



ROLE OF AI APPLICATIONS IN HUMAN RESOURCE MANAGEMENT

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ABSTRACT

As business changes, Human Resource Management (HRM) faces new challenges that need to be addressed while ensuring the growth and development of the organization. This study examines the use of artificial intelligence (AI) in human resources in relation to recruitment and selection, the hiring process, employee retention, payroll management, general staff management and employee retention. The convergence of artificial intelligence (AI) and human resource management is changing the way companies recruit, manage and hire employees. With the use of AI, machines can now make better decisions than humans based on historical data and behavior. As a result of this change, all employees are being replaced by machines, forcing HR professionals to play a more important role. The benefits of using AI in various departments of human resource management are discussed and the problems encountered in using AI in human resource management are discussed. This article will discuss the benefits of AI for organizations that want to increase the efficiency and effectiveness of their HR functions.

Keywords— Artificial Intelligence, Human Resource Management, Human Resources, Benefits, Challenges

Introduction

The growth of an organization depends on how it organizes work, processes and systems in a cost-effective manner. Recently, human resources (HR) has been making progress through the use of technology and information that employees continue to provide to improve their quality of work. One of these technologies is artificial intelligence. Intelligence - Russell and Norvig define intelligence as "human intelligence" because machines can become human-like by imitating human intelligence, which can be achieved by feeding machines through machine learning models that test and train large amounts of data. It can also be shown that the body can correctly understand the input, learn from it and use it by modifying it to achieve specific goals and tasks. .

The transition from a single administrative system to a multiple administrative system has resulted in the professionalization of this role. Organizations can increase the value of their competitive advantage not only by acquiring, expanding, and integrating human capital, but also by acquiring, expanding, and the integration of these organizations and physical resources can only be achieved when organizations are truly dedicated to human applications. Artificial intelligence technology can be integrated with the HR function to create new solutions to HR staffing problems.



Purpose of the Study

The purpose of this study is to evaluate the impact of intelligence in human resource management, its impact on human resource management, and the problems that may be encountered in the use of human skills. Resource management

Research Objectives

Understand artificial intelligence and how it can be applied to human resource management. Answer its impacts and advantages.

- Comprehend AI and how it applies to HRM.
- Assess the various areas of HRM where AI may be used.
- To critically evaluate the effects and advantages of AI in the specified sections.
- Assess the potential difficulties associated with the implementation of artificial intelligence in human resources management.
- To formulate relevant recommendations based on the research's findings and draw conclusions based on the evaluation of the research

RESEARCH AIM

The purpose of this study is to evaluate the effectiveness of artificial intelligence in human resource management, its impact on human resource management, and the challenges faced in implementing human resource management skills. Learning Objectives â€ Understand Artificial Intelligence and how it can be used in Human Resource Management. Assess the impact of artificial intelligence and its benefits in a specific area. Draw conclusions regarding the evaluation of the study.

LITERATURE REVIEW

Recent studies have shown that cognitive skills have a positive impact on human resource performance. Similar studies by Jia, Guo, Li and Chen, Garima, Vikram and Vinay, George and Thomas, and Vivek and Yawalka have discussed the advantages of using AI in human resource management, including human resource management, recruitment and selection, financial management, training and development, performance management, and human resource strategy planning. Garima, Vikram and Vinay further explained the benefits for employees, HR professionals, and the organization, and concluded that AI has transformed daily tasks in HR with less human interference. George and Thomas, on the other hand, stated that People cannot change.

Vivek and Yawalka also show how AI can reduce workload and streamline workflows. While they used secondary data to write the report, George and Thomas went a step further and conducted interviews (using appropriate questions) with human resource employees in companies. Garima, Vikram, and Vinay conducted a study on 115 HR professionals in a specific region using data using multiple regression methods to test hypotheses. A weakness in many roles in the workforce is the inability of HR to address the problems posed by (Garima, Vikram, and Vinay) and (George and Thomas) in using AI tools in many jobs. Jia, Guo, Li and Chen stated that most organizations are



not yet ready to use AI in HR functions, while Vivek and Yawalka reported that it is difficult to find qualified candidates to do so. AI tools and AI are disrupting HR decision making because technology seems to have replaced it. The challenges of using these technologies in human resource management in organizations have not been studied in detail. The ideas they use in their analysis are mostly derived from secondary data, which is not different from our analysis, as we aim to review articles, journals, blogs and websites. In this review article, the challenges in implementing AI will be discussed in more detail, the paths of action will be identified and future opportunities identified through the literature review will be presented.

Applications of Artificial Intelligence in Human Resources Management

The impact of artificial intelligence on human resources management is rapidly increasing. It has the potential to transform HR operations by providing impact and in-depth analysis across functions. Tasks such as recruitment and selection, promotion, performance management, employee engagement and retention are now being carried out with the help of virtual assistants.

A. RECRUITMENT AND SELECTION

The development of human resources information systems (HRIS) paves the way for the use of artificial intelligence. "HRMS is the process of collecting, storing, retrieving, preserving and analyzing the information an organization needs about its resources, employees and organizational characteristics." Recruitment and Selection HR professionals are responsible for finding talent and hiring candidates for an organization. When trying to find the right person in a sea of talent, finding the right candidate can be a challenge. Screening candidates and reviewing resumes to find the right candidate for the job is a tough job for HR managers. They need to connect with the right candidates and fill the vacant positions as soon as possible because vacancies can cause a lot of damage to the organization due to delays. Making sure that the candidate is good is important because it increases the chances of the candidate accepting the offer.

It is important to ensure that the candidate team has a good experience from the first contact. It can be reworked by doing big data analysis first to find patterns. It can also be used to improve the recruitment process during the recruitment process. AI technologies such as chatbots can be added to the organization's website to engage visitors and increase conversation. Potential candidates will be willing to provide background information and other basic information when talking to the bot. Chatbots can ask job candidates what they are interested in and answer some of the simple questions that candidates ask. This will help save time on some of the more complex aspects of recruiting, such as gathering candidate information, pre-screening candidates, scheduling interviews and meetings, and assigning candidates. Along with answering simple questions, this can be done through chatbots. Complete Machine learning techniques can be used to help interpret large amounts of data and discover patterns that



the organization has never seen before. AI technology can help identify candidates who are a good fit for a job by scanning resumes.

Machine learning models examine the candidate's experience, skills, education, and various areas of interest of the organization before selecting a candidate. This technology can narrow down the list of all applicants by screening those with the most skills. This will identify candidates based solely on merit and can help eliminate bias if necessary. AI can also perform background checks, such as reviewing a candidate's social media profile, to ensure the selected candidate is the most qualified. This will save recruiters time, make the hiring process fair, and ensure the best candidates are hired. Companies often fail to respond or respond to candidates who apply for a job or attend an interview. Current employees reportedly expect to hear back from companies within 10 minutes of applying for a job.

Therefore, it is important to contact them after the job search or interview; otherwise, you will lose them to more competition. Software that includes AI, such as Chabot, Applicant Tracking Systems (ATS), and Customer Relationship Management (CRM), helps to answer all the questions of the candidates instantly, test them and provide updates on their progress. With AI, factors such as preferences and biases are unlikely to play a role in the hiring and selection of potential candidates. In this process, the perceptions of job seekers can be influenced by factors such as race, language, gender and even ethnicity. By combining algorithmic assessment platforms with automation and AI, biases can be eliminated. The advantage of this platform is that if bias is found after the review, changes can be made to reduce or eliminate the bias.

B. Onboarding

On boarding is the process of quickly and effectively integrating new employees into an organization's culture and policies. On boarding is an important part of the human resources management process. It provides not only the cultural dimension of the business, but also the meaning and support of cultural institutions. A good orientation process will make candidates feel good about the organization, be more involved, and want to stay in the organization longer. But these new employees need more attention, and handling them alone is a difficult task. AI can revolutionize the hiring process, automate processes, make it easier for new hires to collaborate with employees and management teams, and make it easier to work on the books and spend time.

This is important because this is where recruiters form their view of the organization. Intelligent chatbots also play a role in this process. AI-based chatbots can help gather information, provide employees with the information they need, organize information, provide employees with all the necessary forms, request the necessary information from employees, and provide appropriate guidance online. These chatbots can also help new employees create new accounts and integrate them into the organization's processes without IT support. The AI onboarding process is flexible in



terms of time and space, allowing new employees to integrate into the system on their own. These chatbots can also gather feedback from new employees, helping them perform better and provide a better work experience.

C. Training and development

HR professionals must ensure that employees have the skills and experience to meet individual and organizational needs and expectations through training and development. Learning and development will help respond to change, monitor technology use, engage students, develop skills, develop leaders, support conflict management, intelligence and innovation. have professionals and technical experts.

D. Performance Management

Having a good performance management system is very important in every organization. Monitoring employee engagement can be achieved through effective performance management. Through these models, it is also possible to monitor the impact of the training provided by the institution. This model can help employees align their work with goals and objectives. Effective performance management processes always require time-consuming steps such as goal setting.

E. Employee Management

Self- assessment, manager evaluations, discussions and signatures. Work and unfinished work. With the help of artificial intelligence tools, it is easy to manage the behavior of each employee and analyze their performance. Rewards can be offered to achieve goals faster, and when goals are not achieved on time, artificial intelligence can help improve the product through alerts and suggestions.

F. Compensation Management

Collaboration, or a good working relationship, involves employers and employees working together to create a fair workplace. Some organizations have difficulty fully understanding their employees and their needs. Understanding employees will help HR managers in organizations that spend a lot of time managing conflicting work situations. In organizations where employees are subjected to abuses such as indiscipline, sexual harassment, annual strikes, bullying, and other interpersonal issues that can affect company life, it is the responsibility of HR managers to prevent and resolve these problems. Since communication is an important part of employee engagement, chatbot automation can also help here. This platform allows employees to communicate more and speak freely. This can provide instant feedback to employees and HR professionals, for better or worse. Employees can freely discuss their feelings without having to meet in person or schedule a meeting.

Benefits

AI benefits all industries by reducing the time and effort required to complete complex tasks, resulting in greater accuracy and better results. As the value of HR data increases, so does the time required to evaluate the data. AI software can now easily detect data



patterns and manage highly sensitive data. This helps computers detect errors and inconsistencies faster and more accurately than HR staff.

This saves a lot of time and increases revenue. One of the main goals of every organization is to generate revenue, which allows businesses to make the most of their talents and human-machine collaboration. Sexual intercourse time requires a lot of human involvement. This includes building relationships with customers, creating more workspace, staff development, and focusing on ideas. Although many companies continue to use online learning tools for continuing education, these tools are often disruptive and employees do not get the maximum benefit from them. Better learning outcomes can be achieved by carefully planning and delivering programs using intelligent tools [18]. Artificial intelligence can reduce various costs within an organization, such as recruitment and training. It provides better preparation for future problems by providing appropriate and effective solutions thanks to its measurement and prediction capabilities. The work done by the management yields results, but HR professionals need to be aware of the problems that may arise. The biggest challenge in integrating AI into HR operations is the mindset of employees.

The proliferation of AI enables the tracking of many aspects of employee behavior, which is a growing concern. Therefore, issues related to the misuse of AI and unfair and inappropriate use of data sharing should be addressed correctly, and all partners should be aware that these interventions made before the equipment is used for all these purposes will facilitate the transition. . This is because AI is used at all levels of the department, including human resources. Due to lack of expertise, employees often find it difficult to learn and integrate new AI tools into their roles. As technology takes over the power and role of HR in business decision-making, there is a high probability that HR will limit their ability to make decisions in everyday life. It may be possible to observe people's emotions and understand how they affect people's behavior, motivations, and emotions [30]. It lacks the human touch and does not reveal certain qualities that a new employee may or may not have. AI does not understand teamwork and the differences between individuals working together.

Technology cannot replace the ability of HR managers to understand people on a personal level. AI can be incorporated into business solutions, but it cannot do some of the things a manager would want to do face-to-face. It relies on all historical data for analysis and prediction. AI technology "learns" through algorithms to make good use of data and does not introduce bias into the analysis. It learns from the algorithms and data it processes and can absorb the programmer's biases without their knowledge [31]. As AI technologies are implemented, their benefits may also be impacted. If a company uses unfair tactics, its ability to hire talented people will be affected.



Technology cannot be held responsible for bias if the hiring process is questioned or criticized, so HR managers and HR staff must take responsibility. Errors in the process can lead to misinterpretation of data, incorrect criteria used to select applicants, and not selecting qualified or multiple candidates. The size of the company plays a role in determining the availability of forecast data. Operating companies are usually small, with a few hundred to a few thousand employees, so there is little data on hand. Some events in the organization are less visible. Events such as withdrawals do not occur very often, so there are not enough observations to make a prediction. Larger data and analysis are needed to complete the data. There is also a problem with different storage because many organizations' data are in different warehouses and need to be carefully shared so that the warehouse manager paper can be washed.

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