On the Influence of Artificial Intelligence on Human Resource Management

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Abstract: *With the development of The Times, the era of artificial intelligence has arrived. The conflict between man and machine and technology began, and the wave of change in the field of human resource management came. Artificial intelligence has brought high productivity and huge wealth, but it will also replace some people's jobs, forcing human resource management to shift to a new model. This paper will explain the application status of artificial intelligence in human resource management, and analyze the changes brought by the application of artificial intelligence to traditional human resources, and finally propose some countermeasures for enterprises and practitioners.*

Keywords: Human Resource Management; Artificial intelligence; Change strategies.

1. INTRODUCTION

The application of artificial intelligence (AI) in the field of human resource management (HRM) is having a profound impact on organizations and employees. In recent years, China has begun to pay attention to the development of artificial intelligence. Therefore, the field of human resource management, which specializes in dealing with people, is very sensitive to artificial intelligence. After the gradual application of artificial intelligence to human resource management, the traditional human resource management has undergone tremendous changes, and practitioners and enterprises have to change their thinking and actions to cope with the changes (Bankins, 2021). Overall, the introduction of AI can improve HRM efficiency, accuracy, and transparency, enabling organizations to better manage talent, enhance employee satisfaction, and help anticipate and respond to potential HR challenges. However, issues related to privacy, ethics and fairness also need to be carefully handled. In this context, this paper analyzes the changes of traditional human resource management under the influence of artificial intelligence, and puts forward some suggestions for enterprises and practitioners.

2. APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE FIELD OF HUMAN RESOURCE MANAGEMENT

2.1 Application in Training

The application of AI in training offers many innovative ways to learn and develop. AI can customize a personalized learning path. This helps ensure that each participant is trained at a level appropriate to their level and subject needs, improving learning outcomes (Espindola et al., 2023). With VR and AR technology, training can be more practical and immersive. For example, virtual reality can simulate real work scenarios and allow students to practice and apply skills in a safe environment. In addition, in the field of education, intelligent educational assistants and chatbots can be used to answer students' questions, provide additional learning resources, and provide real-time feedback. This helps to increase participants' understanding and engagement with the content. Using big data analysis, AI can track students' learning progress, identify learning difficulties, and provide personalized support. This helps educators better understand the needs of their trainees and adjust training programs to provide more effective instruction. In addition, gamified learning applies elements of game design to stimulate students' interest through rewards, challenges, and interactivity. AI can be used to optimize gamified learning experiences and improve engagement and learning outcomes (Yawalkar, 2019). The application of artificial intelligence in training helps to improve the efficiency, personalization and interactivity of training. These applications also help to better meet the needs of students and ensure that they can achieve better outcomes in the learning process.

Enterprises recruit and introduce excellent employees, and training can improve the knowledge and skill level of employees. Whether enterprises will be abandoned by The Times depends largely on the effect of training. In the traditional model, training is usually conducted in a centralized way, which is boring and inefficient. In the training

for most employees, the course is not targeted and does not meet the needs of employees. In addition, many practical operation links have been replaced by theoretical teaching due to the lack of facilities, which has greatly affected the improvement of staff's work ability (Bhardwaj et al., 2020). The emergence of intelligent products will push enterprise training to a new height. Intelligent training platform and data analysis system can be used to establish a huge online knowledge base, good data analysis ability can effectively analyze the shortcomings and shortcomings of employees and formulate courses according to the symptoms. In addition, intelligent training can also develop training programs through knowledge base and database, and realize scene simulation and evaluation and evaluation, truly achieving the most efficient. For example, business giant Walmart has used VR technology to train its employees. VR products can simulate the real scene, coupled with the use of headset products, employees seem to be in the real scene. In these scenarios, employees will play different roles, such as product salesmen, etc., and the training specialist will guide employees to enter the role as soon as possible according to the set plan and complete the training work in the virtual scene.

2.2 Application in Recruitment

The application of AI in recruitment involves multiple aspects, from resume screening to interview assistance to talent analysis. Firstly, AI can be used to automate and optimize the resume screening process. Using natural language processing and machine learning techniques, Ai can quickly analyze large numbers of resumes, identify key skills, experience, and academic qualifications, and recommend the most relevant candidates to recruiters. AI enables recruiters to search and match candidates more precisely. Using natural language processing technology, AI can understand a recruiter's queries and provide a list of the most relevant candidates from a vast database to meet the requirements of a particular job. The virtual interview platform uses voice recognition and sentiment analysis technology to provide recruiters with a way to assess candidates' communication skills and emotional intelligence (Verma & Bandi, 2019). This approach provides a consistent interview experience and reduces the distractions of subjectivity. Introducing chatbots into the hiring process could improve the candidate experience. These bots can answer frequently asked questions, provide information about company culture and hiring processes, and can also be used to initially screen candidates. AI can analyze vast amounts of employee data to identify successful employee patterns and predict the performance of new hires. This helps companies better understand their talent pool and optimize recruitment and talent development strategies. AI can help reduce bias in hiring and ensure a fairer hiring process. By eliminating subjective judgment, AI helps ensure that every candidate gets an equal shot at hiring (Biliavska et al., 2022). Overall, the application of AI in recruitment can increase efficiency, reduce the involvement of subjective factors, provide more impartial and objective assessments, and improve the overall recruitment experience. However, potential ethical and privacy concerns need to be carefully addressed when applied to ensure that AI is used in a way that complies with regulatory and ethical standards.

Recruitment is an important part of human resource management, and the success of recruitment is directly related to the development of enterprises. With the improvement of artificial intelligence technology, intelligent recruitment began to appear and gradually applied to the practice of enterprises. Artificial intelligence is different from human beings, they will collect personnel information from different channels according to the industry big data and the characteristics and requirements of the job recruitment of enterprises, and screen out the candidates who are most in line with the characteristics of the job from thousands of resumes, in addition, they will automatically match their most suitable positions according to the characteristics of talents, then arrange the interview work, and finally determine the job list (Pathak & Solanki, 2021). Automatically review resumes through artificial intelligence, match suitable positions, and arrange job interviews. According to the Human Resources Department, intelligent recruitment reduces recruitment costs, saves HR a lot of time, and the use of information technology also increases the fairness of recruitment.

Italent integrated talent management cloud platform includes intelligent recruitment service module. Italent will integrate enterprise data and job characteristics, publish recruitment information on the official website and other channels, integrate resources through various channels, use the two-way matching mechanism between talents and jobs, select talents by job characteristics, and consider the ability and characteristics of candidates, and recommend suitable jobs intelligently. In addition, Italent conducts personnel assessment and examination according to different positions, independently arranges online or offline interviews, and can automatically approve and handle the entry procedures after passing the interviews. Italent's intelligent recruitment services cover almost the entire process of recruitment, from advertising to employee onboarding, and there are very few jobs that require human participation.

AI analyzes employee performance data to provide a more comprehensive assessment. This helps to set more

specific, data-based goals, while also providing employees with more targeted feedback and development suggestions. AI can analyze employee feedback to help management better understand problems in the organization and take targeted improvement measures. Sentiment analysis tools can also identify employee emotions and mood changes. In addition, automated tools can simplify many personnel management tasks, such as payroll calculation, benefits administration, and employee attendance (Hmoud, 2021). This helps reduce human error and improve overall efficiency. Smart devices and sensors can be used to monitor the health and well-being of employees. This data can be used to develop wellness programs that provide targeted support to improve the quality of life and work for employees. AI uses big data for predictive analytics to help companies better understand talent trends and future manpower needs. This helps to develop an effective talent planning strategy.

3. THE IMPACT OF ARTIFICIAL INTELLIGENCE ON TRADITIONAL HUMAN RESOURCE MANAGEMENT

3.1 Opportunity

3.1.1 Improve the efficiency of human resource management.

Through the Internet and computer technology, artificial intelligence can quickly handle various tasks. Information and technology allow artificial intelligence to surpass the limits of all living organisms and perform tasks repeatedly and efficiently. The blessing of database and cloud technology also makes artificial intelligence's control and accuracy of data far exceed that of human beings, improving the quality of work. At the same time, artificial intelligence strictly follows algorithms and procedures to analyze and interpret big data, avoiding the influence of subjective consciousness, and thus avoiding the unfair results caused by human emotional factors and empiricism (Qamar et al., 2021). For example, in enterprise recruitment, artificial intelligence collects big data of the industry market, refers to the company's needs and job characteristics, screens candidate resumes one by one, and arranges video interviews or offline interviews. In this process, artificial intelligence relies on sophisticated algorithms to analyze to the maximum extent whether the ability of each candidate matches the characteristics of the position, which is more high-quality and quantitative than human subjective judgment. Second, when interviewing candidates, AI will not be tired, will not produce tired resistance, from the beginning to treat every interviewer fairly. Artificial intelligence will not miss fairness because of appearance, speech habits, personal preferences, etc., to ensure the rigor and fairness of the work to the greatest extent.

3.1.2 Reduce the input cost of human resource management.

Artificial intelligence reduces the cost of human resource management mainly in two aspects. First, artificial intelligence uses information network and data integration and analysis technology to allocate human resources in the most reasonable way and assist managers in allocating work, which greatly reduces unnecessary links and avoids inefficient allocation of labor as far as possible, thus reducing labor costs. Second, artificial intelligence has replaced some people's work, such as file management, entry and departure procedures, etc., enterprises only need to choose and purchase artificial intelligence systems or equipment reasonably, without paying salaries and preparing employee benefits, they can obtain more efficient results, which greatly reduces labor costs.

Take training as an example, most of the traditional training lacks pertinence. A typical example is to gather employees together regularly to carry out scattered and broad knowledge imparted and technical practice. This largely ignores the needs of employees, which leads to a lot of repetitive and ineffective cost outlays (Qiu & Zhao, 2018). In addition, the salary payment of the trainer and the layout of the training site are not small expenses. After the application of artificial intelligence to training, it will analyze the needs of each employee, provide different learning programs and courses for the shortcomings, and truly achieve the right medicine and reduce costs to the greatest extent. Moreover, artificial intelligence training is mostly carried out on the network, and employees can freely arrange work and training, sitting at the same time, which reduces the cost of delayed work because of training.

3.1.3 Promote the transformation of enterprise human resource management mode.

The traditional human resource management is often out of step with the enterprise strategy. The personnel department focuses on the management of staff affairs and is closed within the department, which is not conducive to the long-term development of the enterprise (Li,2018). After the application of artificial intelligence to human resource management, simple and repetitive work is replaced by machines, and employees are liberated, with more

time and energy for department construction, and promote the deep integration of human resource management with the overall strategy of the enterprise. In addition, the use of artificial intelligence has forced human resources departments to change their original thinking mode of focusing on indicators and performance and start to really focus on people themselves. It can be seen that the application of artificial intelligence promotes the traditional human resource management to a new model at the level of thinking and strategy and promotes its continuous transformation.

3.2 Challenge

3.2.1 The lack of compound talents is contradictory with the high demand of the market.

The application of artificial intelligence promotes the transformation of human resource management in a new direction. In this new mode, enterprises need highly interdisciplinary talents who are proficient in human resource management knowledge and skills, have certain information management technology, and have strategic thinking and forward-looking mind. In the past, human resource management was not paid attention to and was often regarded as a job that everyone could engage in until recent years. The development of human resource management is still at a climbing stage (Buzko et al., 2016). Although the courses carried out by colleges and universities are constantly updated and changed, most of them still stay in the traditional direction of human resources, which results in the lack of highly interdisciplinary talents in the talent market. It has caused the contradiction between high demand and lack of talents. According to the current development situation, the contradiction cannot be cured for a long time, only with the reform of education to ease. The speed of education reform is not proportional to the development of science and technology, which will lead to the reduction of intelligent human resource management efficiency, lack of control and talent matching.

3.2.2 Equipment and technical conditions are insufficient, cannot play its due value.

At present, although the replacement period of artificial intelligence products is getting shorter and shorter, product types and functions are constantly enriched, but its overall development level is still in its infancy. The application of artificial intelligence by enterprises is still in the stage of exploration and reference, and they are mostly in line with industry benchmarks or model enterprises, changing traditional ideas, learning new technologies, and gradually applying artificial intelligence (Tewari & Pant, 2020). As mentioned above, the combination of artificial intelligence and big data, cloud technology, etc., plays a real strength, in these enterprises, whether these technologies are available, and even if they are available, whether they can match with artificial intelligence is an unknown. It can be seen that the human resources department and even the entire enterprise, due to the limitations of technology and equipment, to a large extent did not develop the real value of artificial intelligence, they only stay at the level of reference and imitation, artificial intelligence application only brings about the efficiency of basic work, which is far from the ultimate goal. Therefore, the application efficiency of artificial intelligence is largely affected by the existing equipment and technology level of enterprises, and how to adapt technology and equipment is a major challenge.

In addition, human beings, as conscious organisms, have all the advantages that technology does not have, have emotions, and have subjective judgment. These are things that artificial intelligence cannot replace. Although artificial intelligence can operate efficiently and quickly, it lacks judgment and compromise, and lacks emotion and communication (Vrontis et al., 2022). Whether it is external communication or internal cooperation, enterprises need to pay attention to not only performance and profit, but also spirit and emotion. Taking training as an example, although AI intelligent training breaks the disadvantages of traditional training and can tailor training programs, enterprises must not rely on intelligent systems entirely, but also need to pay attention to the role of people.

Here is another major challenge of artificial intelligence for human resource management. Artificial intelligence, which represents high efficiency and high productivity, is too easy to be favored by capital, thus eliminating the role of human beings in a deformed growth trend (Tambe et al., 2019). Enterprise managers who are carried away by profits and money are likely to ignore employees, resulting in the continuous reduction of the comprehensive quality of employees and the continuous rigidity of enterprise production mode. Seemingly efficient production, but in fact, the internal void, vulnerable.

3.2.3 Employee satisfaction decreases, and resistance occurs.

As a social person, people need not only material incentives, but also spiritual comfort. Although artificial intelligence can complete various tasks fairly and efficiently, it lacks flexibility, will not change according to reality and special circumstances, and only blindly follow the written program (Johansson & Herranen, 2019). The real world is full of unknowns and changes, and the level of artificial intelligence is not able to adapt to these changes, and over time, if it is not handled properly, the satisfaction of employees will decline, and the human resources department will have conflicts with other departments. The sense of crisis that could be replaced at any time, coupled with the negative effects brought about by artificial intelligence, will make human resource management practitioners increase resistance and resist the application of artificial intelligence.

3.2.4 There are risks of data management and leakage.

Information technology brings huge productivity, but also contains huge risks, in the highly developed Internet technology today, data leakage has become a commonplace problem. Artificial intelligence is, in the final analysis, an emotionless machine and program without the ability to judge right from wrong (Abdeldayem & Aldulaimi, 2020). Countless company secrets, customer information and other data are generated, analyzed and interpreted, each link has the risk of disclosure. Cyber hackers, unscrupulous competitors, and accidents are all responsible for data breaches. As mentioned earlier, artificial intelligence applications lack technical matching and complex talent matching, and this situation is more or less manifested in various forms. These technical and institutional contradictions greatly increase the risk of data leakage. Companies only need to ensure the loyalty of employees, coupled with the constraints of legal ethics and industry norms, and the risk of data leakage is low. Once the adoption of artificial intelligence, cloud technology and other information technology, not only people, enterprises also need to strengthen the monitoring and management of intelligent systems and technologies, which is a small expense for enterprises. Even if the budget is sufficient, the machine only follows the procedure, the so-called loyalty is only a string of passwords, firewalls and so on with a string of characters. Once sensitive data is leaked, the impact on the enterprise is huge.

4. CHANGE STRATEGY OF HUMAN RESOURCE MANAGEMENT

4.1 Accelerate the Change of Thinking Mode and Cultivate Compound Talents

Artificial intelligence has been applied to simple and repetitive work, and many low-level practitioners have lost their jobs, which forces other practitioners to look at the forefront of the industry, learn new technologies and knowledge, deeply change the original mode of thinking, seize all the opportunities that can be seized, learn the latest technologies, and not be abandoned by The Times (Strohmeier & Piazza, 2015). Enterprises also need to support and encourage the behavior of employees and provide certain opportunities and platforms at appropriate times to help employees better improve themselves. For example, enterprises can carry out centralized training, and use the strength of enterprises to find industry model figures and excellent teams to teach employees. The application of artificial intelligence, prompting human resource management to turn to a new development model, the enterprise needs is to master a variety of knowledge and technology of technical talents, the need is to keep pace with The Times, innovation and innovative talents, this point alone by the efforts of employees is far from enough, the enterprise in this link, perhaps shouldering more important responsibilities.

4.2 Construct a New Mode of Human Resource Management and Improve the System Guarantee

The real application of artificial intelligence to human resource management is not just the purchase of equipment and the introduction of technology. To truly integrate artificial intelligence into the construction of enterprises and into the work of human resource management, what is needed is the support of strategies and systems (Kshetri,2021). Only with the improvement of strategy and system can artificial intelligence and human resource management be deeply integrated from the spiritual level and behavioral constraint level.

In my opinion, there are mainly three aspects to improve the strategy and system: First, the enterprise must strengthen the staff team building, enhance the communication and communication among employees, so as to reduce the generation of contradictions; Second, open up the feedback system of employees, listen to and adopt the opinions of employees appropriately, so that the personnel management of enterprises is more humanized; Third, divide the rights and responsibilities system of artificial intelligence and employees to ensure that things fulfill their responsibilities and truly exert the maximum value of artificial intelligence; Fourth, improve corporate rules and regulations to link the application of artificial intelligence to employee performance.

4.3 Human and Intelligent Division of Labor Cooperation, to Achieve Maximum Management Efficiency

Artificial intelligence is tireless, efficient, fair and impartial, but it lacks flexibility and emotion. Human emotions are rich, flexible and diverse, but their energy is limited, and their data analysis ability cannot be compared with artificial intelligence. Artificial intelligence and human beings have always been two subjects of confrontation, but if they can grasp the relationship between the two and seek win-win cooperation, they will play a greater value.

HR professionals are freed from trivial tasks and should focus on strategy and vision. After analyzing the internal and external environment, the talent strategy in line with the overall strategy of the enterprise is formulated with reference to the development status of the industry and the internal personnel factors of the enterprise, and the strategy is refined into specific measures that can be implemented (Song & Wu, 2021). The specific behaviors mainly include building a strategic human resource team that ADAPTS to the development of the enterprise, including recruiting excellent employees, rationally allocating existing human resources, conducting regular training to enhance employees' skills and tapping the potential of human resources. Artificial intelligence can be used for simple and repetitive work, and can also be used for data integration, analysis and other work that requires information technology support.

In this link, the management of the human resources department must pay attention not to underestimate the role of people (Rodgers et al., 2023). Artificial intelligence, even if it is intelligent, simple and efficient, is ultimately a tool created by people to assist people. In the transition stage from traditional human resource management to new human resource management, people are still the core subject of work.

4.4 Enrich Corporate Culture and Improve Employee Satisfaction

As mentioned above, the application of artificial intelligence has weakened the emotional communication between employees, and inevitably produces all kinds of contradictions, which is a common disease brought by information technology, and cannot be solved by a few things and a few people (Johnson et al., 2022). After the application of artificial intelligence technology, enterprises need to pay attention to the in-depth exploration and construction of corporate culture and lay a solid foundation at the spiritual level. In addition, enterprises should pay attention to the experience of employees, care about the behavior of employees, accept the opinions of employees, make up for the emotional loss caused by indifferent machines, and better promote the development of enterprises.

5. CONCLUSION

This paper discusses human resource management around artificial intelligence. Firstly, this paper expounds the application of artificial intelligence in the field of human resource management from three aspects: recruitment, training and employee management. This paper analyzes the impact of artificial intelligence on traditional human resource management from the perspectives of opportunities and challenges. Finally, the author puts forward corresponding countermeasures to enterprises and practitioners for the reform of human resource management. While AI offers huge benefits for human resource management, companies need to take privacy and ethical concerns seriously as they adopt these technologies and ensure transparency and impartiality throughout the process. In addition, human judgment and communication remain critical in human resource management, as interpersonal and emotional intelligence are areas where AI is difficult to completely replace.

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