

# Research on Innovation of Employee Performance Management Appraisal System—A Case Study of Manufacturing Enterprises

Zhixiong Li<sup>1,\*</sup>

<sup>1</sup>Belarusian State University, Minsk, 220030, Belarus

\*Corresponding author

**Abstract:** Employee performance management appraisal system is very important for the organization. It can promote the achievement of goals, improve the quality and efficiency of work, stimulate employee motivation and personal growth, optimize the allocation of resources and talent management, and contribute to the establishment of a fair and just work environment. Through effective performance management appraisal system, organizations can better realize the optimization of internal management and human resources, and improve the overall performance and competitiveness. Nowadays, most manufacturing enterprises have changed from the original labor-intensive industry to the technology integrated enterprise, and this change undoubtedly has higher requirements for the personnel management level of the enterprise itself. Taking manufacturing enterprises as an example, this paper briefly analyzes the current situation of employee performance management assessment in manufacturing enterprises, and puts forward effective paths and ideas for system innovation.

**Keywords:** Manufacturing Enterprises, Performance Appraisal, System Innovation

## 1. The Importance of Employee Performance Management in Manufacturing Enterprises

### 1.1. Promote the Realization of the Company's Production and Operation Objectives

Performance management is the core and key of the internal management system of an enterprise, and the corresponding assessment matters and assessment standards all convey the development strategy and production and management direction of the enterprise invisibly. Good performance management enables the company to distribute the corresponding strategic objectives to the corresponding posts and departments, and the enterprise personnel can complete the corresponding work in accordance with the assessment items and assessment standards of the corresponding company. From the actual effect, not only the executive ability of the employees themselves has been improved, the work can also be implemented, the production and management objectives can be achieved, and the competitiveness of the enterprise will be further improved (Gruman & Saks, 2011; Layraman, 2022; Abdullahi, Raman, & Solarin, 2022).

### 1.2. Improve Production and Management Efficiency

Performance appraisal results have a direct relationship with employees' salaries and positions. Performance management is based on employees' production, management and other work. Perfect and sound performance management can make employees have a good career development, but also can find the defects in the work ability of employees [1]. The specific assessment results can help employees better plan their future work career and continuously strengthen their work ability, and the production and management efficiency of the enterprise will naturally improve. Especially for manufacturing enterprises, they have high requirements on the technical level, management level and comprehensive ability of employees (Benitez, Ruiz, & Popovic, 2022; Hosseini, Tajpour, Salamzadeh, et al., 2022) the improvement of employees' technical level has a positive impact on the sustainable development of production management (Otchere-Ankrah, 2022).

### 1.3. Improving Performance and Achieving Steady Growth and High-Quality Development

In addition to the above two aspects, the innovative development and comprehensive

implementation of the performance management assessment system can form a good corporate culture within the enterprise, so that the enterprise can maintain an efficient and high-quality operating atmosphere for a long time, so as to effectively improve the enterprise efficiency and develop, and truly achieve the development goal of high quality and stable production (Vest, Duhon, Tarnoff, et al., 2022; Luarn & Huang, 2022; Yu, Barnes, & Ye, 2022). From the perspective of performance management appraisal system innovation, manufacturing enterprises are constantly exploring new development goals and strategic goals, so that the goals of employees and corporate strategic goals to achieve effective unity, with the implementation of the performance management appraisal system innovation, enterprises can also get healthy and sustainable development, efficiency has been improved (Porkodi, Tabash, & Hawamdeh, 2022).

## 2. Analyze the Current Situation of Employee Performance Management in Manufacturing Enterprises

This paper discusses in detail the innovation path of employee performance management assessment of manufacturing enterprises, taking a manufacturing enterprise in our country as an example, to analyze the current performance assessment status of each position [2]. The enterprise is a comprehensive manufacturing enterprise that integrates product manufacturing, sales and investment. The company has 1,000 employees, including senior management, production technicians, sales staff. There are 225 management staff, accounting for 22.5%; 477 technical staff, accounting for 47.7%; 133 sales employees, accounting for 13.3%; There are 165 employees in other positions, accounting for 16.5% (Figure 1). From the perspective of the personnel structure of the enterprise, the largest number of technical positions. The following is an analysis of the actual situation of the current employee performance appraisal management of the enterprise.

### Enterprise personnel composition

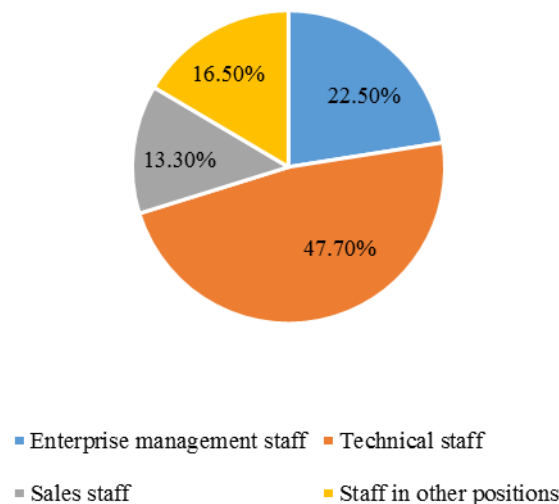


Figure 1: Enterprise personnel composition

### 2.1 Management

The management of manufacturing enterprises has the responsibility of coordinating, directing and coordinating. The evaluation criteria for the management should be based on the performance of the team, so the indicators of management positions should be designed from multiple aspects. At present, the actual status of the assessment of the enterprise is as follows [3]. The assessment standard of the management personnel of the enterprise can be elaborated from three aspects (Figure 2) namely, the assessment dimension, the assessment content and the assessment weight. There are three aspects of assessment, namely, attitude ability, team performance and special contribution. The assessment content is based on the assessment dimension. The assessment content of attitude ability has

educational level, ideological ethics, professional ethics, work attitude, management ability, professionalism, working years, professional title qualification eight points, the assessment weight of 5%; The assessment content of team performance includes production index, sales index and quality index, with the assessment weight accounting for 10%, 20% and 20% respectively; The special contribution includes the construction of talent team and the contribution to the enterprise, accounting for 5% and 5% of the assessment weight respectively. From the above analysis of the assessment content, it can be learned that although there are many assessment contents for managers on the surface, most of them do not have clear assessment standards, and only three indicators are quantified in more than ten assessment contents. In addition, the work content of the managers in the enterprise is basically arranged directly by the general manager, and there is no item that can be directly included in the assessment standard in the annual plan (Figure 3). Although the performance appraisal of managers does exist, it is only a comprehensive scoring of the performance of managers, and in practice, it is rarely directly related to financial data, which is not a performance appraisal. If the management work results are good, outstanding performance, there is no reward; There are no clear penalties for management failures. Therefore, the performance management of the management cannot directly reflect the real work results of the managers [4].

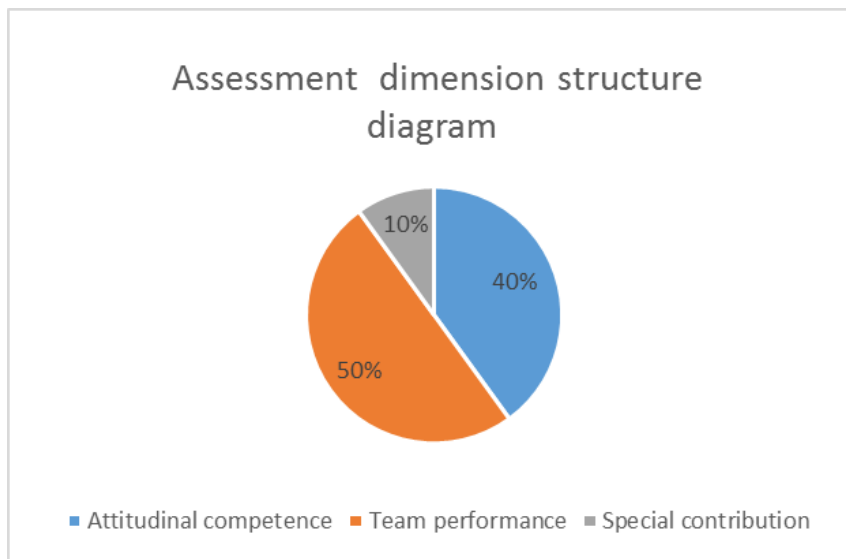


Figure 2: Evaluation criteria for management personnel

## 2.2 Production technical posts

Production technical staff is a valuable asset in the enterprise, and its technology directly affects the production quality of the product, so the performance assessment of this position is more strict. Although most of the technical staff's own education is not high, but its practical experience is more rich, with good quality such as hard work. The number of technical employees in the enterprise is 477, which is not low, but the core technical talents are relatively few. The age distribution of technical employees is as follows (Table 1): the number of employees over 45 years old is 176, accounting for 36.89%; The number of 35-45 years old was 167, accounting for 35.01%; The number of 25-35 years old was 115, accounting for 24.10%; The number of people under 25 years old is 19, accounting for 3.98%. From the age distribution of technical employees in the enterprise, it can be found that the distribution of the number of people in different age groups is not uniform. Employees over 45 years old are facing retirement, and new employees under 25 years old are not added. It is precisely because of this phenomenon that the value of technical personnel is higher, and even the salary of some technical personnel with higher technical level is higher than that of managers. In this case, the performance appraisal of technical personnel is particularly important. The company's performance assessment of technical posts is also divided into three dimensions, namely, comprehensive quality, attendance and special contribution. Among them, the comprehensive quality includes educational level, work attitude, production performance assessment and professional title, and the assessment weight is 10%, 10%, 50% and 10% respectively. Attendance includes asking for leave, leaving early, being late and working overtime, and the assessment weight is 2%, 4% and 4% respectively. Special contribution refers to the contribution made to the enterprise, and the assessment weight is 10%. Judging from the above assessment content, there are relatively single problems, different types of technical posts have

great differences in business content, and the incentive policy is not specific enough. It can be seen that when the performance management system was developed, the managers believed that the performance appraisal system was a tool to reward and punish employees, rather than a means to manage the enterprise [5].

Table 1: Age distribution of technical staff

Type	Number of people	Take up a proportion of
Over 45 years old	176	36.89%
35 to 45 years old	167	35.01%
25 to 35 years old	115	24.10%
Under 25 years old	19	3.98%

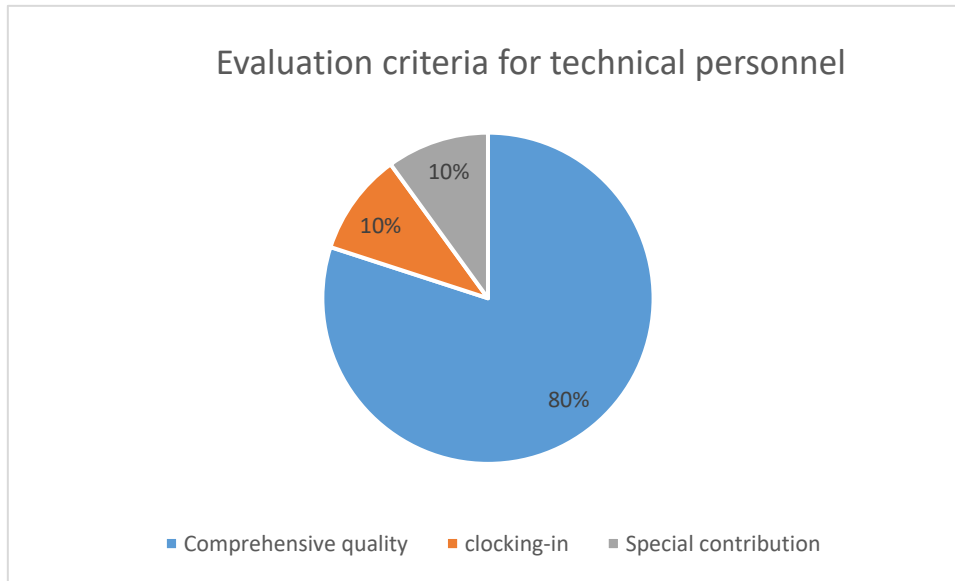


Figure 3: Assessment criteria for technical personnel

### 2.3 Functional departments

From the perspective of various functional departments of the enterprise, the financial department, the information center, the technology development department, the research department, etc., are very important components. In the process of investigation, it is found that the human resource management department has some problems in management. Influenced by its own professional level and practical experience, it has a relatively limited understanding of the work content of different departments, so there is an obvious lack of ability in establishing systems and mechanisms. Manufacturing enterprises have higher requirements for the administrative department in the actual development process, but from the current point of view, the administrative department has not formed a comprehensive management consciousness and management concepts, so the performance management mechanism also needs to be better innovative implementation to ensure the application effect [6].

### 2.4 Sales department

The company's sales positions are divided into three categories: marketing director, marketing manager and supply and marketing personnel. Its assessment system is divided into five kinds, but for the marketing director, there is only one assessment indicator, which is the completion of sales profit, and the assessment weight is 100%. This assessment method is relatively simple, in a nutshell, the marketing director is assessed according to the completion of his sales profit, and the performance reward or punishment is given to him. From the perspective of the development needs of manufacturing enterprises, in order to fully mobilize the work of the sales department, the key performance indicator (KPI) performance assessment method can be adopted, starting from the enterprise's own business indicators, combined with the production situation to develop sales task indicators. Under normal circumstances, according to the enterprise 90% ~ 95% of the production indicators to develop sales task indicators, less than 90% of the production indicators to accept the deduction penalty, 95% of the sales staff exceeded the production indicators in accordance with 1%

(Table 2). The sales staff must maintain close contact with the production department, so that the sales staff can better complete their work.

*Table 2: Key Performance Indicators (KPI) performance appraisal methods*

Target achievement	Compensation situation
Production index 90% ~ 95%	Regular pay
Below 90% production target	Deduction penalty
95% of the production target was exceeded	1% provision

### **3. The Effective Path of Employee Performance Management System Innovation in Manufacturing Enterprises**

#### **3.1 Innovative Content**

First, the innovative development of content is analyzed from the overall perspective. In the process of formulating the content of the performance management system, manufacturing enterprises need to design from the work content of the department and job responsibilities, and design specific assessment indicators based on the daily work status, attendance rate, political attitude, professionalism, professional ability, professional quality and other contents of employees. Based on the work ability, workload, work performance and other basic indicators of the staff system assessment. Performance appraisal indicators cover all aspects. In the actual design process, different functional departments and second-level units should be fully considered to ensure the accuracy of the assessment, and the assessment work should be fully implemented in combination with the actual assessment objectives. It should be noted that manufacturing enterprises need to fully consider the specific output ratio analysis, such as raw materials, production technology, production efficiency, etc. This index, which is designed in combination with the characteristics of manufacturing enterprises, has an important positive impact on the development of enterprises. In short, it is carried out in accordance with the three aspects of work performance, industrial capacity and work attitude, including the achievements achieved in the work, the quality of work, the quantity of work and the completion of work objectives. At the same time, it is also necessary to establish and continuously improve the performance management assessment system, continuously improve the assessment standards according to the development of enterprises and national standards, and continuously revise the performance assessment content indicators according to the Deming ring model, so as to make objective evaluation [7].

Second, analyze the innovative development of content from the perspective of security. From the perspective of manufacturing enterprises, safety and environmental protection are the core of their enterprise survival, especially in recent years, the manufacturing industry market competition is becoming increasingly fierce, enterprises need to constantly innovate the level of technology, strengthen work management, through the construction of green factories, and ultimately achieve the unity of environmental protection and economic benefits, so as to achieve sustainable development, and improve production and production quality at the same time, Reduce the dependence on external technology, strengthen the ability of independent research and development, independent production, and achieve social benefits while strengthening economic benefits. Therefore, in the process of performance management system innovation, it is necessary to add safety indicators and environmental protection indicators within the corresponding scope of responsibility [8].

#### **3.2 Innovation Process**

The innovation process of the enterprise's employee performance management system can be divided into the following seven steps.

One is to determine the goal. All performance appraisal objectives are set to achieve the development goals of the enterprise. Therefore, the first point in the innovation process is to set goals. Managers can take the enterprise development strategy as the guidance, set big goals, and then decompose the goals and implement them to various departments and finally to people. It is worth noting that when managers finally break down metrics to individuals, they should focus on communication to ensure that goals are achieved [9].

The second is the assessment content. The personnel department should formulate the performance appraisal content according to the business direction and actual work content of different positions in the enterprise, especially sales positions and technical positions. Instead of only using quantitative data

as the assessment content, the assessment content should be diversified as far as possible [10].

Third, assessment indicators. Managers can use the KPI method to develop assessment indicators to ensure that the indicators are compatible with finance, customers, employee improvement, and internal processes.

The fourth is to determine the weight, the manager should list all the assessment content for comparison, combined with the business direction of the job to rank the importance of the standard, the first indicator weight is larger. In the sorting process, it is necessary to involve multiple people and fully combine the opinions of different positions.

Fifth, clarify assessment procedures. The personnel department is responsible for formulating the assessment plan, and the managers in different positions review the assessment plan and put forward suggestions for modification. Then, the managers in different positions evaluate their own departments, and then carry out the internal assessment of the departments. The personnel department collects assessment data and issues assessment results.

The sixth is to determine the assessment method. Firstly, the Balanced scorecard (BSC) method is used to evaluate all employees. Secondly, self-evaluation and 360 mutual evaluation are carried out in different departments to form evaluation materials. Finally, the evaluation is carried out according to the achievement of the goals of each department.

Seventh, determine the feedback method. Feedback can be divided into interview feedback and written feedback. The interview feedback should be led by the personnel department, or the senior management should interview employees in different positions based on the actual assessment of the employees, affirm the excellent performance of the employees, point out the correction methods for the negative performance, and strive to improve in the next performance assessment. Written feedback is often used for employees in technical positions. This is because the work content of technical employees is relatively professional, and it is difficult for managers to point out the shortcomings in their work through on-site interview. Therefore, it is necessary to point out the shortcomings in the last performance appraisal in written form and help them realize their shortcomings. Make improvements in the next review.

### ***3.3 Innovative Means***

In addition to the above two aspects, the innovation of performance management assessment means can further improve the accuracy and reliability of the assessment itself. First, for manufacturing enterprises, assessment methods and assessment subjects must be paid attention to, on the basis of the implementation of comprehensive assessment methods, to improve the overall assessment development level of employees from both qualitative and quantitative perspectives. In addition to the management, the assessment subject can also include the evaluation of customers, suppliers and colleagues, so as to ensure the objectivity of performance appraisal as much as possible. For example, after formulating the corresponding performance appraisal system, the manufacturing enterprise can first conduct a one-week publicity within the unit, and arrange professionals to introduce the assessment indicators and assessment standards to ensure that every employee can understand and agree with the assessment system implemented by the unit. After the publicity, according to the feedback opinions of employees, the assessment system is optimized and the feasibility of the system is checked through trial operation. In view of the problems found in the trial operation, further optimization and improvement are carried out to maximize the feasibility of the system, so that the performance appraisal results of all employees within the enterprise can be improved.

Second, we should fully implement the work of quantitative performance appraisal. Manufacturing enterprises themselves are more special, there are many departments, and the uncertainty of daily production and operation is strong, which also brings certain difficulties to daily production and management. Therefore, in the design of quantitative performance appraisal mode, we should improve the corresponding assessment and supervision mechanism to ensure that the work is really implemented. For example, manufacturing enterprises can set up corresponding supervision and inspection working groups, according to the work characteristics of different departments, in accordance with the above assessment indicators, evaluation methods to implement the inspection work, build a trinity of management, to ensure that the relevant work can be systematically carried out. Enterprises can develop a system of accountability, once found problems, the first time to find the responsible person. In accordance with the checklist-type assessment and supervision work, the assessment work of January assessment, monthly cash, and everything notified is implemented, and the

daily work system is comprehensively controlled to ensure that the performance assessment is truly integrated into the daily production and life, and the spirit and decision of the superior are fully integrated into the production and business activities.

#### 4. Conclusion

To sum up, employee performance appraisal management is particularly important for the development of manufacturing enterprises. Taking a manufacturing enterprise as an example, this paper analyzes the current performance appraisal status of various positions and elaborates the innovation path and content of its performance appraisal system in combination with its actual operation situation, which can serve as a reference for relevant personnel. Develop a performance appraisal management system that conforms to the actual situation of the enterprise, so as to achieve the purpose of promoting the sustainable development of the enterprise and finally achieve the strategic goal of the enterprise.

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