Unveiling the Potential of Artificial Intelligence (AI) Platforms for Revolutionizing Recruitment Processes in Organizations Operating in India

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This research paper explores the potential of artificial intelligence (AI), specifically existing AI platforms, in fostering fair recruiting practices while eliminating biases. The study investigates how AI-powered recruitment platforms can contribute to creating a more equitable and inclusive hiring process, enhancing the representation of underrepresented groups, and mitigating discriminatory practices. The objectives of this study encompass evaluating the effectiveness of Artificial Intelligence in enhancing diversity and inclusion in recruitment, assessing the ethical considerations and challenges associated with AI adoption, and providing practical recommendations for organizations aiming to adopt AI solutions in their recruitment strategies. Through a mixed-method research approach, including interviews with industry professionals, analysis of relevant articles, and examination of AI service vendor websites, valuable insights were gathered. Findings indicate that AI platforms offer various functionalities, including resume screening, candidate sourcing, interview scheduling, and skills assessment, which can streamline the recruitment process, reduce bias, and increase efficiency. Organizations operating in India have adopted AI in different stages of the recruitment cycle, with a significant focus on resume screening. AI tools such as Phenom and Eightfold.ai, Paradox, Calendly, Talview, and Zappyhire have demonstrated positive outcomes in terms of time savings, improved candidate experiences, and increased diversity.

Keywords: Artificial Intelligence, AI, Recruiting, AI in Recruiting, Human Resource Management, Technology, Automation, Mitigating Human Bias, Fair Recruiting, Inclusion.

1 Literature Review

1.1 AI in Recruiting: Streamlining the Hiring Process

Artificial Intelligence (AI) has emerged as a transformative technology, revolutionizing various sectors, including recruitment [18]. The integration of AI in recruiting processes holds great potential to streamline and optimize the hiring process, enhance decision-making, and improve the overall efficiency of talent acquisition. The use of AI in recruitment has gained considerable attention in recent years due to its ability to automate and augment traditional and mundane recruitment practices [16][17]. AI-powered solutions offer organizations the opportunity to analyze vast amounts of applicant data, identify patterns, automate mundane recruitment tasks, and make informed decisions in a more objective and efficient manner[19]. These technologies encompass a wide range of applications, such as resume screening, candidate sourcing, skills assessment, interview automation, and background verification [1]. Many companies operating in India are using AI technology in some of the part of their recruitment cycle either integrating the external AI tools within their internal ATS and other platforms, or using their own AI product in various recruitment processes. For An SME that used AI sourcing solutions, 41% of their new hires were made through talent rediscovery [2].

Electrolux Group used Phenom AI solutions and it saved 78% of their recruiting time with Phenom AI Scheduling, 20% with Phenom Video Assessments, and witnessed a decrease of 9% in their average time to hire [3]. General Motors saved 11000 hours by enabling AI interview scheduling [4]. McDonald's reduced its time to schedule interviews by 99.93%, the time to schedule for them went from 3 days to 3 minutes [5].

1.2 Objectives

This research paper aims to investigate and explore the potential of AI, especially the existing AI platforms, in fostering fair recruiting practices, with a specific focus on promoting diversity, equity, and inclusion (DEI) and eliminating biases. The study aims to examine how AI-powered recruitment platforms can contribute to creating a more equitable and inclusive hiring process, thereby enhancing the representation of underrepresented groups and mitigating discriminatory practices. By comprehensively understanding the potential of AI in recruiting, and studying the adoption of AI by the various organizations operating in India, this research seeks to provide valuable insights for organizations aiming to adopt AI solutions in their recruitment strategies.

2 Methodology

To gather comprehensive insights into the potential of unexplored AI platforms for recruitment, a mixed-method research approach, a mix of primary as well secondary research method was adopted. The methodology involved gathering data through interviews with industry professionals, extracting key insights from relevant articles, and analyzing AI service vendor websites. The combination of these methods facilitated a holistic understanding of the topic from both practitioner and academic perspectives.

A total of 15 organizations' data is taken into account for the research purpose who operate in India, out of which 7 are IT companies. The entire data for market insights and competitor analysis is solely based on the interviews with people across the industries and information available on the internet. It's limited only to their operations in India which forms one of the limitations of the market research.

3 Findings

3.1 Market Insights

Table1. Adoption of AI tools across industries in the recruitment cycle

Industry	Organisations	Recruitment Cycle						
		Sourcing	Screening	Interview-Scheduling	Interviews	Offer-Roll-out	BGV	Other
Information Technology	IBM	1	1					1
	TCS	0						
	Accenture		1					
	Infosys		1		1			1
	Mindtree	1	1					1
	Tech Mahindra	1	1					1
	HCL	0						
Consulting	Deloitte		1					
	KPMG							1
Banking & Finance	Std Chartered Bank	0						
	Morgan Stanley	1	1	1	1			1
	Goldman Sachs	0			1			
Insurance	Bajaj Allianz				1			
Pharma and Healthcare	GSK	0						
Online Travel Services	Expedia		1	1	1			

The above table depicts in what process of the recruitment cycle, do these organizations use AI. 1 depicts in what process of their recruitment cycle are these organizations using AI. Blank boxes mean the organizations are not using AI in that process. 0 is for the companies that are not using AI at all.
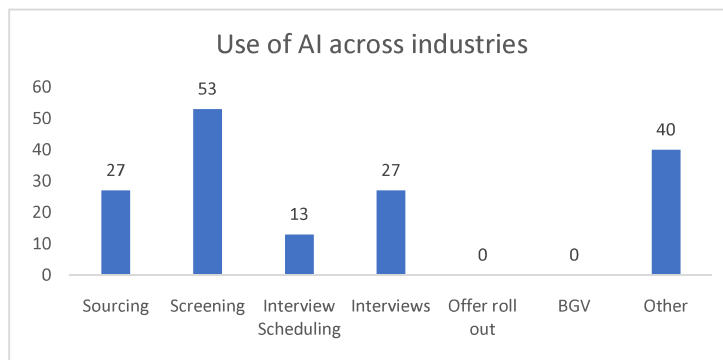

Chart1. Adoption of AI tools across industries

Overall, most of the organizations are using AI for their screening with around 53% of the companies. 27% of them are using for sourcing and interviewing process, 13% are using in interview scheduling, and 40% are using AI in other process of recruitment which are not mentioned separately, for example in deciding compensation, internal mobility, handling candidates' queries in real time [6].
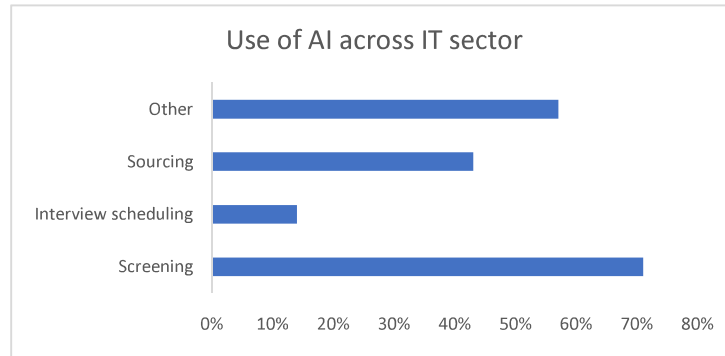
Use of AI across IT sector

Other	
Sourcing	
Interview scheduling	
Screening	

0% 10% 20% 30% 40% 50% 60% 70% 80%

Chart2. Adoption of AI tools across IT sector

The above pie chart shows the data only specific to use of AI across IT companies. The highest is 71% showing maximum use of AI in the resume screening.

3.2 AI Tools, their Purpose, and their Outcomes

Table 1. AI tools available at the disposal of the organizations operating in Indian market.

AI tools/ vendors	Purpose	Outcome
Phenom, Eightfold.ai	Sourcing, screening, interview scheduling	Decreased Time to source and screen Ranked list of the most eligible candidates Diversity and inclusion Widen the qualified candidate pool
Paradox, Calendly	Interview scheduling	Lower TAT to schedule interviews Reduce manual efforts Better candidate experience
Talview	Interview Proctoring	Enhanced test security Objective and consistent evaluation: Mitigate human bias Inclusion
Zappyhire	Interactive Gamified Assessments	Better candidate conversion Increased diversity and inclusion Instant and accurate feedback and insights to the candidates and the recruiters Better candidate experience

Process:
Phenom, Eightfold.ai
AI employee discovery: Suggests who all within the organization can be considered as a great fit for the roles, increasing the percent of openings filled by internal talent.

AI rediscovery: Pulling out profiles from organizations' CRM, the ones that are called leads (who have applied for job alerts /past applicants / regular visitors on career website)

AI cloud sourcing: Matching profiles extracted from the organisations' integrated job boards and making a database for the passive candidates [7].

Fit score: Ranking of the CVs done basis the Job description, suggesting what profiles are the best fits for the given role. [8][12][13]

Paradox, Calendly
AI interview scheduling: Automatically syncs directly with calendars of interviewers and interviewees sending them open interviews slots via email. It also reschedules the interviews if required. [14][15]

Talview
Video interviewing: Recorded interviews, that will be evaluated at interviewer's convenience, and that too only the ones that have a good proctoring and behavior reports.

Talview Behavioral Insights report: It claims to provide 100% accurate fake resistant insights, it recognizes background noise detection, speaker recognition and the engine analyses the subtext of a candidate's responses.

It Leverages psycholinguistics to analyze a candidate's response and predict behavior in half the time (Based on established models such as big 5 and Intrinsic Values)

It ranks the candidates according to their performance basis our preference for the essential and desirable competencies [9].

Zappyhire
A customized Gamified assessments designed that involves Behavioral Assessment, Neuroscience-based Games, Personality, Aptitude test.

A custom-built gamification assessment simulating real workplace scenarios to measure real job competencies for critical roles of the organization [10].

4 Conclusion

In conclusion, this research paper aimed to investigate the adoption of AI by various organizations operating in the Indian context, and explore the potential of AI, particularly existing AI platforms, in fostering fair recruiting practices with a specific focus on mitigating human bias and promoting diversity, equity, and inclusion while reducing Turn Around Time for various recruiting processes. Through a mixed-method research approach encompassing primary and secondary research methods, valuable insights were obtained to guide organizations in adopting AI solutions in their recruitment strategies. The objectives of this study were twofold. Firstly, the research aimed to evaluate how AI-powered recruitment platforms can contribute to creating a more equitable and inclusive hiring process. By suggesting the functionalities and algorithms of these platforms, the study examined their potential to mitigate biases at different stages of the recruitment process, such as resume screening, candidate selection, and interviews. The findings highlighted the effectiveness of AI in promoting fair and objective decision-making frameworks that prioritize qualifications and experiences over

demographic attributes. Secondly, the study revealed promising potential for AI platforms in broadening the representation of diverse candidates in the hiring process by identifying the features and functionalities of AI systems, the study sought to understand how they can assist in sourcing and identifying diverse talent pools. The adoption of AI technology by the organizations across multiple industries in their recruiting practices have enabled them to make a difference to their earlier recruiting metrics. A fortune 50 insurance company in India that used Talview's proctoring and video interviewing solutions earlier faced challenges identifying the talent located in tier 2 and 3 cities in India, sourcing the right skilled talent for positions efficiently in a tight labor market, and witnessing lower interview conversion rate. AI Remote proctoring solution they used easily integrated with any third part assessment platform, and performed security checks with face authentication and 360-degree environment check. This helped them reduce their average time to process interviews reduced from 11 to 6.9 days and saved 1 million USD in a year which otherwise they would've spent on live interviews and proctoring, and teams doing environment checks [11]. The correct solutions being executed at the correct time are vital for any AI development to take place in an organization.

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