



# Digital Recruitment Technology Implementation: A Study of Select Companies in Yadadri Bhuvanagiri Dist. of Telangana State, India

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## **Authors' contributions**

*This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.*

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## **ABSTRACT**

The power of digital technology has brought many changes in human life. From the past two decades, the majority of the things, entities, businesses and market have been using digital technology in the name of E-Business, E-Market, and E-Recruitment, and Ecommerce. Now, it's time to be evidence for Digital Recruitment by organizations. With the pace of development in telecommunication and digital technology, companies depend more on technology rather than traditional method for various activities. Most of the companies are using digital technology to implement HR practices and using digital tools like digital data, chat bot technology, Artificial Intelligence HR, AI recruitment, cloud HR. These tools are helping companies in identifying the vacant positions and notifying the vacant positions, Majority of the IT Companies are adopted the above technologies, but few companies are resisting in adopting the new technology for recruiting

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the employees. The core objective of this research paper is to identify the differences in usage of digital technology by organizations in recruiting employees in rural and urban areas. For this purpose we identified the companies located in the rural and urban area of Telangana state. In this research paper we used 5 points Likert scale questionnaire to collect the primary data from HR managers of the select companies that are located in Yadadri Bhuvanagiri Dist of Telangana State. The data has been collected through Google forms. The sample is selected by a convenience sample method. The data was analyzed with the help of SPSS 28.0.0.0, MS-Excel and after all the analysis we came to a conclusion that there is no significant difference in technology usage in Rural and Urban areas, in recruiting the employees.

*Keywords: Digital recruitment technology; digital tools; implementation of HR practices; e- recruitment; social media recruitment; traditional recruitment; digital recruitment strategies.*

## 1. INTRODUCTION

Many changes have been taken place in recruiting the employees' right from attracting the candidate to placing them in the vacant position. Digital recruitment sounds new but most of the recruiting companies are unknowingly using and used to recruit their employees' using digital technology. Most of the present generations are habituated to use social media [1-3]. People are using the social media to mold their career too. In this context many companies that are located in metro cities have started using social media for the recruitment. By the lessons taught by the COVID-19 pandemic, companies struggled a lot to recruit the right candidate and companies are realized that social media can also be used for recruiting the employees [4,5]. Digital Recruitment technology helped many organizations to complete their recruitment process with less effort [6,7].

**Digital Recruitment:** Digital Recruitment is that which uses the digital technologies like Digital Data, AI HR, Machine Learning and HR cloud technologies to catch the attention of choose and take the right candidate for the positions that are unoccupied. The organizations are searching for technologies suitable for recruiting the candidate.

**Digital Recruitment process:** Digital Recruitment process is different from the traditional recruitment process. It altered the way of recruiting the candidates. Whereas the manual recruitment process mainly consists of posting for job advertisements, searching for the candidate and contacting him, manually taking resumes and reviewing resumes, contacting the candidates and scheduling interview and verifying the relevant document everything is manual in traditional recruitment process [8,9]. But, the digital recruitment process alters the majority of the steps and changes the way of attracting the candidates. Right from receiving

the application from the aspirant to the hiring everything is automated.

### Digital Recruitment Strategies:

1. **Mobile career website:** The recruiting companies need to develop a user friendly website that can work in both the desktop and the smart phones. As this is 5G generation there is vast increase in the usage of smart phone. The aspirants are now habituated to check for the updates of their career on smart phones only.
2. **Run with Social Media Recruitment:** In recent days, we cannot imagine a person without a social media account. It has become common for everyone to be active in social media. So depending on the social media will surely benefit the organization to recruit the right person with less effort.
3. **Watch your Opponent's company :** By observing your competitive company that how they are recruiting the people and what are the technologies that they are using in recruitment process will help your organization to enhance the quality of recruitment process.
4. **Employee customized digital strategies:** Every organization needs to develop their own technology which suitable for their organization.
5. **Be updated in using technology:** Nowadays Organization needs to adopt new technology to compete with other organizations that are far better in using technologies.

When the organizations start using these strategies in the digital recruitment process, they will save time and costs.

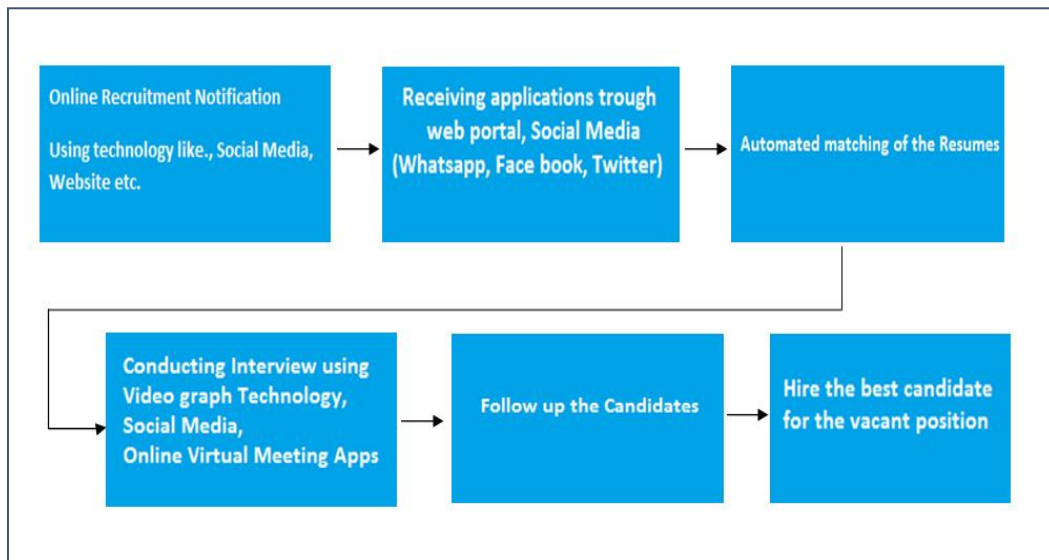


Fig. 1. Digital recruitment process

## 2. REVIEW OF LITERATURE

Adam Vaccaro [10] said that the recent recruiting technology works by collecting a bunch of potential recruits and chopping off those who don't meet certain qualifications, or don't use certain buzzwords in their resumes and cover letters of the applicants. The automation of HR enhances the professional development of HR professionals in the organization [11]. Automating the Recruitment Processes acquiring the best talent involves the planning, sourcing, assessing, hiring and on-boarding of top talent and helps companies in implementing the best practices of recruitment and hiring the best talent available in the market [12].

Murphy [13] defined digitalization is the process of converting analogue signals or information in any form into a digital format that can be understood by computer systems or electronic devices.

Mosca Marta [14], said that after all several characteristics seem to be important to be best define digitalization when the authors talk about the topic digitalization is fast moving, flexible, easy to use, customer focused, data driven, collaborative process and strategically important for the success of Organizations.

Geetha R and Bhanu Sri Reddy D [15] opinioned in their paper entitled Recruitment through Artificial Intelligence: A conceptual study, Artificial Intelligence is a technology which can work smartly and equal to human brain in

different situations. AI mainly aims at the automating recruitment process when compared to traditional recruitment methods. This paper also stated that Recruitment is the central activity of all organizations. It has been identified that recruitment industry growing up by implementing smart way to recruit using artificial intelligence. Many industries are observed that they are focusing on the changes taking place in recruitment process. AI technology has the great impact in Recruitment activity that enables recruiter align some unstructured candidate bio-data, construct profile into uniformity, identify and match skill sets required for the industry. This paper further concludes that AI is human built software to make the work at ease while the process is carried on. This paper also concluded that AI is the combination of humans and AI that leads to data maintenance, save the cost and time to the organizations with more accuracy and access in total recruitment process.

Deotima Saha and Deepika Pandita [16] in their research differentiated the employees of industrial Revolution and employees of information age as the employees of industrial revolution are known to be manual workers and the employees in the information age are called as employees of knowledge and the employees in today's technological era are known as native Digital (2017).

Eric Premnath and Arun Antony chilly [17] in the paper titled AI in HRM: A Quality study in the Indian Context, detailed the benefits of Artificial Intelligence in HR. And according to this paper 6

out of 8 respondents opinioned that Artificial Intelligence has proven to be major supporting tools for recruiting ideal candidates for their companies and also found that AI is used in recruiting the employees. AI will support the company more efficiently and effectively in recruiting the employees. The paper identifies the benefits of using AI in HR like cost reduction, better man power utilization, Time Efficient and job satisfaction. The paper also pointed the limitations of using AI in HR like Accommodating anomalies in the resumes of the candidates applying for the job. The paper further stated that AI is not perfect as it is still going through the learning curve with regards to HR practices.

N. Bhanu Prakash, Dr G. Sri Rama Krishna , G Samuel [18] have concluded in their article that there is a tremendous growth in IT and the organizations who reduce costs and emphasized the urgency of linking HR with digitalization for instant solution.

### 3. RESEARCH OBJECTIVES

1. To Study and analyze the implementation of Digital Recruitment process in Telangana state of India.
2. To Study and analyze the differences in usage of digital technology based on geographic factors.

**Research Hypothesis:**

**Null Hypothesis:**

**H<sub>0</sub>:** There is no significance difference between rural and urban located companies in terms of usage of Digital recruitment technologies.

**Alternative Hypothesis:**

**H<sub>a</sub>:** There is a significant difference between rural and urban located companies in terms of usage of Digital recruitment technologies.

### 4. RESEARCH METHODOLOGY

The science which is used to collect identify and find the unknown or known facts is known as research methodology. This leads to dig out some truths. Research generally referred to as the search for knowledge. In this study, quantitative research has been used.

### 4.1 Research Design

The research design is a framework that determines the collection and analysis of data. It details the procedures that are needed to carry out the study and the nature of the information that is to be collected is thoroughly defined (Malhotra and Birks, 2003). In this study the author adopted quantitative approach and research design used explorative and descriptive. Explorative research has been carried out for the purpose of understanding the digital recruitment awareness and usage Telangana State of India. The descriptive research is a type of conclusive research.

### 4.2 Sampling Technique and Sample Size

The sampling technique used is non- probability purposive sampling. The sample size taken for the current study is 41. The data were collected from rural and urban companies of Telangana state.

### 4.3 Data Collection Methods

**Primary data:** Primary data collected through the well structured questionnaire.

**Secondary data:** Secondary data were collected from internet, journals, etc.

### 4.4 Data Collection Instrument

The data are collected by well structured five point Likert scale questionnaire, which are relevant in gather the facts. The questionnaire has been constructed based on two-types: they are multiple choices and close ended questions. The scale ranges from 1 to 5, 1 - Strongly agree, 2 - Agree, 3 - Neutral, 4 - Disagree, 5 - Strongly disagree.

### 4.5 Statistical tools used to analyze the data

T- Test is used to analyze the data

### 4.6 Limitations of the Study

The study adopted purposive sampling method which is non-random, and there may be a chance of sampling bias. This study did not address extensively the perceptions of users toward digital-recruitment portals. The present study has been confined to Yadadri Bhuvanagiri district of Telangana state of India.

## 5. DATA ANALYSIS AND DISCUSSION

**Table 1. Response rate**

S. No.	Questionnaire distributed	Questionnaire returned	Valid questionnaire	In valid questionnaire
1	60	55	41	14

*For analyzing and interpreting the collected data SPSS 28.0.0.0 and Ms-Excel has been used*

**Table 2. Reliability statistics**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.769	.771	13

**Table 3. Gender**

Gender	Frequency	Percentage
Male	26	63
Female	15	37
<b>Total</b>	<b>41</b>	<b>100</b>

*Source: Primary data*

**Interpretation:** The above table representation shows that 63% respondents are Male and 37% are female

**Table 4. Location**

Location	Frequency	Percentage
Urban	26	63
Rural	15	37
<b>Total</b>	<b>41</b>	<b>100</b>

*Source: Primary data*

**Interpretation:** The above table representation shows that 63% respondents are from urban and 37% are Rural

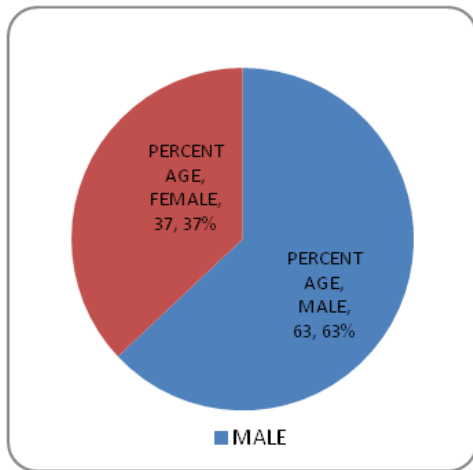
**Table 5. Distribution of sample**

Location	Male	Female	Total
Urban	15	11	63
Rural	0	15	37
	<b>Total</b>		<b>41</b>

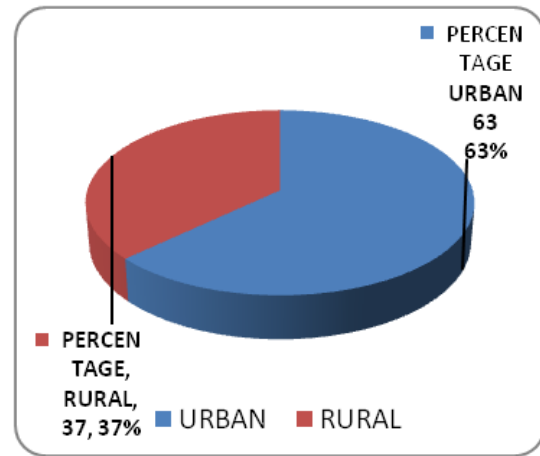
*Source: Primary data*

**Interpretation:** The above table representation shows that 63% respondents are urban and 37% are rural. From the total of 41 respondents 15 respondents are male from urban, 11 are female urban, 15 are female urban. It is found that majority of the respondents are from urban and they are female.

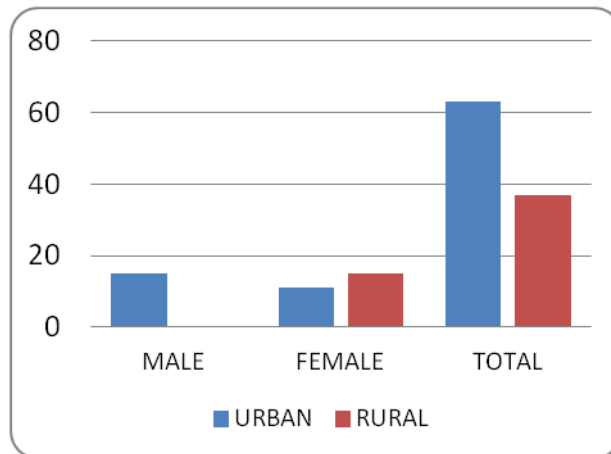
**Graphical Representation:**



**Fig. 2. Gender**



**Fig. 3. Location**



**Fig. 4. Distribution of sample**

**Table 6. News paper advertisement**

Newspaper recruitment notification		
Location	Agree %	Disagree %
Urban	93	7
Rural	54	46

Source: Primary data

**Interpretation:** The above table representation shows that 93% respondents from urban agree that they are notifying through Newspaper and 54% from rural area are notifying though Newspaper

**Table 7. TV advertisement**

Tv add recruitment notification		
Location	Agree %	Disagree %
Urban	100	0
Rural	4	96

Source: Primary data

**Interpretation:** The above table representation shows that 100% respondents from urban are agree and 4% from rural area agreed that they are notifying through TV ADD

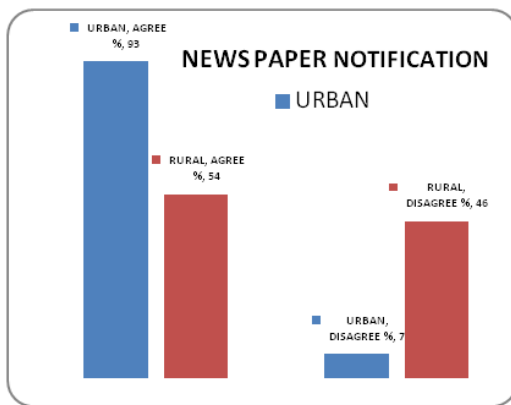
**Table 8. Website recruitment notification**

Location	Agree %	Disagree %
Urban	87	13
Rural	92	8

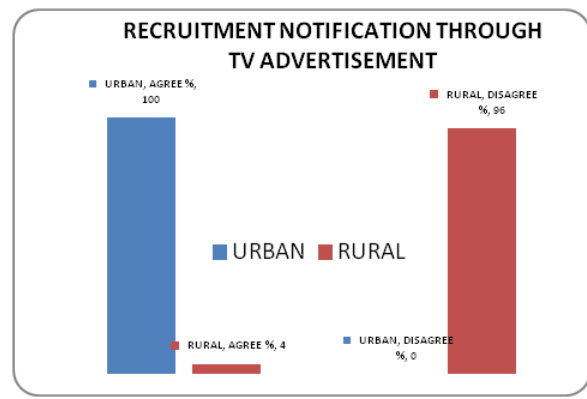
Source: Primary data

**Interpretation:** The above table representation shows that 87% respondents are from urban and 92% are rural area agreed on website recruitment notification.

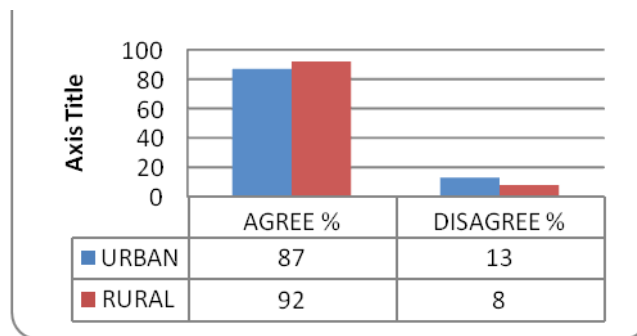
**Graphical Representation:**



**Fig. 5. News paper advertisement**



**Fig. 6. TV advertisement**



**Fig. 7. Website recruitment notification**

**Table 9. Recruitment notification using social media**

Recruitment notification using social media		
Location	Agree %	Disagree %
Urban	87	13
Rural	58	42

Source: Primary data

**Interpretation:** The above table representation shows that 87% respondents are from urban and 58% are rural area agreed on social media based recruitment notification.

**Table 10. Screening test online**

Screening test on line		
Location	Agree %	Disagree %
Urban	80	20
Rural	15	85

Source: Primary data

**Interpretation:** The above table representation shows that 80% respondents are from urban and 15% are rural area agreed on online screening test for selecting the aspirants.

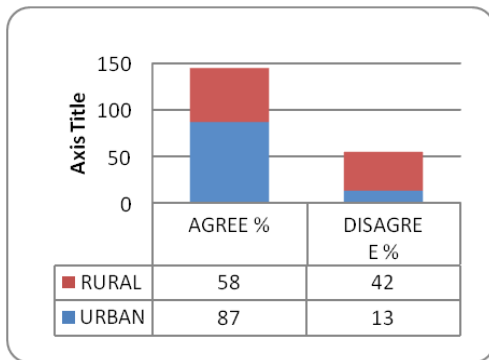
**Table 11. Video interview**

Interview : Video interview		
Location	Agree %	Disagree %
Urban	57	43
Rural	62	38

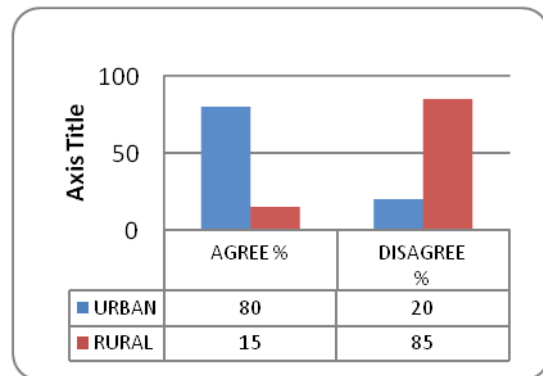
Source: Primary Data

**Interpretation:** The above table representation shows that 57% respondents are from urban and 62% are rural area agreed on video interview for selecting the aspirants.

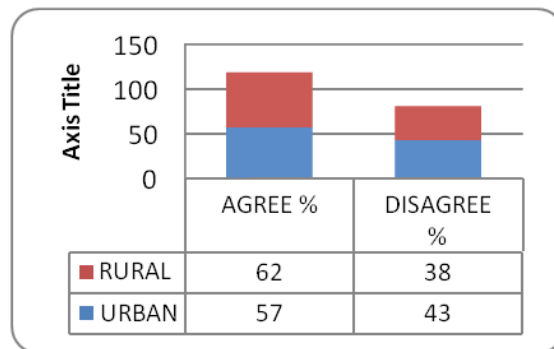
**Graphical Representation:**



**Fig. 8. Recruitment notification using social media**



**Fig. 9. Screening test online**



**Fig. 10. Video interview**



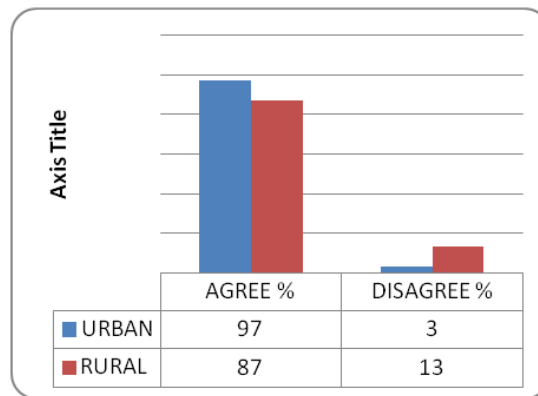
**Table 12. Interview using social media**

Interview : Using social media		
Location	Agree %	Disagree %
Urban	97	3
Rural	87	13

Source: Primary Data

**Interpretation:** The above table representation shows that 97% respondents are from urban and 87% are rural area agreed on interview using social media for selecting the aspirants.

**Graphical Representation:**



**Fig. 10. Interview using social media**

**Table 13.T-test results**

Digital recruitment process	Location	N	Mean	Std dev	T - value	Df	P value	S/n s
Newspaper notification	Rural	26	3.54	1.35	-0.522	35	0.605	NS
	Urban	15	3.76	1.347				
Tv add notification	Rural	26	1.583	0.717	-1.798	39	0.08	NS
	Urban	15	1.9411	0.555				
Website add notification	Rural	26	4.375	0.769	-	38	0.866	NS
	Urban	15	4.411	0.618				
Social media recruitment notification	Rural	26	2.29	0.907	-10.68	37	0.0541	NS
	Urban	15	4.64	0.492				
Interview using social media	Rural	26	3.25	1.326	-1.991	36	0.054	NS
	Urban	15	4.0588	1.248				
Screening test	Rural	26	3.0208	1.140	-1.742	39	0.0892	NS
	Urban	15	3.5294	0.639				

T- Test has been conducted to know the digital recruitment usage in rural and urban areas of Telangana state

**Interpretation:** Above table based on the significant value it is identified that there is no significant difference with the various job location of the respondent companies in terms of digital recruitment. Hence, the alternate hypothesis is accepted. It can be concluded that digital recruitment doesn't differs with location of the respondent company.

## 6. FINDINGS OF THE STUDY

The data collected was analyzed carefully and the following findings were drawn:

- i. The results found that job location does not have a significant impact on the digital

recruitment. T-Test results show that there is no significant difference in using digital recruitment technology in terms of location. In other words, digital recruitment usage doesn't vary with different location groups.

- ii. From the study, it is administered that the respondents including male and female are aware of the digital recruitment technologies.
- iii. From the study, source of awareness of the digital recruitment is mostly social media, followed by friends and news paper.
- iv. From the study, it is found that the companies geographically located in rural area are also adapting to the digital technology in recruiting the personnel.

## 7. CONCLUSION

In the present scenario of COVID there is an increase in usage of smart phones by different cross sections of the society and developments in information technology. Digital recruitment technology and tools helped a lot both the job aspirants and the recruiters to find the best for their career and organization respectively. The companies that are stuck with traditional recruitment process are using digital recruitment process. Technology usage in present scenario will definitely help both the organization and the job aspirants.

## 8. RECOMMENDATIONS

From the study we have found that still some companies are stuck with traditional recruitment method. Traditional recruitment method is the best method to find the talent. But, with the tremendous change in using technology companies are always trying to reduce the cost of recruiting and recruiting the best. So, the companies that are stuck with traditional practice to recruit people need to adapt to the technology. And at the same time the companies those who are using Digital recruitment technology should not totally depend on the technology. Because, an AI recruiter cannot to read the human psychology as HR recruiter does.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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