

The Use of Artificial Intelligence for Human Resource Management Activities: Challenges and Possibilities

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Abstract

The integration of Artificial Intelligence with human resources practices is emerging as the predominant trend of the future workplace. It is believed that it will make organizations better because these applications can analyze, predict and diagnose to help HR teams make better decisions. AI can be embedded in functions such as recruitment, training, on-boarding, performance analysis, retention etc. However, a majority of organizations are still lagging in integrating AI to its HR practices because of the very nature of HR activities. The efforts of doing so are beset with several challenges including the cost of applying AI to HR activities. While AI implementation is seen to be an opportunity to enhance performance, AI can create a better future only if it is clearly understood, the challenges surmounted and the integration undertaken in a systematic manner. If this is done then AI can redefine the relationship between worker and manager as well as the role of a manager in an AI-driven workplace. There are both challenges and fears in the path towards integrating AI into HR but as AI slowly gets adopted by organizations, workers become more optimistic and overcome their fears. The world's COVID-19 response has further altered how we work and this has increased the need to keep workers at all levels connected, engaged and efficient. This is possible only with the use of technology. Artificial intelligence is a vital means to connect an entire employee population and understand what they need. This paper explores the conceptual and practical implications of AI integration into HRM and builds the case for the imperative for organizations to leverage AI in the HR function and keep up with the times.

Keywords: Artificial Intelligence, Human Resource Management function, Data Generation, Data Analysis, Decision Making

Introduction

The world is responding dynamically to the changes that are swiftly sweeping the globe. The workplace too is changing rapidly in response to these changes. The business world is fascinated by and is enthusiastic about adopting artificial intelligence (AI) in various functional areas. While in certain areas like marketing it is being rapidly adopted, there is a gap between wanting to and actually being able to apply AI to decision making in the areas such as HR. While the use of artificial is still in its elementary stages, yet, the adoption of smart technology is slowly being witnessed at the workplace. Companies across the world are increasing investment of HR in artificial intelligence (AI) in an effort to benefit from its many promises.

Artificial intelligence (AI) has been around for over two decades and has been impacting how we live, and work and relax, but today its presence is more visible than ever before. It is not uncommon to see a new AI-driven system, tool, or product appear and outperform human effort.

AI impacts our life on several levels varying from:

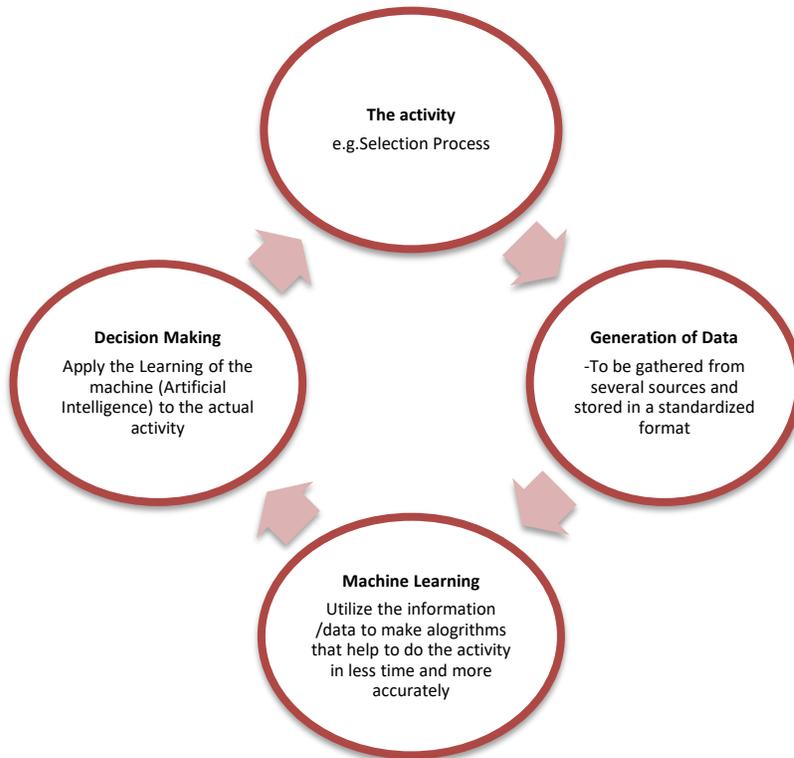
- Making tedious and time-consuming tasks automated
- Augmenting human capabilities
- The amplification of human functions.

Thus, AI offers Human Resources Managers an opportunity to free themselves from tasks that can be handled by AI and focus upon strategy building.

What is AI?

AI refers to a set of technologies that allow a computer to perform tasks that would have required human cognition, including decision-making. Human beings process the information they gather and evaluate it in order to draw a conclusion. While machines per se are not intelligent, if we feed a machine with correct and relevant information, we can get them to take intelligent decisions. That is the essence of artificial intelligence. Taking it one notch up, Artificial Intelligence is a technology that facilitates computers to recommend actions based on available data. Thus, AI can be used by human resources management in several ways to streamline processes and to improve efficiency.

The AI Management in HR Activities



At every stage of the AI Management in HR activities there are challenges which make its use difficult.

The chart outlines these challenges-

Stage in AI Management in HR activities	Challenges
(I)The Activity (that we want to perform using AI)	The outcomes of HR decisions involve human cognitions and so many HR activities may not be amenable to use of AI
(II)Data Generation stage	<ol style="list-style-type: none"> 1.Many HR phenomena are Complex and it would be difficult to gather data in those areas 2.Human resource analytics also suffers from small data as the number of employees even in large firms will be limited in comparison to lers say number of consumers. 3.Employee reactions to data collection efforts can cause bias in their responses and the data for instance based on how they think the data will be used .
(III)Machine Learning Stage	
(IV)Decision-Making stage	<ol style="list-style-type: none"> 1.Fairness and legal issues - An algorithm is likely to be backward looking because its responses depend on previous responses. An example of this could be the presence of past discrimination in the data used to build a hiring algorithm 2.<i>Ease of understanding</i> the criteria used for data analytic-based decisions may not be there, complicating matters for employees using it or on whom its decisions are applied. 3.How employees will react to algorithmic decisions-Change always impacts people so a change in formal decision-making when algorithms are used may be resisted and will affect employees' experiences and behavior.

Areas where the use of AI in HRM is viable

AI can play a vital role in transforming HR and the workforce. This transformation is reflected in the advantages that AI has and these include:-

- Eliminating human bias
- Improving efficiency in candidate assessment

- Improving relationships with employees
- Increasing compliance
- Increasing adoption of metrics
- Improving workplace learning

AI solutions are very effective in areas such as recruiting and talent acquisition.

A number of startups and service providers offer artificial intelligence-based solutions for HR activities such as:

- Employee Sourcing
- Interviewing
- On-boarding
- Coaching and
- Employee service centers

Benefits of AI

So it is clear that organizations are making forays into using AI to add onto if not replace human resources processes but technology is likely to have a bigger impact on the field with greater acceptance. HR professionals must prepare to understand the options available and its applications. The benefits of AI may not be instantaneous but they do set the right tone. Short-term benefits result from automation, medium-term benefits are reflected in augmentation and finally long-term benefits include amplification of activities undertaken by human being. These can be seen in the figure below: -

Short term benefits	Medium term Benefits	Long term Benefits
Through AUTOMATION	Through Augmentation	Through Amplification
Save money	Induce Self Learning	Better decision making
Improve design	Improve predictive efficiency	Increase autonomy at work
Give accuracy	Improve Interpersonal relations	Increase Strategic Human activities

Benefits of applying AI in HR activities

Main Applications of AI in HR

There are many applications of AI to HR activities & processes. Let us discuss the main applications of AI in human resources:-

1. Recruitment and on -boarding

During recruitment, AI can help the hiring organization as well as the applicants of the job.

- AI technology can simplify application processes by designing user-friendly forms that job applicants can complete easily and so reduce the number of incomplete or abandoned applications.
- AI can help in candidate rediscovery using its applicant database. AI technology can analyze the existing pool of applicants and identify those that would be a good fit for new roles as and when required.
- AI can help to improve the on boarding process. Since AI technology allows new hires to utilize human resources support at any time of day and in any location through the use of chatbots and remote support applications the on- boarding process can be done at the recruits own pace, and also reduce the administrative burden, leading to faster integration.

2. Internal Mobility and Employee Retention

- HR can use artificial intelligence to improve internal mobility and employee retention.
- Using feedback surveys and employee recognition systems, HR can assess employee engagement and job satisfaction to understand the employees' requirements.
- AI software can evaluate key indicators of employee success in order to identify those that should be promoted, thus driving internal mobility. This will reduce talent acquisition costs and improve employee retention rates.

- This technology can also predict which team member is most likely to quit. This knowledge helps HR to make retention efforts before it's too late

3. Automation of Administrative Tasks

- Automating routine administrative tasks gives HR professionals more time to contribute to strategic planning in the organization.
- Routine processes like administration of benefits, pre-screening candidates, scheduling interviews, etc. can be automated. These functions are important and usually time-consuming and leave HR professionals with less time to serve their employees in more important ways.

4. Preparing and storing Candidate Resumes in Digital Forms

- HR connects companies with current and prospective employees on a personal level. To do this on a large scale, HR needs to leverage scalable AI technology.
- AI can glean relevant information from a candidate's resume, store it and automatically input it into future forms so that the candidates don't need to repeat themselves.
- AI can help the organize to analyze a candidate's previous work experience and interests and match them with open roles best suited for them and to assess candidates even before they have spent time with a recruiter on the phone.

5. Understanding Employee Referrals

- AI can help HR teams to understand employee referrals by examining the kinds of candidates employees are referring and assessing who refers the most successful ones
- AI can also analyze previous performance data and recognize when candidates similar to successful employees are being recommended

6. Data-Backed Resources and Insights

AI gives HR data-backed resources and insights collected from employees. This helps HR to take action and deliver the employee experience leading to engagement and lowers turnover.

7. Chatbots can aid Employee Engagement

- Employee engagement requires analyzing employee sentiment on a day-to-day basis. Chatbots empower both the employee and HR professionals to keep the engagement conversation going.
- “Chatbots can provide a natural, human-like and always-on communication tool that engages the user in personalized conversations. These conversations are then analyzed and leveraged to address the specific concerns, wants and needs of the employee. The action after the conversation is just as critical as asking for feedback in the first place.”
- Chatbots allow HR practitioners to understand sentiment so they can address potential roadblocks to take action and prove to employees their voices matter, which boosts engagement and reduces turnover.

8. Re-imagining Training and Development Programs

- Training and development departments using AI is likely to increase over the next couple of years. Agile and adaptable learning programs to meet the individual needs of employees will be created.
- Training and development must teach people AI skills and digital dexterity, and prepare employees for new roles requiring more human skill sets: analytical, strategic, critical thinking, cultural awareness, emotional intelligence
- Mentoring and Coaching chatbots can be made accessible to leaders.

9. Leveraging Transactional Workforce Data

AI can be used to leverage transactional workforce data to predict employee potential, fatigue, flight risk and even overall engagement, ultimately enabling more productive conversations to improve the employee experience, retention and performance.

Using AI for these important but repetitive administrative requests also unburdens managers, allowing them to spend more time on the floor, working with customers, and training teams.

10. Powering Workforce Analytics

Organizations are turning to workforce analytics and planning. In these workforce analytics applications AI in HR empowers managers to solve problems and can lead to more informed decisions that affect employee and organizational success

Human Resource Management must prepare for the future

Artificial intelligence will continue to positively shape the field of human resources management in the coming years, HR professionals should also be aware of the challenges that they might face.

The most common concerns that HR leaders have focus primarily on making AI simpler and safer to use by addressing security and privacy concerns.

Another issue is that people would rather interact with a human in the workplace than a machine. Employees want their organizations to respect their personal data and ask for permission before using such technology to gather information about them.

Organizations also want to feel protected from data breaches, and HR professionals must take the appropriate security measures into account.

To prepare for the future of human resources management, professionals should take the necessary steps to learn about current trends in the field, as well as lay a strong foundation of HR knowledge that they can build upon as the profession evolves.

Organizations must work towards developing a data driven mindset that readily adopts AI. The following steps can help in the process:-

- Personalizing the learning experience keeping in mind the job role, present skill set, plan for future goals, and working towards close skills gaps.
- Assigning work and projects on the basis of employee skill sets and organization project requirements using social learning channels.
- Matching content and making recommendations relevant to employee needs.
- Chatbots that are accessible to employees can give them real-time responses to their FAQ's (frequently asked questions).

GROWING USE OF AI IN HR

Many companies globally already use AI in some way for HR. Common Hr activities that use AI for HR, companies include:

- Using chatbots to look up information such as company policies or benefits Identifying the best candidates based on publicly available data, like social media profiles
- Providing recommendations for learning and training to employees
- Using chatbots to engage with candidates during recruitment
- Screening and assessing candidates during recruitment

In the present business scenario companies planning to invest in AI will focus in the following areas:

- Chatbots for employee self-service, such as changing benefits or requesting time off.
- The ability to identify employees who are disengaged or at risk of leaving.
- Suggestions of job openings or career paths for current employees.
- Help in the performance management process.
- Customization or improving benchmarking in compensation.

Conclusion

Despite the challenges, the advancements in machine learning and artificial intelligence in HR are rapidly increasing. A big shift in the way people across the world interact with technology in different functional areas including HR is being seen. The relationship between humans and machines is being redefined at work, and there is no one-size-fits-all approach to successfully managing this change, but one thing is clear that the relationship between the two is here to stay and must be managed to offer competitive advantage and superior performance to the organization. Conceptual and practical insights together can help AI-management in HR to move forward towards efficiency and appropriateness.

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