# AI in Human Resource Marketing and Its Influence on Recruitment Efficiency

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**Abstract:** *The introduction of AI tools in HR marketing has significantly transformed the recruitment process, increasing its efficiency and reducing recruitment costs. Artificial intelligence (AI) allows you to automate and optimize many routine tasks, such as resume analysis, conducting interviews and adapting new employees. Thanks to this, HR specialists can focus on strategically important tasks. The use of chatbots and virtual assistants speeds up the recruitment process and reduces the influence of the human factor, which contributes to an objective assessment of candidates. Research shows that companies that actively use AI technologies achieve better results in recruiting and retaining staff. AI integration also helps in predicting and preventing employee burnout, increasing their overall productivity and satisfaction. Thus, AI tools become an integral part of modern HR processes, significantly improving the quality of human resource management and contributing to the achievement of strategic goals of companies.*

**Keywords:** AI tools, AI tools in HR marketing, HR marketing, hiring, AI tools in hiring, modern technologies, AI, artificial intelligence, AI

## 1. Introduction

In recent years, human resource management has undergone significant changes due to the implementation of digital technologies, particularly artificial intelligence (AI). The digitalization of HR processes has become a critical part of the strategic development of companies aiming to enhance their competitiveness and efficiency. The use of AI tools in HR marketing enables the automation of routine tasks, optimization of the hiring process, and improvement of human resource management. Concurrently, brand management plays a vital role in the development and sustainability of a company compared to its competitors. Effective brand management contributes to increased consumer loyalty, greater trust in the company's products or services, and the formation of a long - term emotional connection with customers. Brand management itself involves a set of strategies and actions aimed at creating, developing, and maintaining the brand's image and reputation. HR marketing, as part of employer branding, focuses on promoting the company as an attractive employer, attracting, and retaining talented professionals. The interconnection between brand management and HR marketing lies in creating a consistent and appealing brand image for both consumers and employees. These changes underscore the necessity of a thorough analysis of AI's impact on HR processes and an evaluation of its effectiveness.

The relevance of this research is driven by the rapid development of artificial intelligence technologies and their widespread application across various business sectors, including HR. In the context of global digitalization and increasing competition, companies are compelled to seek new approaches to human resource management. AI tools not only accelerate the hiring process but also enhance its quality by minimizing the human factor and subjective errors. The importance of this research is further validated by the growing number of companies implementing AI technologies in HR marketing and demonstrating positive outcomes.

The goal of this study is to explore the application of AI tools in HR marketing and their impact on the efficiency of hiring processes.

### 1) Integration of AI Tools in HR Marketing

Artificial intelligence not only digitalizes many processes but also enhances their efficiency, improving labor productivity and expanding human capabilities. The primary goal of large companies is the automation of all key HR processes. Research [2] indicates that artificial intelligence will change the role of HR in the future. According to data from HeadHunter, 33% of respondents believe that by 2050, AI will significantly transform HR processes, 63% think that robots will be responsible for recruiting personnel, and 47% are confident that employee training will be conducted with the help of AI.

HR processes where AI is applied include candidate selection and evaluation, onboarding of new employees, comprehensive personnel assessment, burnout and turnover prevention, staff development, intelligence testing, payroll systems, and the automation of document management.

AI assists in quickly and efficiently processing resumes, conducting interviews, and onboarding new employees, thereby reducing the workload on HR professionals. Virtual assistants and chatbots help new employees adapt to working conditions by providing necessary information about the company.

AI - based systems also allow for an objective evaluation of employee performance, identification of informal leaders, prevention of burnout and turnover, and optimization of the training and testing process for personnel. These technologies contribute to more efficient and productive work in the HR department, ensuring a high degree of automation and improvement in the quality of human resource management [2].

However, in practice, there are often cases where employees exhibit unprofessional behavior, disregard moral and legal principles, and engage in various forms of deviant behavior,

including opportunism. This inevitably reduces the overall effectiveness of the company.

The main reasons for violations of labor discipline include personal indiscipline of workers, non - compliance with statutory norms, low levels of professional training, and insufficient attention from managers to modern personnel

technologies. One such technology is Intelligent Information Systems Technology (IIS), which allows for the automation of the process of diagnosing employee behavior.

An example of the use of IIS in human resource management, along with software products that implement this technology and typical shortcomings, is presented in Figure 1.
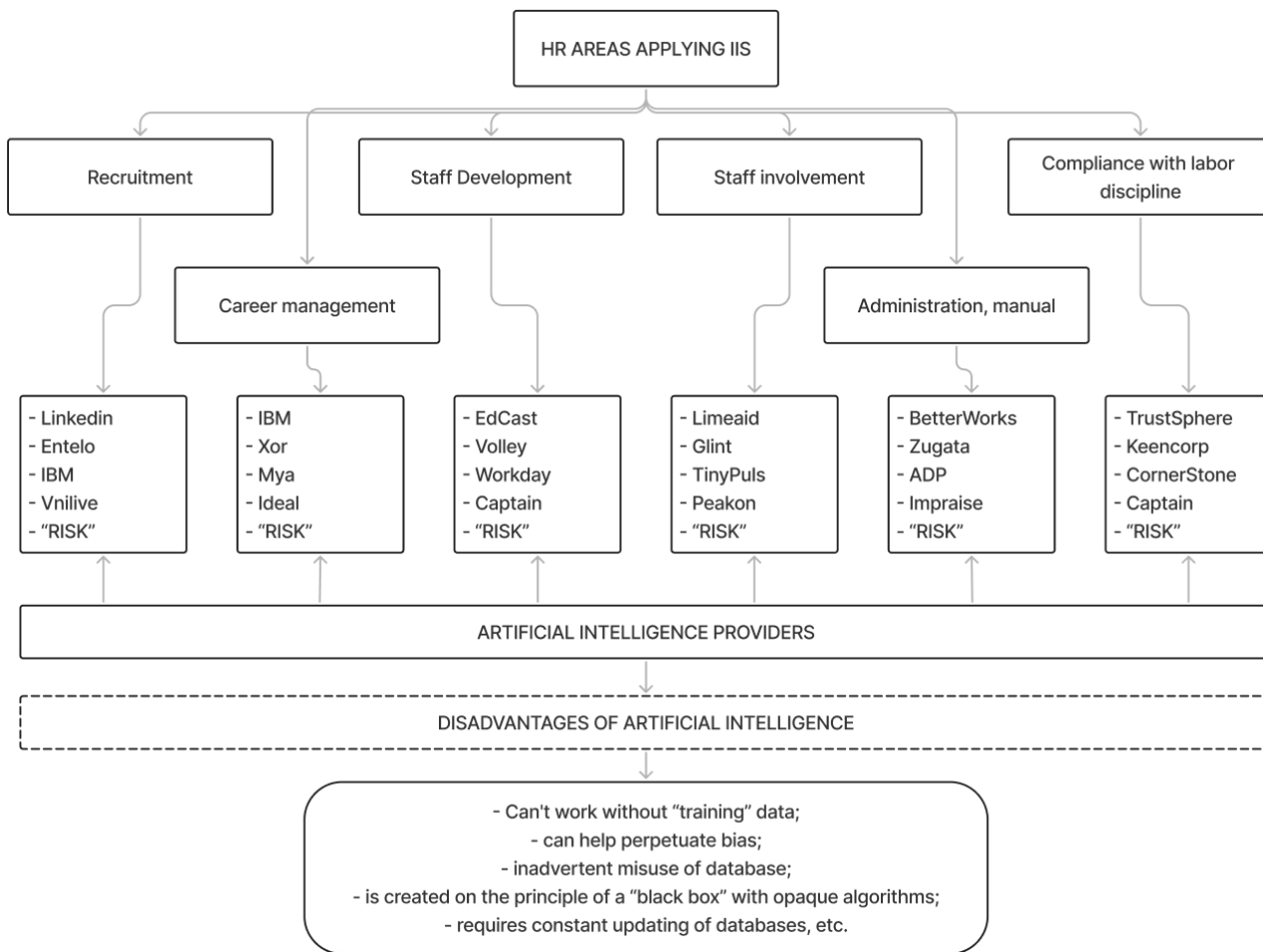


**Figure 1:** HR areas applying IIS [3].

## 2) The Impact of AI Tools on Hiring Efficiency

Artificial intelligence is capable of analyzing vast amounts of resumes, highlighting the most suitable candidates, which significantly reduces the time spent on initial selection.

Chatbots and virtual interviews enable the conduct of preliminary interviews without the involvement of a recruiter, which greatly saves time and allows specialists to focus on more complex tasks.

AI uses sophisticated algorithms to analyze data on candidates' qualifications, experience, and potential, helping to more accurately match employees to job requirements and company culture, thereby increasing overall hiring efficiency.

The automation of recruitment processes through AI reduces the number of errors related to human factors, such as data entry mistakes or subjective judgments. AI algorithms can ignore demographic data, helping to reduce bias in hiring.

According to a study by CareerBuilder, 67% of applicants are more likely to stay with a company where the application and

hiring process was simplified and automated using AI. Automated systems help rank and evaluate candidates based on clearly defined criteria, simplifying the decision - making process [4].

In turn, to calculate the effectiveness of using AI technologies in personnel selection activities, KPI systems are employed to assess employee performance and their motivation to achieve higher results. These indicators reflect the current state of the business, indicating the contribution employees make and whether the costs are justified. KPIs create a clear system of productivity criteria.

The KPI system allows for the measurement of employee performance and optimization of company expenses. By using KPIs, it is possible to determine how productively employees are working and adjust their salaries according to their contribution to the company's growth.

With KPIs, one can effectively plan the work of both individual employees and entire departments. For example, a sales manager might be set goals of 200 cold calls per day, 20

closed deals, and 150, 000 rubles in net profit per month. These plans allow the employee to clearly understand their tasks for the month and better organize their work. For the company, this creates the opportunity to set strategic goals, analyze results, and correlate them with the incurred costs.

By linking bonuses to achieved KPI targets, a transparent and understandable motivation system can be created. Employees will know exactly what needs to be done to receive a bonus. This not only increases their motivation but also allows them to see their contribution to the company's success.

In turn, KPI metrics are selected individually depending on the specific nature of the business and the job responsibilities of the employees. They can be classified as follows:
- Target (strategic) and functional (operational);
- Financial (revenue, profit) and non - financial (customer satisfaction, employee turnover);
- Individual and collective.

These types are examined in more detail in the tables below.

**Table 1:** Quantitative and Qualitative Methods [5].

| Quantitative | Qualitative |
|---|---|
| Results that can be quantified: percentages, rubles, hours, kilograms, etc. Example: profit, costs, conversion rate, number of deals, completed tasks, client meetings. | Results in the form of subjective assessments. Example: evaluation of service quality, customer satisfaction (good or bad, in points, by rating). |
| **Lagging (result - oriented)** | **Leading (predictive)** |
| Work results: what has already been achieved. Example: sales volume, number of closed deals and client meetings, profit. They help monitor delays from the plan. | Forecast of the result. They help assess interim results and understand where tactics need to be adjusted. Example: planned sales volume or number of client meetings, customer satisfaction. |

**Table 2:** External and Internal Factors [5].

| External | Internal |
|---|---|
| Reflect the results of the company's activities externally. Example: market share, entry into the global market, competitiveness. | Achievements within the organization. Example: total income, turnover rate, quality criteria for goods and services, etc. |
| **Relative** | **Absolute** |
| Results that are correlated with each other and with other metrics. Anything expressed in percentages and ratios. Example: the company's net profit growth in September compared to July. | Standalone results expressed in numbers. Example: the company's net profit in September. |

Key performance indicators in the HR field are designed to assess how well human resource management activities align with the company's strategic goals. Examples of HR KPIs may include:
- Number of closed vacancies;
- Achievement of personnel development plans;
- Turnover rate of young employees;
- Compliance with probation period standards;
- Recruitment costs;
- Speed of vacancy closure.

It is important that the selected KPIs truly impact the company's financial results, rather than being just a set of abstract parameters that are difficult to measure. For example, metrics such as the percentage of personnel costs, the number of closed deals, and turnover rate are significant. In contrast, employee tenure, training duration, and the ratio of HR specialists to the total number of employees may be less important [5].

**3) Examples of Successful AI Tool Implementation in HR Marketing**

Examples of successful AI technology implementation in HR will be examined based on surveys of employees from companies involved in this activity.

The first organization where the role and capabilities of AI will be considered is Avito. Anna Panova, Head of Recruitment for Product and Tech, believes that artificial intelligence is an opportunity to look at things from a different perspective [6]. For instance, ChatGPT accumulates vast amounts of data, learns from it, and offers responses that may differ from our own. It's a way to broaden experience by gaining new insights. Humans have physical limitations in the amount of information they can process, and AI helps overcome these limitations, expanding our capabilities. For her, AI is both a challenge and an accelerator of processes. While there are many advantages, it's important not to overlook the drawbacks: any experience and logic must be filtered through results.

Regarding the role of AI, in recent years, Avito has focused on automating and optimizing current processes, as well as on a data - driven approach. In a landscape of fluctuating factors, this approach enables quick and accurate management decisions. AI is focused not only on HR but also on the entire business, helping to enhance efficiency. AI is primarily viewed from the perspective of automating routine processes. A large team is engaged in Avito's internal development and strengthening HR processes through automation. AI is part of a long - term strategy to optimize processes and eliminate time - consuming tasks. However, personal communication remains important: employees and candidates value a personalized approach and detailed feedback. In summary, AI is utilized in the following processes:
- Candidate Attraction: Automation of recruitment through Amazing Hiring, which has become a significant source of candidates.

- Employee Onboarding: Automation of onboarding processes, enabling new employees to quickly navigate the company's procedures.
- Predictive Models: Creation of predictive models to forecast staff turnover, evaluate the effectiveness of initiatives, and analyze labor markets.

The main reason for applying AI in HR is to increase labor productivity. AI technologies allow for significant cost reduction while maintaining or even increasing the volume of output. This is particularly relevant for processes with a high degree of transactional and repetitive tasks.

Examples of AI usage include the following functions:
- Turnover Prediction: A model has been developed to predict employee resignations, helping managers and HR business partners retain valuable employees and minimize costs associated with turnover.
- Automation of Exit Interviews: Robots conduct interviews, analyze responses, and provide analytical data, allowing for more precise management of the termination process.
- Chatbot Assistant: This bot answers standard questions, analyzes complex queries, and learns from user interactions, providing more effective employee support.

For Severstal, AI is utilized in several key aspects of the company's operations. First, it serves as a strategic assistant to management, making decisions related to personnel management, from employee development and hiring to career advancement and organizational design. This assistant employs internal algorithms and tools, providing a deeper understanding of processes than any HR specialist could, as the human mind is incapable of retaining such vast amounts of information simultaneously. Second, for each individual employee, the term "assistant" remains relevant but on a smaller scale. The organization aims to create a unique experience within the company through new technologies, combining corporate culture and team intelligence with the capabilities of new tools. This is intended to ensure employee satisfaction and make the company a preferred employer.

Examples of AI usage in HR include:
- Support for HR Specialists: AI assists in creating texts such as job descriptions, interview questions, and candidate correspondence.
- Virtual Consultant on the Career Website: This tool provides information about the company and job openings.
- Creation and Maintenance of E - Learning Courses: AI generates text for courses, images, and graphic elements, and also handles voiceovers and feedback processing from learners.
- At Sber, artificial intelligence (AI) represents a key area of development for modern companies, regardless of their size or industry. AI acts as a crucial tool that enhances HR processes, offering competitive advantages that may soon become the foundation for success in any industry. Examples of AI applications include:
- Recruitment and Hiring: This encompasses a variety of tools, from resume parsing to predicting candidate success.

- Training Recommendations: The system analyzes employee profiles and suggests personalized content.
- Performance Tracking: AI analyzes employee goals and provides recommendations for improvement, as well as tracks the time spent on priority projects.

Thus, it can be said that the use of AI in HR processes not only enhances efficiency but also contributes to more precise and personalized personnel management, ultimately leading to improved overall company performance [6].

## 2. Conclusion

In conclusion, the application of AI tools in HR marketing has proven its significance and effectiveness, positively impacting the hiring process and personnel management. The implementation of artificial intelligence allows for substantial improvements in the quality of candidate selection, reduction of time and financial costs, and enhancement of the objectivity of evaluations. Companies that actively utilize AI technologies demonstrate higher performance in human resource management, which contributes to achieving their strategic goals. In the context of constant change and business digitalization, AI tools are becoming a key element of successful HR marketing, providing companies with competitive advantages in the labor market.

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