

# Research on Human Resources Management Mechanism of Chemical Enterprises

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Chemical enterprises belong to one of the important basic industries in China. The human resources management is the key to improve the market competitiveness of chemical enterprises. Based on the theory of modern human resources management, this paper analyses and studies the present situation and problems of human resources management in chemical enterprises and puts forward the measures and schemes of constructing human resource management mechanism in chemical enterprises. This paper makes clear that the core of human resource management is people-oriented, and the perfect human resource management mechanism is the basis of enterprises maintaining the core power in the market competition. This paper analyses and discusses the existing problems and shortcomings in human resources management of chemical enterprises in China and puts forward corresponding improvement measures from performance evaluation system, staff training system and mechanism system in order to enlighten and provide reference to relevant employees.

## 1. Introduction

The products of the chemical industry (Johnson, 1954 & Gerrit, 1991) permeate all aspects of our life and are important fundamental components of Chinese national economy. Its sustainable development (Gerstlauer, 2006) has practical significance for the economic development of the society. Under the information background, along with the improvement of production technology (Tironen, 2003), chemical enterprises is in the transition period of transforming from the traditional extensive industry to the technology- and knowledge-intensive industry, and although they will be restricted and influenced by many factors in the transition period, the most important factor for the development of enterprises and the promotion of market competitiveness (Glagola, 2001) is the employees of enterprises - human resources (Wright, 2016). Human resources are the most valuable resources of enterprises and the key resources for the enterprise to obtain the core competitiveness (Patrick, 1993; Barney, 1998). How to manage the human resources efficiently (Lowther, 1994), arouses the enthusiasm, initiative and potential of the employees is one of the important topics for chemical enterprises to achieve their business objectives (Herrmann, 2008).

At present, chemical enterprises in China face many problems in the management of human resources, such as the conflict and contradiction between traditional personnel management and modern human resources management (Zaleska, 2007), imperfect human resources management system (Pirzada, 2013), lack of trainings for employees (Bartel, 2010) and single and imperfect incentive mechanism, all of which will lead to the lack of motivation for employees, the loss of talents, the decline in benefits of enterprises, and the serious restriction on the development of chemical enterprises and even chemical industry (Sun, 2001). This paper studies the present situation and mechanism of human resources management in chemical enterprises, discusses the existing problems in the current human resource management mechanism in chemical enterprises, and discusses the corresponding improvement measures and solutions.

## 2. Human Resource Management Mechanism

### 2.1 Definition and characteristics of human resource management mechanism

Human resource management (Medsker, 1994) refers to the management behavior through a series of

activities, such as planning, organization, training, examination and encouragement on the acquisition, development and utilization of human resources with scientific methods, so as to finally achieve the objectives of the enterprise (such as obtaining economic benefits and asset appreciation) and employee value. The content of human resources management mainly includes the following six aspects, as shown in Figure 1.

Human resources are the most important resources of enterprise (B Schneider, 1993) with the following characteristics in the process of human resources management: (1) the core of human resources management is people-oriented; (2) human resources management depends on the support and help of the whole enterprise; (3) human resources management is the art mainly to study people and people, and people and things, and its goal is to fully explore the potential of people, improve work efficiency, and achieve the goals and tasks of enterprises.



Figure 1: Human Resources Management Module Diagram

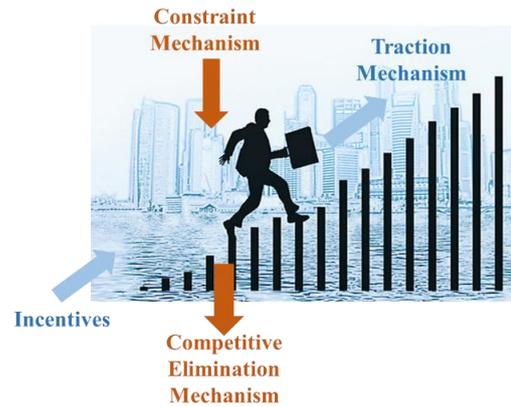


Figure 2: Human Resources Management Mechanism

**2.2 Human resource management mechanism**

The human resources management mechanism (Schuler, 1992) is to integrate human resources through the elements of human resources management system to bring the best effect and state of human resources into full play. Generally, the human resources management mechanism is divided into four models, which act on human resources in an organization together and improve the effectiveness of human resources management from different perspectives. They are incentive mechanism, traction mechanism, constraint mechanism and competition and elimination mechanism, as shown in Figure 2 as below.

**2.3 Objectives and tasks of human resource management**

The human resources management is to meet the strategic needs of the enterprises, optimize the corporate image and improve the management efficiency of the enterprise. Its main objectives and tasks are shown in Figure 3 below.

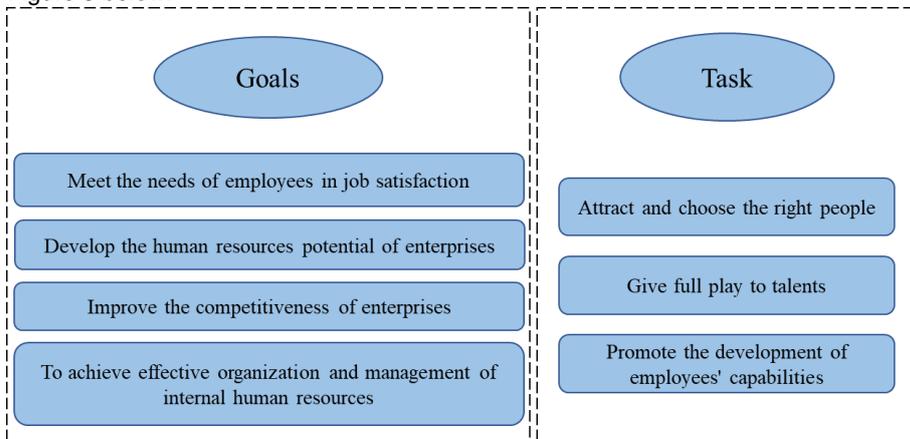


Figure 3: Human Resources Management Goals and Tasks

### 3. Characteristics and Mechanism of Human Resources Management in Chemical Enterprises

#### 3.1 Overview of chemical enterprises

Chemical enterprises refer to those engaged in chemical life or R & D. The products of chemical enterprises penetrate into all aspects of our life and chemical industry is the pillar industry of national economy. The chemical industry contains a wide variety of products and its classification is shown in Figure (4) below. Due to the complexity of products and processes in chemical enterprises, they are major polluter with a large number and a great variety of pollutants produced in production. At the same time, chemical products may produce harmful substances in the processing, storage and use of all links, which may affect the environment and human health. Therefore, chemical enterprises have high requirements on the support of ecology, safety, resources and society.

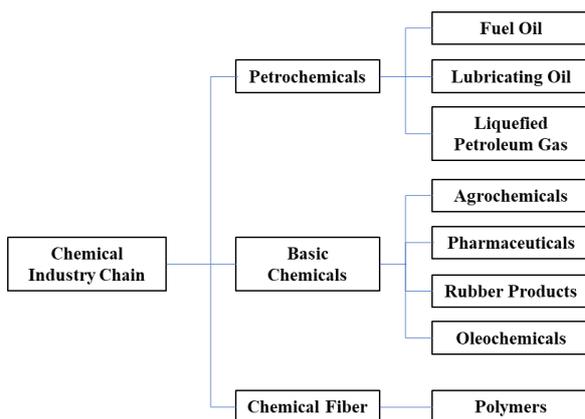


Figure 4: Chemical Industry Classification



Figure 5: Human Resource Management System

#### 3.2 Characteristics of human resource management in chemical enterprises

Chemical enterprises include both state-owned enterprises and private enterprises. In the human resources management system of chemical enterprises, it generally includes some work contents and items as shown in Figure 5.

Due to the influence of the environment, the industry develops an enterprise organizational structure with varied and diversified organizational environment. Therefore, the human resources management of chemical enterprises also has the following characteristics:

- (1) The personnel flow is too fast, especially the flow of employees in the front line of chemical enterprises is too frequent, which is not conducive to the normal operation of enterprise production and brings challenges and pressure to human resource management and training of enterprises.
- (2) The construction of human resource management system is not perfect enough. In the transition period from traditional personnel management to modern human resource management, it is necessary to further improve the post analysis and personnel matching, performance evaluation, salary incentive and staff training.
- (3) The information level of human resources management is relatively low and the work efficiency is not high, which are caused by the lack of hardware support on one hand and the lack of personnel familiar with relevant human resource management technology and work on the other hand.
- (4) The leadership of chemical enterprises has not yet recognized the important role of employee quality in improving corporate development and market competitiveness, so the investment in training staff skills and creativity is seriously insufficient.
- (5) The the human resources management department in the enterprises has insufficient influence and power, and limited ability to generally plan the human resources and organizational structure of the whole company.
- (6) The employees of chemical enterprises are recruited from all over the country. If an enterprise does not have its own unique corporate culture, it is difficult to attract the employees to stay for a long time, which brings hidden troubles to the long-term development of the enterprise.

#### 3.3 Comparison of human resource management modes in chemical enterprises

The chemical industry is a huge industrial chain, so chemical enterprises of different scale and different organizational structure are distributed in the whole industry, and they are different in human resources

management. The Table 1 compares small, medium and large chemical enterprises in the human resources basic management and incentive methods among respectively.

Table 1: The Human Resource Management Characteristics Comparison between Different Scale Chemical Enterprise

Business Scale	Human Resources Management	Employee Needs	Incentives
Small	Staff recruitment and training is simple; Job design is not clear; Arrange people according to position.	Employee needs are neglected.	Simple material incentive.
Medium-sized	Staff recruitment training adopts a certain process; Job design is relatively clear; Arrange people according to position.	Pay more attention to employee needs.	The combination of material incentives and spiritual incentives.
Large	Staff recruitment training system is perfect; Job design is clear; Arrange people according to position and arrange position according to people.	Pays great attention to employee needs.	The combination of material incentives and spiritual incentives.

#### 4. Construction of Human Resource Management Mechanism in Chemical Enterprises

##### 4.1 Human resource management mechanism and related problems in chemical enterprises

Chemical enterprises belong to resources- and technology-intensive industry, but still adopt traditional personnel management in the human resources management mechanism, lacking scientific and reasonable human resources management mechanism, and the human resource management mechanism adopted and its related problems are shown in Figure 6 as below.

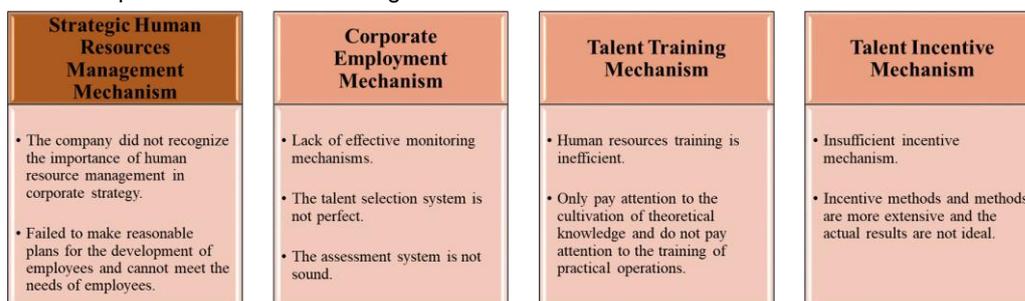


Figure 6: Chemical Enterprise Human Resource Management Mechanism

##### 4.2 Construction of human resource management mechanism in chemical enterprises

###### 4.2.1 Overall thinking of human resource management optimization

In the process of the development of chemical enterprises in China, the problems related to human resource management always exist, and have some relations among them. We should optimize the human resources management mechanism based on the overall concept. The RPDCA cycle method shown in Figure 7 can be used as the overall thinking of building the human resources management system, continuing to improve the human resources management system, so as to achieve the objectives of the enterprise and meet the needs of employees.

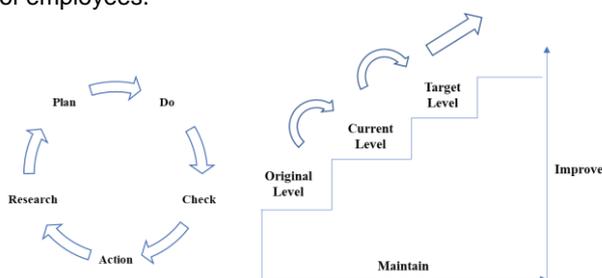


Figure 7: RPDCA Circular Pattern Diagram

### 4.2.2 Improving the performance evaluation system

Performance evaluation is an effective way for an enterprise to understand the working conditions of its employees, as well as an effective way for the employees to understand and improve their own qualities and abilities. Therefore, regular performance inspection is a powerful measure to improve the management level. In order to avoid "taking the form" of evaluation and improve the pertinence of evaluation, make more effective use of evaluation results to further arrange the work, and improve the efficiency of the enterprise, the following aspects as shown in Figure 8 can be considered to improve the performance evaluation system. Figure 9 is the structural diagram of the evaluation system of chemical enterprises.

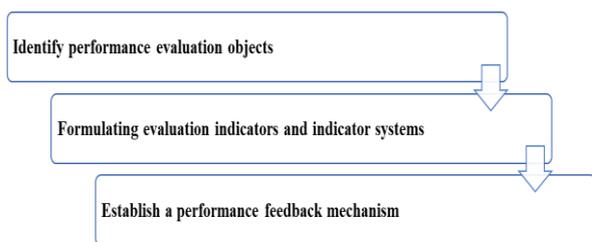


Figure 8: Performance Evaluation System

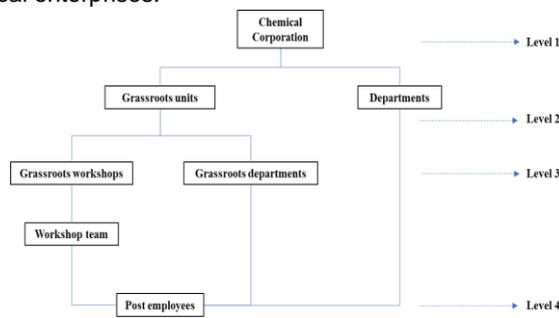


Figure 9: Evaluation System Structure

### 4.2.3 Establishing an effective incentive system

Under the information background, the core of human resource management of enterprises is "people-oriented" while the incentive system is set up according to the diversified demand of employees. The specific incentive system is shown in Figure (10) as below.

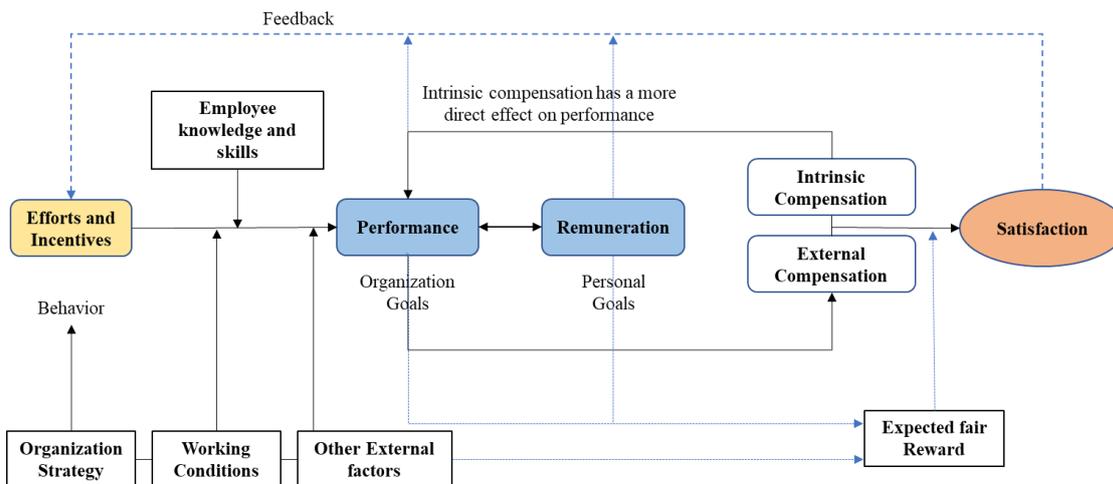


Figure 10: Incentive System

### 4.2.4 Establishing systematic training mechanism

The core of the enterprises is talents. Only by improving the qualities and abilities of the employees, can the innovation ability and competition ability of the enterprises be enhanced and the enterprise be guaranteed to develop continuously. The establishment of systematic training system for the long-term systematic professional training on employees are one of the important tasks of human resource management in chemical enterprises. The human resources management department should set up the corresponding training courses to regularly train the employees according to the educational background and job of the employees and the organization and personnel composition of the enterprise and design the corresponding supervision system to ensure the effectiveness of the training. A perfect training mechanism can be set up from the following aspects, Improve the targeted training of employee, Establish training assessment and supervision system, Establish a training concept for the common growth of employees and companies, Establish a training effectiveness evaluation system.

## 5. Conclusions

Based on the modern human resource management theory, this paper studies the human resources management mechanism of chemical enterprises and concludes as follows: (1) It is clear that the core of human resources management is people-oriented, and the perfect human resources management mechanism is the basis of enterprises maintaining the core power in the market competition. (2) The paper discusses the characteristics of human resource management in chemical industry and compares the human resource management modes of chemical enterprises in different types. (3) This paper analyzes and discusses the existing problems and shortcomings in human resources management of chemical enterprises in China and puts forward corresponding improvement measures from the perspectives of performance evaluation system, employee training system and mechanism system.

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