

# ***Environmental Risk and Safety Assessment on the Innovation Path of Low-carbon and Economic Human Resource Management***

**Yanyu Chen\***

*Northwestern Polytechnical University, Xi'an, Shaanxi, China*

*chenyy628@mail.nwpu.edu.cn*

*\*corresponding author*

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**Abstract:** Since the reform and opening up, China's economy has developed rapidly, but because of the relatively stable economic growth in recent years, it shows that the policy dividend of the industry is gradually fading. In this context, if enterprises want to enhance their competitive advantage, they must do well in their own management construction. The advantages of an enterprise can be summarized as the advantages of talents. If an enterprise wants to operate for a long time, it must control the environmental risks and potential safety hazards. At present, there is little research on the combination of environmental risk and human resource management at home and abroad. In view of this situation, this paper will focus on the innovation of environmental risk and safety assessment on low-carbon and economic human resource management. Firstly, this paper discusses the influence and significance of environmental risk and low-carbon economy on human resource management of enterprises, and holds that it is a modern scientific management way to combine environmental factors and low-carbon concept into human resource management structure. Through the establishment of risk assessment, we can quickly and accurately mine the explicit and potential risks that enterprises are facing at present. Then with the human resource innovation management method of this paper, we can make up for the shortcomings and control the risks. Finally, this paper also establishes a comprehensive evaluation index of enterprise human resource management, which can play a very good guiding role in enterprise human resource management. In the specific experimental analysis of industries and enterprises, through the experimental data, this paper believes that environmental risk awareness has a greater impact on the development of enterprises, and reasonable and effective human resource management methods can control the risk well. Therefore, the innovative management of human resources in this paper has a good reference for modern enterprise management.

## 1. Introduction

Since the beginning of the 21st century, human beings are facing challenges from all aspects, including natural environment and social environment. However, in the final analysis, it is a challenge to human development and survival law. The 21st century is a century of vicissitudes, a century of self-reliance and constant self-improvement, a century of daring to break through, and a century full of infinite possibilities. With the development of the times and the progress of the society, science and technology have become the most important productivity. The Internet and information connect the world with you and me. Under such a large background, human society is facing unprecedented competition. The main force of competition is knowledge, the main carrier of knowledge is talents, talents are the core of enterprises, and enterprises are indispensable for the development of national economy. The competition of enterprises has naturally shifted from material process organization to intellectual resources (talents). The management decision-making and practical activities of enterprises also directly affect the sufficiency and necessity of intellectual resources (talents). From this point of view, human resources play an important role in improving the external environment, optimizing the organizational structure and improving the competitiveness of enterprises. The training of talents, the use of talents, the growth of enterprises and the power of talents are the core issues of human resource management. In this era, talents help enterprises, and enterprises rely on talents to take off. Enterprises and talents must follow certain labor contract and psychological contract relationship to jointly realize the development mode of high input and high output of human capital and win-win strategy. Respect, payment, commitment, hard work, trust, support, innovation, learning, cooperation and unity will become the new choice of human resource management in the new era.

In this context, human resource management in western developed countries has been widely discussed the so-called "strategic human resource management", trying to carry out all-round innovation in human resource management practice. In contrast, the human resource management of Chinese enterprises, whether in theory or in practice, is in a very backward position, the gap is very large. In recent years, we have done a lot of work in theory. Human resource management has become a hot topic in the academic and business circles of our country. In practice, China's enterprises especially call for respect for employees, pay attention to the principle that employees are the owners of the enterprise, and design nearly perfect theoretical principles, such as the principle of recruitment, selection and appointment of talents, the principle of integrity of limitations, strengths and weaknesses, virtue and talent, because this is the principle, principle, full-time long-term principle, etc, On the surface, they pay more attention to recruitment than the western countries, because no Western countries put forward the so-called principles, they focus on how to act, and we just lack effective measures to achieve the ideal principles.

Environmental risk assessment is a new and comprehensive research field. After a period of time, especially past 20 years, a complete theoretical system of environmental risk assessment been established. In practice, environmental risk assessment has become the main way to prevent environmental risks from the source, and to prevent major environmental pollution events from causing harm and loss to people's life and property safety. In order to reduce the business process of environmental risk as much as possible, this is a new research direction in the field of human resource management application of environmental risk and safety assessment daily human resource management and prevention of such risks from the perspective of personnel management.

Therefore, this paper will take environmental risk and safety assessment as the main research direction of low-carbon economic human resource management innovation, fully integrate environmental risk into low-carbon economic human resource management structure, and explore a new set of human resource management methods. First of all, this paper discusses the definition of

risk assessment and the impact of low-carbon economy on human resource management. This paper holds that applying environmental factors and low-carbon concept to human resource management is a modern scientific management mode. In order to optimize the shortcomings of the existing management methods, this paper reestablishes the environmental risk assessment procedures and specific evaluation methods. Through the environmental risk assessment, enterprises can clearly analyze the current risks and security risks. As an important reference of human resource management, the evaluation report is purposeful to make up for in personnel training and management. Therefore, this paper has carried on the innovation transformation to the human resources management, compared with the past; it pays more attention to the knowledge supply and the strengthening of the management idea. In the end of this paper, the real estate industry is taken as the sample of this experiment. In the comparison of the influence weight among the variables of large, medium and small enterprises, state-owned and private enterprises, coastal open areas and human resource management, this paper analyzes the experimental data and concludes that low-carbon economic human resource management based on environmental risk can improve the competition of enterprises very well Strive for advantages and establish a foundation for long-term development [1-3].

## 2. Related Basic Concepts

### 2.1. Concept of Risk Assessment

Risk assessment is to determine the probability (probability) of a dangerous event and the degree of danger of a simulated event. Calculate the risk value, evaluate the risk acceptability, put forward risk prevention and control measures and emergency plans, etc., to provide basis and guarantee for risk management.

#### 1. Environmental risk assessment

Environmental risk refers to the hazardous events that have adverse effects on human health and welfare and are caused by or pass through the natural environment with certain uncertainty. It refers to the process that engineering construction and environmental risk assessment can predict the leakage of toxic, inflammable and explosive substances caused by operation (excluding man-made damage and natural disaster), the new generation of toxic and harmful substances, or the impact of accidents on personal safety and environment and damage assessment, prevention, emergency response and mitigation measures.

#### 2. Safety risk assessment

Safety risk assessment is a process of comprehensive system engineering method used to predict and assess potential risks and possible consequences of proposed or existing projects and systems, and put forward corresponding safety countermeasures according to the risk value of possible accidents to make the project or system safe. It focuses on fire, explosion, toxicity and other major accidents that may cause major property loss or large-scale casualties [4-5].

### 2.2. Sustainable Development Theory

In the early 1960s, Rachel Carson published silent spring, which pointed out that the rapid economic growth seriously damaged the ecological environment. This shocking fact triggered the debate on the traditional development model. In 1983, the United Nations World Commission on environment and development published the report "our common future", and formally put forward the concept of sustainable development. Sustainable development refers to "meeting the needs of contemporary people without compromising the ability of future generations to meet their needs".

Sustainable development theory does not pursue temporary economic growth, but emphasizes

that economic growth should not cause damage to the ecological environment. attaches great importance to the sustainability of economic growth, including international fair development, ecological carrying capacity and other important contents. In fact, goal of low-carbon economy is consistent with sustainable development. Ultimate goal is the harmonious coexistence and sustainable development human economy, society and natural environment. The theory of sustainable development includes four mature theories: economic theory, human land system theory, ecological theory and population carrying capacity theory.

### **2.3. Basic Theory of Low Carbon Economy**

Low carbon economy first originated from energy and climate change. Although the connotation of LOW CARBON ECONOMY has been further sublimed through the research of experts and scholars at home and abroad, this paper holds that low carbon economy is a "green economy" with clean and efficient resource utilization and recycling as the core and three low to high principles as the main characteristics, In the process of pursuing green ecology, energy development, raw material procurement, production, use and waste disposal, we will continue to recycle energy and clean energy, and achieve the maximum ecological and economic benefits with the lowest cost of energy and environment, It is in line with the environment-friendly development strategy of China's economy. In this production activity, it pays attention to the ecological environment, clean energy, waste recycling and utilization, which is also in line with China's green / ecological development strategy [6-9].

### **2.4. Sustainable Development Theory**

1. Affect the quality of human resources and employment. Human resource management under the low-carbon economy model has a significant multiplier effect on employment. The human resource management under the low-carbon economy mode can greatly improve the employment pressure of college and technical secondary school graduates in China. From a macro perspective, the development of low-carbon economy is conducive to solving the problem of domestic employment shortage, stimulating domestic demand, increasing income and reducing dependence on export economy.

2. Affect the allocation of human resources. With the development of economic globalization, the competition among countries in the world is increasingly fierce. The development of a country urgently needs a large number of talents as the support of economic development. Economic competition is also manifested in the competition of economic quality and structure, that is, the competition of a large number of low-carbon emerging industries and human resources with good education background.

3. Affect the management of human resources. From the micro perspective, human resource management is the human resource management of enterprises. In a low-carbon economy, the human resource management of enterprises will inevitably have an impact on the original corporate culture, management mode and business philosophy, which is conducive to the reform of employee performance appraisal, incentive mechanism and salary management system [10-13].

### **2.5. Concept and Connotation of Human Resource Management and Innovation**

There are four views on the concept and connotation of human resource management: comprehensive disclosure theory, process disclosure theory, phenomenon disclosure theory and purpose disclosure theory. The author believes that under the guidance of human resource management, economy and humanism, internal and external organizations related to human

resources can be effectively utilized to meet the needs of current and future development through recruitment, selection, training, performance appraisal, salary payment and other management forms, so as to ensure the realization of organizational goals and the maximization of member development.

Human resource management innovation is the use of modern scientific methods. Therefore, human resource management innovation can be understood from two aspects. The first is the management of external elements of human resources. The number of human resources management refers to the appropriate training, organization and coordination of human resources according to human and material resources and their changes, in order to maintain the best proportion and organic combination, so as to give full play to the best effect of people and things. Secondly, the qualitative management of the internal elements of human resources mainly refers to the thought of effective management of human beings. The psychology and behavior (including the thought of coordination, control and management, the individual and group of psychology and behavior) use scientific methods to give full play to the subjective initiative of human beings, so as to achieve the goal of the organization [14-17].

### 3. Human Resource Innovation Management Method

#### 3.1. Environmental Risk Assessment Procedures and Methods

##### 1. Evaluation program settings

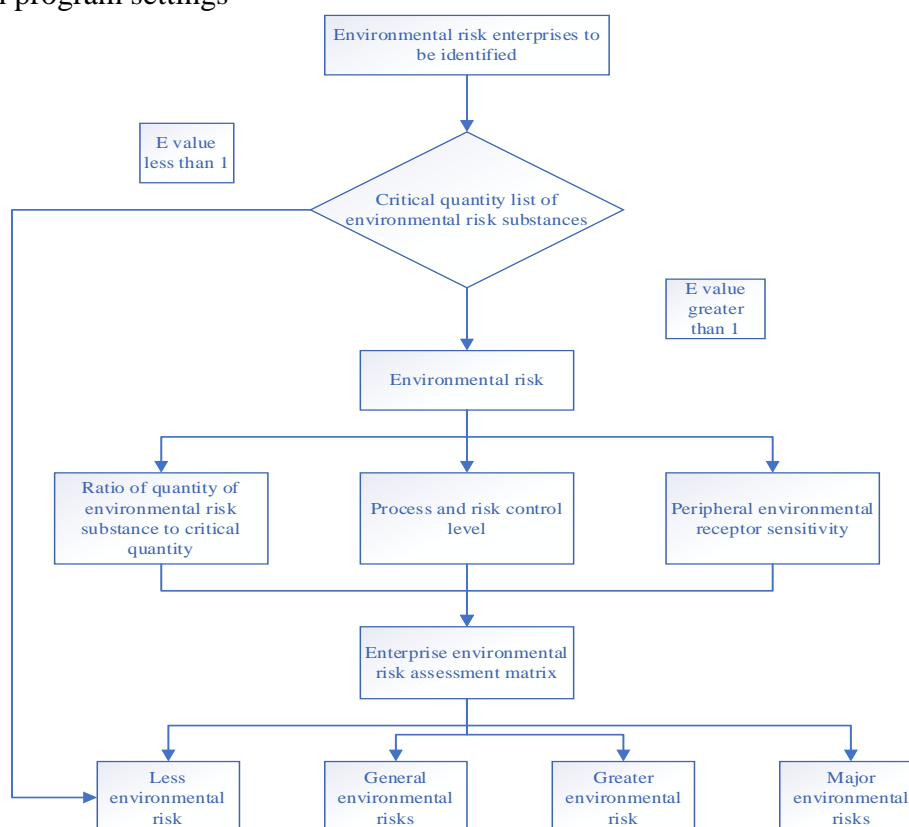


Figure 1. Environmental risk assessment process

Through the qualitative and quantitative analysis of the environmental risk coverage materials of the enterprise, combined with the level of enterprise and risk control involved in the production process, and the environmental sensitive areas of the assessment plant belong to the type, the

control is set with a classification matrix, and the enterprise's environmental risk level is divided into four smaller, generally speaking, greater risk levels, and the environmental risk assessment process is shown in Figure 1.

## 2. Specific content of evaluation index

The contents of the two assessments include the process of the project, the overview of the project, the hazardous materials involved in the project, and the specific risks of the project. Then, we identify and evaluate these contents. In the process of evaluation, the risk units should be divided according to the risk of project materials and the installation points of the project, and then the risk degree of hazard sources and the probability of risk occurrence should be calculated. In the whole process, the two kinds of evaluation have some similarities in the analysis of hazard sources, hazard devices and hazard materials, which can be used for reference. In the early stage of implementing environmental risk assessment, some contents of project safety risk assessment can be used to simplify the environmental risk assessment work to a certain extent and improve the efficiency of assessment. The specific contents of the two risk assessments are shown in Table 1 [18-20].

*Table 1. Specific contents of environmental risk assessment and safety risk assessment*

Content of evaluation report	Safety risk assessment	Environmental risk assessment
Project overview	Need to know process, equipment, materials, site conditions, etc	Need to know process, equipment, materials, site conditions, sensitive points of surrounding environment
Process flow and equipment	Detailed understanding of process conditions and equipment	Need, refer to safety assessment
Device hazard, unit division	Divide according to the characteristics of devices and materials	Need, refer to safety assessment
Rating method	Common methods include event tree, fault tree, PHA, downs, index method, matrix analysis method, etc	Common event tree, checklist method, index method, etc., for reference
Analysis of dangerous and harmful factors	Including detailed analysis of all risk factors such as materials, processes, equipment, etc.; focusing on the analysis of the causes of accidents and control measures	A safety assessment of the well is required, focusing on the toxicity of materials and the possibility of accidents in the plant to determine the extent and extent of the impact inside and outside the site
Risk assessment	Determine the danger of each dangerous unit	Identify the risk of the hazardous unit and identify the maximum credible accident

## 3. Index evaluation method

Determine whether the raw and auxiliary materials, catalysts and products are related to environmental hazardous chemicals, and determine the maximum content of hazardous substances in the plant. If the quantity of hazardous substances changes dynamically in the production process, the maximum quantity of environmental hazardous substances shall be calculated according to a certain time in the Gregorian calendar year [21-23]. Then, compare the maximum limit of environmental risk substances with the critical limit of environmental accident risk substances, and calculate the proportion (k):

(1) When the enterprise only involves one environmental risk substance, the ratio is e;

(2) When the enterprise involves a variety of environmental risk substances, e value is calculated according to formula (1):

$$E = \frac{e_1}{E_1} + \frac{e_2}{E_2} + \Lambda + \frac{e_n}{E_n} \quad (1)$$

Wherein:  $e_1, e_2, \Lambda, e_n$  — the maximum storage capacity or use of all environmental hazardous



substances involved, the quantity of which exceeds 6% of the corresponding critical mass  $t$ ;

$E_1, E_2, \dots, E_n$  — critical value corresponding to all environmental hazardous substances involved,  $t$ .

E value is divided as follows: E1:  $e < 1$ ; E2:  $1 \leq e < 10$ ; E3:  $10 \leq e < 100$ ; E4:  $e \geq 100$ , four grades.

### 3.2. Innovative Design of Human Resource Management System

#### 1. Strengthen the understanding of management concept

As the company's management is the first professional and technical post promotion, there is no experience except for other aspects of their professional comprehensive vocational quality training, professional training and did not participate in human resource management, therefore, the lack of systematic understanding and understanding of the concept of modern human resource management, strategic human resource management is impossible. The company's human resource management work should be closely combined with the company's strategic development, so that the company's human resource management function and development plan are not clearly understood as soon as possible. The leaders of the company require the human resource management department to provide some basic human resource information, lack a clear strategic human resource management and development plan, and the subjective impression of the individual, or more or basically remain in the traditional human resource management, human resource management and the company's development strategy still stay in the general administrative affairs stage of oral therapy, It is not promoted to the position of strategic partner, which provides basis for high-level strategic decision-making. In the aspect of human resource investment, the company's leadership still stays in the cost investment, not realizing that human capital investment is actually an investment, often hovering between the investment view and the cost view [24-26].

#### 2. Human resource innovation management mechanism

In essence, the competition of enterprises is the competition of talents, which is more prominent in knowledge-based enterprises. Paying attention to the role of the environment and the low-carbon economy is undoubtedly a great progress in the concept, but in order to transform knowledge into measures, there must be institutional guarantee. Traditional personnel management does not adapt to the situation of fierce competition, because it does not need the scientific management and effective allocation of "THE FIRST RESOURCR", but people, as a cost, personnel, personnel management and industrial management mouth, are relatively independent in administrative affairs management, document management, cadre selection and appointment, organization setting, ability distribution, salary management and other businesses, It can't form a complete organic system and lacks long-term, systematic and scientific planning in personnel selection, training and motivation [27-28].

#### 3. Performance appraisal and salary design

There are two main points in the process of performance evaluation: evaluation and development. The purpose of the evaluation process is to evaluate the performance of the evaluated person according to the agreed objectives, or to draw conclusions and make judgments after comparing the performance with the main items in the job description. The development assessment starts from discovering and exploring the potential of the assessed, and focuses on the future development. This evaluation may be related to career planning and management continuity. One goal is to determine what kind of knowledge and skills an individual should develop. After determining the development needs of the assessed, some development goals can be determined. Both of them emphasize the importance of feedback, including good and bad feedback, and the importance of personal development in the future. These are realistic incentives.

### (1) Performance evaluation

First, we need to determine which performance to evaluate and which objective and subjective methods to use. The most considered performance factors in the evaluation are as follows:

- 1) Knowledge, ability and skills related to work.
- 2) The working attitude is analyzed from three aspects: enthusiasm, sense of responsibility and enthusiasm.
- 3) In a certain time span, consider the quality of the work in combination with the details.
- 4) Production output.
- 5) Ability to communicate with other team members.

Other less commonly used performance factors include: flexible daily work mode; ability to deal with problems independently; skills of managing others; familiarity with job requirements; history of achievements; attendance records; ability to plan and set priorities; knowledge of health and safety regulations.

### (2) Development assessment

This assessment focuses on the future development of the assessed. The enterprise creates opportunities for employees to provide open and constructive feedback, so that the assessed can understand the form of assessment and express his or her views on the performance of the assessor. This actually emphasizes the establishment of a partnership between managers and subordinates in the evaluation process. On the basis of the company's objectives, define the personal development objectives, so that the assessed have a high sense of identity with the objectives, and have a full understanding of the reality and challenges of the objectives [29-30].

## 3.3. Evaluation Index Setting and Evaluation Method of Human Resource Management

### 1. Indicator weight setting

There are few variables in this indicator system (see Table 2 for specific indicator settings) and the relationship is relatively clear. Therefore, the "direct weighting method" can be used when setting weights. Each evaluation index is weighted according to its importance.

The weight calculation formula is:

$$W_j = \frac{r_j}{\sum r_i} \quad (j=1,2,\dots,n) \quad (2)$$

Where  $W_j$  is the corresponding weight and  $r_j, r_i$  is the corresponding number of indicators.

Table 2. Enterprise quantitative analysis indicator weight setting

First level indicators	Secondary index	weight	Three level indicators
Resource indicators (0.5)	Proportion of knowledge workers	0.2	1. Proportion of R & D expenses
	Proportion of resource creation	0.6	2. Independent intellectual property rights per capita
	Proportion of intangible assets	0.2	3. Output rate of unit knowledge equipment
Business indicators (0.167)	Proportion of customized production	1	
Organizational structure indicators (0.333)	Management control span	0.5	
	Information transmission structure	0.5	

### 2. Evaluation synthesis



It can be seen from the above indicators that the organizational structure indicators can enlarge or reduce, so the multiplier effect of the big indicators should be considered in the synthesis. Here, the following formula is used comprehensively:

$$S = M(I + B) \quad (3)$$

Among them,  $S$  is the comprehensive evaluation value,  $B$  is the comprehensive value of business indicators,  $I$  is the comprehensive value of knowledge resources indicators, and  $M$  is the comprehensive value of organizational structure indicators.  $M$ . The comprehensive methods of  $I$  and  $B$  are

$M = \sum_i w_i \times X_i$ . The calculation method of  $I$ ,  $B$  is similar. So, you can get

$$S \left( \sum_{i=7}^8 w_i \times X_i \right) \left[ \left( \sum_{i=1}^5 w_i \times X_i \right) + w_6 \times X_6 \right] \quad (4)$$

The analysis shows that the greater the comprehensive value is, the better the human resource management plan is, and it can better reflect the comprehensive competitiveness of enterprises.

#### 4. Analysis on the Effect of Human Resource Management

##### 4.1. Test Object

This experiment will take real estate enterprises as the experimental samples. According to the experimental requirements, the experimental project samples are divided into six categories: large-scale enterprises, small and medium-sized enterprises, state-owned enterprises, private enterprises, coastal enterprises and noncoastal enterprises. Data analysis is carried out according to different experimental projects.

##### 4.2. Result Analysis of Large, Medium and Small Enterprises

Table 3. Human resource management performance of large, medium and small enterprises

Large enterprises		Small and medium enterprises	
Enterprise code	Total score	Enterprise code	Total score
C1	0.426	B1	0.451
C2	0.387	B2	0.388
C3	0.469	B3	0.432
C4	0.524	B4	0.426
C5	0.462	B5	0.408
C6	0.408	B6	0.475
C7	0.477	B7	0.405
C8	0.637	B8	0.427
C9	0.459	B9	0.413
C10	0.414	B10	0.419

From Table 3 and Figure 2, it can be seen that the strategic human resource management performance of large enterprises and small and medium enterprises is generally not high, and the evaluation results are mostly about 0.5, but the concept of management focus of large enterprises is very clear, which is management focus. The direction of cash management is the flow of cash flow, which is the meter of cash flow in the whole management of the enterprise and the tracking of the

mobile party to predict the amount of cash flow and adjust the cash flow, The work of cash flow is also enterprise information and dynamic prediction, planning and control. It is the safe and stable cash flow of insurance enterprise capital. In recent years, the continuous improvement of cash flow, corporate capital flow of cash flow management is mainly to achieve the big goal: first, corporate cash flow, to ensure that corporate cash flow marketing activities are good enough.

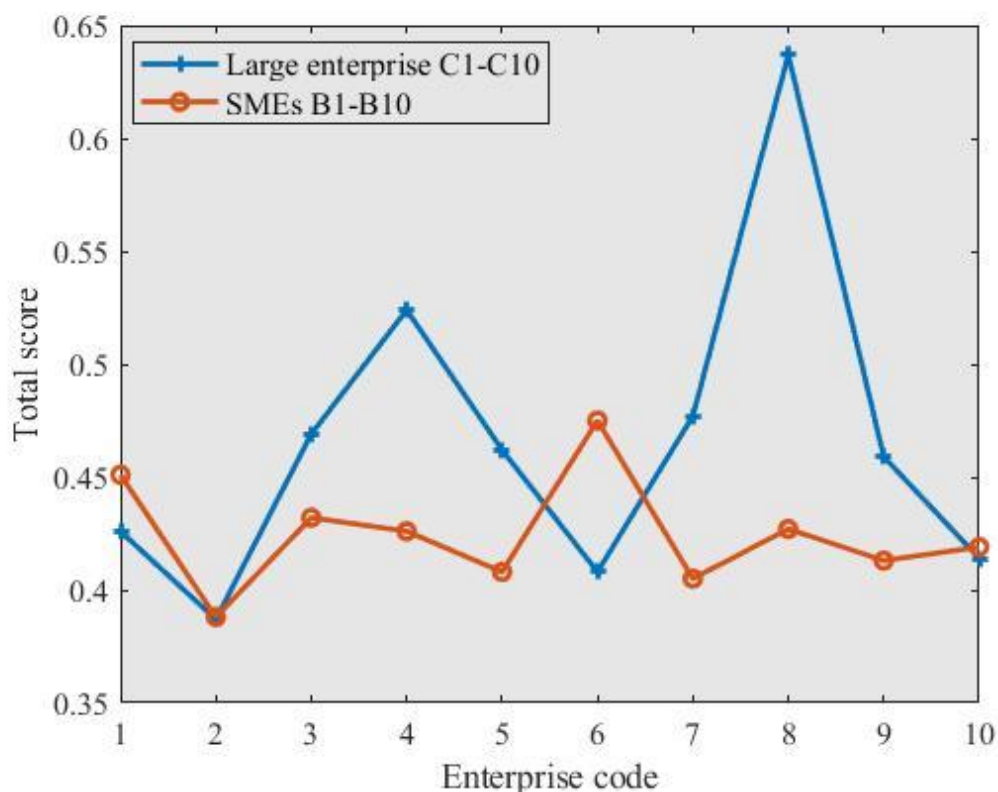


Figure 2. Analysis of human capital management performance of large, medium and small enterprises

#### 4.3. Analysis of the Results of State-owned and Private Enterprises

Table 4. Human resource management performance of state-owned and private enterprises

state-owned enterprise		private enterprise	
Enterprise code	Total score	Enterprise code	Total score
G1	0.436	S1	0.396
G2	0.489	S2	0.687
G3	0.627	S3	0.527
G4	0.449	S4	0.684
G5	0.536	S5	0.428
G6	0.478	S6	0.419
G7	0.389	S7	0.609
G8	0.456	S8	0.501
G9	0.429	S9	0.570
G10	0.702	S10	0.635

From Table 4 and Figure 3, it can be seen that the overall performance of human resource management is not high in both state-owned enterprises and private enterprises, and the profit of China's industrial development, the era when the company hopes to make as much profit as possible

by relying on sales, has passed. In the future, the industry will be better, and the real estate market will be more open and competitive. Technology, including design, construction and management skills, put forward higher requirements; On the other hand, with the development of China's economy, the income, living environment and quality level of consumers have been improved, and the requirements for living environment are higher and higher. They have higher requirements for product quality, so they have also tested the quality and technical level.

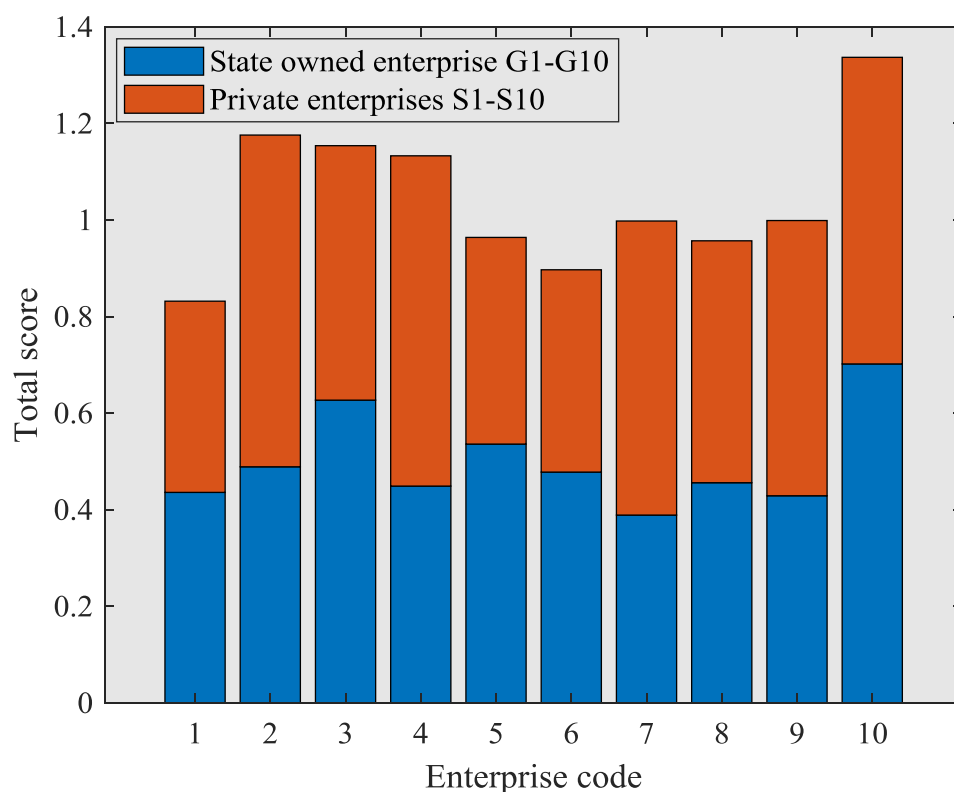


Figure 3. Analysis of the performance of human resource management enterprises and private enterprises

#### 4.4. Analysis of Results in Different Regions

It can be seen from and Figure 4 that the scores of coastal areas and non-coastal areas are not high. The scores of coastal areas remain around 0.55, while the scores of non-coastal areas are basically around 0.45. This means that it will take about 2-3 years for each enterprise from initial project expansion, land inspection, land use planning and calculation, to land selection and land bidding, to housing construction, and finally to sale or lease. In the initial stage of entrepreneurship, enterprises must hold a large number of liquidity to support the flow of capital, and constantly accumulate capital to realize the return of capital appreciation, that is, to obtain profits. Therefore, in the whole process, there are higher requirements, so the technical level of quality is a test. In terms of housing, China's real estate development industry has passed the era of huge profits. Only through exhibitions can real estate enterprises make profits by building houses and selling houses, which has been more refined. In the future, the real estate industry will develop in the direction of modernization, and the market competition will be more intense. In the early stage, the enterprise must support a large amount of cash flow, but there is no leasing stage, which can recover the original investment, and continuously accumulate the cash recovery cost and actual capital.

Therefore, the whole process, the first 2-3 years of time business cost of a large amount of capital.

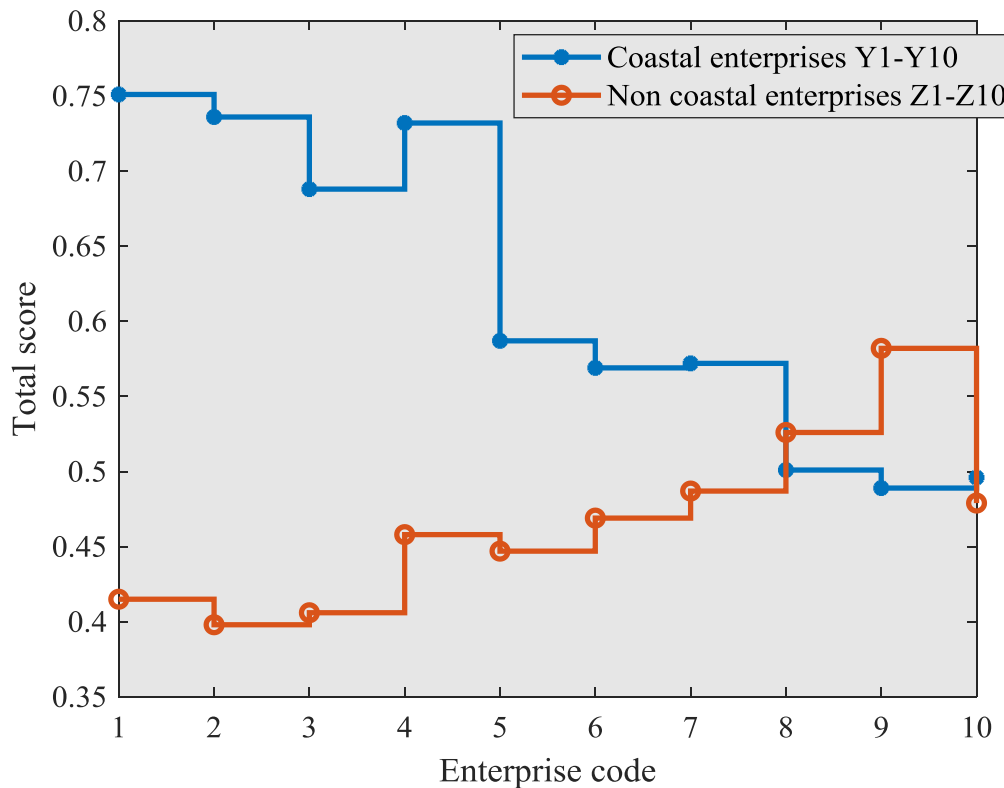


Figure 4. Analysis of human capital management performance of enterprises in coastal and non-coastal areas

#### 4.5. Analysis of the Effect of Variables

The effect analysis of human resource management variables is divided into three parts: direct effect, indirect effect and total effect. The sum of direct effect and indirect effect is the total effect. Because the variables studied in this paper are significant, only general regression analysis is needed to estimate and test the intermediary effect.

Table 5. Impact analysis of variables on workflow performance

Variable and variable number	direct influence	Indirect impact			Total impact
		knowledge acquisition	Knowledge sharing	Knowledge application	
Staffing (1)	0.42	0.12	0.13	0.10	0.77
Staff training (2)	—	0.08	—	0.07	0.15
Employee participation (3)	0.21	0.15	0.08	0.12	0.53
Performance management (4)	0.26	—	—	—	0.26
Compensation management (5)	—	—	0.12	0.06	0.18

It can be seen from Table 5 and Figure 5 that there are direct, indirect and total effects among the variables, as well as the analysis results of each variable on the innovation performance of workflow. The data shows that the direct and indirect effects of staffing on Workflow innovation performance are significant, respectively zero point four two and zero point three five, the total impact is zero

point seven. The mediating effect accounts for 65% of the total effect. Employee training and compensation management have no direct impact on Workflow innovation performance, only indirect impact. Performance management has only a direct impact on the performance of workflow innovation. Employee participation has a significant direct and indirect impact on Workflow innovation performance zero point two one and zero point three five The total effect is zero point five three The intermediary effect accounted for 72% of the total effect.

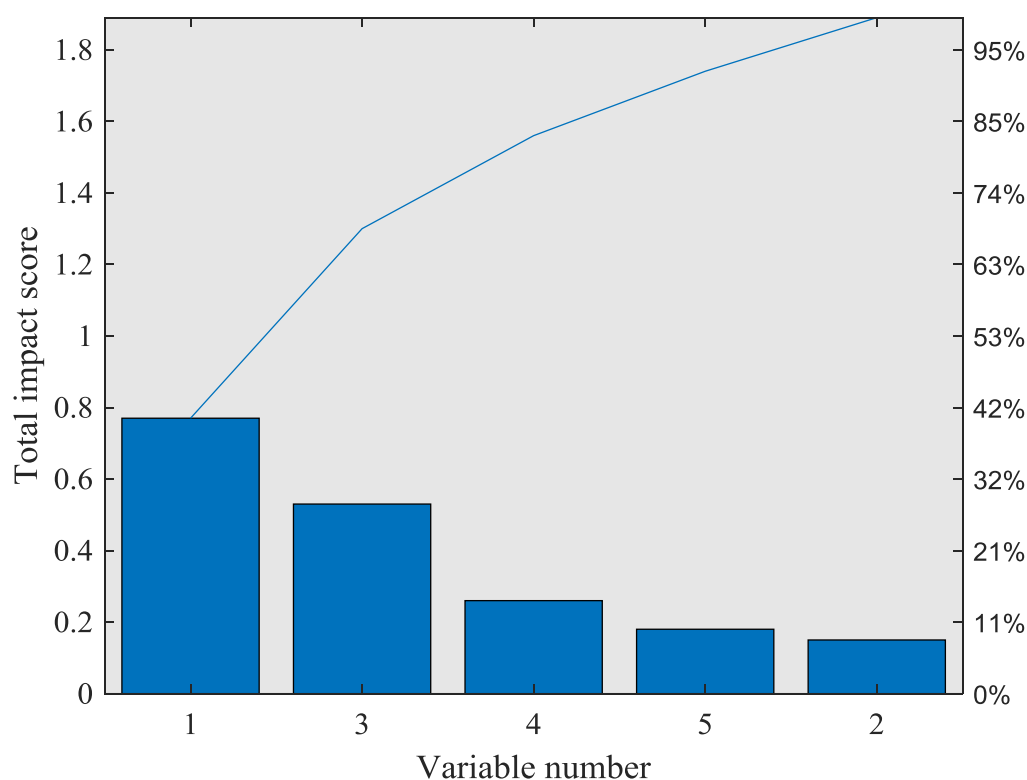


Figure 5. Impact analysis curve of each variable on workflow performance

## 5. Conclusion

Human resource management innovation is a hot research field at home and abroad in recent years. Many experts and scholars hope to strengthen the comprehensive strength of enterprises through human resource management. And most enterprises also gradually realize that human resource management is not simply the management of people, but a comprehensive system which combines many factors, including recruitment, talent training, development space, and incentive methods. At present, most of the research in this field is limited to the internal optimization of management methods, such as the adjustment of compensation structure, etc., but the healthy development of enterprises is still subject to the external risk crisis, and the strength of anti-risk ability also determines the fate of enterprises to a certain extent. The new management mode that combines environmental factors and low-carbon concept into human resource structure studied in this paper solves this problem well, establishes a unified evaluation mechanism from the inside to the outside, and then according to risk evaluation and enterprise human resource comprehensive index, it can effectively improve the comprehensive strength of enterprises. In a sense, the competition of enterprises is the competition of talents. The experiment proves that the innovation mode of human resource management under the low-carbon economy researched in this paper can

avoid the above shortcomings, and it is a scientific modern management mode, which is worth popularizing and using widely.

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### Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

### Conflict of Interest

The author states that this article has no conflict of interest.

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