

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

SUMY NATIONAL AGRARIAN UNIVERSITY

ECONOMICS AND MANAGEMENT FACULTY

Public management and administration department

QUALIFICATION WORK

education degree - Master

on: «**Management and administration of personnel
development at enterprises**»

Completed:

student of
specialty 073 Management
EP «Administrative management»
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SUMY NATIONAL AGRARIAN UNIVERSITY

Faculty Economics and Management
Department Public management and administration
Education degree «Master»
Field of Study 073 «Management» (EP «Administrative Management»)

Approved:

Head of
 Department
 «_____» _____ 2024

TASK

on qualification work for student

Zhang Yuanyi

1. Theme of Management and administration of personnel development at Qualification enterprises work:

Supervisor Alina Mykhaylivna Brychko, PhD., Associate Professor

approved by the university from _____

2. Deadline for student completed project (work)

March 10, 2024

3. Background to the project (work):

educational methodical manuals, monographs, textbooks on the subject of research, scientific publications, economic and financial statements for the period of 2019-2021

4. Contents of settlement and explanatory notes (the list of issues to develop):

The research involves the analysis of human resource development needs of The Institute of Standards and Technology and the management of employee career planning, aiming to build a strategic human resource training system and enhance the competitiveness and sustainable development of enterprises.

5. Date of assignment:

December, 15 2022

CALENDAR PLAN

№	Title the stages of the degree project (work)	Date of performance project stages	Note
1	Definition and approval of the thesis, preparation of the plan - schedule of work	September, 2022	done
2	Selection and analysis of literary sources, the preparation of the first theoretical chapter	September - October, 2022	done
3	Preparation and presentation of draft of the first chapter of the thesis	November 2022	done
4	Collection and processing of factual material, synthesis analysis of application issues in the enterprise	December 2022	done
5	Making the theoretical part of the thesis, summarizing the analytical part	January 2023	done
6	Design options improve the research problem	January 2023	done
7	Completion of the project part of the thesis, design chapters	January 2023	done
8	Previous work and its defense review	March 2023	done
9	Checking the authenticity of the thesis	March, 12 2023	done
10	Deadline for student completed the thesis	March, 10 2023	done
11	Defense of the thesis	March, 22 2023	done

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SUMMARY

Zhang Yuanyi. Management and administration of personnel development at enterprises.

Master's thesis in the specialty 073 «Management», EP «Administrative Management» SNAU, Sumy-2024 - Manuscript.

Taking The Institute of Standards and Technology as a case study, this paper discusses the operation and management of human resource development in enterprises. The study highlighted the importance of human resource development, especially in the context of intense market competition for SMEs. The Institute of Standards and Technology shows that SMEs are often constrained by funding and short-term interests in human resource management, and lack long-term planning. The research focuses on blended learning training methods, combining online learning and traditional teaching to enhance employee interaction and upskilling.

The research involves the analysis of human resource development needs of The Institute of Standards and Technology and the management of employee career planning, aiming to build a strategic human resource training system and enhance the competitiveness and sustainable development of enterprises. Case studies by The Institute of Standards and Technology show that companies need to focus on the development of senior leadership, the enhancement of middle management capabilities, and the development of skills and career competencies of junior employees. Research methods included literature reviews, questionnaires, and interviews. Problems at The Institute of Standards and Technology include a lack of career planning for employees, inadequate training and development courses, and an inadequate human resource management system. In view of these problems, the study proposes corresponding solutions, including establishing a sound human resource management system, carrying out human resource development project planning and demand identification, and improving the ability of employees at all levels.

Overall, the study demonstrates the strategic significance of corporate human resource development, especially in a rapidly changing market environment, highlights the importance of continuous upskilling, and the correlation between human resource development strategies and employee personal growth and corporate loyalty.

Keywords: enterprise; human resource development, strategic training system, employee career planning management

АНОТАЦІЯ

ЧЖАНГ ЮАНЬИ. Управління та адміністрування розвитку персоналу на підприємствах.

Магістерська робота зі спеціальності 073 «Менеджмент», ОП «Адміністративний менеджмент» СНАУ, Суми-2024 р. – Рукопис.

Взявши за приклад Інститут стандартів і технологій, у цьому документі обговорюється функціонування та управління розвитком людських ресурсів на підприємствах. Дослідження підкреслило важливість розвитку людських ресурсів, особливо в контексті гострої ринкової конкуренції для МСП. Інститут стандартів і технологій показує, що МСП часто обмежені фінансуванням і короткостроковими інтересами в управлінні людськими ресурсами, і їм бракує довгострокового планування. Дослідження зосереджено на методах змішаного навчання, поєднуючи онлайн-навчання та традиційне навчання для покращення взаємодії між працівниками та підвищення кваліфікації.

Дослідження включає в себе аналіз потреб розвитку людських ресурсів Інституту стандартів і технологій та управління плануванням кар'єри співробітників з метою побудови стратегічної системи навчання персоналу та підвищення конкурентоспроможності та сталого розвитку підприємств. Тематичні дослідження Інституту стандартів і технологій показують, що компаніям необхідно зосередитися на розвитку вищого керівництва, покращенні можливостей керівництва середньої ланки та розвитку навичок і професійних навичок молодших співробітників. Методи дослідження включали огляд літератури, анкетування та інтерв'ю. Проблеми в Інституті стандартів і технологій включають відсутність планування кар'єри працівників, неадекватні курси навчання та підвищення кваліфікації, а також неадекватну систему управління людськими ресурсами. З огляду на ці проблеми, дослідження пропонує відповідні рішення, включаючи створення надійної системи управління людськими ресурсами, здійснення планування проектів розвитку людських ресурсів та визначення попиту, а також підвищення кваліфікації працівників на всіх рівнях.

Загалом дослідження демонструє стратегічне значення корпоративного розвитку людських ресурсів, особливо в ринковому середовищі, що швидко змінюється, підкреслює важливість постійного підвищення кваліфікації та взаємозв'язок між стратегіями розвитку людських ресурсів та особистим зростанням співробітників і корпоративною лояльністю.

Ключові слова: підприємство; розвиток людських ресурсів, система стратегічного навчання, управління плануванням кар'єри співробітника.

CONTENT

INTRODUCTION	7
CHAPTER 1 THEORETICAL AND METHODOLOGICAL FUNDAMENTALS OF MANAGEMENT AND ADMINISTRATION OF THE DEVELOPMENT OF THE STAFF OF THE ENTERPRISE	12
CHAPTER 2 ANALYSIS OF THE MANAGEMENT AND ADMINISTRATION OF THE STAFF DEVELOPMENT OF THE ENTERPRISE (IN THE EXAMPLE OF THE INSTITUTE OF STANDARDS AND TECHNOLOGY)	22
2.1 General characteristics of the enterprise	22
2.2 Analysis of the system of management and administration of the company's personnel	26
2.3 Analysis of the dynamics, structure of the company's personnel and evaluation of the effectiveness of its management	29
2.4 Analysis of the influence of salary on research institute performance	35
CHAPTER 3 IMPROVEMENT OF MANAGEMENT AND ADMINISTRATION OF PERSONNEL DEVELOPMENT AT THE ENTERPRISE	38
3.1 Promote the digital transformation of human resource management and create a teaching cloud platform	38
3.2 Improvement of the system of motivating the company's employees	41
3.3 Improvement of the organization of management and administration of personnel development of the enterprise	45
CONCLUSIONS	56
REFERENCES	58
APPENDIXES	61

INTRODUCTION

Relevance of the topic. In the new era, the role of talent and human resource value in enterprise competition is rising, and enterprises need to focus on human resources. Leading the modernization and development of enterprises through human resources is also a major topic that enterprises need to think about. Insufficient overall planning of human resource management and random talent recruitment are the problems faced by enterprises in management. For today's society, not only the economy and society are gradually formed, human resource management is also constantly improving, the traditional concept of human resources is the management of labor, in the continuous development and improvement of personnel management. With the continuous evolution of the economic market, the demand for manpower is also expanding, managers should not only simply manage the labor force, but also take scientific means to improve the efficiency of personnel organization and promote the further development of human organization. In fact, enterprise managers can allocate resources reasonably and scientifically through training, recruitment, rewards and punishments, so as to improve employee work efficiency and mobilize employees' enthusiasm for work.

Relationship with academic programs, plans, themes. Master's thesis is done according to the plan of research at Sumy National Agrarian University.

The purpose of the research is to establish an effective enterprise management system to improve the efficiency of human resource management.

According to the purpose, ***the main objectives of the study*** were identified:

- Compare and analyze the ways and functions of human resource management;
- Analyze the obvious deficiencies of modern enterprise human resource management mode;
- Analyze the reasons for the deficiency of human resource management in modern enterprises;
- Analyze the measures that modern enterprises can reform and innovate in human resource management;

- Promote human resource management from the basic work scope to a strategic position.

Object of the research there is how to improve the effectiveness and efficiency of human resource management for small and medium-sized enterprises, taking the Institute of Standards and Technology as an example.

Subject of the research theoretical, theories and methodologies related to enterprise human resource management.

In the context of intense competition, this study looks at forward-looking strategies for human resource development. Through the analysis of practical cases of the Institute of Standards and Technology, the study aims to provide practical guidance for enterprises in the same industry that are in the bottleneck of development. We observe that SMEs are often constrained by financial constraints and short-term profit driven by human resource management, and lack long-term planning and sustainable development perspectives. This study focuses on the effectiveness of blended learning training methods, combining online learning and traditional classroom teaching, in order to enhance employee interaction and skill upgrading. At the same time, the study highlights that in a rapidly changing market environment, workforce teams need to constantly update their skills to adapt to customer needs and market changes. The human resource development strategy not only improves the current production capacity of the enterprise, but also lays a solid foundation for the long-term competitiveness of the enterprise. In addition, this strategy is in line with employees' personal interests and values, promotes their personal growth and loyalty to the company, and provides excellent employees with a pipeline for future management positions.

The main research content of this paper is that mainly introduces five classic human resource models, through which they explain what the role of human resources is, how human resources add value to the business, and how the business affects human resources. They are:

- 1.The Standard Causal Model of HRM
- 2.The 8-box model by Paul Boselie
3. The HR value chain

4. ASTD Capability Model

5. The Harvard Framework for HR

In addition, this paper also deeply discusses the accurate analysis of the human resource development needs of the Institute of Standards and Technology and the effective management of employee career planning, aiming to build a strategic human resource training system to enhance the competitiveness and sustainable development of enterprises. Based on the relevant literature and the actual development of the company, the study proposes a set of multi-dimensional, multi-channel and diversified human resource development programs. The study also focused on the support conditions for training delivery and the improvement of effectiveness evaluation methods to ensure the effectiveness and adaptability of the programme. Through the analysis of the implementation results, this paper confirms the key role and strategic significance of human resource development in promoting the growth of enterprises. The study emphasizes that enterprises need to update the concept of talent development, actively create an environment suitable for the growth of all kinds of talents, stimulate the initiative and creativity of employees, explore their potential, and gradually establish an efficient human resource development mechanism.

Methodological basis of the study there are scientifically substantiated interpretations of processes and phenomena in economics, dialectical, logical and systemic approaches to their consideration. In this study, a large number of relevant data and cases were analyzed in depth by using the method of literature collation and induction, so as to extract the theories and literature closely related to the research topic. Through the in-depth understanding and analysis of these materials, combined with the application of relevant theories in practice, the human resources problems of the Institute of Standards and Technology are explored in detail. In addition, the study also used questionnaire and interview methods to design a questionnaire specifically for the human resources problems of the Institute of Standards and Technology, and collected first-hand data through questionnaires and in-depth interviews. The questionnaire survey covered all employees of the company, while the interviews were mainly aimed at middle and senior management and

representatives of various departments. The collected questionnaire data was collated and analyzed in a timely manner, and based on this, a human resource development strategy and corresponding solutions for the Institute of Standards and Technology were formulated. This multi-method approach provides a solid foundation for the effective integration of theory and practice.

Information base includes scientific works by domestic and foreign scientists in the problem area, national statistical report data, the publication of official and scientific journals, enterprise manufacturer's reporting information, international and Chinese scientific time conference materials.

Elements of scientific novelty of the obtained results of work are: The development of a new human resource management system, such as the Institute of Standards and Technology, is very large in small and medium-sized enterprises, accounting for a high proportion. According to the World Bank, SMEs account for 90 percent of global business activity and more than half of all jobs. However, they do not have a complete employee management system like large enterprises, they pay more attention to economic development, and ignore that the management of employees is also an important factor in economic development. At the same time, they also lack the corresponding funds to develop human resource management systems, and this study aims to find suitable human resource management strategies for these enterprises to promote the long-term survival of small and medium-sized enterprises.

The practical significance of the obtained results is that can be used as a guide for human resource management of small and medium-sized enterprises.

Personal Achievements:

1. Zhang Yuanyi. The reform and innovation of human resources management under the background of informatization Матеріали V Міжнародної науково-практичної інтернет-конференції «Актуальні проблеми сучасного бізнесу: обліково-фінансовий та управлінський аспекти», 22-23 березня 2023 р. Дубляни. 2023 – С.28-30

2. Zhang Yuanyi. The key factors in personal development from the perspective of enterprises *Матеріали Всеукраїнської наукової конференції студентів і аспірантів – (25-28 квітня 2022 р.)*. Суми, 2023. С. 363

The structure and scope of work. Qualification work consists of an introduction, three chapters, conclusions and suggestions, a list of references, which consists of 60 titles. The main text is placed on 22 pages of analysis part, the work contains 9 tables, 11 figures.

CHAPTER 1

THEORETICAL AND METHODOLOGICAL FUNDAMENTALS OF MANAGEMENT AND ADMINISTRATION OF THE DEVELOPMENT OF THE STAFF OF THE ENTERPRISE

The concept of human resources was first proposed in Western countries. R. Cummins first used the term in his work at the beginning of the 20th century, but its meaning is different from what is understood in the 21st century. Peter Drucker, a leading figure in the field of management science, clearly defined human resources in the modern sense in his 1954 book "Management Practice". He emphasized that human resources have unique qualities such as coordination, integration, judgment and imagination, which make them a special resource, and their potential needs to be stimulated through effective incentive mechanisms to bring substantial economic value to enterprises.

1979 Nobel Laureate Theodore S. W. Schultz and Gary Becker developed the modern theory of human capital, which further deepened the concept of human resources. The theory defines human capital as the capital embodied in people with the ability to work, formed through investment (e.g., education, training), emphasizing the importance of the quantity and quality of human resources for economic growth. Schultz pointed out that the contribution of the improvement of people's knowledge, ability, health, and other qualities to economic growth far exceeds the increase in the quantity of physical capital and labor.

With the continuous development of human resource theory, talent is regarded as the first factor of production of enterprises and has received more and more attention. In his book, the British economist Harbison emphasized that human resources are the fundamental foundation of national wealth, and that people are the active force driving social, economic and political development compared to capital and natural resources. This perspective highlights the centrality of human resources in socio-economic development.

Human resources, like other resources, are idiosyncratic, available, and limited. Its materiality is reflected in the fact that a specific human resource necessarily corresponds to a certain number of people, and its availability lies in the fact that greater value can be created through the use of physical ability, knowledge, ability, and personality and behavioral characteristics (such as personality and values).

Development of human resource management theory. Taylor's Theory of Scientific Management (1903)

Frederick W. Taylor (1856-1915), a classical American management scholar whose main works include *Principles of Scientific Management* (1911) and *Scientific Management* (1912). He believes that management should be scientific and standardized, that it is necessary to advocate a spiritual revolution, and that the interests of both labor and management should be the same. The result of the implementation of scientific management is to improve production efficiency, and high efficiency is the basis for employees and employers to achieve common prosperity. Therefore, Taylor believes that only with science. Standardized management replaces traditional experience management, which is the means to achieve the highest work efficiency. The main takeaways are:

- Carry out action research, determine the operating procedures and action specifications, determine the labor time quota, and improve the scientific operation methods to improve work efficiency;
- Make scientific choices for workers, train workers to use standard operating methods, and make workers grow in their posts;
- Formulate a scientific process flow to standardize machines, equipment, processes, tools, materials, and working environments as much as possible;
- Implement piecework wages, excess work, and excess remuneration;
- Separation of management and labor.

Successful cases of the application of scientific management theory: The Gantt chart was used for planning control, the world's first Ford automobile assembly line was created, the mechanized large industry was realized, the labor productivity was greatly improved, and the situation of high efficiency, low cost, high wages and high profits appeared.

Study of the movements of the Gilbres (1907)

Frank B. Gilbreth (1868-1924) was the father of American movement studies. Mrs. Gilbreth, the first doctor of psychology in American history, is honored as the "First Lady of Management" in the United States. His main works include: *Studies in Action* (1911), *Management Psychology* (1917), *Studies in Fatigue* (1919), and *Studies in Time* (1920). They use observation, recording, and analysis methods to conduct motion studies to determine standard process actions and improve production efficiency. At the same time, they developed production flow charts and program diagrams, which are still widely used today. They argue that through the study of movements, workers' sense of self-management can be developed; They pioneered fatigue research, and their impact on worker health and productivity continues to this day.

Weber's Theory of Tissue (1911)

Max Weber (1864-1920), a classical German management theorist, is known as the "father of organizational theory". His main works include: "The Protestant Ethic and the Spirit of Capitalism", "General Economic History", "The Theory of Social and Economic Organization", etc.

According to Weber, there are three kinds of power in society, one is traditional power, which is possessed by traditional practice or hereditary, the second is supernatural power, which is derived from nature worship or follower ship, and the third is legal power, which is the power prescribed by law or system.

For economic organizations, it should be based on reasonable and legitimate power in order to ensure the continuous and lasting business objectives of the organization. The rules and regulations are the guarantee for the healthy operation of the organization and the basis of the legitimate power in the organization. Weber's ideal model of bureaucratic organization is:

- The organization is formed according to legal procedures, with clear goals and complete rules and regulations;
- The structure of the organization is a hierarchical control system, and the people in the organization exercise their powers according to their positions and formal job responsibilities;

- The relationship between people is the relationship between people and work, not the relationship between people and people;
- According to the needs of the position, open selection of suitable talents;
- Reasonable division of labor and professional training to improve production efficiency;
- Pay according to the position and contribution, and establish a promotion reward and punishment system to improve the professionalism and sense of achievement of workers.

Weber rationally and creatively put forward the organizational theory and organizational norms of administrative organization science, which is his greatest contribution to the history of management thought.

Fayol's General Theory of Management (1916)

Henri Fayol (1841-1925), a French classical management theorist, is known as the three pioneers of Western classical management theory, along with Weber and Taylor, and is respected as the founder of the management process school. His representative work is *Industrial Management and General Management* (1916).

Fayol put forward the theory of five functions of management: that is, management is the five functions of planning, organizing, commanding, coordinating and controlling, and put forward 14 management principles: division of labor, power and responsibility, discipline, unified command, subordination of individual interests to the interests of the whole, personnel compensation, centralization, hierarchy, order, fairness, personnel stability, innovation and team spirit. Fayol's general management theory distilled the universal principles of management, which are still used as a guide for our day-to-day management.

In summary, the HR Standard Model shows how HR strategies are developed and the impact of HR on the internal processes and financial results of a business.

The methodological basis of human resource management. Paul Boseli's eight-box model

The model shows 4 external factors and 4 internal factors in HR work, and their influencing role. The four external factors include: general market environment, external population market environment, external general institutional environment

and external population institutional environment. These are all external forces that influence how a business conducts human resource management. For example, a lack of certain skills in the market can have a direct impact on how a business sources talent, recruits, and hires compared to a situation where there are a large number of qualified candidates in the market. Another example is that changes in the external institutional environment (e.g., new legislation) will have an impact on the way human resources work (e.g., restricting what human resource management can or cannot do) by influencing the external demographic institutional environment (e.g., trade unions, work committees).

As shown in Figure 1.1, the core processes in the middle start with the configuration of the enterprise, and the history, culture, and technology used by the enterprise all affect the way HR is communicated, the goals it wants to achieve, and the effectiveness of HR policies (which are all included in HR strategy and practice).

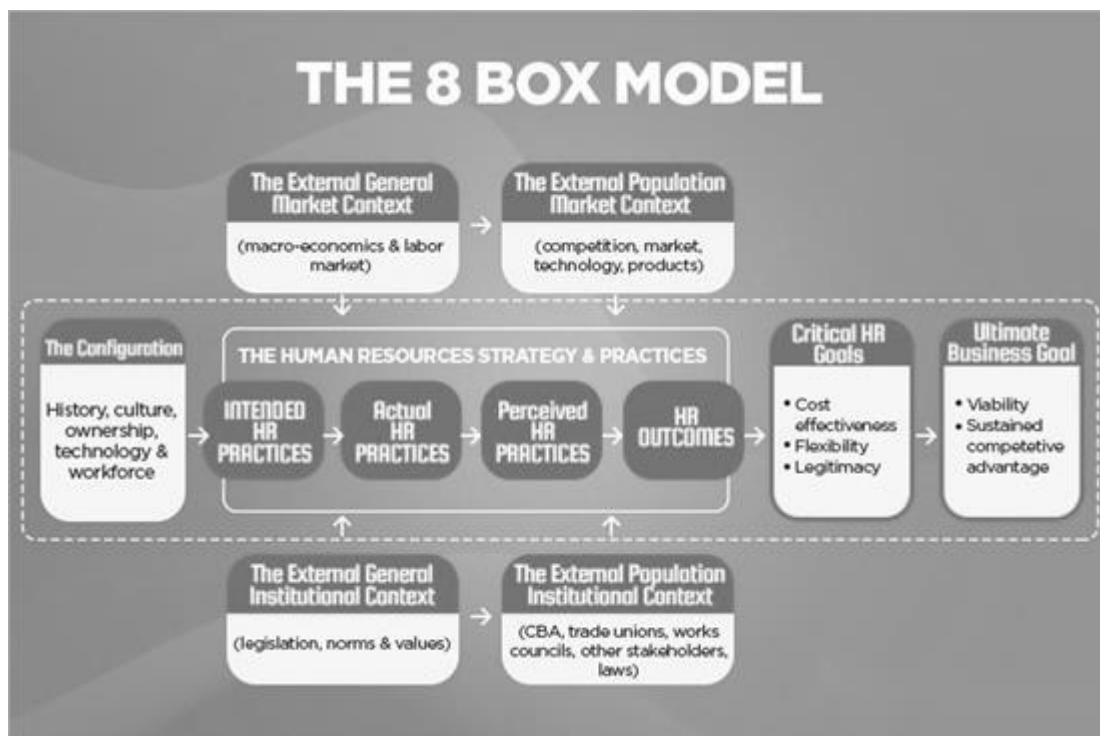


Figure 1.1 - The 8 Box Model

Source: The Ultimate Guide to Human Resources Models and Theories

The HR strategy consists of six components:

Expected HR Practices: Our expectations for hiring, training, and other HR practices are important, but models also suggest that these are just starting points.

Actual HR Practices: We can have big expectations, but the execution of HR

practices can be very similar because they are the product of collaboration between HR and business managers. When a business manager decides to do it differently, the intentions may be good, but the actual practice can be very different.

Perceived HR practices: This is the employee's perception of what is happening in the organization. HR and business managers can do their best, but if their activities are perceived by employees as having different intentions than practices, this perceived HR practice will not reflect the actual HR practice. **HR outcomes:** Perceived HR practices (hopefully) lead to certain HR outcomes. Similar to the concept of HR outcomes in the HR Standard Causal Model. **Key HR Objectives vs. Ultimate Business Goals:** HR outcomes lead to key HR objectives (i.e., cost-effectiveness, flexibility, legitimacy, etc.) and, in turn, to the ultimate business objectives (i.e., factors related to the viability of the organization, such as profit, market share, market capitalization, and other factors that help build a competitive advantage).

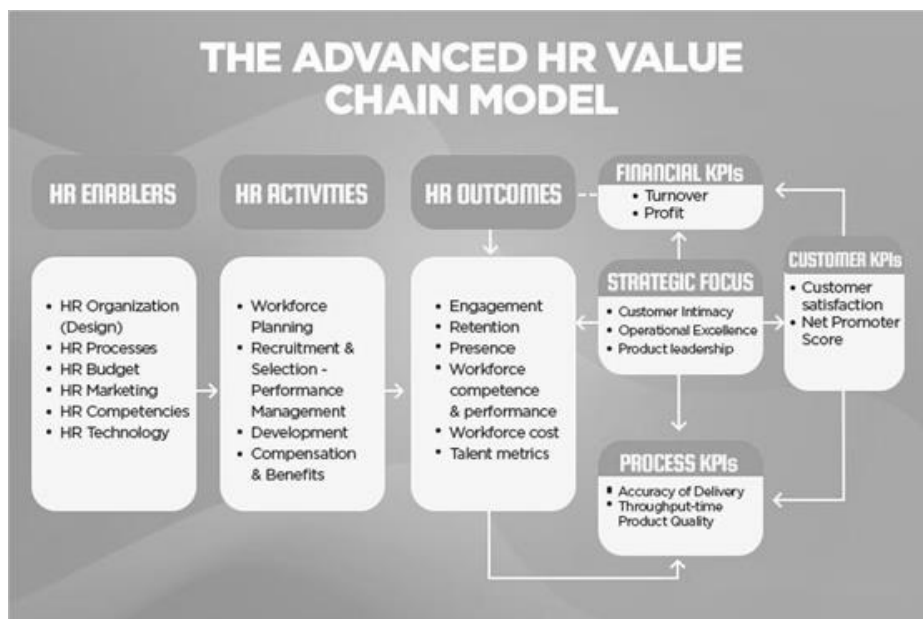


Figure 1.2 - The Advanced Hr Value Chain Model

Source:AIHR and the Advanced HR Value Chain

Human resource value chain

It builds on the research of Paauwe and Richardson (1997) and makes minor changes to the previous two models in terms of how human resources operate. Everything we do (and measure) in terms of HR can be divided into two categories:

HRM activities and HRM outcomes, according to the HR value chain. Human resource management activities are day-to-day activities that include recruitment, compensation, training, and succession planning. These activities are often measured using human resource indicators. These are the so-called efficiency indicators: the cheaper the people we hire and the faster we train, the more efficient we are.

Human resource management outcomes are objectives that are sought to be achieved through human resources management activities. Recruit, train, pay to achieve specific goals/results. These outcomes include employee satisfaction, motivation, retention, and attendance. Focusing solely on measuring human resource management activities will allow businesses to automatically focus on reducing costs (i.e., maximizing efficiency). However, this is not comprehensive, and the focus should also be on human resource management results, which can help align processes with goals.

For example, if you spend more time hiring new employees (hiring hours, an efficiency indicator), the new hires you recruit may be a better match for the company (hiring quality, an outcome indicator). Our goal should be to put the best people in the right position, not to take shortcuts, and to hire as cheaply and quickly as possible. It also provides insight into why the focus should be on measuring human resource management results rather than activities. When human resource management activities and human resource management results meet their goals, they lead to better performance. This means that when the right people are hired, they are enrolled in the right training programs, and key employees are retained, the company's performance improves.

ASTD Capability Model

The ASTD competency model is one of the most recently developed models, created in 2004 during a meeting of the American Association for Training and Development, which has been adjusted and reworked twice, in 2009 and 2011.

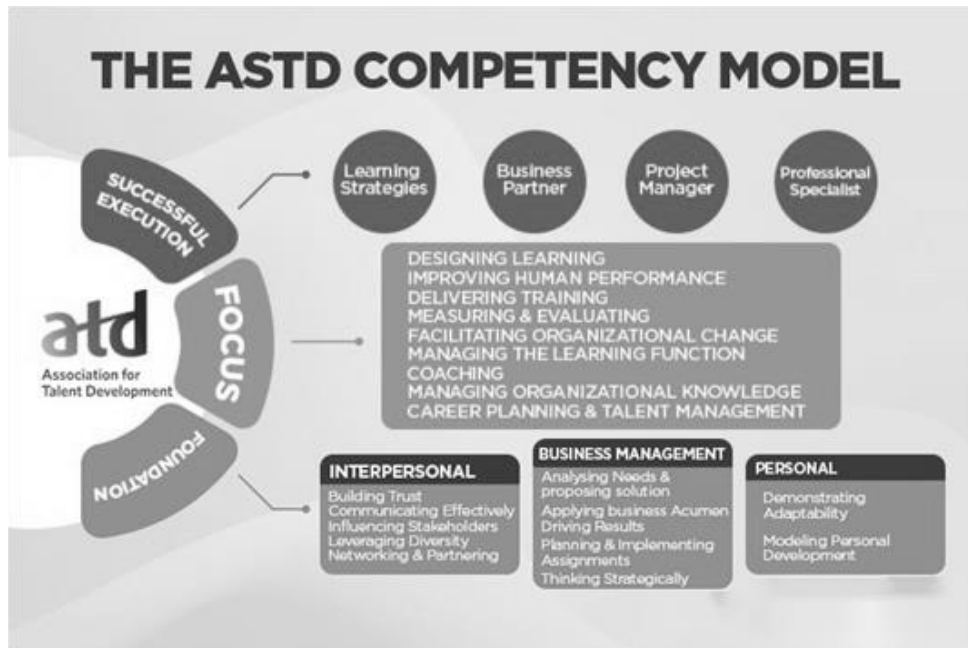


Figure 1.3 - The ASTD Competency Model

Source: The ASTD Competency Model - The HR Guides

The model focuses on three fundamental blocks of a business and its HR processes:

Foundation level: Includes basic competencies: personal, interpersonal and managerial.

Focus Level: Specialized areas such as mentoring, improving employee performance, social learning, career planning, and evaluation are introduced.

Executive Level: Focuses on four key professional roles: Learning Strategist, Project Manager, Business Partner, and Professional Expert.

The model is people-centred and encourages the identification of key actors, their personal and professional development, and the analysis of the capabilities and contributions they can bring to the organization. This model is also a valuable model for determining how to replicate the success of key performers and how to train and deliver new employees in a similar way.

Harvard Human Resource Management Framework. The model consists of five parts.

The model starts from the left, the interests of stakeholders (including shareholders, management, employee groups, governments, etc.), which determine human resource management policies.

At the same time, contextual factors have an impact on these benefits.

Contextual factors include labor force characteristics, trade unions, labor markets, and all the other factors listed in the 8-box model mentioned above.

Contextual factors and stakeholder interests influence human resource management policies, which include core HR activities such as recruitment, training, incentives, and work systems.

When done well, human resource management policies lead to positive human resource management results. These include the previously mentioned talent retention, cost-effectiveness, organizational commitment, and competency.

These positive HRM outcomes lead to long-term outcomes that can be personal well-being, organizational effectiveness, and social well-being.

The Harvard Framework is an HR model that takes a more holistic approach to HR that includes different levels of outcomes.

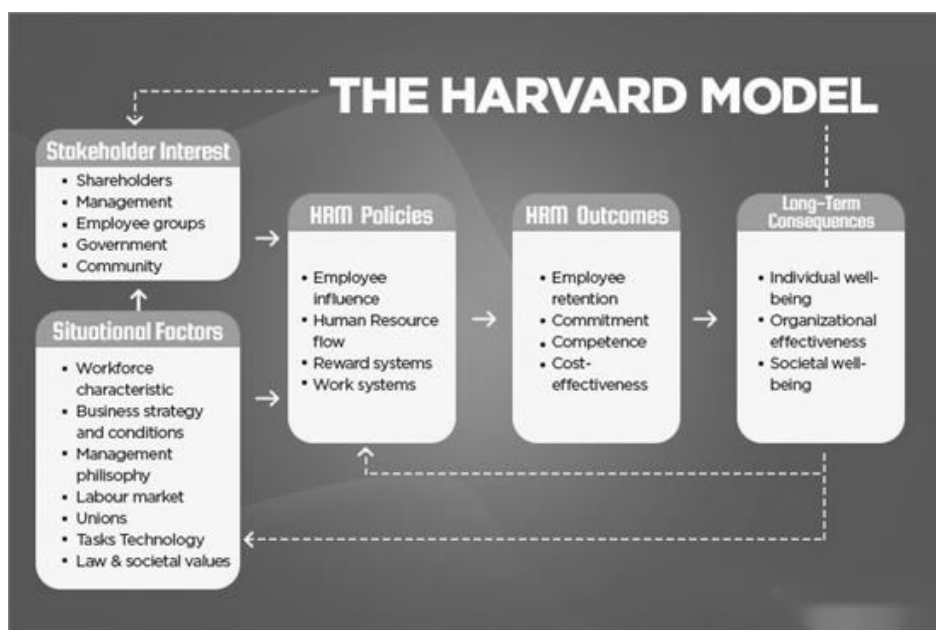


Figure 1.4 - The Harvard Model

Source: The 'Harvard' Model (Beer et al., 1984). Source: Beer et al. (1984), Figure 2-1, p.16, Map of the HRM Territory.

The development history of enterprise employee management. 1.4.1 Personnel file management stage

This stage is still a management style before the nineties of the last century. At that time, the management of employees in the enterprise was this form of file management - people were managed as a kind of file, and this method was effective for personnel management at that time. At that time, the personnel department

basically managed the overall logistics work of the enterprise, and it was still a kind of personnel affairs department, the specialized department of human resources has not yet been formed.

Human resource management stage

This stage is a concept that began to emerge in the nineties of the last century. In the business world at that time, as a new concept, it began to be gradually accepted by the majority of enterprises, so that it was widely used and popular. This concept mainly takes work as the core of daily affairs, and begins to pay more attention to the work level of employees, and at the same time forms a certain concept for the professional management of human resources of enterprises.

Human resources stage

With the advent of the 21st century, many new things have begun to appear in people's sight, and the strategic human resource management of enterprises has also begun to enter the enterprise and has been accepted. From then on, the human resource management of the enterprise began to be more important, and the human resource manager also began to appear as the senior management of the enterprise. At this stage, the requirements of enterprises for human resource managers began to increase significantly, and many colleges and universities began to pay attention to the teaching of courses in this area, and the human resource management of enterprises began to develop rapidly.

Talent management stage

The first decade of the 21st century has passed, and the development of the company's talent management system in China is also going on in a very rapid way, and the advent of economic globalization and related crises has also prompted the current enterprises to think about the improvement of the talent system. In view of the current situation, the importance of talents has begun to be more reflected, and enterprises have begun to pay more attention to the cultivation of talents.

CHAPTER 2

ANALYSIS OF THE MANAGEMENT AND ADMINISTRATION OF THE STAFF DEVELOPMENT OF THE ENTERPRISE (IN THE EXAMPLE OF THE INSTITUTE OF STANDARDS AND TECHNOLOGY)

2.1 General characteristics of the enterprise

The Institute of Standards and Technology was founded in 1984 and headquartered in China. The Institute of Standards and Technology is a quasi-public scientific research institution specializing in standardization research, service and application. It is the 99th WTO information inquiry service center in the world, and is equipped with national technical institution brands .

Mission: Let standards create value.

Vision: To become an excellent standardization think tank.

Core values: loyalty, hard work, innovation, win-win, care.

Strategic objectives: The comprehensive ability of standard research has reached the world-class level, providing all-round technical support for the performance of government functions and the high-quality development of industry and economy, and continuously improving the ability of sustainable development and the sense of gain of employees.

On the basis of traditional businesses such as standard research, item coding and unified social credit code, relying on the reform of the majority of the ministerial system, it has innovatively carried out new business areas such as e-commerce, Internet of Things, intellectual property, quality, brand, credit, low-carbon, big data, food and drugs, green development, certification, etc., and has been approved to set up postdoctoral innovation practice bases. Relying on the National Natural Science Foundation of China, it is the first local standards institute in China with the qualification of certification body, and has launched a number of national initiatives: the first to carry out electronic services for standard data, the first to create an online dispute resolution mechanism for e-commerce, and the first real-time statistical

analysis platform for organizations in China. It has successively built a public service platform integrating standardization and informatization, including a standard information public service platform, an information platform for technical measures for market access, a Shenzhen standard technical support service platform, a comprehensive service platform for intellectual property protection in Shenzhen, a product quality traceability and risk assessment platform, a basic support platform for e-commerce credible transactions, a public opinion monitoring and risk early warning platform, a unified social credit code application platform, a public service platform for Internet of Things standards and intellectual property rights, and a public platform for Internet security standard research and testing. Internet of Things system evaluation and testing platform and smart container electronic product monitoring and certification platform.

There are 16 departments in the institute, and a scientific research service team of nearly 400 people (46% of whom have doctoral and master's degrees, and more than 79% of the personnel are professional and technical personnel) has the strongest scientific research ability, the largest number of employees, the widest business field, and the highest degree of participation in international standardization among the local standard institutes in China. It is comprehensive standardized scientific research institution integrating government professional laboratories.

Focusing on the grand goal of high-quality development and building a modern socialist country in an all-round way, we will comprehensively promote the implementation of the "Standard +" strategy, consolidate the achievements of standard construction, and create a high-quality development city example with high standards. On the basis of traditional businesses such as standards, item codes and unified social credit codes, new business areas such as e-commerce, international standardization, intellectual property rights, food safety, green carbon neutrality, industrial innovation, and energy storage have been innovatively carried out, and the breadth and depth of standardized technical support have been continuously expanded.

Have won the IEC 1906 Award and the ISO Excellent Award. In recent years, SIST has obtained 55 international and national professional qualifications, 29

provincial and municipal professional qualifications, participated in 16 international standard technical committee, 25 National Technical Committee and 18 provincial and municipal standard committees, and established a wide range of standards and regulations, intellectual property rights, international trade, 13 public service platforms in various key areas such as e-commerce have initiated the establishment of 19 standards alliances, with standard resources covering nearly 200 standardization professional organizations around the world, with a collection of 1.68 million bibliographies and 970,000 texts, continuing to lead the country.

Have undertaken more than 1,700 scientific research projects, including more than 700 papers and nearly 700 research reports, participated in the formulation and revision of more than 1,000 standards, undertaken 24 pilot demonstrations, and 59 standardization committees.

In terms of standard setting ,has published a total of 1080 standards, including 26 international standards and 235 national standards. Besides, also undertook 59 technical committees, 16 international and 25 nationals. In terms of awards, SIST made a total of 10 international and national awards, 5 provincial awards, 8 municipal awards.

The first is Standardization research and services, this is the basic research and services, and the unified social credit code application and services include counter administrative services and certificate issuance services, electronic seal issuance and promotion, business licenses and digital certificates issuance and real-name authentication. The article code management and application provide traceable identity bar codes for goods, facilitate the efficient circulation and sharing of product information around the world, and provide services such as commodity source data collection and label specification design.

The second field is the research and service of international standardization, which mainly integrates international standardization resources to support the international standardization work of enterprises, and also includes the development of standards in key areas, foreign exchanges and cooperation, and the operation and maintenance of the international standardization gathering platform.

The third field is digital economy (e-commerce) support and service include the internet and e-commerce industry chain standards, supervision, credit, security, technology and other related research and application services.

In addition, SIST also provide technical support for intellectual property rights, including the creation, protection, application, management and service of intellectual property rights.

Next field is about food safety research services, mainly to provide technical support for governments, scientific research, industrial services and enterprise improvement. Has established the first dynamic comparison database of global food safety standards and technical regulations covering 38 international organizations, countries and regions.

Meanwhile, also focuses on agriculture, providing government and enterprises with a package of technical services such as policy research and planning, standardization, certification and evaluation, branding, and digitalisation.

Next field is about green development and environmental standardization research, including the disclosure of ESG information, the creation of sustainable enterprises communities and the construction of ecological and environmental standards. Water-saving services are also included, including the development of water-saving standards and water-saving planning.

The next field focuses on strategic emerging industries and provides comprehensive technical support for governments, enterprises and industries. There are many popular emerging industries such as new energy vehicles, materials and smart cities. The last two fields are international economic and trade rules and regulation research and compliance standardization research and system construction consulting services, the former is mainly for the government, enterprises and industries to provide customized technical trade measures related services, to provide enterprises/industries import and export technical service solutions. The latter is to carry out compliance policy research and case analysis, compliance management standards formulation, compliance performance evaluation consulting and other work.

The Institute of Standards and Technology has a small scale, greater mobility, greater independence, richer diversity of employees, and a high overall quality of

employees and a high level of education (nearly 50% of them have doctoral and master's degrees). There is no parent company, and it is not affected by too many external factors in personnel management, so it has a certain representativeness, and it is used as a research case and investigated.

2.2 Analysis of the system of management and administration of the company's personnel

The Institute of Standards and Technology starts from the overall situation of the company, establishes the standard of human resource strategy system, and conducts a set of quantitative assessment indicators for employees at each level for better analysis and statistics. Quantitative analysis is required from various aspects such as human resource operation efficiency, turnover rate, employee engagement, talent arrival rate, talent structure, salary analysis, etc.

2.2.1 human resource operation efficiency, the numerator is the cost of human resources, the denominator is the sales of enterprises, whether it is 2% or 30%, the key is to compare with themselves, whether there is progress every year, and competitors, whether there is an advantage. The lower the value of the human efficiency index, the greater the sales created by the same labor cost, and the higher the efficiency of the enterprise. Human efficiency is not only an important indicator of human resources, but also the core indicator of enterprise efficiency management.

For example, the efficiency of human resources operations will be optimized by 5% on the basis of the previous year, and the index value will become 95% of the previous year, that is, the sales of the enterprise will increase, and the salary package will also increase, but the growth rate will be less than the sales growth.

To learn to digest the annual optimization of human resource operation efficiency, enterprises need to upgrade technology and improve management, which is not an easy task to complete. As the core indicator of an enterprise, the efficiency of human resource operation can force internal change and improvement.

2.2.2 Turnover rate analysis rate, in addition to the company's overall turnover rate analysis, the key is to classify the turnover rate analysis by stratification, vertical

stratification is to analyze according to different levels, including specialists, supervisors, directors and other management levels, but also including standard engineers, standard experts and other technical levels. The horizontal classification is analyzed according to the functions of the administrative department, the logistics department, etc. Seniority, age, core positions, performance levels, and departments can all be seen as variations of hierarchical classification, in order to find out why turnover rates vary among different groups of people within the same company. The annual exit analysis is a comprehensive physical examination and scan to ensure that individual problems found during repeated recruitment and exit interviews at ordinary jobs are verified, and the severity of the problems is verified with data. Find the common problems of the company, find the individual needs of a certain type of key group of people who have not been met, and the work plan will find the bull's-eye. For example, through data analysis, the turnover rate of technical personnel who have worked in The Institute of Standards and Technology for three to five years and with medium performance is very high, and the analysis finds that competing companies are also carrying out standardization-related work and need professional standardized talents, so human resource planning needs to be adjusted: salary increase strategy adjustment, targeted talent training, opening of technology channels, and agreement with competitors not to maliciously poach.

2.2.3 Employee engagement, regular employee satisfaction surveys, through the problems of employee feedback to improve the enterprise self-correction and improvement mechanism, and diagnosis is the first step. Having an external consultant diagnose is one option, and passing an employee engagement survey is an effective way for companies to self-diagnose. Employee engagement surveys are generally based on Gallup Q12, and companies add some personalized questions and do questionnaires.

The key to this work is to design the topic well at the beginning and continue to do it every year, so that you can compare it with the past every year, and through the review, you can see the effect of the improvement measures after the implementation, and with relatively reliable feedback, the direction and intensity of subsequent improvement will be more certain. The second key is the quantitative analysis of

hierarchical classification, which is the same as the turnover rate analysis. The aim is to discover the reasons behind the different levels of engagement in different departments and among different people.

2.2.4 Talent in place, talent in place includes recruitment in place and internal transfer in place. The low rate of talent in place not only needs to consider the recruitment ability of the human resources department, but also needs to consider the company's long-term talent planning, salary strategy, internal rotation mechanism, talent echelon training and many other aspects.

2.2.5 talent structure, need to combine the company's talent inventory data, analysis of the company's hierarchical classification of different groups of people seniority, age, education, the number of talents. Through analysis, although there is no strict standard, it can still be judged through analysis whether the structure of the company's old, middle and young people is reasonable, and whether the strength of talent replenishment and elimination needs to be adjusted in three years. By making R&D, equipment and other technical talents into a talent pyramid, you can compare the number of each level. The judgment method can be empirical judgment or experience quantification, for example, the Institute of Standards and Technology has a set of standards for the talent ratio: 1 expert (and three projects), 1 project manager, 2 senior engineers, 3 engineers, and 3 assistants. Through the talent pyramid, we can see at which level the company's talents are insufficient or surplus, and whether the pyramid will become thinner or fatter after the growth of talents in the next three years.

2.2.6 salary analysis, the external competitiveness and internal fairness of the salary are very important, the company's overall salary positioning to cut out the core talent salary positioning, local talent salary positioning, and the need to combine with human efficiency management, to achieve the salary package mechanism, the recruitment and salary adjustment, two things for one thing, in the department budget level implementation, so that the department decision-making whether to use less people, more wages.

2.3 Analysis of the dynamics, structure of the company's personnel and evaluation of the effectiveness of its management

2.3.1 Introduction to the Personnel Structure of the Institute of Standards and Technology

The Institute of Standards and Technology consists of 27 senior managers, including the president, vice president, director, deputy director, chief engineer, union president, assistant to the dean, and heads of various sub-departments, as well as 12 middle managers, including the second head of each department. About 360 grassroots employees make up the majority of the company, as shown in Figure 2.1. At present, the company's human resource development is mainly focused on traditional personnel management, covering recruitment, labor relations and compensation and performance management, but the development of human resource planning and training development is relatively slow.



Figure 2.1- Human resource management diagram

Source: Difference Between Personnel Management and Human Resource Management

In order to investigate the human resources problems of The Institute of Standards and Technology, the interview method and questionnaire survey method were used in the investigation of the human resources problems of The Institute of Standards and Technology. Through interviews with various departments, department managers and employees were invited to conduct in-depth interviews, each of which

lasted 45 minutes, focusing on work problems, personal career planning, and suggestions for improvement. Interviews with department managers include additional information on department management challenges and future development plans. The active cooperation of employees provided a wealth of feedback on the survey, demonstrating their strong desire to solve HR problems.

The questionnaire was conducted anonymously and consisted of 20 questions, mainly related to employees' career planning, ability development needs, perceptions and expectations of human resource development, and opinions on human resource curriculum design. Two open-ended questions are set up to explore the skills needed in the future and ways to improve job performance. A total of 400 questionnaires were distributed and 372 were recovered. Most employees answered seriously, but the answers were brief in terms of future career planning and job performance improvement, reflecting the lack of long-term planning among employees.

This method of combining interviews and questionnaires aims to gain an in-depth understanding of the current human resources situation of The Institute of Standards and Technology and the actual needs of employees, and to provide an empirical basis for formulating effective human resource development strategies. Through the collection of this authentic information, the HR challenges faced by the company can be more accurately identified and resolved, while taking into account the personal development of employees and the overall needs of the business.

After more than two months of research, the problems of the Institute of Standards and Technology employees in human resources were analyzed. The survey results show that most employees lack a clear direction for career planning. Only 14% of employees have a detailed career plan, while most of the others are confined to their current work status and often feel powerless in the face of work problems. The survey found that 39% of employees lack a clear vision for the future, although they are willing to improve their capabilities according to the company and job requirements. At the same time, 43% of employees have expectations for the future, but lack mature career planning and feel lost about the future. Another 4% of employees said they didn't have any career plans at all. This situation reflects the obvious lack of career development and problem-solving skills of employees, and

requires more attention and support from the company in its human resource development strategy.

Table 2.1-Survey data of employee career planning

Future Career Planning	
Options	Proportions
Detailed career planning	14%
Ideas.but confused about the future development	43%
Follows the crowd, actively cooperates with the company and the development requirements of the position	39%
No clear career plan	4%

Source: Analysis based on questionnaire

1) In the survey, 56% of the employees of The Institute of Standards and Technology pointed out that the company has not established a sound human resource management system, resulting in a lack of professional career planning, which makes young employees feel confused and affects their work enthusiasm and potential. At the same time, 65% of employees mentioned the lack of systematic vocational training in the company, which is not only common to new employees, but also to old employees, who also face a similar problem, lack of training and development courses for vocational competencies. Unclear job responsibilities are also a major problem, with 45% of employees reporting that the company fails to provide detailed job descriptions, which not only causes confusion for new employees, but also leads to mutual blame among employees when problems arise in the project, affecting the teamwork atmosphere. In addition, 31% of employees are dissatisfied with the current performance appraisal indicators, believing that the company should look beyond short-term benefits and consider various indicators comprehensively. These feed backs point to areas where the company needs to improve in human resource management and development.

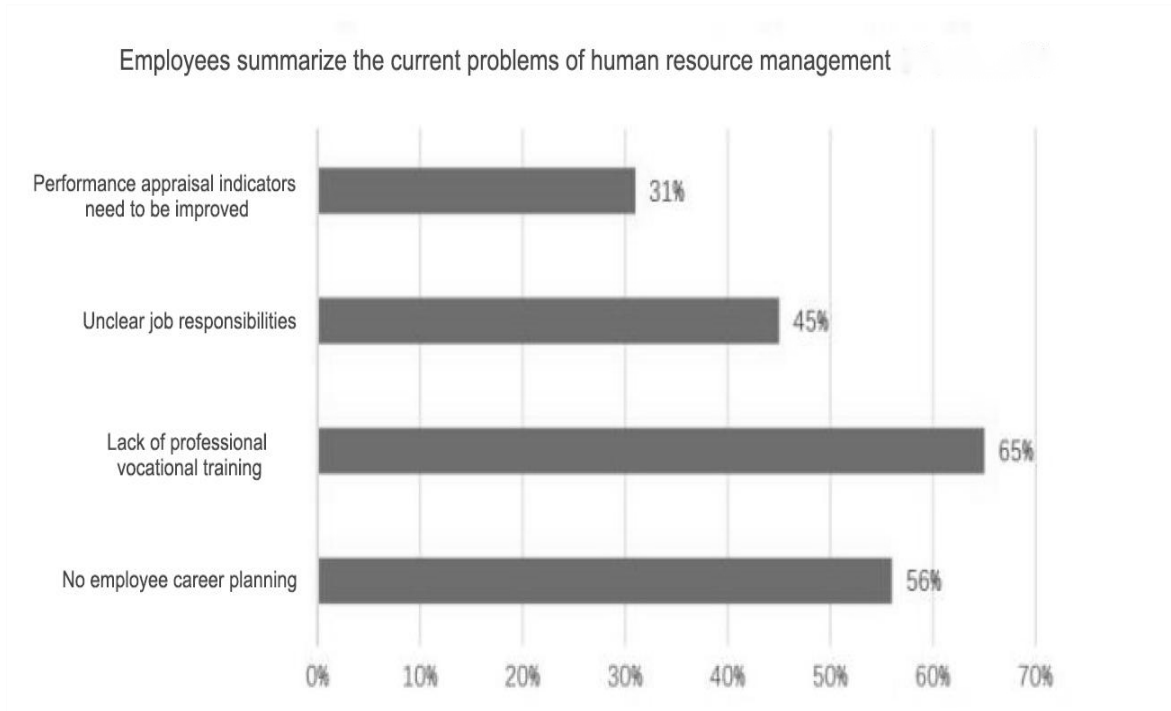


Figure2.2- Survey Data on Existing Problems

Source: Analysis based on questionnaire

2) In in-depth interviews conducted by The Institute of Standards and Technology, 67% of employees reported that the company lacked a training system for high-end technical talents. Although the company has tried to expand the market for the development of new energy standards in recent years, such as wind power and nuclear power industries, and recruit professionals in related fields, because the new energy business is still in its infancy, the level of new energy standard compilation is uneven, and the talents in the new energy field cannot write standards, and the standardization talents do not understand the technical content in the field of new energy. This kind of work distribution makes them often only engaged in some basic work, and they feel that their own value is not fully reflected. The company's current operating philosophy focuses on maximizing personnel efficiency, which further leads to the loss of new energy talents and a decline in motivation. Twenty-seven percent of the employees surveyed expect the company to come up with a solution, and suggested that the company allocate funds for research and development, including talent training and development in the field of new energy standardization such as wind power and nuclear power. They believe that such an investment is

essential for the long-term growth of the company. In addition, 22% of employees said that they would be comfortable taking on some international standard work at the same time, but they stressed the need to control this part of the workload reasonably to ensure that most of their energy can be focused on the relevant business. These feedbacks underscore the importance of the rational use and development of high-end technical talents, while pointing out that companies need to be more flexible and forward-looking in human resource management.

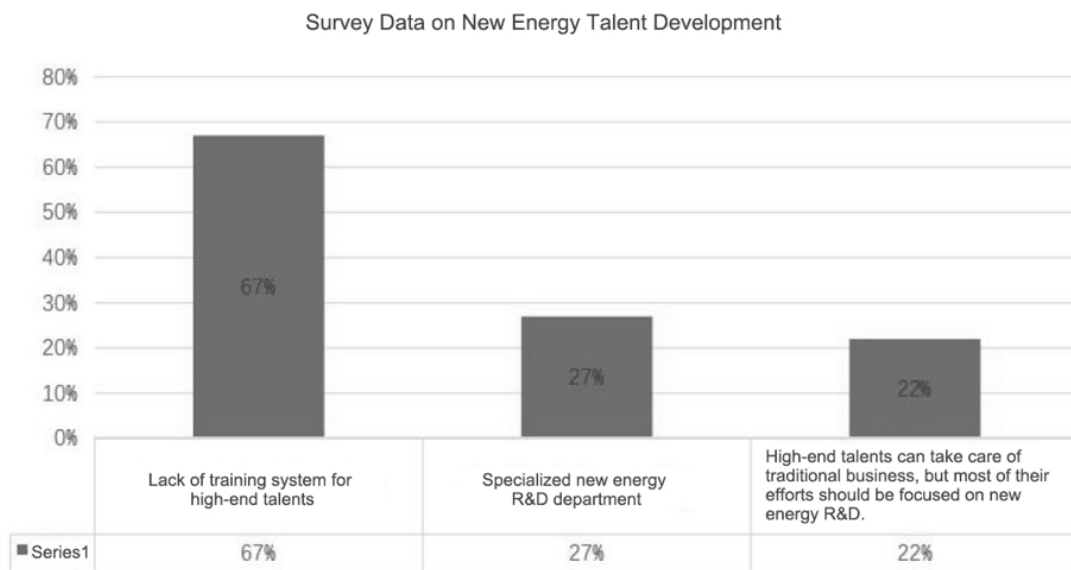


Figure 2.3 - Survey Data on New Energy Talent Development

Source: Analysis based on questionnaire

3) According to the survey, 54% of employees at The Institute of Standards and Technology believe that top management has not fully changed their role. Specifically, the behavior of management is more reflected in the technical staff and the management personnel, ignoring the overall strategic planning of the enterprise. In addition, 62% of respondents believe that middle managers are incompetent, partly because the hands-on management style of senior leaders limits the growth space of middle managers. This management style makes the role of middle-level cadres more skewed towards executors rather than real department managers. These findings reflect problems with the leadership style of The Institute of Standards and Technology. From the initial scale of 100 people to the current team of 400 people, the line management and hands-on approach of senior leaders are still dominant, which affects the company's management efficiency and the overall coordination of

the team to a certain extent. The limitations of this management model need to be addressed through effective organizational restructuring and management capacity improvement.

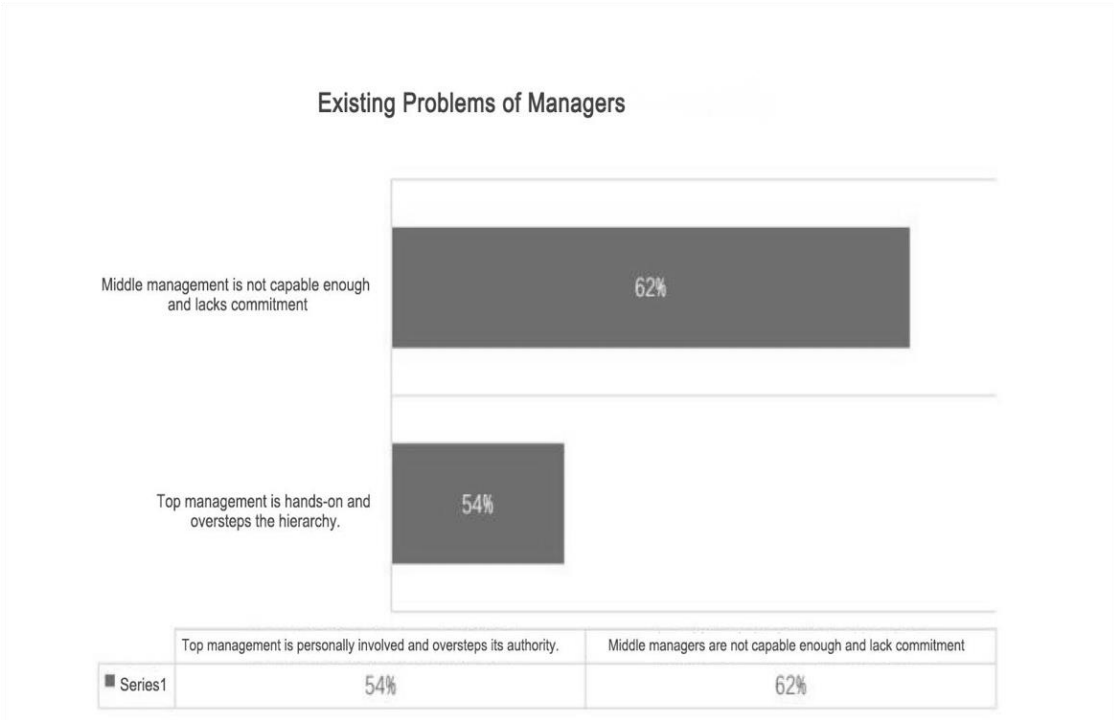


Figure2.4 - Survey Data on Existing Issues among Management Personnel

Source: Analysis based on questionnaire

4) The survey found that the preference of employees of The Institute of Standards and Technology for human resource development methods showed a clear trend. According to Figure 3.6, employees generally prefer workshops and online courses, reflecting their dissatisfaction with traditional indoor teaching methods and their preference for flexible and diverse learning formats and interactive learning environments. This type of course arrangement provides more opportunities for brainstorming and communication, which is more in line with the learning habits and needs of contemporary employees. In addition, outward bound activities and other forms of human resource development (e.g., university training, project development, seminars, etc.) have also been welcomed by employees. These findings show that employees at The Institute of Standards and Technology are eager for more diverse, innovative, and interactive learning experiences in their careers. Companies should consider these needs when formulating human resource development plans to

promote the all-round development of employees and improve the overall human resources level of the enterprise.

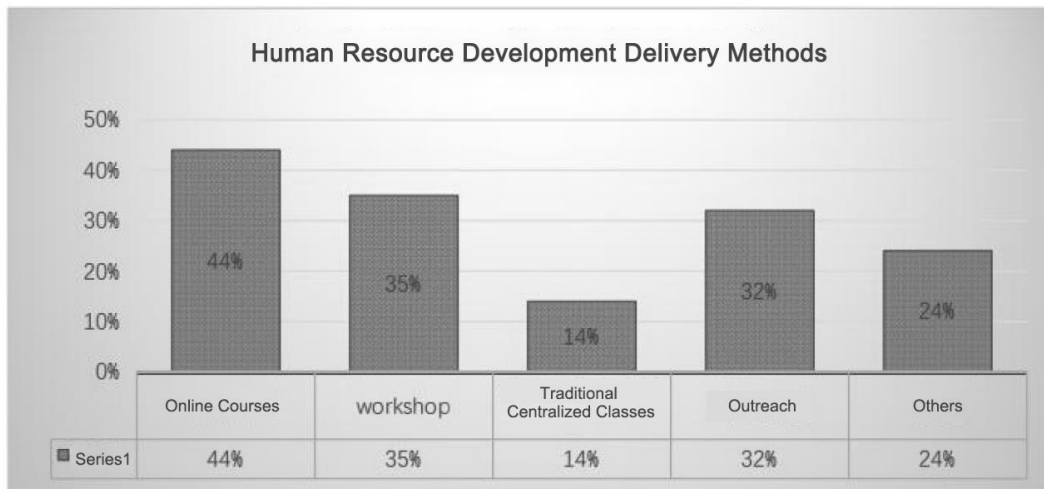


Figure 2.5 -Human Resource Development Delivery Methods

Source: Analysis based on questionnaire

In general, the management of the research institute has not realized the change of role identity, they should sort out a human resource management framework, establish a more reasonable salary system, and offer some courses for employees, which is also conducive to the long-term development of your company and improve the stability of employees.

2.4 Analysis of the influence of salary on research institute performance

Under the constraint of the salary-performance contract, the company's operating performance determines the salary level of employees, so employees are bound to try their best to improve the company's operating performance and thus increase their own remuneration.

Therefore, hypothesis H is proposed: salary level has a positive impact on the company's business performance.

Choice of variable

1) Independent variable

The total amount of an employee's compensation.

2) Dependent variable

In this paper, corporate financial performance and income indicators will be selected to measure corporate performance.

3) Control variables

Corporate governance is not an easy thing, in the process of corporate governance, the size of the enterprise, the enterprise risk management ability, the asset turnover efficiency of the enterprise, etc., have a significant impact on the performance of the enterprise. In order to make a more comprehensive consideration of the factors affecting enterprise performance, this paper selects a conventional measurement index from each aspect. The specific variables are described in Table 2.2.

Table 2.2-Variable declaration

Type of variable	Variable selection	Representative code	Explanation of variables
Dependent variable	Business performance	EPS	Earnings per share: net profit/paid-up capital
Argument	directors	LnPay	The natural logarithm of the total remuneration
Control variables	The size of the enterprise	LnSize	The natural logarithm of total assets
	Enterprise risk	DEBT	Debt-to-asset ratio: total liabilities/total assets
	Operating income	Income	The natural logarithm of total operating income
	Operational efficiency	ATR	Total Asset Turnover: Operating Income/Average Total Assets

Source: Based on the design of the study model

SPSS software was used to carry out the regression analysis of the model. From the regression results, the adjusted R^2 was 0.161, indicating that the regression equation set by the model has a certain degree of fit. Table 2.3 shows that the Durbin Watson value of the equation is 1.338, and the VIF values of the variables in Table 2.4 all fluctuate in 1, indicating that there is basically no autocorrelation or multicollinearity between the explanatory variables in the equation set by the model.

Table 2.3-Model abstract

model	R	R^2	Adjusted R^2	Errors in standard estimates	Durbin Watson
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1	0.401a	0.161	0.161	0.9278155	1.338
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Source: Based on the spss analysis results

Table 2.4- Variable declaration

model	Factors not normalized		Normalization factor	t	Distinctiveness	Colinearity statistics	
	B	Standard error	Beta			Difference	BRIGHT
(Constant)	-4.612	0.241		-19.151	<0.001		
LnPAY	0.175	0.015	0.131	11.972	<0.001	0.782	1.279
LnSIZE	0.125	0.010	0.151	13.119	<0.001	0.709	1.410
DEBT	-0.777	0.023	-0.336	-34.042	<0.001	0.961	1.041
Income	-0.006	0.005	-0.011	-1.114	0.265	0.997	1.003
ATR	0.013	0.019	0.006	0.669	0.504	0.998	1.002

Source: Based on the spss analysis results

The coefficient of compensation (LnPay) is 0.175, which is significantly and positively correlated with enterprise performance (EPS), indicating that the more compensation incentives, the more corporate performance can be improved. Hypothesis H is verified.

If enterprises want to improve their performance, they need to optimize the salary and reward system for employees and encourage them to create performance, rather than thinking of ways to deduct wages. Therefore, it is very necessary to improve the salary level of employees.

CHAPTER 3

IMPROVEMENT OF MANAGEMENT AND ADMINISTRATION OF PERSONNEL DEVELOPMENT AT THE ENTERPRISE

3.1 Promote the digital transformation of human resource management and create a teaching cloud platform

3.1.1 Introduction of the Integrated Human Resources Management System

An integrated human resource management system is one of the core tools for digital transformation. With the introduction of s-HR, companies can centrally manage data on employee information, compensation and benefits, performance appraisal, training and development, and provide a variety of reporting and analysis functions. The implementation of s-HR includes requirements analysis, system selection, customized development or purchase, implementation and training.

3.1.2 Implement digital recruitment and talent management

Digital recruitment is one of the important aspects of digital transformation. By establishing online recruitment platforms, recruitment websites, and social media channels, businesses can expand their recruitment reach, improve recruitment effectiveness, and reduce recruitment costs. At the same time, the introduction of a talent management system to automate the recruitment process and centralized management of information can improve the efficiency of talent selection and management.

3.1.3 Implement an employee self-service platform

The introduction of employee self-service platforms is an important measure to improve the employee experience and reduce the workload of the HR department. Employees can use the self-service platform to manage their personal information, inquire about compensation and benefits, apply for leave and training, etc. In addition, the platform can also provide online training resources, performance evaluation tools, and more to help employees improve their capabilities and development.

3.1.4 Promote digital training

Digital transformation also brings new opportunities for training. Enterprises can set up an online training platform that offers a variety of training courses and learning resources. At the same time, combined with artificial intelligence and data analysis technology, learning effect evaluation and personalized recommendations are carried out to help employees better learn and develop.

3.1.5 Strengthen data security and privacy protection

The digital transformation of human resources is a complex and long-term process that requires comprehensive planning and execution. By introducing an integrated human resource management system, implementing digital recruitment and talent management, implementing employee self-service platforms, adopting artificial intelligence technology to assist decision-making, promoting digital training and continuing education, and strengthening data security and privacy protection, enterprises can achieve efficient human resources operations and improve employee experience. Through case studies, we can see the effects and advantages of these measures in practical application. Therefore, actively promoting the digital transformation of human resources is of great strategic significance and long-term value for enterprises.

3.1.6 Design and Implementation of Human Resource Information Management Promotion Platform

3.1.6.1 Function introduction of human resource information platform

This design platform will provide three different ports, which are: administrator end, personnel department audit end, employee registration end. The administrator allocates resources and allocates resources to employees of each department; the employee registration side can register personal information, study courses and submit work reports; review the information submitted by employees and integrate information data, and the three links coordinate with each other to operate the system together. Table 3.1 is the platform port function information table.

Table 3.1- Port function information table

The name of the port	outline
Admin side	Overall allocation of resources and reasonable allocation of resources
Audit end of the personnel department	Review employee information and consolidate processed data
Employee registration terminal	Register personal information, study course resources, and submit work progress

Source: Human Resource Information Management Promotion Platform

3.1.6.2 Resource allocation management

Provisioning management is a proprietary function of the administrator side. The details are shown in Table 3.2.

Table 3.2- Provisioning management table

Functional modules	Provisioning management
Product number	XX-01
participator	administrator
Preconditions	Identification information has been identified and authorized
Postcondition	Allocate resources and obtain resource information
The main event stream	1) Admin verifies login identity 2) The system displays the login success page 3) The administrator obtains the resource information and assigns it 4) Wait for the system response after confirming that the operation is completed

Source: Human Resource Information Management Promotion Platform

3.1.6.3 Management of Employees' Personal Information

In employee personal information management, the three ports have different functions. See Table 3.3 for details.

Table 3.3- Functional modules

Functional modules	Management of Employees' Personal Information
Product number	XX-02
participator	administrator
Preconditions	Identification information has been identified and authorized
Postcondition	View employee information
The main event stream	1) Admin verifies login identity 2) The system displays the login success page 3) The administrator enters the employee number to check the work 4) After the review is completed, confirm and wait for the system response

Source: Human Resource Information Management Promotion Platform

The construction of human resources information platform is the trend of The Times. The update and upgrading of the platform will bring high-quality experience to managers and employees, and inject an accelerator to the development of enterprises. When designing the platform, the function design, resource allocation and the management of employee information should be fully considered, so as to ensure the most efficient operation of the information platform. At the same time, attention should be paid to protect the personal information of employees to prevent leakage.

3.2 Improvement of the system of motivating the company's employees

3.2.1 The importance of improving the company's incentive system

Effective incentive is something that managers must do well, it can be said that motivation is a very important factor in the enterprise, only reasonable and effective incentive can maximize the potential of employees, in order to stimulate the enthusiasm and initiative of employees for work. In order to give full play to the enthusiasm and initiative of employees, it is necessary to establish and improve an effective reward and punishment mechanism to achieve clear rewards and punishments.

Enterprise management is a science, incentive mechanism is an important part of enterprise management, plays a very important role in modern enterprise management, incentive mechanism can stimulate the enthusiasm and initiative of employees, mobilize the enthusiasm and creativity of employees, but also improve the work efficiency of employees, is conducive to improving the economic and social benefits of enterprises. Therefore, it is very necessary to establish a reasonable and effective incentive mechanism in modern enterprise management.

To establish a scientific incentive mechanism, we need to pay attention to the following aspects:

- It is necessary to formulate a scientific evaluation system, not subjective and arbitrary. The work performance of employees should be objectively evaluated, so that there is a fair, objective and scientific evaluation system.

➤ To establish a fair and reasonable reward and punishment mechanism, rewards and punishments must be open, fair and just, and rewards and punishments must be timely and accurate.

➤ It is necessary to pay attention to the combination of spiritual incentives and material incentives, and give material rewards and spiritual rewards to employees with outstanding performance, remarkable achievements and great contributions, so as to stimulate the inherent potential of employees and mobilize their enthusiasm and initiative.

➤ Pay attention to the spirit of teamwork. It is necessary to pay attention to the spirit of teamwork, and not let the idea of individual heroism override teamwork.

3.2.2 The influence of enterprise incentive mechanism on employees' retention intention

The influence of the incentive mechanism of an enterprise on the employees' willingness to stay is mediated by the job satisfaction and the organizational support sense as the intermediary. Make assumptions and verify the relationship between several variables of enterprise incentive mechanism, organizational support sense, job satisfaction and willingness to stay. This study expects to contribute to incentive mechanism and retention retention in the new era.

3.2.2.1 Variable design

➤Enterprise incentive mechanism scale

The scale uses the Likert five-point scoring method, with a total of 15 questions, and each item is positive scoring. Each item has five options: from left to right, "completely inconsistent" to "fully consistent", and "1" to "5" respectively. The higher the score, the higher the satisfaction of employees with the enterprise incentive mechanism.

➤Organizational support sense scale

The scale uses the Likert five-point scoring method, which has eight questions, each of which is positive scoring. Each question has five options: from left to right for "completely inconsistent" to "fully consistent", from left to right for "1" to "5". The higher the score, the higher the sense of organizational support provided by the enterprise.

➤ Job satisfaction scale

The scale uses the Likert five-point scoring method, there are six questions, and each item is positive scoring. Each item has five options: from left to right to "completely inconsistent" to "full compliance", from left to right to "1" to "5". The higher the score, the higher the employee is satisfied with working in the enterprise.

➤ Inventory of willingness to stay

The scale uses the Likert five-point scoring method, which contains three questions, each of which is positive scoring. Each item has five options: from left to right, "completely inconsistent" to "fully consistent", and from left to right, "1" to "5" respectively. The higher the score, the higher the employees' willingness to stay in the enterprise.

3.2.2.2 Mediator effect test. According to the data results in Table 3.4, the incentive mechanism of enterprises is significantly and positively correlated with organizational support ($r = 0.77^{**}$, $p < 0.01$), job satisfaction ($r = 0.69^{**}$, $p < 0.01$), and willingness to stay ($r = 0.54^{**}$, $p < 0.01$). Organizational support was significantly and positively associated with job satisfaction ($r = 0.65^{**}$, $p < 0.01$) and willingness to stay ($r = 0.51^{**}$, $p < 0.01$). Job satisfaction was significantly and positively associated with interns' willingness to stay ($r = 0.64^{**}$, $p < 0.01$).

Table 3.4- Results of correlation analysis on incentive mechanism, job satisfaction and retention intention

<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	
gender	1.79	0.41	1.00							
Degree	2.05	0.34	-0.02	1.00						
Duration	1.58	0.74	-0.12*	-0.02	1.00					
Type of company	2.77	1.43	0.09	0.00	-0.16**	1.00				
Incentives	3.48	0.54	0.11	0.10	0.06	0.01	1.00			
A sense of organizational support	3.52	0.67	0.17**	0.11	0.06	0.04	0.77**	1.00		
Job satisfaction	3.26	0.77	0.05	0.09	0.10	0.18**	0.69**	0.65**	1.00	
Willingness to stay in the job	3.05	0.90	-0.01	0.11	0.15**	0.02	0.54**	0.51**	0.64**	1.00

Source: The Influence of Enterprise Incentive Mechanism on Interns' Retention Intention—

Moderated Mediation Model

3.2.2.3 Moderated mediating effect test

After controlling for gender, educational background, internship duration and company type, SPSS software was used to test the mediation effect on the influence of stay intention; the results are shown in Table 3.5.

According to the analysis results in Table 3.5, the enterprise incentive mechanism significantly positively affects the interns' willingness to stay (Model 1, $B = 0.88$, $p < 0.01$), which indicates that the enterprise incentive mechanism can positively affect the willingness to stay; the higher the incentive mechanism provided by the enterprise, the stronger the willingness to stay.

Specifically, the intermediary effect of job satisfaction on the enterprise incentive mechanism on the willingness of interns is 0.29, playing part of the intermediary role.

Table 3.5- Job satisfaction mediated as effect test results

	Model 1 (Willingness to Stay)			Model 2 (Job Satisfaction)			Model 3 (Willingness to Stay)		
	<i>B</i>	<i>p</i>	β	<i>B</i>	<i>p</i>	β	<i>B</i>	<i>p</i>	β
gender	-0.11	0.29	-0.05	-0.05	0.50	-0.03	-0.08	0.39	-0.04
Degree	0.16	0.21	0.06	0.06	0.52	0.03	0.12	0.27	0.05
Duration	0.14*	0.02	0.12	0.09*	0.04	0.09	0.09	0.10	0.07
Type of company	0.02	0.49	0.03	0.10**	0.00	0.19	-0.04	0.14	-0.07
Incentives	0.88**	0.00	0.53	0.97**	0.00	0.68	0.29**	0.00	0.18
Job satisfaction							0.60**	0.00	0.52
<i>R</i> ²	0.31			0.51			0.44		
<i>Adjust R</i> ²	0.30			0.51			0.43		
<i>F</i> -number	27.51			64.43			40.01		
<i>Sig</i>		0.00			0.00			0.00	

Source: The Influence of Enterprise Incentive Mechanism on Interns' Retention Intention—

Moderated Mediation Model

It can be seen that the enterprise incentive mechanism is one of the influencing factors of the willingness to stay, and the incentive mechanism of the enterprise will have a positive impact on the employees' willingness to stay. When the enterprise incentive mechanism is done better, employees will have a higher willingness to stay.

3.3 Improvement of the organization of management and administration of personnel development of the enterprise

The Institute of Standards and Technology is facing a period of transformation for its core business. The reintegration and development of human resources should be implemented. The company has set specific strategic goals for human resource development. In the next two years, the primary goal is to establish and improve the company's human resource development system, which covers all aspects from employee career planning to training and development, to ensure that the development of employees' careers is closely integrated with the company's future strategy. In the next 3 to 5 years, the goal will shift to cultivating and introducing high-quality talents at all levels, realizing the improvement and practice of the company's long-term development strategy, and maximizing the advantages of talents. In order to ensure the effective implementation of the company's strategic goals, The Institute of Standards and Technology needs to establish an efficient human resource development system. This system will be based on the strategic needs of the enterprise organization, ensuring the systematization of the development process and the effectiveness of the target translation. In addition, emphasis is placed on the quantitative evaluation of results in order to facilitate the measurement of progress and value. In the process of human resource development, the company needs to continuously evaluate and adjust its training strategy in a timely manner to comprehensively improve human resources at all levels, including senior leadership, management ability of middle-level cadres, and business skills of grassroots employees. Looking ahead, The Institute of Standards and Technology plans to grow corporate value and enhance market competitiveness by cultivating core employees and optimizing the human resource structure. Such a strategy will give the company an edge in new business areas and promote the sustainable development and added value of the enterprise.

3.3.1 The Institute of Standards and Technology Human resource strategic planning

Within the framework of the Institute of Standards and Technology's HR strategic plan, the focus is on supporting the Institute's R&D transition from traditional standards to new industry standards. In this process, the first task of the enterprise is to conduct a detailed analysis of the overall organizational structure, followed by the analysis of the responsibilities and task plans of each position, and the formulation of job descriptions and work specifications. Given that the company is undergoing a transformation, job responsibilities need to incorporate the skills required for the future. At the same time, personnel screening is carried out, based on the company's strategic planning and human resources needs, suitable employees are selected for training, and new people are introduced through recruitment for some special positions.

When developing a human resource development plan, the objectives should be based on reality and avoid being too idealistic. It is advisable to set goals in stages, such as two-year and three- to five-year plans. Short-term goals may include developing relevant professionals, recommending and recruiting new employees internally, and building a team focused on R&D and the new energy market. At the same time, the strategic development direction of three to five years should be clarified, and the talent development plan should be continuously adjusted according to the actual situation. Companies need to conduct a comprehensive analysis of internal performance and human potential, and combine feedback from colleagues and leaders to understand and evaluate employees. In the process of talent development, there may be contradictions such as training time affecting work progress, so it is necessary to fully communicate in the early stage to ensure the effective use of resources. Talent development plans should be integrated into the company's strategy and the current corporate environment, requiring collaboration across departments, not just the efforts of a single department. The objectives, resources, environment and potential impact on existing work of developing the curriculum need to be considered to ensure the effectiveness and feasibility of the programme. The human resource development system needs to be sustainable, constantly adjusted according to the actual situation, and regularly formulate human resource strategic planning to achieve the common development of employees and

the company. Comprehensively consider all factors to ensure that human resource development needs are feasible and effectively implemented.

3.3.2 Develop career plans for employees of The Institute of Standards and Technology

At The Institute of Standards and Technology, employees' career planning is closely integrated with the company's HR strategic planning. Employees are required to conduct a self-evaluation, including an objective review of their skills, interests, relevant experience, and emotional intelligence. This process helps employees to have a clear understanding of their career direction, including their current abilities, career aspirations and future plans.

The key to career planning is goal setting, which involves short-term, medium-term and long-term goals. Long-term goals need to be based on reality and combined with long-term personal pursuit and efforts, while short-term goals need to be specific and clear as part of long-term goals. In the planning process, the objectives should be adjusted in a timely manner according to the implementation situation and changes in the external environment. In addition, career planning should also take into account external environmental factors, such as environmental characteristics, development trends, advantages and disadvantages, etc., to assess the possible impact of these factors on the career. Career orientation is at the heart of planning, requiring employees to seek the best match according to their career goals, personal potentials and conditions. This involves a high degree of alignment of factors such as abilities, interests, personality, and environment. The planning and implementation phase requires careful monitoring of the development and execution of the program. In the implementation of human resource development, the effect should be regularly evaluated, and the plan should be diagnosed and adjusted to ensure its continuity and integrity.

For The Institute of Standards and Technology, the analysis of the organizational structure, the analysis of tasks, and the development of job responsibilities and job specifications are equally important. In the face of the company's transformation, job responsibilities need to integrate the skills needed for the future. Personnel selection should be based on the company's strategic planning

and human resources needs, select employees suitable for training, and solve the problem of talent scarcity through recruitment.

3.3.3 Leadership development of senior employees

At The Institute of Standards and Technology, leadership development for senior employees is focused on three phases: personal growth, team leadership, and strategic thinking. Leadership development is not only about traditional skills, but also about changing mindset and time management skills. This shift helps managers take on better leadership roles, while effective time management allows them to use their time more efficiently.

The core competencies of leaders include focus, vision, self-discipline, execution, and influence. These competencies are covered throughout the three phases of the training. The senior leadership team at The Institute of Standards and Technology was challenged by time coordination and opted for a combination of online and workshops.

Online classes are conducted through a partner third-party training institute and focus on case studies and theoretical knowledge. At the same time, a two-day workshop is held every quarter, where senior leaders brainstorm in a relaxed environment, discuss the company's current problems and future development strategies, and formulate specific implementation plans. This training model not only takes into account the busy work schedule of the leadership, but also ensures that the training content is in-depth and practical, and helps the senior leadership team to achieve substantial leadership improvement.

1) Self-leadership and self-development

In the first phase of leadership development at The Institute of Standards and Technology, the focus is on self-leadership and development. At the heart of this phase is the self-awakening of leaders, i.e., from the perspective of a line manager to the perspective of a leader, looking at problems and ways of working in a new dimension. Leadership development is not only the application of a series of scientific methods, but also the comprehensive development of individual leadership ability.

In the process, the leader's self-competence will be significantly improved. This includes the holistic development of emotional intelligence, decision-making, execution, influence, and empowerment. In particular, it is worth emphasizing the change in mindset and the improvement of time management skills. By changing their mindset, top managers are able to take on the role of leaders more effectively, and effective time management allows them to get the most out of their fragmented time. The key to this stage is to guide leaders to recognize their own potential and responsibilities, stimulate their inner motivation, and motivate them to pursue personal and team growth spontaneously. Through self-awareness and self-improvement, leaders can better understand and practice the true meaning of leadership, so that they can play a more active and critical role in the organization. This self-leadership and development not only contributes to personal growth, but also has a positive impact on the entire organization.

2) Team building and team leadership

The second phase of leadership development at The Institute of Standards and Technology focuses on team building and leadership. At this stage, the core of the leadership team is not only to focus on the surface performance of the team, but more importantly, to tap the potential and initiative of the team members. With the rapid development of the information society, employees are no longer just in the role of executing orders. How to cultivate and develop employees and stimulate their initiative has become one of the main tasks facing leaders. This stage of the curriculum focuses on building trust, dealing with ambiguous decision-making, achieving execution excellence, driving change and talent development.

Through the learning modules, W's executives are expected to break the traditional ineffective leadership model and significantly improve team performance and cohesion through effective communication, conflict management and motivational mechanisms. Learning how to listen, coach, and give feedback is a key element of a good leader to help subordinates maximize their potential. At this stage, leaders need to focus not only on the skills and contributions of team members, but also on their personal growth and professional development, so as to form a more efficient, dynamic and mutually supportive team. Such a team will be a key force for

the company to respond to market changes, achieve goals and enhance the corporate image.



Figure 3.1 Leadership model

Source: <https://conantleadership.com/leadership-models/>

3) Leading the future and strategic thinking

In leadership development at The Institute of Standards and Technology, leading the future and strategic thinking are the focus of executive training. At present, many top managers have not fully demonstrated the role of leaders in their work, and still act as middle management cadres. Therefore, it is particularly important to develop the ability to have a forward-looking vision and strategic thinking. The core responsibilities of senior management include defining the business objectives, strategies and tasks of the business. This is particularly critical for The Institute of Standards and Technology's entry into new areas, where the management needs to deeply understand and analyze industry dynamics and policy guidance to provide a solid foundation for the company's future strategic development. Leaders should be directly involved in the top-level design of corporate leadership development and promote the establishment and improvement of various management mechanisms. To achieve this, The Institute of Standards and Technology partners with third-party training providers to develop customized courses that incorporate corporate strategies

and industry trends. The course content focuses on how to select and develop good managers, and emphasizes the importance of "empowerment". Empowerment is the transformation of behaviors and attitudes that give others greater capacity and autonomy, and has become a hot topic in the field of management in recent years. The Institute of Standards and Technology's human resource development plan includes the selection of potential managers, the establishment of a talent management mechanism, the implementation of an enablement strategy, and the improvement of talent planning. Through these courses, it aims to help senior managers provide effective selection and training mechanisms for subordinate managers, so as to create a healthier and more positive management environment within the enterprise and promote the realization of the company's strategic goals.

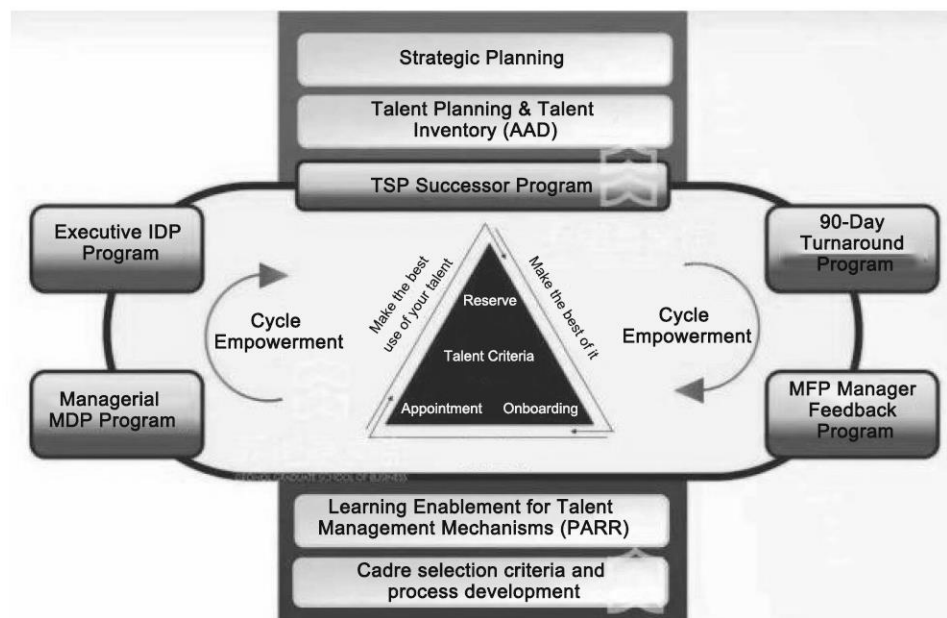


Figure 3.2 Leadership Development Model

Source: MBA think tank Encyclopedia

3.3.4 Management skills development of middle-level employees

The core of the responsibilities of middle managers at The Institute of Standards and Technology is to clarify the responsibilities, abilities, qualities and management requirements of the positions under their jurisdiction, and to establish evaluation standards. They need to invest time and effort in evaluating the performance of their subordinates and proposing ways to improve them. For a long time, due to over-reliance on senior leadership, the middle managers of The Institute of Standards and

Technology have not fully realized their potential, especially when encountering problems in project management, they often need to consult their superiors, which affects their work efficiency.

In response to this situation, the management skills development of middle staff at The Institute of Standards and Technology will focus on industry characteristics and knowledge in the field of new energy. In cooperation with third-party training institutions, the company provides centralized and online teaching methods to enable middle managers to have a deep understanding of the industry and project management. In addition, the training also includes small class classes, and experts are invited to the company to give in-depth explanations of management cases. In the classroom, through group discussions and case studies, managers can promote an in-depth understanding of the learning content and share each other's insights and gains. The key to the development of management skills of middle-level employees is to comprehensively improve their decision-making, execution and team coordination skills. Through these comprehensive trainings, The Institute of Standards and Technology aims to build a middle management force that can handle problems independently and lead effectively in a team. This not only improves the professionalism of individuals, but also helps to improve the overall operational efficiency of the company, laying a solid foundation for achieving the long-term development goals of the enterprise.

1) Basic skills of management

The Institute of Standards and Technology's basic skills in middle management cover both people and business management. When it comes to people management, the focus is on self-management and managing employees. Self-management includes role positioning, mental development, emotion management, and time management, while employee management focuses on employee motivation, employee development, and team building. In terms of transaction management, the emphasis is on job management skills such as goal setting, effective delegation, adequate communication, performance evaluation, and problem solving. These skills development not only help middle managers manage their teams and work more effectively, but are also the key to improving the efficiency of the entire organization.

2) Team goal setting

The Institute of Standards and Technology is committed to providing training courses that are easy to understand and implement through efficient human resource development methodologies and industry-relevant case studies. The starting point of these courses is to improve the competence of middle staff, using a combination of theory and practice to ensure that employees can get practical benefits from the training. Importantly, training is designed to have a tangible impact on the way employees think and work, increase productivity and motivation, and lead to transformation across the organization.

Through the human resource development course, it aims to solve the problems of inaction and lack of responsibility of middle management cadres. The online course will be divided into multiple sections according to the needs of middle managers to improve their professionalism and management ability from different perspectives. This comprehensive approach to training will help middle managers better understand and respond to challenges at work, improve their leadership and team management skills, and effectively promote the progress and development of the company as a whole.

3.3.5 Employability development of grassroots employees

1) Self-management

At The Institute of Standards and Technology, self-management focuses on improving work attitudes and emotional management, and cultivating a professional mindset. Employees need to focus not only on their jobs, but also on improving their emotional intelligence (EQ) in the workplace, including stress management and wellness planning. Engineers and workers should incorporate their own career development plans to achieve a higher level of improvement in the field of soft skills. Effective emotion management and a positive mindset can help improve job performance, while proper stress transformation is essential for employees' physical and mental well-being. Through this comprehensive improvement, we aim to achieve a work-life balance and promote a virtuous circle in both professional and personal life of employees.

2) Skill upgrading

At The Institute of Standards and Technology, upskilling focuses on the development of professional competence. In the face of increasingly fierce social competition, continuous learning and skill improvement of employees has become particularly important. In order to meet the strategic needs of the company's transformation to the new energy sector, the online course content of grassroots employees focuses on professional skills training, communication and collaboration skills, time management and execution. The business transformation in the field of new energy has put forward higher requirements for the professional ability of employees, such as the processing technology of workshop employees and the design ability of designers.

In the transition period of the core business, it was decided to implement the reintegration and development of human resources. The company has set specific strategic goals for human resource development. In the next two years, the primary goal is to establish and improve the company's human resource development system, which covers all aspects from employee career planning to training and development, to ensure that the development of employees' careers is closely integrated with the company's future strategy. In the next 3 to 5 years, the goal will shift to cultivating and introducing high-quality talents at all levels, realizing the improvement and practice of the company's long-term development strategy, and maximizing the advantages of talents. In order to ensure the effective implementation of the company's strategic goals, it is necessary to establish an efficient human resource development system. This system will be based on the strategic needs of the enterprise organization, ensuring the systematization of the development process and the effectiveness of the target translation. In addition, emphasis is placed on the quantitative evaluation of results in order to facilitate the measurement of progress and value. In the process of human resource development, the company needs to continuously evaluate and adjust its training strategy in a timely manner to comprehensively improve human resources at all levels, including senior leadership, management ability of middle-level cadres, and business skills of grassroots employees. Looking to the future, we will achieve the growth of corporate value and the enhancement of market competitiveness by cultivating core employees and

optimizing the human resource structure. Such a strategy will give the company an edge in new business areas and promote the sustainable development and added value of the enterprise.

To sum up, if enterprises want to manage employees more effectively, they should pay attention to the important role of incentive mechanism for employees. At the same time, enterprises need to develop a more systematic and convenient management system, which is very helpful to improve the efficiency of employee management. The most important thing is to update the framework and system of employee management and change the past rough management mode.

CONCLUSIONS

Based on human resource management theory and organizational behavior, this study analyzes the current situation of staff training in China through extensive data collection and field research. As a member of The Institute of Standards and Technology, my attention to the company's human resources prompted me to explore the countermeasures to solve the staff training problems of small and medium-sized enterprises by combining the knowledge and the actual situation of the company, and to find the human resources development path suitable for small and medium-sized enterprises. This study combines theory with practice and aims to deepen the practical application of the theory.

In general, from the perspective of in-depth research on the development of personnel management, this paper puts forward and discusses three suggestions for bringing substantial improvements to enterprises. First of all, we advocate the use of digital informatization to improve the efficiency of employee management. At present, the environment in which enterprises are located is digital and informatized, which provides convenience for the orderly and effective management of human resources. With the help of data analytics, companies can better understand the needs and expectations of their employees, helping them make more effective decisions.

Secondly, we emphasized the importance of improving the employee incentive system. Employee incentive system is a reflection of corporate culture, which can stimulate the enthusiasm of employees and enhance their sense of identity with the enterprise, thereby improving their work efficiency and the overall competitiveness of the enterprise.

Finally, we put forward recommendations for improving the management framework for people development. This will help companies clarify the career path of each employee and support their long-term development. By providing ongoing training and development opportunities, businesses can help employees achieve continuous growth in their careers and maximize their potential.

In the process of enterprise personnel management development, it is necessary to optimize management efficiency by combining digital information tools, enhance

employee enthusiasm by improving the incentive system, and provide continuous career development opportunities through a perfect personnel development management framework. This not only brings the improvement of efficiency and competitiveness to the enterprise, but also provides employees with the possibility of sustainable development, and contributes to the win-win situation of the enterprise and employees.

After verification, the research found that human resource development can indeed enhance the competitiveness of enterprises and contribute to the development of enterprises. This paper deeply analyzes the problems existing in the human resource development system of small and medium-sized enterprises, and discusses how to improve the construction of the employee development system at different levels. Despite the shortcomings of this study in some aspects, it is expected to inspire more studies to further explore this area.

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Appendix

Appendix

The questionnaire survey conducted within the enterprise has the following questions:

1. What are your views on the status quo of The Institute of Standards and Technology human resource management?

- A. Very satisfied
- B. More satisfied
- C. same as
- D. discontent
- E. Very dissatisfied

2. What HR areas do you think The Institute of Standards and Technology needs improvement?(multiple choice)

- A. Staff training and development
- B. Career planning and promotion mechanisms
- C. Performance evaluation and feedback
- D. Employee incentives and benefits
- E. Recruitment and talent introduction

3. Does the The Institute of Standards and Technology training program meet your career development needs?

- A. Fully satisfied
- B. To a greater extent
- C. same as
- D. Less satisfaction
- E. Not satisfied at all

4. Which training method do you prefer?

- A. Offline face-to-face courses
- B. Online remote courses
- C. Practice operation training
- D. Internal lectures and seminars
- E. Mixed learning

5. Do you think The Institute of Standards and Technology leadership training is effective?

- A. Very effective
- B. valid
- C. same as
- D. Not very effective
- E. of no avail

6. Are you satisfied with the company's current performance appraisal system?

- A. Very satisfied
- B. More satisfied

- C.same as
- D.discontent
- E. Very dissatisfied

7. What do you think are the advantages of The Institute of Standards and Technology in talent training?

- A. Professional training
- B. Career opportunities
- C. Strengthen practical skills
- D. Leadership development

8. Are you satisfied with the employee promotion mechanism of the company?

- A. Very satisfied
- B. More satisfied
- C.Same as
- D.Discontent
- E. Very dissatisfied

9. What's your biggest challenge in your work?

- A. Lack of skills
- B.Communication disorders
- C.Management problem
- D. Lack of incentive
- E.Other

10. Where do you think the company can provide more support?

- A. Personal skills improvement
- B. Career planning
- C. Work and life balance
- D.Employee welfare
- E. Management and communication

11. Are you satisfied with the company's current talent introduction strategy?

- A. Very satisfied
- B. More satisfied
- C.Same as
- D.Discontent
- E. Very dissatisfied

12. Do you feel that your work is meaningful in The Institute of Standards and Technology?

- A. Very meaningful
- B. Have a certain meaning
- C.same as
- D. Not very meaningful
- E. It's completely meaningless

13. Do you think The Institute of Standards and Technology's human resource development contributes to personal growth?

- A. Very helpful
- B. Have some help
- C. same as
- D. Not very helpful
- E. No help at all

14. Are you satisfied with your employee relationship?

- A. Very satisfied
- B. More satisfied
- C. same as
- D. discontent
- E. Very dissatisfied

15. How do you evaluate the company's training resources and facilities?

- A. beyond compare
- B. preferably
- C. Same as
- D. Range
- E. very bad

16. Are you satisfied with the working environment and culture of the company?

- A. Very satisfied
- B. More satisfied
- C. same as
- D. discontent
- E. Very dissatisfied

17. What do you think of the company's communication and information flow efficiency?

- A. Very efficient
- B. More efficient
- C. same as
- D. Not too efficient
- E. Very inefficient

18. Do you think the incentive mechanism of The Institute of Standards and Technology is fair and effective?

- A. Very fair and effective
- B. Fair and effective
- C. same as
- D. It's not fair and effective
- E. Completely unfair and valid

19. Are you satisfied with the career development opportunities offered by the company?

- A. Very satisfied
- B. More satisfied
- C. Same as
- D. Discontent
- E. Very dissatisfied

20. What do you think The Institute of Standards and Technology needs the most attention to in human resource management in the future?

- A. Training and development
- B. Performance management
- C. employee welfare
- D. Leadership development
- E. Talent introduction and retention