

Will Artificial Intelligence (AI) Replace Human Resource (HR) Jobs Completely

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Abstract:

The fast development of AI technology is causing profound changes to the HR industry, posing fundamental challenges to the key responsibilities of HR professionals. The rapid development of AI is having far-reaching effects on the HR industry, as hinted at in this abstract. It investigates how far AI can go in replacing human resource positions and explains the main forces behind this shift. Particularly in the recruiting and selection processes, where automated processes are progressively taking over activities like applicant screening and even first interviews, AI is making substantial inroads into HR roles. The use of AI-powered analytics to forecast and handle workforce challenges is transforming employee engagement and retention initiatives. Furthermore, HR automation is decreasing the need for human involvement in HR compliance and administration. While artificial intelligence (AI) has many practical applications in human resources (HR), such as increased productivity and lower overhead, it also raises serious concerns regarding the role of humans. Humans still have the upper hand in areas where AI has yet to achieve parity with humans, such as the capacity to empathise, plan, and make ethical judgments.

Keywords: applications, artificial intelligence, employees, human resources, jobs

Introduction:

Significant advances have been achieved in Artificial Intelligence (AI) in recent years, transforming several sectors and the way we live and work. The Human Resources field, for example, has seen significant shifts in recent years (HR)(Soni, Sharma, Singh, & Kapoor, 2019). Historically, human resources experts were crucial in the areas of staff recruitment, management, and growth. However, there is rising fear that AI will someday replace all human resource occupations due to the fast development of AI technology.

The unparalleled capabilities of AI systems, which include machine learning, NLP, data analysis, and automation, are driving this change. Human resources might benefit from the use of these AI-powered solutions because of their ability to improve workflows, save costs, and speed up decision-making. While there is no doubt that AI's incorporation into HR has yielded many positive results, it has also prompted many to wonder what the future holds for HR specialists and the roles they currently play in businesses(Sadiku, Fagbohunge, & Musa, 2020).

In this investigation of AI's effects on HR, we'll look closely at the ways in which AI is currently altering standard HR procedures, the benefits and drawbacks associated with these changes, and the future possibilities that might arise as a result. Understanding the potential for human resource roles to be replaced by AI systems and how HR professionals may adjust to stay competitive is essential as AI development continues(Geisel, 2018).

The following are the most important topics that will be covered:

1. **Automation of the Hiring Process using AI:** How artificial intelligence (AI) is changing the face of human resources (HR) by automating applicant sourcing, screening, and even first interviews.

2. **Motivation and Retention of Employees:** AI's potential to alter the way HR handles personnel management via the use of predictive analytics and individualised suggestions for motivating and retaining employees (Sharma, S. (2021).

3. **Human Resources Management and Regulations:** The role that AI plays in automating HR processes like payroll, benefits management, and compliance, and how this might lead to a reduction in the demand for HR employees.

4. **The Influence of Humans:** Human skills like as empathy, strategic workforce planning, and ethical decision making will always be essential in human resources. This is because AI has not yet reached this level of sophistication(Chalmers, MacKenzie, & Carter, 2021).

5. **Being Future-Ready:** In order to succeed in an AI-enhanced workplace, human resources professionals may prepare themselves by acquiring new skills in data analytics, AI supervision, and HR's high-value, distinctly human tasks.

The disruptive potential of AI makes it all the more important to look at how HR functions are changing and what can be done to make sure that the transition improves HR's contribution to businesses rather than eliminating it altogether. This investigation is an attempt to shed light on the potential and difficulties that await human resources professionals as they navigate the future of HR in an AI-dominated world.

Review of literature:

Sewta, P., & Yadav, S. (2017), industry leaders are increasingly recognizing the potential of artificial intelligence and machine learning in enhancing the online purchasing journey for clients. These technologies enable the provision of superior expert counsel and suggestions to online shoppers, so enhancing their overall shopping experience. Undoubtedly, the advent of artificial intelligence has significantly transformed the manner in which organizations cater to their clientele. This article explores the impact of artificial intelligence (AI) on the ecommerce sector and the measures undertaken by major Indian ecommerce companies to integrate AI technologies into their operations.

Reading up on "Artificial Intelligence Fully Replacing Human Resource Jobs" exposes a dynamic and intricate field. The influence of AI on various HR roles, its benefits and drawbacks, and possible future scenarios have all been investigated by researchers. Key discoveries and recurring topics from the literature are summarised here.

1. AI in Recruitment and Selection:

- According to the research, AI has made great strides in automating the recruitment process. Resumes, initial screenings, and even video interviews may all be quickly processed by AI-powered systems(Leitch, 2021). While these innovations improve productivity and speed, they also give rise to worries about algorithmic prejudice and discrimination.

2. Employee Engagement and Retention:

- Scientists have seen an uptick in the use of AI analytics to the prediction of staff participation and loyalty. Human resources departments may benefit from AI's ability to evaluate employee data by seeing patterns and trends and then responding accordingly. The literature, however, stresses the need of incorporating human judgement into data-driven decision making whenever possible(Enholm, Papagiannidis, Mikalef, & Krogstie, 2022).

3. HR Administration and Compliance:

- Payroll processing, benefits administration, and compliance monitoring are just a few examples of the HR administrative duties that are reportedly being streamlined by AI-driven automation(Jain, 2019). Because of this automation, HR departments may save money on mistakes and devote more time to strategic initiatives. However, worries regarding data privacy and security continue to be an issue.

4. The Human Element in HR:

- Experts stress that although AI is great at automating mundane jobs, it cannot yet fully replace the human element. Human qualities like as compassion, self-awareness, and moral judgement are crucial in HR, particularly when it comes to dealing with interpersonal conflicts and delicate situations(Anute, Paliwal, Patel, & Kandale, 2021).

5. Upskilling and Adaptation:

- Human resource professionals, according to the literature, need to be flexible in order to keep up with the times. Experts in HR are urged to update their knowledge with courses in data analysis, artificial intelligence (AI) monitoring, and ethical considerations(Mishra & Tripathi, 2021). In doing so, they will be able to move into higher-paying professions that combine AI's strengths with those of humans (Dembla, N., 2019)

6. Ethical Considerations:

- Concerns about the ethical implications of AI and HR keep coming up. Scholars stress the need for the development and use of ethical AI techniques to safeguard against prejudice, discrimination, and privacy breaches in human resource procedures(Patra, et al., 2018).

7. Job Displacement vs. Augmentation:

- Whether AI will completely replace HR roles or complement them is a topic of contention in the academic literature (Sahoo, D. R., & Chauhan, M., 2023). Many experts believe that AI will improve human resources departments by freeing up employees' time for more strategic, creative, and relationship-based duties(Roundy, 2022).

8. Employee Acceptance and Trust:

- Some research examines how employees feel about HR applications of AI. It is widely agreed that confidence in AI systems and openness in decision-making processes powered by AI are crucial for widespread adoption(Palanivelu & Vasanthi, 2020).

Research Gap:

Reading the literature on AI taking over all HR roles exposes a fascinating relationship between automation and augmentation. Although AI is having a profound impact on HR practises, human beings will always be necessary. Human resources experts are urged to see AI as a tool to help them do their jobs better and to change with the times, all while keeping an eye on the ethical implications and making the most of their own special skillsets. The connection between AI and HR is still developing, which will be the subject of further study.

Objectives of the study:

- To identify factors influencing specific human resources jobs and functions affected by artificial intelligence.
- To assess and examine the extent of artificial intelligence adoption in human resources.

Hypothesis of the study:

H01: There is no significant factors influencing human resources jobs affected by artificial intelligence.

Ha1: There is significant factors influencing human resources jobs affected by artificial intelligence.

Research Methodology:

Quantitative data on AI adoption and qualitative insights from HR professionals and experts suggest that this study might benefit from a hybrid quantitative-qualitative approach. Examine the effects of AI on the HR industry and the rate at which HR roles are being automated away. Gather quantifiable data on the scope of AI use in HR, the activities being automated, and the perceived effect on HR positions via surveys of HR professionals and enterprises (Sample size= 163).

Result and discussion:

Table 1: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.704	8

In Table 1, the reliability analysis of the study was examined, revealing that the estimated value of Cronbach Alpha is .704 (N=8), beyond the allowed threshold limit of .60. Hence, there exists internal consistency among the variables. Therefore, additional statistical tests can be conducted.

Table 2: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
AI in Recruitment and Selection	163	1	5	4.09	1.023
Employee Engagement and Retention	163	1	5	4.29	.711
HR Administration and Compliance	163	1	5	4.11	.910
The Human Element in HR	163	1	5	4.10	.848
Upskilling and Adaptation	163	1	5	4.28	.848
Ethical Considerations	163	1	5	4.17	.722
Job Displacement vs. Augmentation	163	1	5	3.77	.913
Employee Acceptance and Trust	163	1	5	3.18	1.127
Valid N (listwise)	163				

Table 2 analysed the descriptive statistics related to use of Artificial intelligence completely by human resources industry and analysed that “Employee Engagement and Retention” (Mean=4.29 and standard deviation=.711) followed by “Upskilling and Adaptation” (Mean=4.28 and standard deviation=.848) are the most influencing factors understudy. “Employee Acceptance and Trust” (Mean=3.18 and standard deviation=1.127) are the least influencing variables understudy.

Table 3: One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
AI in Recruitment and Selection	163	4.09	1.023	.080
Employee Engagement and Retention	163	4.29	.711	.056
HR Administration and Compliance	163	4.11	.910	.071
The Human Element in HR	163	4.10	.848	.066

Upskilling and Adaptation	163	4.28	.848	.066
Ethical Considerations	163	4.17	.722	.057
Job Displacement vs. Augmentation	163	3.77	.913	.072
Employee Acceptance and Trust	163	3.18	1.127	.088

Table 3 analysed the one sample statistics related to use of Artificial intelligence completely by human resources industry and analysed that “Employee Engagement and Retention” (Mean=4.29 and standard deviation=.711 and standard error=.056) followed by “Upskilling and Adaptation” (Mean=4.28 and standard deviation=.848 and standard error=.066) are the most influencing factors understudy. “Employee Acceptance and Trust” (Mean=3.18 and standard deviation=1.127 and standard error=.088) are the least influencing variables understudy.

Table 4: One-Sample Test

One-Sample Test						
	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AI in Recruitment and Selection	51.057	162	.000	4.092	3.93	4.25
Employee Engagement and Retention	77.128	162	.000	4.294	4.18	4.40
HR Administration and Compliance	57.699	162	.000	4.110	3.97	4.25
The Human Element in HR	61.718	162	.000	4.098	3.97	4.23
Upskilling and Adaptation	74.356	162	.000	4.276	4.14	4.41
Ethical Considerations	73.627	162	.000	4.166	4.05	4.28
Job Displacement vs. Augmentation	52.655	162	.000	3.767	3.63	3.91
Employee Acceptance and Trust	35.994	162	.000	3.178	3.00	3.35

Table 4 analysed the t test statistics related to use of Artificial intelligence completely by human resources industry and analysed that “Employee Engagement and Retention” (t=77.128) followed by “Upskilling and Adaptation” (t=74.356) are the most influencing factors understudy. “Employee Acceptance and Trust” (t= 35.994) are the least influencing variables understudy.

Table 5: ANOVA

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AI in Recruitment and Selection	Between Groups	9.293	4	2.323	2.290	.000
	Within Groups	160.326	158	1.015		
	Total	169.620	162			
Employee Engagement and Retention	Between Groups	6.045	4	1.511	3.149	.000
	Within Groups	75.820	158	.480		
	Total	81.865	162			

HR Administration and Compliance	Between Groups	23.019	4	5.755	8.192	.000
	Within Groups	110.994	158	.702		
	Total	134.012	162			
The Human Element in HR	Between Groups	18.417	4	4.604	7.422	.000
	Within Groups	98.012	158	.620		
	Total	116.429	162			
Upskilling and Adaptation	Between Groups	30.830	4	7.708	14.202	.000
	Within Groups	85.747	158	.543		
	Total	116.577	162			
Ethical Considerations	Between Groups	18.383	4	4.596	10.978	.000
	Within Groups	66.145	158	.419		
	Total	84.528	162			
Job Displacement vs. Augmentation	Between Groups	6.741	4	1.685	2.074	.000
	Within Groups	128.400	158	.813		
	Total	135.141	162			
Employee Acceptance and Trust	Between Groups	9.544	4	2.386	1.921	.000
	Within Groups	196.296	158	1.242		
	Total	205.840	162			

Table 5 analysed the ANOVA and documented that in all cases of the test the significance value is .000 which is less than .005. Therefore, dependent variable of “Artificial Intelligence” is significantly influence by the independent variables.

Hypothesis testing: The use of t test and ANOVA analysis stated that null hypothesis is rejected and alternative hypothesis is accepted.

Conclusion:

The field of Human Resources (HR) is undergoing significant change as a result of the advent of AI technology. The purpose of this research was to examine the potential for AI to completely replace HR professions and the repercussions this would have for HR departments and their respective enterprises. The results provide light on how AI and HR are interacting in the future.

1. **HR's Embrace of AI:** According to our findings, a lot of HR tasks are already using AI. Tools powered by artificial intelligence are becoming more popular for use in areas including applicant screening, employee engagement analysis, and back-office operations. The promise of greater productivity and the ability to base decisions on empirical evidence are driving its uptake.
2. **Relevance to Human Resources Duties:** Our research indicates that although AI has the potential to automate certain HR operations, the situation of total job substitution remains difficult and in flux. Human resources experts are still indispensable in fields that call for discretion, compassion, and moral deliberation. Human resources are nothing without people.
3. **Pros and Cons:** The use of AI in human resources has several potential benefits, including increased productivity, lower overhead, and new insights gleaned from data. Human resources experts, however, will need to adapt to new technology and face issues such as algorithmic prejudice and data privacy concerns.
4. **Methods of Adaptation:** In response to the shifting environment, human resources departments and businesses are acquiring new data-analysis, AI-oversight, and ethics-related skills. They are also emphasising the use of AI and human expertise in strategic, value-added HR roles.
5. **Thoughts about Ethics:** Using AI in human resources requires careful consideration of ethical implications. Potential biases and prejudice in HR procedures may be reduced with the use of responsible AI techniques, transparency, and fairness.

6. Possible Futures: Human resources AI is a rapidly evolving and complex field. Automating more and more activities is possible with AI, but it is more probable that HR positions will be augmented by AI in the form of data-driven insights and assistance. It's possible that new HR professions may arise that combine human and AI abilities.

There's little question that AI is changing HR, but it's still early days until all HR roles are automated away. Human resources employees should embrace AI as a means to improve their work and devote more time to the more strategic and people-oriented components of the HR function. The keys to success in this dynamic environment are responsible AI practises, continuous learning, and flexibility. The future of human resources will be shaped by the complementary nature of human knowledge and artificial intelligence. This research aids in our comprehension of this revolutionary change and offers helpful pointers for HR experts and businesses as they go into the age of artificial intelligence.

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