reported to decision makers before a performance management review plan is developed. Secondly, it is necessary to analyze the integrity and correctness of the collected data so as not to be misled by the error information. The more accurate and detailed the data information, the more responsive and responsive the decision will be to the needs of the enterprise. Finally, because of the broad base of data that big data can capture, the efficiency and effectiveness of utilizing this data is very important in enterprise management services. The information behind this data is key to management decision-making considerations. The decision-making organization or individual that makes the performance management strategy needs to have the business ability to see the essence through the phenomenon, so as to strictly respond to the requirements of the enterprise from the data and maximize the profit. Through data collation, the management cost of the enterprise can be accurately measured, and the work value and development direction of the employees can also be accurately quantitative or qualitative.

Data source is the basic guarantee of performance setting and an important basis for the realization of evaluation process. Only by providing sufficient data on personnel input, time input, various outputs and results, can we evaluate the use of resources and work efficiency. At present, the collection of manual assessment data limits the compilation of several key performance indicators. With the development of big data mining technology, it has become a reality to collect information from various fields and working modules, and has more advantages.

2.1 Deeply tap the potential of employees

With the advent of the powerful Internet and automation technology, the number of purely manual workers has decreased dramatically, and companies need intellectuals and have higher requirements for employee development. Enterprises require human resources to be fully started to maximize the benefit ratio of human cost and investment. Nowadays, many positions demand employees with compound abilities, and have considerable requirements for working ability. To this end, the company must use performance management to give full play to the potential of employees to carry out different tasks, go beyond the limitations of current abilities and successfully achieve their personal value goals in work activities. Collecting and analyzing big data can help companies make an objective assessment of employees' professional abilities and potential. Without data support, it is possible to make full use of employees' potential due to insufficient information based on subjective judgment. With the support of data, employees' potential performance can be
recognized from different perspectives, including but not limited to learning background, past work experience, personal personality traits, development preferences, etc. The company assists employees in the objective analysis of their business potential, and on this basis, designates reasonable performance appraisal standards to further help staff understand and utilize their own abilities and make contributions to the development of the company. In addition, big data can even help to make the right work plan for enterprise activities and organizational structure, so as to provide employees with better opportunities and improve their ability to prepare for more macro strategic changes.

2.2 Optimize the structure of human resources, reduce costs and improve efficiency

For the sustainable development strategy of an enterprise, the human resource structure is very important. The organization level of an enterprise must be able to adapt to the industrial competition and market demand in the current situation, and adjust sensitively and quickly with the changes of the competitive environment and market wind direction. For some employees with strong individual ability and outstanding performance, the enterprise can adjust the employees to other positions more suitable for performance or appoint them as the backbone person in charge after analyzing their work performance, labor demand, and ability preference through big data. In the broader aspect of employee management, departments responsible for formulating management strategies can use big data analysis to enhance information collection and acquisition, and have a clearer objective understanding of organizations and individuals, so as to truly grasp the potential hidden needs or problems of functional departments. If the improvement of organizational structure and manpower allocation with the assistance of big data technology can be properly implemented, it will greatly improve the job satisfaction of employees, stimulate their enthusiasm for work, act as a bridge between departments and employees within the organization, promote coordination and cooperation, form a top-down stepped and diversified performance mechanism, and comprehensively grasp the work performance of employees within the enterprise. Effectively integrate assessment criteria to optimize human resource structure.

![Figure 2-1 Performance appraisal structure supported by big data](image)

Figure 2-1 Performance appraisal structure supported by big data

In the process of development, enterprises' demand for staff has changed from quantity to quality. It is one of the important directions of big data application to regulate the quantity and quality of staff through the design of performance appraisal. How to effectively control the human investment of the enterprise and improve the work quality of existing employees is a balance problem worth
thinking about. In the past, the performance appraisal model without using big data and relying solely on human resources is likely to cause improper allocation of human resources, too much or too loose work pressure, and the employees on board cannot work efficiently. Therefore, if the enterprise requires the staff to maintain high efficiency and high level of work, it is necessary to optimize the organizational form through the combination of big data collection and performance appraisal standards. On the one hand, the input of human cost is reduced, the quality of talents is guaranteed and the organizational structure is refined. On the other hand, optimize the personnel allocation through the understanding of enterprise employees. In addition, since the personalized data contains psychological, learning, ability, interest and other information, the enterprise can also carry out the corresponding talent training plan and staff ability planning according to the development strategy research. This will provide opportunities for more training, enhance business skills, and improve the parts of the job that are not particularly easy to do. The long-term development of the enterprise needs reasonable and scientific management mode, but also needs to constantly strengthen personnel training. Under the background of big data, human resource management of enterprises is flatter and human resources can be fully utilized (Du Keying. Enterprise human resource management innovation under the background of big data [J]. Think Tank Time,2019(02):99+101）

3. Prospect and summary of performance management strategies under the background of big data

With the promotion of big data, the content of performance appraisal can be closer to the real working situation of each employee, and even accurate to the personal working status and career development tendency, which can better enhance the enthusiasm of employees, and to a large extent solve the problem of employee dissatisfaction caused by the unscientific and unclear performance appraisal standards in the past. The existing enterprise performance appraisal model is becoming more and more mature. Stimulated by new technologies, new human resource management positions such as data analyst have emerged. The task of these new positions is to sort out and comprehensively analyze data sources and provide guidance for the long-term strategic development of enterprises. Cut additional capital investment, and just automate the calculation based on the collected data, using hierarchical regression curves and data prediction principles, combined with big data.

In the era of big data, the results of enterprise performance appraisal are increasingly diversified, which is reflected in the development of performance appraisal from the traditional salary increase and employment promotion to the career development of employees. With the help of data-based performance evaluation system, enterprises can better understand the situation of employees, provide them with appropriate positions, and allocate human resources reasonably (He Ziping. Discussion on enterprise performance Management in the era of Big Data [J]. China Township Enterprise Accounting,2021(8):170-171.

The improvement of technology and the iteration of information means have accelerated the reconstruction of performance appraisal system. Enterprises need to pay attention to the reform of big data and be sensitive to new technologies and trends. In order to improve the practical rate of enterprise performance appraisal and complete each key, the final goal is to make use of the advantages of big data to rapidly informationize organizations and individuals, integrate data information from the standpoint of employees, cover as many aspects as possible such as post competency, ability growth, talent evaluation and adjustment, and timely update the thinking and knowledge structure of existing employees. Analyze the needs of employees, improve their professional skills and quality, and improve management efficiency (Huang Fei. Research on Rationalization of evaluation indicators in promoting enterprise performance management in the era of Big Data [J]. Investment and Entrepreneurship,2020,31(11):127-128. (in Chinese) The strategic arrangement of performance appraisal and big data plays a crucial role in improving human
resource management, optimizing the internal talent structure and enhancing the external competitiveness of enterprises.

References