



# Research on Enterprise Incentive Mechanism under the Innovative Application of Power Data

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**Abstract.** At present, the management structure of enterprise incentive mechanism is generally set in the form of single structure, and the coverage of incentive is small, which leads to the decline of the multi-stage efficiency of the final incentive mechanism. Therefore, this paper puts forward the design and practical research of enterprise incentive mechanism under the innovative application of power data. According to the current measurement requirements and standards, firstly, multi-dimensional incentive targets are formulated, and the cross-dynamic mode is adopted to expand the coverage of incentives, and the combined management structure of cross-dynamic power data application and incentive mechanism is designed. On this basis, the application model of incentive mechanism in power data enterprises is constructed, and the application of incentive mechanism is finally improved by feedback processing. The test results show that: according to the currently selected six aspects of work content, working hours, work performance, salary and treatment, subsidy standards and assessment structure, the results of multi-stage efficient calculation of the incentive mechanism can reach more than 90% in the end, which shows that the designed incentive mechanism has been further optimized and improved under the background of innovative application of electric power data, and the overall effect has been significantly improved, and the incentive implementation degree is high, which has practical application value.

**Keywords:** Power data; Innovative application; Enterprise rules; Incentive mechanism; Enterprise reform; Data integration;

## 1 Introduction

The establishment of enterprise incentive mechanism can strengthen the control of daily work to a certain extent, and form a more complete and specific management system with internal enterprise standards, so as to protect its future development [1]. However, for a long time, due to the special internal control framework, power supply enterprises

have been in the state of basic planned operation mode, and the work of personnel departments is very complicated and changeable. Under the guidance of traditional management methods, there are no links such as performance appraisal, ability cycle test, incentive maintenance and professional skills training, which further leads to the final enterprise's difficulty in achieving the expected management effect [2]. In order to solve this problem, relevant personnel have designed the currently applied enterprise incentive mechanism [3]. This type of incentive mechanism is mostly one-way, although it can achieve the expected tasks and objectives of enterprise management and employee incentive, but in the process of practical application, the links are changeable and the regulations are not closely connected, which leads to many uncontrollable problems in internal management and control of enterprises, and then affects the final development result [4]. Moreover, the one-way enterprise incentive mechanism has low comprehensive efficiency in daily application, coupled with the influence of external environment and specific factors, which hinders the subsequent internal management. Therefore, this paper puts forward the design and practical application research of enterprise incentive mechanism under the innovative application of power data. Different from the original application form of enterprise incentive mechanism, this time, under the background of innovative application of electric power data, combined with the current development state of the enterprise, the incentive conditions, contents, rules and audience groups are designed for each link, and the corresponding incentive means are added to improve its adaptability to the internal management rules of the enterprise [5]. We should strengthen the elimination of egalitarianism in enterprises in a diversified way, take the set incentive objectives as a guide, mobilize the enthusiasm of employees and continuously introduce outstanding talents. Use the innovative application of electric power data to balance the symmetry between enterprise management and economy, and stabilize the management and control environment of enterprises [6]. Combined with the actual situation of enterprises, the corresponding incentive guarantee and system are designed, and multi-dimensional scheduling and adjustment of incentive means are carried out in different periods. In the process, we learn from successful enterprise incentive mechanism cases, innovate and expand the influence scope of incentive mechanism, and provide reference and theoretical reference for the development of related enterprises and the improvement of incentive mechanism [7].

## **2 Design enterprise power data innovation application incentive mechanism**

### **2.1 Develop multi-dimensional incentive objectives**

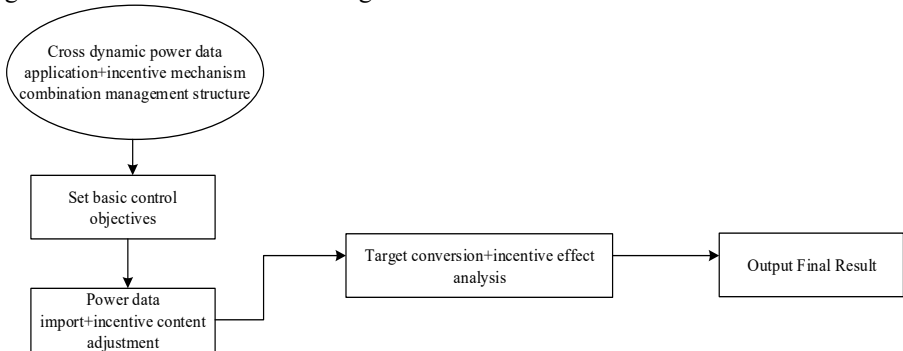
In fact, the daily control and internal management of enterprises is a very complicated and tedious work with strong pertinence. Although this form can achieve the expected incentive objectives, it takes a lot of time and is difficult to achieve the expected incentive objectives [8]. At present, the incentive mechanism and guiding objectives are mostly unidirectional, and the overall efficiency is low, which is one of the important reasons for the inconspicuous final incentive effect. Therefore, the multi-dimensional

incentive objectives are formulated [9]. Firstly, according to the daily production and operation needs of the enterprise and the optimized development direction in the future, a basic management and control plan is constructed, and each link is divided into corresponding incentive stage goals. Then, the multi-dimensional goals are established in a concrete, detailed and clear way, and an interlocking target-level incentive framework is designed [10].

Then, on this basis, set the target incentive content in the link, as shown below, which are participation in decision-making, target concretization, deadline completion and performance feedback. These four parts are the basic contents of the current enterprise incentive mechanism, so the setting of targets and incentive standards must also be based on this basis to increase the actual pertinence and stability [11]. However, it should be noted that the implementation standards, contents, incentive targets and directions of multi-dimensional incentive targets are not fixed, but they are adjusted accordingly with the actual enterprise development and the fluctuating market demand, which makes them more flexible [12]. At the same time, the goals covered by the multi-dimensional incentive mechanism can be implemented cooperatively, which can merge the current goal incentive tasks, maximize the overall incentive goals, and create a more stable environment for enterprise innovation and development [13].

## 2.2 Cross dynamic power data application+incentive mechanism combination management structure design

Different from the traditional management structure of incentive mechanism, the combined management structure of cross dynamic power data application and incentive mechanism [14] is designed based on the changes of innovative application standards and requirements of power data. We can use the established enterprise incentive targets as a guide to obtain basic data and information, and then summarize and integrate them for subsequent use [15]. Next, based on the change of enterprise development direction, adjust the actual management content and design the corresponding combination management structure. As shown in Figure 1 below:



**Fig. 1.** Diagram of combined management structure of cross dynamic power data application and incentive mechanism

According to Figure 1, the design and practical analysis of the combined management structure of application and incentive mechanism for cross dynamic power data is completed. Then, on this basis, through the innovative application coverage of power data, the current incentive content, structure and target are adjusted. Using the method of cross-dynamics, this paper measures the work enthusiasm of enterprise content employees and investigates their satisfaction with the incentive mechanism. Then, on this basis, the "last elimination system" and "competitive promotion system" are added to the built-in incentive structure, and the management and incentive deepening are carried out in three stages, with the aim of improving the overall incentive effect. As shown in the following table 1:

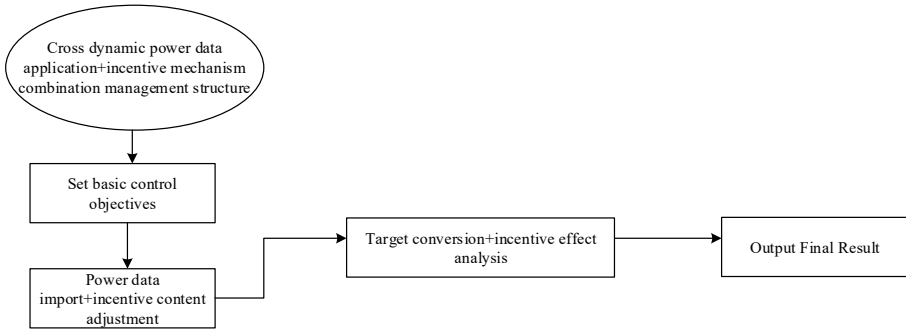
**Table 1.** Analysis Table of Incentive Effect of Cross Dynamic Power Data Application+Incentive Mechanism Combination Management Structure

Incentive mechanism application testing stage	Last elimination system	Competitive promotion system
The first incentive stage	Employees are in the adaptation stage, exploring rules	Understand promotion principles and increase competition
Second incentive stage	Basic mastery of rules, increased competitiveness	Continuously updating incentive content and refining promotion restrictions
Third incentive stage	Obtain final incentive results	Obtain final incentive results

According to Table 1, the analysis and research on the incentive effect of the combined management structure of cross dynamic power data application and incentive mechanism are realized. With the assistance and support of power data application, the current enterprise incentive mechanism is more perfect and specific. In addition, the overlapping of this structure with smart grid can also expand the coverage of incentives and enhance the vitality and vitality of enterprises.

### 2.3 Power data enterprise incentive mechanism application model and feedback processing to achieve perfect application of incentive mechanism.

The so-called power data mainly refers to the innovative applications in energy management, smart grid and electricity market transactions. In the process of designing enterprise incentive mechanism, the overall mechanism structure and power data can be multi-dimensionally integrated, so as to further expand the actual enterprise development scope, clarify the corresponding development direction and strengthen the final incentive effect. At present, the content of enterprise incentive is divided into the following parts through the initial model, namely, incentive mechanism, subsidy policy, preferential measures, performance control, working hours management, work content adjustment and so on. Add an incentive target to the model, and combine it with power data to set up the specific system of the model, as shown in Figure 2 below:



**Fig. 2.** Structural diagram of application model of incentive mechanism in power data enterprises

According to Figure 2, the design and innovative application of the application model structure of the incentive mechanism of power data enterprises are completed. Next, it is necessary to establish a corresponding feedback mechanism, constantly improve the overall effect of the incentive mechanism, expand the actual incentive coverage, improve the work efficiency of enterprises, and achieve a win-win situation.

### 3 Example analysis and verification

This time, the actual application effect of enterprise incentive mechanism under the innovative application of electric power data is mainly analyzed and verified. Considering the authenticity and reliability of the final test results, the G enterprise is selected as the main target of the test, and professional equipment and devices are used to collect the enterprise management data and information within the cycle, and then they are summarized and integrated for subsequent use. Next, according to the changes of current measurement requirements and standards, the final test results are compared and studied. Next, based on the innovative application background of power data, the initial case analysis environment is associated and built.

#### 3.1 Brief introduction of enterprise basic management.

According to the obtained initial power data, the current innovation application background is constructed, and the actual application environment of G enterprise incentive mechanism is correlated and analyzed. G enterprise is a compound electric power enterprise, and its daily work is busy, so the number of employees is large. The internal management and control structure and departments of enterprises are characterized by diversification, and managers can achieve daily management and control objectives. However, at this stage, due to the increase of tasks and workload in enterprises, the daily work pressure has also become greater, and the management of employees' daily work content, work quality and work time-consuming has become loose, resulting in confusion within enterprises and a straight decline in work efficiency. Combined with

the actual enterprise situation, the proportion of personnel in each department is measured, and at the same time, six control cycles are set, each cycle is 3 months, and the employee turnover rate of G enterprises within three surrounding areas is calculated, as shown in the following formula 1:

$$F = (1 + k)^2 \times \mu\phi - \frac{ku}{2} \tag{1}$$

In Formula 1:  $F$  indicates the employee turnover rate,  $k$  represents the number of people in a single department,  $\mu$  indicates the number of people who have not left the company,  $\phi$  represents a controllable number of people,  $u$  indicates the setting period. Combined with the current measurement, the calculation of employee turnover rate is realized. According to the change of turnover in each cycle, the practical application effect of the incentive mechanism currently formulated is judged. After a period of investigation, we can understand the actual situation of the enterprise in the incentive mechanism. Taking the turnover rate as the guiding goal, if the turnover rate is too high, it means that the incentive effect is not obvious, and if the turnover rate is within a reasonable range, it means that the incentive effect is better. In this part, it should be noted that employees' emotions, work enthusiasm and human resource management effects can highlight the application results of enterprise incentive mechanism. At this point, the basic measurement indexes and parameters are set, as shown in the following table 2:

**Table 2.** Enterprise Incentive Mechanism Basic Measurement Indicators and Parameter Settings Table

Name of Basic Measurement Indicators for Enterprise Incentive Mechanism	Directional parameter standard value	Measured controllable parameter reference value
Incentive content	Enterprise's incentive standards, incentive structure, and incentive objectives	Enterprise's incentive standards, incentive structure, incentive goals, salary and benefits, cohesion, and resignation situation
Incentive mechanism execution stage	Basic research+analysis of the current situation of the enterprise+coverage of incentive mechanisms+analysis of results	Basic research+analysis of the current situation of enterprises+coverage of incentive mechanisms+correction of enterprise incentive links+analysis of results
Controllable turnover rate/%	85.62	90.25
Employee volatility ratio	3.55	4.26
Stable fixed value	13.02	15.24

According to Table 2, the basic measurement indexes and parameters of enterprise incentive mechanism are set up. Then, on this basis, the basic test environment is built and related. Next, based on the current actual development incentive situation of G enterprise, the comparison method is mostly calculation research.

### 3.2 Example analysis process and result verification comparison

In the above-mentioned test environment, combined with the innovative application background of power data, the incentive mechanism of the selected G enterprise is actually measured and verified. According to the application test requirements of the current incentive mechanism, 245 male employees and 200 female employees were selected in this enterprise for testing. The selected employees are all between 25 and 42 years old and have worked for more than 2 years. Compare and measure the initial enterprise incentive mechanism with the incentive mechanism designed under the current innovative application of power data, and calculate, analyze and adjust the incentive mechanism from six aspects: work content, working hours, work performance, salary and treatment, subsidy standard and assessment structure, and first design the corresponding test structure, as shown in Figure 3 below.

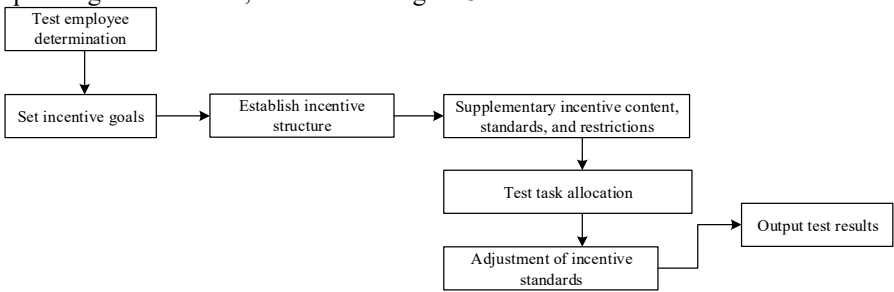


Fig. 3. G diagram of enterprise incentive mechanism test structure

According to Figure 3, the design and practical analysis of G enterprise incentive mechanism test structure are completed. However, it should be noted that the incentive mechanism, content and standards currently designed are not fixed, but are adjusted with the actual development and needs of enterprises to form a circular incentive system to better meet the requirements of testing. According to the set test cycle of incentive mechanism, the specific content of incentive mechanism is adjusted through the coverage of innovative application of power data, and the efficiency of final incentive mechanism is calculated, as shown in the following formula 2:

$$M = (m + n)^2 \times v\eta - \sum_{u=1} nu \tag{2}$$

In Formula 2:  $M$  indicating that the incentive mechanism is efficient,  $m$  represents the coverage,  $n$  represents a controllable range,  $v$  indicate that turnover rate within the period,  $\eta$  indicates the number of people tested,  $u$  represents an incentive link.

Combined with the current measurement, the analysis of test results is realized, as shown in the following table 3:

**Table 3.** Comparative Analysis Table of Test Results

Incentive mechanism testing process	Efficiency of the first test management phase/%	Efficiency of the second test management phase/%	Efficiency of the third testing management stage/%
Work	75.23	89.32	90.12
Working hours	70.16	82.04	93.41
Job performance	74.94	87.64	92.15
Salary and benefits	79.35	89.11	95.16
Subsidy standards	73.24	80.35	97.51
Assessment structure	78.55	84.61	94.38

According to Table 3, the comparative analysis of the test results is realized: according to the currently selected six aspects: work content, working hours, work performance, salary, subsidy standard and assessment structure, the calculated results of the efficiency of the incentive mechanism stage can all reach more than 90% in the end, which shows that the designed incentive mechanism has been further optimized and improved under the background of innovative application of power data, the overall effect has been significantly improved, and the incentive implementation degree is high, which has practical application.

## 4 Conclusion

In a word, the above is the design and verification research of enterprise incentive mechanism under the innovative application of power data. Compared with the initial application form of enterprise incentive mechanism, this time, combined with the innovative application state of power data, the current incentive scope is further expanded, and a more flexible and changeable incentive structure is designed to optimize incentive means and improve incentive rules and contents. At the same time, with the help of the innovative application background of electric power data, the initial enterprise incentive mechanism has gradually changed from a fixed rule structure to a dynamic rule-limited structure, which has been unnecessarily strengthened in terms of salary system, incentive rules, promotion system, incentive objectives, etc., breaking the limitation of the traditional enterprise solidified incentive model, highlighting the application effect of scientific, reasonable and long-term incentive mechanism to a certain extent, and laying a solid foundation for the development and innovation of enterprises.

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