REVOLUTIONIZING RECRUITMENT: THE SYNERGY OF ARTIFICIAL INTELLIGENCE AND HUMAN RESOURCES

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ABSTRACT

Objective: To critically assess the impact of Artificial Intelligence (AI) on the recruitment process within the Human Resources (HR) sector, pinpointing its potentialities and challenges.

Method: A comparative approach was employed to contrast traditional recruitment strategies with AI-enhanced techniques. The analysis centered on the inherent advantages and challenges of AI adoption in recruitment.

Results: The benefits of AI in recruitment significantly outweigh its limitations. The research indicates a trend of broad endorsement of AI in the corporate realm, with AI systems adeptly: a) cataloging behavioral patterns, b) determining job fit based on disposition, c) synchronizing these with job specifications, d) interfacing with enterprises, e) facilitating virtual interviews, and f) engendering synergistic outcomes.

Conclusions: AI, reflecting its foundational ethos, holds the potential to produce both commendable and adverse effects in recruitment. The self-evolving capability of AI necessitates continuous oversight to circumvent governance challenges.

Practical Implications: Responsible adoption of AI in HR can optimize recruitment processes, rendering them more efficient and precise. However, it is imperative to strike a harmonious balance between artificial and human intelligence to ensure ethical and efficacious deployment, minimizing risks and maximizing benefits.

Keywords: Digital Transformation; Artificial Intelligence; Recruitment Strategies; Human Resources; Self-evolving Capability

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Introduction

'Recruitment' can be traced back as one of the core functions of Human resource management. Infact, in the initial days, Human Resource Management and Recruitment were used interchangeably. It was a trend that organizations appointed a HR manager with an intention of recruitment of correct person for the available job. After recruitment was finalized, depending on the quality of the 'hire', the training needs were identified. Likewise, the performance appraisal and other functions of management were added to the preview of HR manager's job profile.

Over the years, with evolution of corporate image, the role of HR managers has undergone a major change as well. They perform many activities other than recruitment, within an organization. However, recruitment still happens to be a major challenging task for every HR department of the organization. The HR managers face challenges at every step of recruitment process under the traditional method. Every HR manager understands that one wrong 'hire' has the potential to cost a huge loss and it also carries the risk of damaging the 'image' of the organization in the outside world.

"One bad fish spoils the whole pond", this phrase holds so true in the field of recruitment. During recruitment process, the 'candidate' presents his best face, not necessarily his real face to the HR team. After passage of time, the newly appointed 'hire' understands the matrix of the organization. After careful study, the 'ploy' starts and bad-mouthing the seniors or the process of spreading unethical practices poisoning the minds of the peers, juniors starts getting implemented. Hence, spreads negative vibes throughout the organization. This way, the wrong hire costs too high for any organization. This further converts into affecting the goodwill of the work culture and newer talented recruit avoid joining the institution. This is a vicious circle and the entire blame has to be borne by the HR manager for recruitment of a wrong choice of 'hire'.

A few challenges related to Recruitment that are commonly observed especially with reference to Indian context can be summarized as follows:

a) Huge pool of applications:

This was one of the key tasks of an HR manager during the traditional regime. The number of applications received vis a vis the number of vacancies is heavily lopsided to the former. The numbers of applications are many times higher. To search the correct talent from amongst the pool is really challenging.

b) Manual screening of resumes:

Once the applications are short-listed, the next task involved screening the resumes carefully. Those resumes that matched the organizational goals were to be found and letter of interview needed to be sent.

c) Scheduling of interviews:

The interview scheduling was a painful process by itself. The venue, the panel and the set up in physical environment required lots of coordination work. The information to be sent to candidates had to be planned weeks before the date of interview for giving them enough time to prepare as well as reach on time.

d) Actual interview process:

The actual process of interview was a hurdle within the hurdle. To ensure all the interviewees were present at their allotted time and management of the entire process was a tedious process. The requirements of the interviewer and the interviewee were needed to be taken care of for a successful interview to happen.

e) Lengthy and time-consuming recruitment tasks:

Many interviews did not curtail in a single round. There were series of rounds of interview conducted back to back shortlisting the available candidates. The different tasks included the Preliminary round, Group Discussion, Personal interview and these rounds consumed a lot of energy, time and resources in an effort to identify and choose one candidate.

f) <u>Human bias of the HR manager:</u>

This was the biggest challenge for every HR manager. After careful shortlisting of candidates, resume screening, scheduling of interviews and different tasks conducted, the bias of the interviewer was the biggest hurdle in selection of proper candidate. The personal relations of candidates with people within the organization were a serious threat for selection of the right candidate.

g) <u>Induction training:</u>

This was one important process after selection of the right conduct. To make the candidate conducive to the work environment, know his peers, the organizational structure and all official relationships. The traditional methods demanded a lot of resource allocation for this last but most important aspect.

While HR managers struggled with each of the above challenges at some point of time, the introduction of Artificial Intelligence has proved itself to be a boon to overcome these challenges scientifically and systematically.

<u>Artificial Intelligence and Machine Learning:</u>

Artificial Intelligence (AI) is a science of developing intelligence software programs which can reduce the human intervention of repetitive jobs. AI refers to developing the software by use of math and algorithm that stimulates the reasoning power that people use to analyses new information and also take decisions.

Machine Learning (ML) is the application of Artificial Intelligence. The actual use of mathematical data to command the computers to take decision is referred to as Machine Language. This ML helps computer develop its intelligence for all decision making purposes.

Advantages of Artificial Intelligence:

Many advantages are driven home by use of AI in the modern world. To name a few –

a) Newer opportunities are explored;

b) complex problems are solved by use of AI,

c) future prediction has become easier,

d) faster and better decision making

e) increase in operational efficiency

f) one-way interview through video-based interviewing

g) Improves the quality of 'hire'

AI has entered all the spheres of modern life. We can experience the use of AI in retail sector, healthcare, banking and finance, sales and marketing, cybersecurity, customer service, transporatation, and manufacturing. The role of AI and ML has affected Human Resource Management as well.

In the Human Resource Management, every aspect of HR is influenced by AI and recruitment is no exception. As recruitment involves lot of repetitive jobs, the intervention of AI enhances the ability to select the right candidate for the right job positively. A few of the positives of intervention of AI during recruitment can be summarized as follows:

1) Target Audience:

The AI software can target the individuals related to the job. Further, it can post advertisements that are visible only to such people. The entire mechanism can be based upon the browsing history of individuals

2) Automated screening:

In a country like India, population explosion is a major concern. This huge population causes higher percentage of unemployed youth. This means that for every vacancy, applications

received are in multiple times. The AI software with a defined job description screens the received applications and makes the life of HR manager a lot easier.

Apart from screening the application, the AI software are capable enough to define the selection process and guide the applicants through the process systematically. This in turn gives a better experience to the candidates applying for the job.

Considering the candidate relationship management being implemented, the goodwill of the organization gets enhanced as well. Thus, AI plays a dual role of better screening and improving the candidate experience.

3) Cost effective:

AI ensures the quality of candidates which are screened is of high quality. This bi-product of such enhanced AI based hiring is the reduction in the cost involved. The reduction of cost improves the profit which may be shared amongst the employees as incentive. This may finally lead to job satisfaction and reduction in attrition rate as well. In simple words, the AI backed process can be a financial gain for all the stakeholders. It proves to be a win-win situation for all.
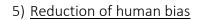
4) Assistance during interviews:

The technological advancement when put to use effectively can be a great assist to the HR managers. The lengthy interview process can be divided into two parts – virtual interview (technology based) and physical interview (face to face). The initial screening can happen during the virtual mode and then a fewer number can be called up for interview during the actual physical interview. This would result in benefits of resource savings for all the parties concerned.

Hence, AI can contribute by reducing the work load during interviews as well.

5) Reduction of human bias

Every HR manager is aware of this major advantage of an AI software system – reduction of human bias. While the human system is perfect for analysis the body language, the inherited character of giving additional brownie points to his candidates can never be ignored. So inspite of tight rounds of interview, a candidate with lesser quality can sneak inside by asking for favours by way of recommendations. The interview becomes subjective and it is very difficult to subjectiveness from human intervention.

AI, on the other hand, is purely objective and avoids biasness of any kind to any person in particular. So, merit becomes the only way of selection.

6) Virtual assistants or Chatbots:

The most commonly used AI software is a chatbot. A Chatbot intelligently provides all the basic information related to the organsiation which helps the candidate to settle down comfortably. Also, a few advanced Chabot's are equipped with features to scrutinize the candidate's response and provide detailed reports.

While AI is a boon for every HR manager in his own accord, there are a few pitfalls which need to be considered as well.

The drawbacks of use of AI and ML with reference to Recruitment can be summarized as follows:

a) System bias:

AI and ML have successfully removed the HR manager's biasness from the system which is considered as a biggest breakthrough of the modern world. However, one more aspect which needs to be considered alongside is that the AI software works on the directions received from the developer. Though AI removes the bias of the HR managers at a broad level, the biasness of the developer remains within the system.

So whether AI is a master or AI is a slave is a debatable question? AI as a slave is an acceptable situation, however AI as a master can lead in to a different equation altogether. Though this entire equation stands at an infant stage, this is going to grow big on all account and blow the equation beyond expected proportion.

b) <u>Gender bias:</u>

Though at grass root level, it has been observed at a particular instance the algorithm had taught itself that male candidates were preferred over female candidates. This major goof-up happened as the system was set up to understand the pattern based on vetting CV screener over a 10 year period. Obviously, the past 10 year experienced more CVs from male over female. Hence the system results favoured male over female candidates.

c) <u>Language bias:</u>

As a single instance, the algorithm was set to reject candidates whose English was poor. In the present case related to a UK company, many of the candidates were foreigners.

Hence, the algorithm set up the system in such a way that the English sounding names qualified for the given conditions and many foreign candidates were rejected out of the process.

d) <u>Decoding human emotions:</u>

The AI through Chabot's are unable to decode the human emotions precisely. This is possible due to many factors beyond the control of the system. In the modern world, where an individual is more expressive through words, many of the younger generation use emoticons, sticks to express their mental state. A mixture of words and/or emoticons may put the chat box in a puzzle.

The bias of the AI system remains a major threat for implementation of objectives for which the system was developed. However, there are steps that have been suggested to overcome even this Algorithm biasness of the system. These suggestions are yet to be tested and implemented

on the 'big data'. However, the problems mentioned above are addressed and possible solutions are worked out which is a favourable sign of improvement.

The suggestions to overcome the algorithm biasness can be summarized as follows:

a) Validated data at the source

b) Improve the algorithms regularly

c) Remove the unconscious biasness that creep into the system

d) Install a proper check at regular intervals and random processes.

Conclusion

AI has entered our lives in a big way and has started making its impact on our day to day activities. Right from waking up, up to sleeping, we are surrounded by AI and ML in one or the other way. The HR field cannot prove itself to be an exception and remain aloof. AI and ML through various applications have made itself available for every function of HR including recruitment. It is also agreed that the recruitment process is hugely benefitted by introduction of AI and the corporate has welcomed the implementation of AI with open hands inspite of the AI having its own drawbacks. The major reason for acceptance over denial is because of the fact that the advantages derived through AI are much more than compared to the downfalls of AI. Tomorrow will be the day when learning and earning will be a part of the larger system and every activity will be recorded in the system as it happens.

This will strengthen the entire AI system and the following stages are bound to be experienced by the next generation students:

a) Record the behavioural characteristics

b) Decide the job suitability based on the attitude,

c) Match the same with job description

d) Share the data with the companies (sharing the JD)

e) Schedule online interviews

f) Create a win-win situation

The future holds lot of promises with the exploration of AI in the recruitment space boosting the individuals pushes their limits beyond expectations.

A conclusion within a conclusion may be unwarranted but the growth of AI may result into its own destruction. AI is a self-learning tool, so even a small defect at the initial stage may compound itself into magnanimous before anyone realizes the same, not to forget uncontrollable at that stage as well. In very simple words, AI depicts a mirror of the mind, the best results can be derived from a noble mind, and the world cannot escape from the worst results of an evil mind. As every modern day development has its negativity, AI is not exceptional. The mantra for success of this self-reliant system lies on the 'balance' between artificial and natural intelligence.

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