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ARTIFICIAL INTELLIGENCE IN THE CONTEMPORARY CHINESE HUMAN RESOURCE MANAGEMENT VIA IFLYTEK COMPANY EXAMPLE

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ABSTRACT

The rise of Industry 4.0 has accelerated the development of artificial intelligence (AI)-based solutions, making them a key driver of global economic transformation. As technologies mature and application areas expand, more companies have been integrating AI and automation into human resource management (HRM) for recruitment, training, performance evaluation, and employee relations. AI-based intelligent algorithms and automated processes enhance efficiency and address the shortcomings of traditional HRM, but also pose managerial, cultural adaptability, and legal challenges. Strict data protection regulations, particularly China's Personal Information Protection Law (PIPL), increase legal compliance pressures. In this paper the authors reveal the opportunities and challenges of AI applications in HRM through a case study of iFlytek, whose leading position and practical experience can offer valuable insights for applying AI-based solutions and supporting sustainable development for the Chinese enterprises in a competitive global environment.

Keywords: AI, Chinese HRM, cultural adaptability, legal compliance, PIPL

1. Introduction

Artificial Intelligence (AI) has gradually become one of the core tools in HRM, which can help enterprises conduct faster and more accurate data analysis to support of the decision-making process. The generated data can also be used for long-term data storage and analysis to provide data support for corporate strategic planning. When using generative AI, enterprises have to ensure security and compliance of data to cope with the increasingly stringent regulatory environment (Shanghai Overseas Service, 2024). Digital tools can also track employees' training progress, evaluate their learning outcomes, and provide data support for personalized career development planning. This digital transformation makes the company's HRM more systematic, precise, and improves the efficiency of human resource allocation (Kalvokolanu & Prasad, 2023; Zavyalova et al., 2022).

As the problem of population aging becomes more serious worldwide, many countries face the challenge of labor shortage, especially in high-demand service industries such as medical care and elderly care. Widespread application of automation and robotics technologies not only helps companies reduce their dependence on manpower in repetitive and basic work, but also significantly improves the quality of services in these areas. The development of AI technology has opened up new ways for HRM, companies can train, motivate and deploy employees more effectively, thereby realizing the added value of human capital. This symbiotic relationship will also drive companies to pay more attention to employee's experiences and gradually shift HRM from transactional work to strategic talent management (Deloitte, 2016; Gebayew et al., 2018, Tencent News, 2023).

The globalization trend of HRM has made multicultural management, cross-border legal compliance and language barriers the core issues that multinational companies have to face. Deploying AI recruitment tools, many multinational companies have to ensure that these tools comply with local data privacy protection laws, such as Europe's General Data Protection Regulation (GDPR). At the same time, the trend of globalization has also brought innovation opportunities to companies. Companies can use diverse talent resources, implement inclusive talent management strategies, and further enhance their competitiveness (Roopalatha & Sucharita (2024). In addition, the introduction of AI tools allows HR professionals to devote more energy to strategic, creative and decision-making tasks including talent development, employee training and organizational culture building. In this paper, the authors analysing the introduction of AI tools how to make transition from traditional HRM to intelligent, datadriven HRM supporting business strategies. Furthermore, this research work also proposed some potential strategic options for the decision-makers improving their employees' digital literacy and data analysis capabilities to adapt to the needs of AI-driven intelligent HRM.

2. Methodology

In this review paper, the authors had studied the available relevant theoretical literatures as reference base, gathering, structuring data and draw conclusions. The implementation methodology based on secondary or "desk" research analysing international organisations documents and special databases, scientific publications, studies, online literature sources. The literature search and analysis was carried out in a combined, "snowball method" (Jalali-Wohlin, 2012). It means that further additional relevant literatures were involved based on some pre-selected literature (per author or scientific journal) and their references, as well as additional ideas arising from the authors own existing information. Nevertheless, the diversity of the selected sources supports a multifaceted perspective, a notable portion of the documents comes from secondary media content and corporate publications. These sources provide valuable practical insights but can mean limitations in terms of independence and verifiability. To mitigate potential bias, sources were cross-checked by the authors where possible and evaluated for relevance and credibility for example, by applying qualitative techniques organizing and interpreting data based on recurring themes or patterns to enhance transparency and reproducibility. To analyse the secondary literature on AI in Chinese HRM, thematic coding was applied following Braun and Clarke's (2006) framework. Key documents—such as government action plans, iFlytek corporate reports, and academic studies—were open-coded for concepts like "algorithmic transparency," "PIPL compliance," and "human-technology integration." Through iterative content analysis, these codes were grouped into broader themes linking national policy contexts with iFlytek's practical applications in recruitment, training, and performance evaluation, enabling a focused comparison of macro-level drivers and micro-level practices.

The conclusions and suggestions made by this research work in this article reflect the private professional view of the authors.

3. Landscape of AI-based Solutions Adoption in Chinese HRM

The Chinese government encourages enterprises to innovate and use AI technology to improve HRM processes improving efficiency of data processing and analysis. For example, the "Action Plan for the Implementation of the Innovation and Development of the Human Resources Service Industry (2023-2025)" states that it is necessary for the enterprises to adopt technologies such as big data, cloud computing, and AI to accelerate of business intelligence and management digitization. This policy provides policy support and development space for enterprises to apply AI technology in HR management (Roberts et al. 2021). The below Table 1 briefly summarizes the main political initiatives and Actions Plans.

Table 1. Main initiatives to promote the AI applications in HRM

Policy/Plan	Release Date	Key Content	Impact
Next-Generation AI Development Plan	2017	Establish an open and collaborative AI technology innovation system and promote AI applications across	Provided policy support for the application of AI in HRM
Action Plan for Innovation and Development in HR Service Industry (2023-2025)	2022	Enhance the level of AI in HRM	Promoted further application and development of AI in HRM
Survey on the Level of Attention to Digital Intelligence Applications in HR Systems	2023	Gained attention across various modules with recruitment and employee service platforms	Reflected companies growing focus on demand for the digital transformation of HRM.

Source: Own edition based on Roberst et al. (2021)

In recent years, the Chinese government has continuously issued a series of policies, clearly pointing out the strategic position of AI in enhancing the country's core competitiveness. AI is regarded as one of the important engines of future economic development, and its application has gradually expanded to multiple key industries, such as finance, medical care, education and manufacturing, providing a strong impetus for innovation and upgrading in various fields of the economy and society. With policy support, related strategies such as new infrastructure and digital economy have further provided support for the development of AI and the rapid growth of the market. According to the forecast of International Data Corporation (IDC), China's spending on AI is increasing year by year, and is expected to reach US\$13.03 billion in 2022, showing strong market demand and investment intention. IDC further predicts that by 2026, the market size is expected to increase to US\$26.69 billion, showing the huge potential and development space of the market. The annual compound growth rate (CAGR) of China's artificial intelligence market is expected to reach 19.6% between 2022 and 2026, indicating that this field will maintain a rapid and stable growth momentum in the next few years (IDC, 2024).

You can see in the below Figue 1., that AI and Generative AI (GenAI) investments in the region are projected to reach \$110 billion by 2028, growing at a compound annual growth rate (CAGR) of 24.0% from 2023 to 2028. This indicates the region's crucial influence in shaping the future of global scale AI-based innovative solutions.

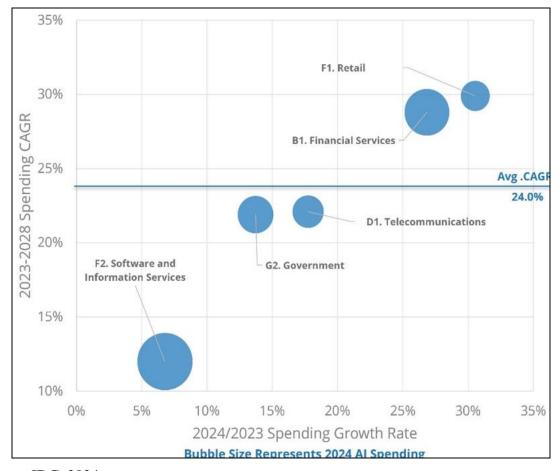


Figure 1. Asia/Pacific Top Largest Spending on AI Industry

Source: IDC, 2024

China's artificial intelligence market is expected to further enhance its position and influence in the world, laying a solid foundation for the realization of national digital transformation and innovation-driven high-quality development.

Main applications fields of AI in HRM

Through automated resume screening, intelligent preliminary interview arrangements, and evaluation and analysis in video interviews, AI helps companies significantly reduce the tedious manual operations in the traditional recruitment process, allowing HR teams to focus more on key decision-making links. Specifically, technologies such as AI-generated content (AIGC), natural language processing (NLP), and machine vision provide companies with powerful tools to quickly and efficiently screen out candidates that meet job requirements. With these technologies, AI can automatically analyze factors such as the content of a candidate's resume, work experience, and professional skills, and preliminarily screen out a list of qualified candidates, greatly shortening the initial screening time for HR (ADP, 2024; Inspur, 2022). In addition, AI technology can also analyze the candidate's tone, body language, and expression through video interviews, and even understand the candidate's soft skills such as expression ability and communication skills through voice analysis, thereby providing HR with a more comprehensive and objective evaluation. Furthermore, AI can also

predict the candidate's potential performance in the company in the future by analyzing the candidate's behavioral data and career development data. This data-driven analytical capability not only improves the accuracy of recruitment, but also makes the company more scientific and rigorous in the selection process. The below Figure 2 reveals penetration rate of AI into the different HRM fields in China.

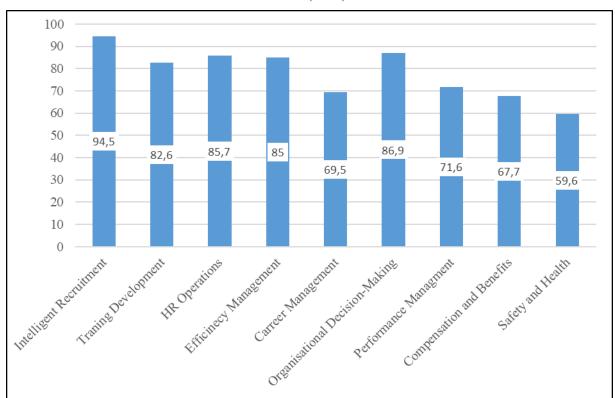


Figure 2. Application Ratio of AI-baased Solutions in the Different HRM Fields in China 2022 (in %)

Source: Own edition based on ADP, 2024; Inspur, 2022

AI also has more advanced methods in talent development, performance management and employee retention. The AI system provides key performance indicators for the HRM team by analyzing data such as employee performance, turnover rate and satisfaction. At the same time, the automated evaluation system can also reduce human bias and improve the fairness of performance evaluation. For example, the AI system can automatically collect employee behavior data at work and generate detailed reports to help HRM managing employees more scientifically. In employee retention, AI can monitor employee satisfaction, health status and turnover tendency in real time through questionnaires, employee feedback analysis, thus helping companies adopt targeted talent retention strategies and helping HR teams develop more effective retention plans reducing employee turnover (Wukong, 2024).

3.1. Impacts of accelerated digital transformation

In the process of accelerating digital transformation, the digital application of various modules of the human resources system has gradually become the focus of enterprises. According to the survey results, the attention of most modules exceeds 60%, among which the intelligent recruitment and employee service platform modules are particularly prominent, reaching a high level of attention. Specifically, the intelligent recruitment module has received 90.68% attention, while the employee service platform has also received 90.06% attention. This shows that in the process of digital transformation, enterprises are increasingly paying attention to the digital application of intelligent recruitment, employee services to

improve the efficiency and service quality of HRM. The digital application of other human resources modules is also developing in a balanced manner. The attention of modules such as performance management, core personnel management, and training management is all above 80%, reflecting that enterprises are committed to the comprehensive development of various modules in the process of promoting the digitalization of human resources to avoid falling behind in future competition. For example, the attention of performance management reached 86.34%, while the attention of training management was 82.61%, showing the key position of these functions in promoting employee growth and performance improvement. It is worth noting that although the attention paid to the labor outsourcing module is slightly lower, at 59.63%, it is still close to 60%, indicating that enterprises' demand for the digitalization of this module is also gradually increasing. Overall, this trend shows that enterprises are no longer focusing only on a single module of human resources digital transformation, but on the overall balanced development of the human resources system. In a highly competitive market environment, companies seek differentiated advantages in HRM. Large companies further enhance the flexibility and accuracy of HRM through self-developed AI systems, while small and medium-sized enterprises (SME's) achieve digitalization of HRM at a relatively low cost through outsourcing or cooperation with professional service providers. At the same time, service providers are also constantly providing customized AI solutions to meet the needs of companies of different sizes (ADP, 2024; Inspur, 2022).

According to the "2024 China Human Resources Service Industry Research Report", with the gradual improvement of relevant laws and regulations, the in-depth application of digital technology and the increasing standardization of the market, the flexible employment industry will develop in a healthier and more orderly direction, and gradually achieve scale and branding to enhance the competitiveness of each company in specific fields by building long-term partnerships (Baidu, 2024a). In this context, the popularity of remote work and flexible employment has led to an increasing demand for distributed employee management in companies. Many companies have introduced advanced digital management systems to support the work arrangements and performance evaluation of distributed teams, making HRM more convenient and efficient. This approach not only breaks the geographical limitations of traditional offices, but also enables companies to flexibly adjust human resource allocation in a broader talent market, thereby gaining an advantage in the global talent competition.

3.2. Challenges and Opportunities

Data Privacy and Security

AI systems usually need to process and analyze a large amount of data involving employee personal information, including sensitive information such as identity information, professional background, and performance records. Compliance management of data not only helps to reduce the legal risks of enterprises, but also enhances employees' trust in AI systems and promotes their effective application within the organization. In addition, enterprises often need to implement multi-level security protection measures, such as data encryption, access control, and regular system security audits, so as to reduce the risk of data leakage and abuse. At deployment of AI systems, data privacy and security have become a priority that cannot be ignored, which is of great significance to the long-term digital development of enterprises (Ministry of Justice PRC, 2024).

Technology Investment and Costs

The introduction of AI technology usually requires enterprises to invest a lot of money in hardware equipment, data storage, algorithm development in the application of generative AI and large models, the update of hardware facilities, the need for data processing, and the

requirements for technical support will bring significant cost pressure. For SME's, especially emerging "specialized and new" enterprises, this high investment may become a major obstacle to the promotion and development of AI applications. However, as AI technology becomes more popular, costs are gradually decreasing, more and more SME's can effectively control expenses by choosing cloud computing services and technology outsourcing models to improve their own technology application level (IDC, 2024; Wang, 2024).

In order to better adapt to the development and application of generative AI and large models, SME's should adopt a series of comprehensive strategies: first, invest in employee training to ensure that the existing team has AI-related skills; second, establish partnerships with professional technology partners to obtain necessary technical support and expertise. In addition, actively seeking appropriate financial support, such as government subsidies, industrial funds can provide additional resources for the application and development of AI technology. It is also key to develop a wise business plan, through a detailed cost-benefit analysis, to ensure that AI projects can achieve substantial results within a reasonable budget. Although the introduction of AI technology may face challenges in initial capital investment for SME'ss, through flexible cost management strategies and effective use of external resources, AI-driven HR intelligent applications offer great potential for this sector.

Synergies between outstanding talents and AI

With the widespread application of AI technology in HR management, the skill requirements of HR professionals have changed significantly. They not only need to have traditional HRM knowledge, but also need to master the skills of data analysis, technology application and AI tool operation in order to make better decisions and perform tasks in a data-driven environment. While promoting the application of AI technology, enterprises also need to strengthen the training of HR personnel's data literacy and technical capabilities. By organizing systematic training courses, encouraging participation in technical seminars or working with AI experts, enterprises can help HR teams adapt to this transformation, enabling them to effectively use AI tools in their daily work, thereby more efficiently supporting the company's talent management strategy to maintain their competitive advantage in the AI-driven market (CPPCC National Committee, 2024), Baidu, 2024b).

3.3. Cultural and Regulatory Dynamics in Chinese HR Automation

Cultural adaptability

In the Chinese company culture, "benevolence" as the core concept of Confucianism emphasizes harmonious interpersonal relationships, family ethics, and social responsibility. This spirit can be transformed into care for employees and emphasis on teamwork in modern corporate management, thus forming a unique organizational culture. In the context of the gradual penetration of automation technology and digital tools into corporate management, the integration of corporate culture with "benevolence" as the core and these technical tools provides companies with a management model that is both efficient and humane (CSTC, 2024). Employees are the most valuable resources of an enterprise. By caring about the physical and mental health of employees, companies can create a good working environment and development opportunities for them. This not only helps to stimulate employees' creativity and enthusiasm for work, but also improves the cohesion and stability of the company. According to Maslow's hierarchy of needs theory, after their material needs are met, employees will pursue a sense of identity and belonging at the spiritual level. The corporate culture with "benevolence" as the core can just meet the needs of employees in this regard, so that they feel respected and cared for at work. Companies can use data analysis tools to regularly understand employees' health status, work pressure and psychological needs, and then provide targeted support.

For example, automation systems can help companies better arrange employees' workloads, avoid excessive overtime, and provide employees with real-time care and encouragement through intelligent feedback mechanisms. Such technical means not only improve management efficiency, but also allow employees to feel the care from the company, thereby enhancing a sense of belonging and loyalty. The corporate culture based on "benevolence" can also promote team collaboration through digital means. With the help of collaboration platforms and communication tools, companies can create a more open and equal communication environment where employees can support and help each other at work strengthening the relationship between employees, making the entire team more cohesive and efficient. Companies need to improve employees' understanding and adaptation through a variety of training and communication methods to help them smoothly with positive attitude accepting the automation change. (Wang Gu Technology, 2024).

Regulatory Factors

Data privacy and information protection have become increasingly important in corporate HRM, especially in the context of the continuous deepening of artificial intelligence and digital management technology. According to information released by the Ministry of Justice, China is accelerating the improvement of data security legal system to meet the challenges of network data security. This includes comprehensive optimization of the legal framework for data privacy and information protection to ensure the compliance of enterprises in the process of data collection, processing and storage (Ministry of Justice, PCR (2024, Xinhua, 2021).

In terms of specific measures, the country has strengthened the security review of network data, encrypted data transmission, strict access control and other means to build a solid security line for network data. Such measures not only reduce the risk of data leakage, but also further protect the privacy of users, so that enterprises have laws and regulations to follow when using big data and artificial intelligence technologies for HRM. From the perspective of practical application, the protection of data privacy is not only the compliance with laws and regulations, but also the maintenance of employee trust in the company's anonymised processing of their personal data, preventing improper use of this sensitive information, which is the key to harmony and stability within the enterprise. Operating an efficient compliance management system, internal audits and external reviews have become key means to ensure that corporate behavior complies with regulations and standards identifying potential hidden risks in daily operations and ensuring internal processes maintaing with increasingly complex regulatory requirements and corporate internal policies(Visure Solutions, 2024). External audits provide companies with an objective thirdparty perspective that can identify issues that may be missed by internal audits. External audits are usually performed by independent third-party audit agencies providing fair feedback on the company's compliance management through authoritative compliance assessments. External audits not only help enhance the credibility of companies in the market, but also enable companies to gain an advantage in competition to meet industry standards and international norms. These tools can help companies automate compliance monitoring, including compliance tracking, risk assessment, and report generation, thereby significantly reducing the time and error risks of manual reviews and help companies adjust compliance strategies in a rapidly changing regulatory environment.

In the process of promoting HRM automation, enterprises need to comprehensively consider three factors: cultural adaptability, regulatory compliance, and data privacy and security protection (Yingsheng, 2024). Cultural adaptability is particularly important in China's management environment.

Integrating the care and team spirit in corporate culture into the automation process not only helps to improve employees' sense of identity, but also ensures that the automation system is in line with corporate values, promoting employees' active acceptance of new technologies.

4. Application of AI in the HRM at the IFlytek Company

Since its inception, iFlytek has been committed to deepening its roots in the field of artificial intelligence, and is committed to working hand in hand with the domestic software and hardware industry chain to jointly build an independent and controllable technology platform. On this basis, iFlytek continues to maintain and enhance its international leading position in core technologies, contributing Chinese wisdom and solutions to the development of global AI technology iFlytek, 2024a).

Relying on the strong scientific research strength of iFlytek's National Key Laboratory of Cognitive Intelligence, iFlytek grandly launched the iFlytek Spark Large Model on May 6, 2023. On October 24 of the same year, iFlytek and Huawei joined forces to jointly release the first domestically produced computing power platform in China that can support the training of large models with more than 100 billion parameters, "Feixing No. 1", in Hefei. The advent of this platform undoubtedly provides strong support for the independent research and development and application of AI technology in China. In January 2024, iFlytek once again reported good news, successfully releasing the first large model in China based on domestic computing power training - iFlytek Spark V3.5. This version of the large model has achieved significant performance improvements, further consolidating iFlytek's leading position in the field of artificial intelligence. Against the backdrop of increasingly fierce competition between China and the United States in science and technology, iFlytek, with its deep accumulation in the field of general large models, is gradually showing its potential to surpass its competitors in industry models and key field applications. In the field of education, the multimodal correction and learning path planning functions of iFlytek Spark's large model provide strong support for teaching students in accordance with their aptitude and reducing burdens and increasing efficiency. According to statistics, students who use the Spark large model to study can reduce the amount of learning and practice on the same knowledge points by more than 50%.

In the medical field, iFlytek's "Smart Medical Assistant" AI auxiliary diagnosis system has been widely used in more than 500 districts and counties across the country, and has conducted more than 700 million auxiliary diagnosis and treatments, bringing more convenient, efficient medical services to the majority of patients. In the industrial field, iFlytek has also demonstrated strong technical strength. The multilingual technology for China's exported automobiles is basically provided by iFlytek. Among them, Volkswagen has jointly released a large-scale car model product with iFlytek after connecting to the iFlytek Spark large model. This cooperation not only enhances the international competitiveness of Chinese automobile brands, but also injects new vitality into the development of the global automobile industry. As of now, iFlytek has cumulatively supported more than 120 million smart terminals to go overseas, providing more intelligent and convenient services to global users. In addition, in terms of enabling software development, iFlytek's iFlytek Spark code capabilities have been successfully applied in more than 100 well-known companies such as Huawei and JD.com.. iFlytek's AI open platform has currently gathered more than 6.47 million developer teams to jointly promote the innovation and development of artificial intelligence technology.

Looking ahead, iFLYTEK will continue to adhere to the independent and controllable technology innovation route and seize the strategic opportunities of general AI. In addition, iFLYTEK will also explore the use of cutting-edge technologies such as quantum computing to break through the bottleneck of large-scale model computing power, and make early arrangements for possible revolutionary breakthroughs in the future (iFlyteck, 2024b).

4.1. Difficulties of AI Application at iFlytek

Although iFlytek's AI system has achieved certain results in the HR field, it faces challenges in data compliance, especially in the strict compliance with the provisions of the Personal Information Protection Law (PIPL) during data collection and use (Ministry of Justice PRC, 2024).

PIPL requires companies to be legal, legitimate and necessary when collecting and using data. iFlytek improves its AI algorithm to ensure that it only collects necessary candidate data in recruitment and explains the purpose and scope of data collection to the data subject (Article 6 of PIPL). According to PIPL, companies have to inform users and obtain their consent when using personal information for automated decision-making. iFlytek informs candidates in advance during the recruitment process to ensure that candidates understand the AI screening process and obtains candidates' consent before data collection (Articles 13 and 14 of PIPL). When applicants have questions, the company provides a complaint mechanism to protect users' right to know and right to object. When using AI for recruitment screening, PIPL requires companies to ensure the transparency and fairness of automated decision-making, especially for decisions that may affect personal rights and interests (PIPL Article 24). iFlytek provides explanatory and transparent functions for AI screening, allowing candidates to understand the reasons for their screening, reducing negative impact of algorithms on recruitment decisions.

Restrictions on cross-border data transmission

iFlytek needs to ensure that the data transmission of AI systems meets cross-border compliance requirements, especially when data involves cross-border, PIPL has stricter compliance requirements for data outbound (PIPL Article 38). In this context, iFlytek has formulated a comprehensive data storage and transmission management policy to ensure the security of data transmission. In traditional Chinese corporate culture, the interaction between employees and HRM departments is usually full of "human touch", that is, emphasizing the trust and understanding brought by interpersonal relationships and direct communication. However, as iFlytek introduces AI systems in HRM, some employees are worried that algorithmic decision-making may weaken this human factor, leading to deviations in performance evaluation. In the financial industry, the transparency and explainability of AI systems are considered very important to ensure compliance with regulatory requirements (China Business News, 2024). In response to these concerns, iFlytek has integrated transparency and explainability features into its AI system, allowing employees to understand the basis for the system's decisions and to intervene manually when necessary. iFlytek's AI HR system provides detailed explanations of decisions, allowing HR personnel and employees to view specific criteria for screening and evaluation understanding the factors that AI refers to during the evaluation process. This transparency helps to enhance employees' trust in AI systems (iFLYTEK, 2024c). Through these measures, iFlytek has successfully implemented AI systems in HRM while maintaining technological innovation, respecting and integrating interpersonal relationship characteristics of Chinese corporate culture.

4.2. New approaches on AI Intergation in the Chinese HRM

AI-based intelligent HR platforms have gradually replaced traditional manual processing methods, helping companies to liberate the human resources department from tedious transactional work, allowing HR to focus on more strategic tasks (AI and Human Resources, 2023; Red Sea Cloud, 2023). By building a comprehensive HRM platform, companies can achieve real-time monitoring, analysis and processing of employee data, making management more transparent and efficient. These platforms not only include employee information management, recruitment process management and performance appraisal, but also help HR departments gain in-depth insights into employee behavior, work performance and career development paths through data analysis and visualization tools. References point out that this AI-based digital management enables HR to better predict talent and allocate resources, and improves the scientificity and accuracy of decision-making (Chen & Liu, 2022; AI and Human Resources, 2023).

Intelligent Recriutment and Matching

Through natural language processing (NLP) technology and machine learning algorithms, AI can quickly screen a large number of resumes, analyze job seekers' career experience and skill levels, and combine multi-source data such as social media profiles and cover letters to accurately match candidates for positions. Traditional recruitment methods are often time-consuming and labor-intensive, and it may take days or even weeks to screen suitable candidates, while AI recruitment systems can complete this step in minutes, greatly improving recruitment efficiency. AI's intelligent screening function reduces human bias and ensures the fairness and transparency of the recruitment process, which helps to attract and retain high-quality talents (Aritificial Intelligence, 2024). AI-driven training management systems can develop personalized training plans based on employees' specific needs and career development directions. AI customizes exclusive learning paths for each employee by analyzing employees' learning preferences, skill levels and behavioral data. Some studies have pointed out that personalized training can not only help employees quickly improve their skills, but also enhance employees' sense of belonging and loyalty to the company, which helps reduce employee turnover (Maimai, 2024).

Real-time Performance Feedback

Traditional performance management is usually carried out on a quarterly or annual basis, with problems such as delayed feedback and poor results. The AI-driven HRM platform makes performance management more dynamic and flexible. By collecting and analyzing employees' work data in real time, managers can provide timely and targeted performance feedback to help employees adjust their work strategies more quickly. This instant feedback mechanism improves employee engagement and enhances their sense of responsibility and accomplishment in their work. This real-time and dynamic performance feedback model effectively improves employee work efficiency and performance (AI and Human Resources, 2023).

Data Security and Privacy Protection

With increasing popularity of AI technology in HRM, there will be a requirement for enterprises to process a large amount of employee data, involving highly sensitive personal information, so data privacy issues have become the core of concern for all enterprises. For example, research points out that once big data in public sector HRM is leaked, it will cause great harm to national, organizational and personal security. As required by the PIPL, enterprises must standardize data processing processes to comply with national data protection standards and enhance employees' trust in data privacy.

It is recommended that enterprises implement active measures, such as implementing multilevel data encryption strategies and identity authentication systems in HR systems, to fundamentally reduce the risk of data leakage. At the same time, regular security reviews are conducted to ensure the effective implementation of data protection policies.

Improved Employee Acceptance

According to Chen & Liu, (2022), individual acceptance is significantly affected by perceived complexity and risk perception of technology. Employees' resistance to AI mainly comes from concerns about being "replaced by machines" and fear of technological complexity. These psychological barriers may affect employees' trust in AI technology and further slow down its promotion. Companies should help employees understand the working principles and practical advantages of AI systems through internal communication and training mechanisms. Through case sharing, interactive training modules and simulated operations, employees can gradually become familiar with AI systems in actual experience and reduce their discomfort with technology. Besides that, organize successful case sharing sessions on AI technology applications to further eliminate misunderstandings about technological complexity by demonstrating how AI optimizes HR management processes and improves employee experience. Companies can conduct transparent advocacy for AI technology, explain the principles of AI in data processing and its actual impact on employee privacy and work, so as to enhance employees' trust and sense of security in AI technology.

System Stability and Scalability

Companies can set up automatic alarm mechanisms to immediately notify the technical team to repair when the system detects abnormal behavior (such as data processing delays or algorithm output deviations). In addition, real-time monitoring can provide dynamic analysis of key performance indicators (KPIs), providing a basis for companies to adjust system operating parameters in a timely manner (Baidu, 2024a; Baidu 2024b). At the same time, it is crucial to establish an employee feedback mechanism. Surveys show that system optimization strategies that include user feedback loops can significantly improve system acceptance and user experience. The feedback mechanism not only helps identify potential problems, but also promotes the matching of technology with actual business needs, and improves the applicability and stability of AI systems in enterprises. In order to meet the diverse needs of different enterprises, AI systems should have a high degree of flexible configuration and customization capabilities. Enterprises can choose suitable modules and services according to their own industry characteristics and business scenarios to ensure that the AI system can be deeply integrated with the existing HRM processes of the enterprise. This flexible configuration method can not only maximize the use of the functions of the AI system, but also significantly reduce unnecessary resource waste.

Scalability is also reflected in the system's ability to support new functions and new scenarios. For example, when enterprises transform from traditional office mode to remote or hybrid office mode, AI systems need to support functions such as remote attendance, virtual interviews and online training. This expansion capability enables enterprises to quickly adapt to changes in the external environment and maintain the efficient operation of HRM. The scalability of AI systems also depends on seamless integration with the existing information systems of enterprises. Through data sharing and business collaboration with management systems such as ERP, CRM, and financial software, AI systems can help enterprises build unified information flows and operation flows. For example, AI systems can directly obtain employee entry records and salary information from the ERP system to automatically complete performance evaluation and annual assessment.

This system integration not only reduces the workload of repeated entry, but also improves the accuracy and consistency of data. To ensure that the AI system can be continuously optimized and upgraded, enterprises need to establish a cross-departmental communication mechanism to promote in-depth understanding of system performance and business needs between the interested stakeholders.

Continous Optimisation and Feedback Mechanism

Real-time monitoring and regular inspection of the model's prediction results, companies can promptly identify potential problems and make necessary parameter adjustments to adapt to changes in the business environment and employee needs. This dynamic adjustment not only improves the flexibility of the system, but also ensures the applicability of the AI system in different HR scenarios. Based on the latest data and employee feedback, companies should regularly update and iterate AI models, use machine learning technology to achieve self-learning and optimization, and thus improve the system's prediction and decision-making capabilities in complex human resource management. The update and iteration of the model can enhance the adaptability of the system and make it more efficient in responding to future business challenges. Finally, in order to ensure that the AI system complies with regulatory requirements and corporate values, companies need to regularly audit and evaluate AI models to confirm whether the system has achieved the expected results, and also provide data support for future optimization (Baidu, 2024a; Baidu, 2024).

The feedback mechanism of AI technology in HRM can effectively improve the adaptability of the system and employee satisfaction. Companies collect employee feedback on the AI system through online surveys, suggestion boxes understand employees' acceptance and satisfaction with AI decisions, thus discover the actual effect of the system and room for improvement. Through natural language processing (NLP) technology, companies can conduct sentiment analysis and keyword extraction on employee feedback, deeply analyze employees' emotional tendencies and concerns, providing data support for formulating more targeted improvement measures. Companies integrate these analysis results into easy-to-understand reports and visual charts, and present them to management and HRM departments help them making more evidence-based decision. Finally, based on employee feedback and the evaluation results of AI system performance, companies can continue to optimize AI algorithms and decision-making processes, continuously improve the application effect of AI in HRM and better meet corporate development and employee needs (Liu &Li, 2023).

4.3. Expected Benefits of AI Adoption for Chinese HRM Practices

The application of AI in China's HRM has brought significant changes, especially in the five major areas of recruitment, training, performance management, cost control and employee services. First of all, in terms of improving recruitment efficiency, AI accelerates the resume screening and candidate sorting process through NPL and machine learning technology, allowing HRM to screen candidates who meet job requirements in a short time, thereby effectively improving recruitment efficiency. At the same time, the AI system can evaluate candidates' basic abilities, such as language expression and communication skills, in the initial screening stage, providing the HR team with a more accurate list of candidates and helping to reduce the number of screenings by the HRM department in subsequent interviews pressure.

In terms of optimizing employee training and development, AI can analyze employees' learning history and skill needs and help companies customize personalized training plans. This personalized training method can not only effectively improve employees' learning effects, but also help companies better explore their employees' potential.

Through the intelligent feedback function of the AI system, employees can obtain real-time progress reports and learning suggestions during the training process, helping them make adjustments based on their own learning effects and improving the overall training efficiency and effectiveness.

In terms of improving performance management, AI accurately evaluates employees' work performance through real-time data collection and analysis. By automatically collecting data such as employees' working hours and task completion status, the AI system can provide managers with detailed performance evaluation basis to ensure the fairness and transparency of management. In addition, AI can avoid the interference of human factors on performance evaluation and make the performance management process more scientific and fair. This not only enhances employees' trust, but also helps improve employees' enthusiasm and job satisfaction.

Cost saving is another highlight of AI in HRM. The automated processing function of AI technology has significantly reduced repetitive tasks in HRM, such as entry procedures, employee resignation management, salary calculation, reducing the workload and labor costs of the HRM department. By reducing errors and omissions in manual operations, AI also effectively reduces the company's operating costs and improves overall management efficiency. Through technologies such as intelligent assistants, AI can assist HRM departments in providing more personalized services to employees, including salary inquiries, vacation applications, job consultations, focusing on strategic talent management tasks.

Summary and conclusions

Introduction of AI technology has played crucial role in many areas of HRM in China. By improving recruitment efficiency, optimizing employee training, improving performance management, saving costs and providing personalized services, AI is helping companies build more intelligent and efficient HRM systems, providing solid support for the common development of employees and companies. The application of these technologies not only helps companies reduce operating costs, but also plays a positive role in improving employee satisfaction and work experience. Cultural adaptability, regulatory compliance and technology implementation costs are the three challenges in the process of Chinese companies advancing AI -based technologies. On the one hand, China's unique corporate culture emphasizes human touch and employee interaction, which conflicts with the calm and logical characteristics of automated systems. Strict regulations such as the Personal Information Protection Law (PIPL) require companies to adhere to high standards of compliance in data collection, processing and storage. In addition, SME's are also facing tremendous pressure in terms of technology investment and cost control.

The authors revealed current status, potential and limitations of the application of AI and automation technology in HR management through case analysis of iFlytek, a leading Chinese AI firm, illustrating both the potential and challenges of AI in HRM. Its Spark Large Model supports NLP, adaptive learning, and intelligent recruitment tools. Unlike many firms, iFlytek actively integrates algorithmic transparency, allowing candidates and employees to understand AI-driven decisions. This mitigates cultural resistance and aligns with PIPL requirements for informed consent and fairness in automated decision-making. However, iFlytek's reliance on proprietary algorithms and corporate-controlled datasets raises questions of bias and replicability. Its compliance strategies—such as localized data storage and consent-based screening—offer a model for other firms, but require continuous oversight. The company's integration of AI into recruitment, training, and performance review demonstrates that technology can complement rather than replace human judgment when supported by governance mechanisms.

Application of AI in HRM has brought unprecedented opportunities for change to Chinese companies but it has also put forward higher requirements for the company's technical capabilities, management concepts and compliance awareness. In the future, with the further development of technology and the gradual improvement of the regulatory environment, Chinese companies need to continue to work hard in strengthen the in-depth integration of technology and culture, combining traditional corporate values with the advantages of AI technology. Exploring innovation capabilities of AI systems can reduce dependence on external technology and enhance technological competitiveness. Through cooperation with governments, academic institutions and industry partners, jointly build a standardized, transparent and efficient HR technology ecosystem. These measures will not only help realize the intelligent HRM in enterprises, but will also promote Chinese enterprises to occupy a more favorable position in global competition.

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