



# Efficiency Optimization of Enterprise Recruitment Management in the Context of Artificial Intelligence

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**Abstract.** In the new era of science and technology development, how to rationally use artificial intelligence technology in human resource recruitment management is a topic worthy of research. This paper analyzes the shortcomings of the current human resource recruitment management, discusses the positive role of artificial intelligence technology applied to human resource recruitment management, and puts forward the strategy of using artificial intelligence technology in human resource recruitment management for the reference of recruitment managers.

**Keywords:** artificial intelligence, human resources, recruitment management.

## 1 Introduction

In the contemporary era of rapid development of information science and technology, with the help of the Internet information platform, artificial intelligence technology has penetrated into the field of human resource recruitment management, showing a mushroom-like growth trend. In human resource recruitment management, how to scientifically use artificial intelligence technology and improve the efficiency of recruitment management has brought a severe test to human resource managers. But there are often two sides to things, and challenges and opportunities coexist. Human resource managers should fully understand the positive role of artificial intelligence technology in human resource recruitment management, continue to explore and try a new model of artificial intelligence technology applied to human resource recruitment management, establish a long-term strategic vision, and use cutting-edge work ideas to continuously improve the ability to use artificial intelligence technology in recruitment management practice, and transform from "transactional" to "expert". Actively promote the application of artificial intelligence technology to human resources recruitment management, and improve the efficiency of intelligent recruitment management<sup>[1]</sup>.

At present, the application of artificial intelligence technology to human resource recruitment management is still a new thing, human resource recruitment managers do not have enough understanding of the importance of artificial intelligence applied to human resource recruitment management, and there are still many deficiencies in the

use of artificial intelligence technology in human resource recruitment management, therefore, the current situation of artificial intelligence technology applied to human resource recruitment management is deeply analyzed, the positive role of artificial intelligence technology applied to human resource recruitment management is discussed, and the strategy of artificial intelligence technology applied to human resource recruitment management is discussed to improve the level of human resource recruitment management, which is of great practical significance.

## **2 Analysis of the Current Situation of Human Resource Recruitment Management**

### **2.1 Unable to make an accurate recruitment plan**

The sustainable development of enterprises needs to continuously recruit outstanding talents in key positions, human resource managers do not make reasonable use of artificial intelligence technology, can not accurately formulate recruitment plans, and also adopt the traditional recruitment management model, resulting in the inability to accurately recruit talents in key positions, and some departments overlap personnel, and there is an unfavorable situation of overcrowding.

### **2.2 The recruitment entry conditions are unreasonable**

Relying on more than 10 million college graduates in the country every year, enterprises set high education as one of the recruitment entry conditions when recruiting talents, so there is a widespread phenomenon of emphasizing academic qualifications and ignoring ability in recruitment. The disadvantages are: first, the one-sided pursuit of the candidate's high education, may not match the candidate's own comprehensive ability and job requirements, affecting the work effectiveness; second, the recruitment of real talents, because the job is too simple, not satisfied with the status quo and resignation, resulting in a waste of human resources.

### **2.3 The recruitment process is too cumbersome**

At present, enterprise recruitment generally adopts the forms of media open recruitment, campus recruitment, and talent market recruitment<sup>[2]</sup>. The recruitment process includes formulating a recruitment plan, publishing recruitment information on the platform, collecting and screening resumes, organizing written examinations and interviews, and hiring notices. The cumbersome recruitment process does not use artificial intelligence, resulting in a long delay in the recruitment process, and the employment needs of the relevant positions cannot be met in a timely manner.

## **2.4 Subjective consciousness affects the fairness of recruitment interview evaluation**

If the enterprise adopts the traditional recruitment model, because the chief examiner in charge of recruitment often has personal emotional colors, in the interview process of the candidate, his subjective consciousness will penetrate into the whole process of the recruitment interview, and it will not be able to fully and objectively understand the comprehensive professionalism and ability of the candidate, which will affect the openness, fairness and impartiality of the recruitment interview evaluation process.

## **2.5 Difficulties in resume screening**

Online open recruitment, campus recruitment and talent market recruitment will attract many job seekers to apply, and the large number of candidates' resumes will increase the difficulty of screening. Because the human resource recruitment management department does not have the conditions to use artificial intelligence to scientifically screen resumes, it still adopts the manual screening of traditional recruitment models, which will waste a lot of manpower and material resources and virtually increase the recruitment cost.

## **2.6 Lack of post-recruitment effect evaluation**

In the process of human resources recruitment, enterprises generally focus on the recruitment process and ignore the post-recruitment effect evaluation process. The continuous quality feedback and follow-up after recruitment and the evaluation of work effect are not timely, which limits the effectiveness of recruitment.

With the continuous upgrading of artificial intelligence technology, it has gradually penetrated into the field of human resource recruitment management, and has also achieved significant work efficiency. Production capital is the source of life for enterprise management, and it is also an important guarantee for the sustainable development of enterprises<sup>[3]</sup>. Affected by the new crown epidemic, the working capital pressure of enterprises has generally increased. The application of artificial intelligence in recruitment management requires capital investment, and from the perspective of the capital market, intelligent recruitment management requires funds, and from the strategic direction of cost priority, the value of capital investment should be considered. In order to pursue economic benefits, enterprises must reduce costs, so in the short term, enterprises generally put aside the investment in intelligent recruitment management, delaying the intelligent process of recruitment management.

### **3 The Positive Role of Artificial Intelligence Technology in Human Resource Recruitment Management**

#### **3.1 Provide data support for accurate recruitment planning**

Artificial intelligence technology is scientifically used in human resource recruitment management, which can mine and collect a large number of candidate information, and carry out big data intelligent screening and scientific analysis of relevant information, obtain accurate data on social talent supply and enterprise demand, and provide data support for the accurate formulation of enterprise recruitment plans to meet the talent needs of key positions of enterprises.

#### **3.2 Bring change and innovation to the recruitment management model**

The traditional recruitment management model has problems such as the heavy workload of the recruitment process, the long recruitment cycle, and the inability to accurately match people and posts. The rational use of artificial intelligence technology in recruitment management has brought reform and innovation to the recruitment management model. Integrating artificial intelligence technology big data into recruitment management resume screening can objectively analyze the information and data of candidates such as education level, political ideology, comprehensive ability, teamwork and personal integrity, accurately match the talent needs of enterprise positions, and improve the effectiveness of recruitment management<sup>[4]</sup>.

#### **3.3 Reduce the cost of human resources recruitment**

The application of artificial intelligence technology has made intelligent recruitment management a reality. Accurate screening and objective analysis of a large number of candidates' resumes to achieve seamless connection between job talent needs and candidates, which not only reduces the cost of human resources recruitment management, but also improves the efficiency of recruitment management.

#### **3.4 It is conducive to the accurate matching of recruitment positions**

The human resources recruitment management department uses artificial intelligence technology to collect big data information such as candidates' educational professional achievements, comprehensive employment ability, and integrity records, and accurately selects the right talents needed by the enterprise through screening and analysis of big data information, so as to achieve accurate matching of people and posts, and make human resources recruitment management more advanced and scientific.

### **3.5 It is conducive to the fairness of recruitment management**

The integration of artificial intelligence technology into recruitment management can minimize the subjective factors of the chief examiner, including ideology, emotional color, human bias, etc. The use of artificial intelligence technology to score the information and interview tests of candidates to obtain objective comprehensive evaluation results, which fully reflects the fairness of recruitment management.

### **3.6 Be able to strictly abide by the code of integrity and morality**

In enterprise recruitment management, face recognition and human-computer interaction verification using artificial intelligence technology can avoid illegal behaviors such as fraudulent academic qualifications and bad integrity of applicants. Supervisors must comply with national laws and regulations and strictly abide by the code of integrity and ethics. It eliminates the lack of integrity and moral misconduct, and effectively controls the risks of ethics and integrity in laws and regulations.

## **4 Strategies for Applying Artificial Intelligence Technology to Human Resource Recruitment Management**

### **4.1 Build an information management platform**

Due to the relatively late development of human resources in China's enterprises, it is necessary to actively learn from the excellent experience of other countries and formulate clear development goals. On the one hand, we should adjust the direction of human resources development according to the actual development goals, and on the other hand, we need to formulate scientific planning. Put innovation management in a dynamic process, and do a good job in the combination of resources, and enhance their own development potential<sup>[5]</sup>.

With the rapid development of social informatization, the management and control of enterprise human resources has become an important content. On the one hand, the application of technology can realize the modernization and informatization of human resources, improve management efficiency to a certain extent, and on the other hand, it is also conducive to enhancing the competitiveness of enterprises. In the practice of enterprise human resource management, it is necessary to focus on correcting and managing the problems and mistakes in human resource management, so as to continuously improve the development ability of the enterprise. Therefore, in the process of improving the competitiveness of enterprises, it is necessary to improve the efficiency of the management and control system and encourage managers to continuously innovate and improve the management model.

Enterprises need to make full use of the human resource management innovation model to integrate enterprise development resources and enhance competitiveness and sustainable development capabilities. Enterprise human resource management inno-

vation puts forward higher requirements for managers, not to imitate as the premise, combined with their own actual situation to innovate management methods, improve management level, and gain competitive advantage. There will be certain difficulties in the process of carrying out the work. Therefore, it is necessary to do a good job in the integration of resources, actively find out their own advantages, clarify problems and gaps, and formulate corresponding solutions to solve practical problems. Therefore, there is a certain difference between enterprise human resource management itself and other management work, and managers should objectively analyze the particularity of enterprise human resource management, actively change the traditional concept, and establish and improve the management system under the guidance of the actual situation and development goals. Specifically, special management departments can be established to arrange different talents for different enterprise positions for management, so that each performs its own duties and makes the best use of its talents. In addition, managers should formulate a sound assessment and incentive system to mobilize the enthusiasm of talents, give full play to the value of human resources, and continue to improve their competitiveness. Managers should also provide platforms and opportunities for talent development<sup>[6]</sup>.

#### **4.2 Accurately formulate a recruitment plan**

The talents needed for various positions of the enterprise are mainly realized through channels such as open recruitment on the network platform, talent market recruitment and on-site recruitment on campus. Human resources and recruitment management departments should be fully aware of the importance of accurately formulating recruitment plans. In order to improve the efficiency of recruitment management, it is necessary to integrate artificial intelligence technology into human resource recruitment management and provide intelligent big data support for the formulation of recruitment plans. The use of intelligent big data can more widely understand the education, quantity, comprehensive quality and professional ability of the supply of talents, so that the recruitment plan is more targeted, specific and scientific. It realizes the accurate docking between candidates and the talent needs of the enterprise, selects the most suitable talents for key positions of the enterprise, and promotes the sustainable development of the enterprise.

In addition, it is necessary to pay attention to the use of artificial intelligence technology when formulating recruitment plans. Because when recruiting general positions in enterprises, there is intelligent technology to provide information and data support, which can ensure the accurate matching of personnel and posts. However, when recruiting senior management positions, because of the importance of their positions, they need to communicate and communicate in combination with interviews, and have a comprehensive understanding of the candidates' corporate development ambitions, macro management concepts, reform and innovation thinking, teamwork spirit, etc., therefore, in the recruitment process, it is necessary to strictly follow the implementation of the recruitment plan, and to flexibly use artificial intelligence technology and combine interview tests to achieve satisfactory recruitment results.

### 4.3 Create an indicator model for recruitment management

Artificial intelligence technology is an emerging driving force for enterprise transformation and brings vitality to the intelligent management of human resource recruitment. In order to further improve the efficiency of enterprise recruitment management, it is necessary to give full play to the technical advantages of integrating intelligent big data into recruitment management, and use information data collection and information data analysis to create an intelligent big data index model for recruitment management according to the actual situation of talents needed for each position in the enterprise. Including graduation school, ideological character, knowledge structure, professional quality, enterprising spirit, team spirit, personal reputation and hobbies. Through the intelligent index model of recruitment management, it can help enterprises accurately recruit the most suitable talents for each position, and arrange them to accurately matched positions according to their comprehensive capabilities, so as to truly make the best use of their talents.

### 4.4 Intelligent screening of recruitment resumes

In the modern network development and the severe employment environment of college students, enterprise job recruitment will inevitably face a large number of candidate resumes, and the traditional mode of manual screening of resumes should be abandoned in the recruitment management process, and intelligent big data technology should be used to screen recruitment resumes. The use of artificial intelligence to screen the resumes of candidates, according to the needs of the position to develop a set of screening qualifications, and the qualification standards into the resume screening system, the resume screening system with the help of OCP to the candidates' resumes for information data screening and in-depth analysis, such as education level, professional skills, unity and cooperation, etc. Choose the best candidate from a large number of resumes.

The advantages of intelligent screening of recruitment resumes are, firstly, it can screen and analyze resumes professionally, accurately and efficiently from multiple dimensions and perspectives, so as to achieve accurate matching of people and jobs. Second, it can greatly shorten the cycle of each recruitment work, reduce the workload of recruitment managers, reduce the waste of recruitment manpower and material resources, and reduce the cost of recruitment management.

In the process of recruiting outstanding talents, enterprises need to obtain a large number of candidate information for intelligent big data screening and analysis in order to select the best suitable talents. Information and data security is a difficult problem that must be faced by the application of artificial intelligence technology in recruitment management, which should be paid attention to by human resources recruitment management departments. It is necessary to establish a risk prevention system for the protection of information and materials, and formulate strict protection measures for the collection, storage, and use of information and data of candidates. After the recruitment work is completed, it is also necessary to strengthen the supervision and management of the applicants' information and materials, increase the confidentiality

of the security of the applicants' information and data, and prevent the occurrence of information and data leakage. Ensure that each candidate's personal information and privacy are securely monitored. Maintain the integrity of the enterprise and the social reputation.

#### **4.5 Improve the intelligent recruitment management system**

In order to ensure the effectiveness of the use of artificial intelligence technology in recruitment management, it is necessary to apply intelligent big data to human resources recruitment management, continuously improve the human resources recruitment management system, and sort out the process of recruitment management. It is necessary to ensure that the use of artificial intelligence technology runs through all aspects of recruitment management, and promote the development of artificial intelligence technology in recruitment management in the direction of high standards, high stability and high efficiency.

The application of artificial intelligence technology to recruitment management is a new thing, and human resource recruitment managers are facing a severe test, but this is both a challenge and an opportunity. It is imperative for enterprise decision-makers to be far-sighted, attach importance to the recruitment of outstanding talents from the perspective of promoting enterprise development, and strengthen the construction of intelligent recruitment management team. It is necessary to formulate a training plan for human resource recruitment managers, regularly organize and participate in human intelligence technology Xi, and improve the theoretical knowledge and application ability of human intelligence technology of recruitment managers.

In order to promote the smooth development of intelligent recruitment management, recruitment managers should have a strategic vision of development and the courage to reform and innovate, continue to learn and Xi explore artificial intelligence skills, improve the ability to use intelligent big data, transform from "transactional" to "intelligent" as soon as possible, and accelerate the process of promoting intelligent human resource recruitment management. Lay the foundation for the intelligent recruitment management of enterprises.

#### **4.6 Pay attention to the effect evaluation after recruitment**

Through the use of intelligent recruitment data indicator model, enterprises select suitable candidates to enrich each position. After the completion of the recruitment task, it does not mean that the recruitment process has ended, and it is necessary to pay attention to the evaluation of the recruitment effect, and to follow up and feedback the follow-up work performance of the recruiters, including all the recruitment positions, the number of people, the professional level and the adaptability of the position. In this way, we can continue to accumulate and summarize recruitment experience, help improve recruitment efficiency, and avoid the waste of talents caused by mismatch between people and posts.

In order to improve the quality of recruitment effect evaluation, artificial intelligence technology can be used to integrate the qualitative evaluation and quantitative evalua-



tion of each recruitment into the enterprise intelligent recruitment system, and through the analysis of the intelligent recruitment system, an economical and reasonable recruitment plan and efficient recruitment methods can be formulated.

## 5 Conclusion

With the progress of science and technology, "Internet +" In order to improve the efficiency of human resource recruitment management, we must do: rational use of artificial intelligence technology, accurate development of recruitment management plan, artificial intelligence technology big data to provide support, the establishment of recruitment management intelligent index model, make full use of intelligent big data to screen recruitment resumes, so that candidates and enterprises urgently need the position of accurate matching, improve the ability of recruitment managers to use intelligently, and gradually improve the effectiveness of recruitment management, to combine with interview tests, flexible use of artificial intelligence technology. In order to select the most suitable talents for the enterprise, improve the intelligent recruitment management system to ensure the smooth recruitment management process, ensure the security of the applicant's information, maintain the integrity and social reputation of the enterprise, pay attention to the effect evaluation after recruitment, ensure the quality of intelligent recruitment talents, strengthen the construction of the intelligent recruitment management team, and make greater contributions to the development of the enterprise. Human resource recruitment managers should seize the opportunity of the times, grasp the opportunity of reform and innovation, abandon the traditional recruitment management model, and constantly explore the new model of artificial intelligence technology applied to human resource recruitment management in the practice of recruitment management, so as to realize the high integration of artificial intelligence technology and human resource recruitment management, and help the sustainable development of enterprises to a higher level.

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