

Transforming Recruitment Process: Exploring The Role Of Ai Shaping Up The Recruitment Effectiveness

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Abstract:

This study shows that the employers are using artificial intelligence to improve the way they hire and manage recruitment. The number of data were collected from 112 employers who actively use AI based recruitment system in a organization to hiring and the reliability of the questionnaire was confirmed with a cronbach's alpha of 0.838. the results show that AI helps employers screen candidates more effectively, make data driven hiring decisions and improve overall recruitment efficiency. The age ,income level and involvement with AI influence how recruitment is perceived and that perceptions vary across roles, experience and income. Employers are increasingly using algorithmic screening, standardizing evaluations and data driven methods to ensure fair and high quality hiring. Overall the study shows that the how thoughtfully integrating AI can make recruitment process smarter, faster and more effective.

Keywords: AI in recruitment, Employee Engagement, Recruitment Effectiveness

Introduction :

The companies are increasingly using artificial intelligence AI in their hiring and selection process. The organization were implements AI in recruitment on this influence key is employee outcomes namely their engagement and level of work performance.

AI recruitment tool help organizations make the hiring process quicker and more efficient. These tools can automatically review resumes, arrange interview schedules and communicate with candidates during different stages of recruitment platform such as LinkedIn, Resume.io, Jobscan, Hirevue and similar tools enable recruiters to handle large number of applications while minimizing manual effort.

These tools can engage with applicants in real time answer frequently asked questions and provide updates on their application status. They also help Personalize then matching them with roles that best fit their profile. Overall, AI powered recruitment system create a smoother and more organized experience for both recruiters and candidates.

Using AI in recruitment can have a strong positive effect on employee engagement has motivated, committed and emotionally connected individual feel toward and smoothing the on-boarding process. Within recruitment process by AI is transparent, responsive and personalized, employees are more likely to believe the organization cares about their growth and well-being. It also indicate that the use of AI in recruitment and selection enhances both engagement and retention among employees.

The link between AI based recruitment and employee outcomes relies on how responsibility the technology is implemented.if AI is used without transparency, ethical, fairness candidates may feel distrustful, which can reduce engagement to prevent this an organizations must

ensure that applicants and employees understand how AI operates in recruitment and that Systems are continually checked for bias, fairness and overall experience quality of employee.

Ai In Recruitment Process:

In this approach ,AI helps make the recruitment process quicker and more organized. For example,AI tools can scan through large numbers of job applications in a short time, match candidates skills with the job requirements and create a shortlist of the most suitable applicators. AI can also post job opening screen resumes and use chatbots to answer candidates questions or guide them through the application steps.

Even with AI assisting in recruitment, people especially HR professionals and hiring managers remain the key decision making. They determine which skills and qualification are required, review the candidates suggested by AI and conduct interviews

Relationship Between Employee And Employer In Relationship Process:

The recruitment process reflects the relationship between employers and potential employee within on organization. It involves treating candidates with right an open mind throughout the hiring process. At the same time employers must ensure that are reviewing a large number of applications or trying to fill a position quickly they remain flexible and adept their approach to identify the most suitable candidate.the organizations aims to balance their operational needs while maintaining fairness, understanding and empathy toward every application.

Literature Review:

Malathi Gottumukkala (2025), the use of artificial intelligence in recruitment has been grown think to advances in machine learning and natural language processing. Research suggests that AI can make hiring faster, lower costs and improve the accuracy of decision while also reducing human bias. AI is seen as a helpful tool that allows recruitment to focus more on strategic and meaningful HR work.

Alnsour et al., (2024) the study explain about how AI was using in recruitment and it shows impact of HR effectiveness for organizational development they focused on Jordanian commercial bank, collected data from 177 HR managers and employees, the study used Amos and SPSS for result. There was a significant positive effect of AI was adoption on HR efficiency and organizational effectiveness, moreover the study is about a relationship between AI based recruitment and compare with HR efficiency. The study concluded that AI implementation in recruitment is essential for enhancing both HR performance and organizational success.

Drekovie (2024) examines how AI is being applied in human resource management especially in recruitment and selection. The paper covers different AI applications, including employee engagement tool, people analytic, talent intelligence platforms and video interviews.it considerations. Overall the study shows how AI is transforming HR process while addressing the complexities of ethical and practical implementation.

Sasi (2024) employees how AI is changing the recruitment process by automating repetitive tasks, analyzing large amount of data to improve decision making and using predictive analytic to anticipate future hiring needs the proper selection.

Meshram (2023) this study discusses how AI is transforming the recruitment process by using large amounts of date to screen applicant, conduct interviews and slept top candidates. AI helps HR manager save time and effort improving overall productivity. Research shows that about 24% of companies already use AI in hiring and many more plan to adopt is soon.

However, the rise of AI and automation may eliminate millions of jobs while also creating new roles, putting pressure on HR department. Overall the study says AI is reshaping talent management and organizational practices worldwide.

Regier et al., (2023) This study shows that artificial intelligence is transforming talent management in U.S based global companies by improving recruitment, employee development and retention. While AI offers benefits like hiring and personalized experiences, challenges such as resistance to change data privacy and training needs still remain. Future research should examine its long term impact on diversity, job roles and organizational culture.

Muhammad Bin Arshad and pei Nian Ming (2024) examined the relationship between employee engagement and employee performance. Their study found the employee engagement plays a critical role in improving productivity, motivation and organizational effectiveness. Engaged employees are more committed to their tasks and contribute positively to organizational outcomes, including improved HR practices such as presentation and retention.

Bedarkar Meenakshi and Neha Pandita (2014) highlighted several important factors that drive employee engagement, such as effective communication, supportive leadership, recognition and a healthy work- life balance. These elements play a crucial role in improving employee satisfaction, increasing productivity and enhancing overall organizational performance as a result they also contribute indirectly to successful recruitment and better retention of talented employees

Musaba Musaba et al., (2024) reviewed recruitment strategies and foundation effective recruitment practices help organizations attract qualified candidates and improve overall organization competitiveness. The study highlights that recruitment effectiveness is influenced by employer branding, recruitment platform and alignment between candidates and organizational culture.

Research Methodology:

This study examines how AI is transforming modern recruitment practices and improving recruitment effectiveness in organizations. It focuses on how AI tools help increase efficiency, reduce bias in employer screening and support better hiring decisions. The data were collected from employers in organizations that use AI in recruitment, their perceptions and involvement. AI helps the employer to find out the suitable person for the job vacancy and it helps the organization grow and it also helps to gain new skills for the employee from this digital recruitment.

Objectives:

- To examine the relationship between age group and recruitment on recruitment effectiveness
- To analyze the impact of using AI in recruitment on recruitment effectiveness
- To understand the level of AI usage in recruitment among across different age group
- To identify the relationship between respondents income level and their use of AI in recruitment.

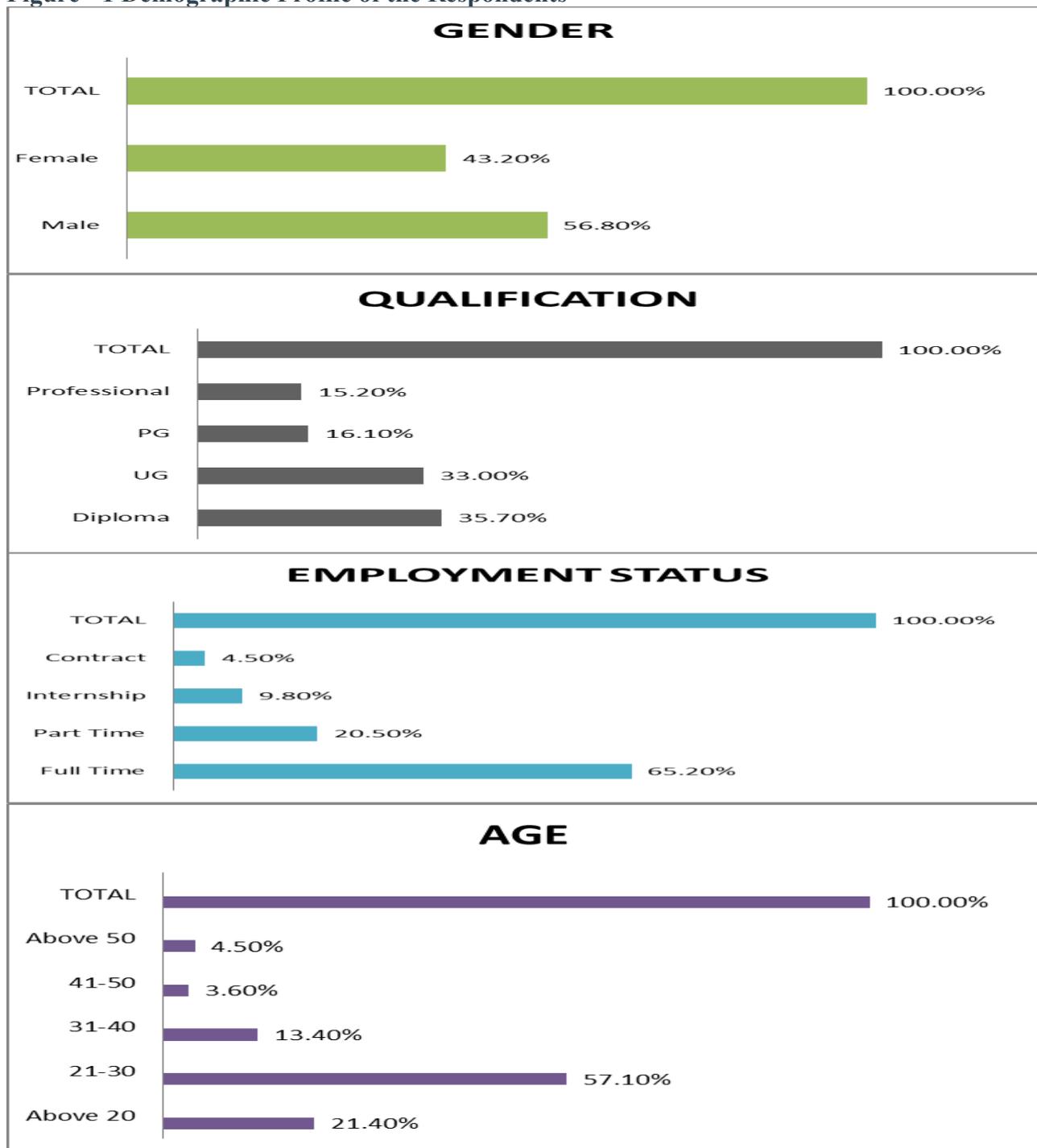
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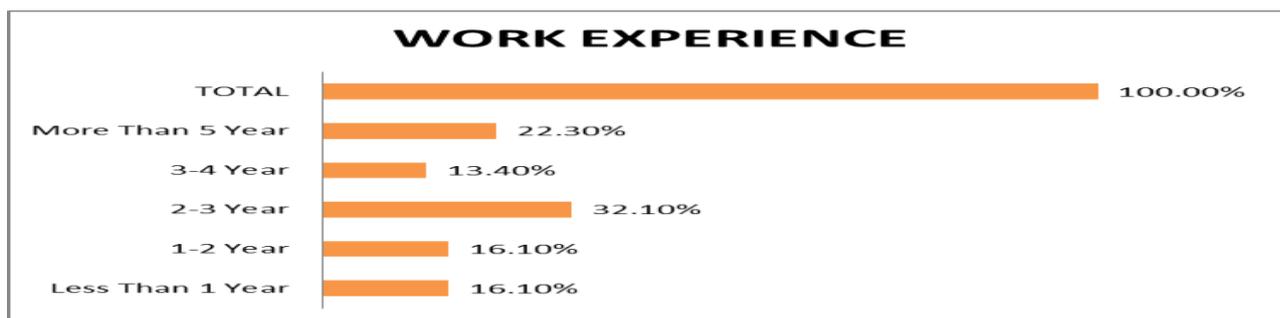
- Percentage Analysis
- Descriptive Statistics
- Chi-square test

➤ One-way ANOVA

Data Analysis And Interpretation

Figure - 1 Demographic Profile of the Respondents





SOURCE: Primary Data

The Demographic profile shows that most respondents are male (56.8%) while 43.2% are female. The majority below to the 21-30 age group (57.1%) indicating that the sample mainly consists of young individuals. Most respondents have 2-3 Years of work experience and are full-time employees (65.2%). in terms of qualification the majority hold diploma and UG, showing diverse education background among participants.

Table - 2 Reliability Analysis :

Cronbach's Alpha	No of items
0.838	19

SOURCE: Primary Data

The reliability test shows that the Cronbach's alpha value is 0.838 for 19 items was indicates a good level of consistency among the questionnaire items. The collected data for this study is dependable and can be used for future analysis.

Descriptive Statistics :

Table - 3 Ai In Recruitment Process

S.NO	AI IN RECRUITMENT PROCESS	MEAN	STD DEVIATION
1.	AI improves the efficiency of the recruitment process	4.51	0.849
2.	I trust AI to screen candidates fairly	4.18	0.808
3.	AI can reduce human bias in hiring decisions	3.91	0.876
4.	I feel comfortable with AI making initial candidate selections	3.95	0.682
5.	AI enhances the quality of shortlisted candidates	3.57	0.824
6.	Using AI in recruitment saves time for hiring managers	3.46	0.805
7.	AI can accurately match candidates to job	3.47	0.939

Source: Computed Data

The use of AI in the recruitment process. The highest mean score (4.51) shows that most respondents strongly agree that AI improves recruitment efficiency. Respondents also feel that AI helps in reducing bias and supports fair screening of candidates. The comparatively lower mean values indicated slightly moderate

Table - 4 Employee Engagement

Source: Computed Data

The highest mean score (3.95) indicates that employees feel proud to be part of the

S.NO	EMPLOYEE ENGAGEMENT	MEAN	STD DEVIATION
1.	The recruitment process makes me feel proud to be part of this company.	3.95	0.868
2.	I actively support our hiring efforts by referring candidates or sharing job posts.	3.54	0.919
3.	I feel energized when participating in recruitment-related activities.	3.30	1.04
4.	I feel emotionally connected to the way we welcome new hires.	2.78	1.25
5.	Our hiring practices motivate me to contribute more to the organization	3.16	1.12
6.	I am confident that our recruitment process attracts the right talent	3.40	1.09

organization. Moderate scores show that employees support hiring efforts, feel confident about attracting the right talents and feel energized in recruitment connection with welcoming new hires and motivation to contribute more suggest that these areas need improvement.

Table -5 Recruitment Effectiveness

S.NO	RECRUITMENT EFFECTIVENESS	MEAN	STD DEVIATION
1.	We evaluate candidates based on standardized, measurable criteria	4.13	0.617
2.	Candidate experience is a priority throughout the hiring journey	3.88	0.611
3.	We have clear hiring goals aligned with our organizational strategy	3.72	0.75
4.	Our recruitment team uses data to continuously improve hiring performance	3.98	0.644
5.	Our hiring process reflects our company's commitment to excellence	3.77	0.735

6.	We consistently meet headcount goals without compromising candidate quality	3.92	0.632
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Source: Computed Data

The work excellence in the recruitment process process. The highest mean score (4.13) indicates that candidates are mainly evaluated using standardized and measurable criteria other aspects like using data to improve hiring performance (3.98) ans meeting headcount goals without affecting candidate quality (3.92) also received positive responses.the results show that organizations follow proper hiring practices and aim to maintain work excellence in recruitment.

Table - 6

Null Hypothesis: There is no significant association between AI recruitment and recruitment effectiveness

AI RECRUITMENT	RECRUITMENT EFFECTIVENESS			TOTAL	CHI-SQUARE VALUE	P-VALUE
	L	M	H			
LOW	10 (28.60%)	16 (45.70%)	9 (35.00%)	35 (100.0%)	18.179	<0.001
MEDIUM	4 (16.40%)	7 (28.00%)	14 (56.00%)	25 (100.0%)		
HIGH	25 (48.10%)	20 (38.50%)	7 (13.50%)	52 (100.0%)		
TOTAL	39 (34.80%)	43 (38.4%)	30 (26.8%)	112 (100.0%)		

****Reject Null Hypothesis@1%**

The Chi-square analysis indicates a significant relationship between AI recruitment and recruitment effectiveness, the p-value shows that strong statistical significance. Respondents involved in high AI recruitment mostly reported low effectiveness (48.1%), whereas those with medium AI recruitment recorded the highest proportion in the high effectiveness category (56.0%). this shows that the level of AI adoption in recruitment plays a significant role in shaping how successful or effective the recruitment process is seen by respondents.

Table- 7

Null Hypothesis(H0): There is no significant association between the age of respondents and recruitment effectiveness.

RECRUITMENT EFFECTIVENESS	AGE					TOTAL	P-VALUE
	Below20	21-30	31-40	41-50	Above50		
LOW	15 (38.5%)	22 (56.4%)	0 (0.0%)	1 (2.6%)	1 (2.6%)	39 (100.0%)	<0.001
MEDIUM	5 (11.6%)	28 (65.1%)	6 (14.0%)	1 (2.3%)	3 (7.0%)	43 (100.0%)	
HIGH	4 (13.3%)	14 (46.7%)	9 (30.0%)	2 (6.7%)	1 (3.3%)	30 (100.0%)	
TOTAL	24 (34.80%)	64 (38.4%)	15 (26.8%)	4 (3.6%)	5 (4.5%)	112 (100.0%)	

****Reject Null Hypothesis@1%**

The crosstab shows that the result indicate a significant relationship between age and recruitment effectiveness. The respondents aged 21-30 years is highest responses,m especially in the medium (65.1%) and high (46.7%) levels of recruitment effectiveness. In comparasion respondents below 20 years recorded the lowest percentage in the high category (13.3%) .the 41-50 and above 50 age groups showed relatively lower responses overall the age influences perceptions of recruitment effectiveness.

Table 8

Null Hypothesis(H0) : There is no significant difference between age group and AI in recruitment.

Factors	AI TOTAL					F value	P -value
AGE	Below 20	21-30	31-40	41-50	Above 50	2.798	<0.030
	24 (2.2%)	64 (3.5%)	15 (4.5%)	4 (4.6%)	5 (1.9%)		

****Reject Null Hypothesis@1%**

The ANOVA shows the significant relationship between age and perceptions of AI among respondents. The age group respondents aged 41-50 years is highest value (4.6%) followed by those aged 31-40 years (4.5%) in contrast, respondents above 50 years reported the lowest mean value (1.9%) the age significantly influences respondents perception of AI.

Table 9

Null Hypothesis(H0) : there is no significant relationship between income level and AI usage among respondents

FACTORS		INCOME					F-VALUE	P-VALUE
INCOME	15,000-25,000	25,001-35,000	35,001-45,000	45,001-55,000	55,001-65,000	More than 65,000		
AI	29 (2.9%)	35 (3.1%)	16 (2.8%)	10 (2.7%)	9 (4.5%)	13 (4.0%)	4.901	<.000

****Reject Null Hypothesis@1%**

The ANOVA analysis shows that there is a significant relationship between respondents income levels and their perceptions of AI. Among the different income groups, respondents earning reported the highest mean value (4.55%), reflecting a stronger perception of AI on the other hand, respondents in the income group recorded the lowest mean value (2.7%) this indicated that income level plays an important role in influencing respondents perceptions of AI.

Findings:

- Income level plays an important role in AI usage.the analysis shows a significant relationship between income and AI adoption (F-value,P-<0.001). Respondents earning 25,001-35,000 reported the highest level of AI usage 35 responses, while those earning 55,001-65000 had the lowest participation (9 responses).
- younger individuals are more actively involved in AI based recruitment .the 21-30 age group recording the higher than the participation of older age groups, particularly those above 50
- The 21-30 age group dominates across all recruitment effectiveness level.they account for 56.4% of low effectiveness, and 46.7% oh high effectiveness categories, indicating that this age group forms the largest share of respondents.
- Age influences recruitment effectiveness it shows that the individual aged 21-30 perform better across all effectiveness level compared with older age.
- AI usage in recruitment is a predictor of predictor of recruitment effectiveness.the result shows that balance or moderate adoption of AI tends to produce better recruitment outcomes than excessive than excessive on AI tool.

Suggestion Of The Study :

- organization should ensue that AI tools used in recruitment are designed effectively to identify candidates who are likely to show higher level of employee engagement and work excellence.
- Strengthen employee engagement programs is closely related to work excellence, organizations should introduce programs such as training, recognition systems and supportive work environment to improve engagement level

- Employers should periodically evaluate the engagement level of employees who were recruited through AI based system to ensure they remain motivated and productive in their roles.
- AI can make the recruitment process faster and more efficient it is important for organizations to include human judgement in the hiring process to ensure fairness and better decision making.

Conclusion:

This study concludes that the artificial intelligence is playing an important role in improving recruitment practices and hiring effectiveness in organizations. Based on data collection from 112 employers using AI based recruitment systems, the findings show that AI helps streamline hiring through better candidate screening and data driven decision making. The results also indicate that factors such as age, income, role and experience how employers perceive and use AI in recruitment. Statistical analyses chi-square and ANOVA confirm significant differences in AI involvement and perceptions of recruitment effectiveness across demographic group. Employees are increasingly evaluating to improve the skills for this digital recruitment this methods were help the company to get success and the will get the talented and skillful employees. The AI human judgement can significantly enhance recruitment efficiency and effectiveness.

Scope For Future Research :

- Compare with traditional methods: examine differences between AI and traditional recruitment approaches
- Additional variably: include factors like job satisfaction, culture and leadership
- Long term impact: study the influence of AI recruitment on engagement and performance over time

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