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ADOPTION OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT: A TAM-BASED ANALYSIS USING PLS-SEM

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ABSTRACT
This proposal explores the transformative role of artificial intelligence ai in human capital recruitment and its impact on organizational attractiveness and applicant intent the research examines how prospective employees perceive ai-driven recruitment processes and how these perceptions influence their willingness to apply for job opportunities a mixed-methods approach was employed combining quantitative and qualitative research a structured online questionnaire distributed via google forms was used to gather quantitative data while qualitative insights were obtained through interviews to enhance research depth the study evaluates organizational brand attractiveness across five dimensions applicant intent through five specific factors and ai-driven recruitment through five additional measures data analysis was conducted using structural equation modeling SEM to identify key influencing factors and test hypotheses the questionnaire was shared via social media platforms utilizing a Likert scale to capture varied responses drawing from a broad spectrum of literature on ai in recruitment and employer branding this study provides a comprehensive analysis of modern hiring practices findings suggest that ai recruitment significantly enhances efficiency and productivity across various stages including sourcing screening assessment interviewing and onboarding however maintaining a balance between ai and human involvement is crucial to ensuring a personalized and ethical hiring experience while ai streamlines many aspects of recruitment human expertise remains essential in delivering the empathy and nuanced understanding that candidates expect ultimately ai-assisted recruitment proves to be an effective tool in attracting applicants while optimizing the hiring process.
Key words: AI-Based Recruitment, organizational Attractiveness, Applicant Intent

INTRODUCTION
On of the most important organizational management processes is setting up and choosing the HR department. This step will help business search for competent applications who meet their requirements and lie. The breakthroughs in information technology in recent years have significantly changed the attitudes and choices of companies in recent years. The business world has been changing rapidly these days, and HR has to adapt to new reality. People are

replaced by machines with many tasks and charms. To compete in the global economy, companies are looking for talented people with multifaceted references (FraiJ, 2021).

Using artificial intelligence technology for various recruitment tasks is called AI recruitment. To find possible top performers, this may be as simple as using AI for regular persecution, assessment, and modification of the predictor's communication and selection process (Koch-Bayram, Algorithms in personnel selection, applicants' attributions about organizations' intents and organizational attractiveness: An experimental study, 2023). AI is now able to reach possible employment candidates as HRM was introduced into electronic reproduction. Electronic employment analysis can also benefit from AI in many ways. First, the job analyzer can create job criteria and descriptions with help of AI.

For example, AI can scan job Descriptions from the past and compare them with job descriptions from the system and eternal openings. It can be argued that AI can be applied to the initial configuration process (Johnson, 2020) with the ability to quick select talented candidates from a large pool of applicants, recruiters can use AI to get information about their person. This increases organizational performance and productivity. (FraiJ, 2021). According to research by (Koch-Bayram, Algorithms in personnel selection, applicants' attributions about organizations' intents and organizational attractiveness: An experimental study., 2023) the company appeal as an employer reflects the ability to showcase, halt and maintain talent. According to a study by (Horodyski, 2023) AI use has significant benefits in improving efficiency, time and automation. However, in this situation there is still a lack of evaluation and no transparency. The general goal of this paper is to fully understand how artificial intelligence changes the employment process and how both employers and job seekers can influence. It functions as a corporate brand tool for business. for job seekers, it can be an efficient, effective and transparent means of finding a job (Waskito, 2023).

Literature Review

The use of artificial intelligence (AI) also affects processes in human resource management (HRM). We address the impact of AI-led recruitment and selection (R&S) processes on organizational climate (atmosphere). Due to the pioneering practice of using AI in this area, the consequences of its application are not yet well revealed. It is essential to illustrate the role and impact of artificial intelligence in supporting HRM activities, as well as to examine the dynamics of human-machine interaction and its implications for employees. (Robert GOLEJ et al., 2024)

This study contributes to the existing knowledge on AI usage in recruitment by offering a comprehensive analysis of previous research. It serves as a stepping stone for further investigations and provides valuable insights for organizations looking to adopt AI in their recruitment processes. However, it is essential to acknowledge the limitations of this study and use it as a springboard for future empirical research that can deepen our understanding of AI's role in shaping the future of recruitment practices. By addressing these limitations and pursuing future research directions, the field can continue to progress responsibly and harness the full potential of AI for effective and equitable recruitment processes. (Asif, 2024)

The integration of Artificial Intelligence (AI) into Human Resource Management (HRM) is fundamentally transforming how organizations manage their workforce, from recruitment and performance management to employee engagement and retention. While AI

provides significant benefits such as enhanced efficiency, data-driven decision-making, and personalized employee experiences, it also introduces challenges related to data privacy, algorithmic bias, and the necessity for transparency and ethical use. As AI technology continues to advance, its impact on HRM will likely grow, leading to more sophisticated tools and practices that further improve organizational effectiveness. Emerging trends, such as the integration of AI with other technologies, an increased emphasis on ethical considerations, and evolving workforce dynamics, will shape the future of HRM. Organizations must carefully navigate these developments, balancing the advantages of AI with the need for responsible and equitable practices. (Mostafa El-Ghoul et al., 9 September - 2024)

Research Questions

1. How does Perceived usefulness ad perceived Ease of Use influences attitude actual Adoption of AI in HRM?
2. How does Attitude towards AI impact AI Adoption?
3. What role does attitude towards in AI play moderation PU's effect on Actual adoption of AI?

Hypotheses Development

H1: PU positively influences AAA.

H2: PEU positively influences AAA.

H3: ATA positively influences AI Adoption.

H4: Attitude Towards AI strengthens the relationship between PU and AAA

Research Design

This research adopts a descriptive quantitative and qualitative methodology. Quantitative research entails gathering numerical data or converting qualitative data into numerical form (Sekaran, 2009). Data collection was carried out through both online methods, utilizing a google for questionnaire, and offline through interviews with experts. The study employs the structural equation modeling (SEM) technique, which aids in analyzing measurement errors, pinpointing key factors, and testing hypotheses. In particular, the partial Least Square (PLS) variant of SEM is utilized, with computations performed using Smart PLS4.0 software. The TAM model has basically few constructs are Perceived usefulness and Perceived Ease of Use that how much easier to Use the Application and how the person can learn the usage of application and how the two constructs influence the attitude towards AI and actual adoption of AI in the organization. Perceived usefulness construct of 3 question item are reduced production cost, save time, enhance productivity and the Perceived Ease of Use consist of 3 question items are easy to understand, user-friendly, adaptable by the employees. Questionaries were distributed via social media such as Instagram, Twitter and WhatsApp as google form. Meanwhile, the use if the Likert scale in this study includes respondents strongly disagree to strongly Agree.

Data Analysis Techniques

In order to evaluate measurement errors, examine factors, and test hypotheses, this study uses the structural Equation Modeling (SEM) technique. The Partial Least Squares (PLS) form of the SEM approach is used here, and the Smart PLS 4.0 software makes Computations easier.

Respondents Description

An overview of the demographics of the respondents is given in this part, which guarantees that the sample is representative of the targeted audience and supports the validity of the study findings. Gender, age and educational background are among the demographic's variables taken into account in this study.

A. Table 1

Results Description of Gender

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	141	40.3	40.3	40.3
	Female	209	59.7	59.7	100.0
	Total	350	100.0	100.0	

The table above shows that the number of female respondents is greater that male respondents. Female respondents were 60% and 40 people while female respondents were the total 350 respondents.

B. Table 2

Age in years					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 25	32	9.1	9.1	9.1
	25-34	219	62.6	62.6	71.7
	35-44	74	21.1	21.1	92.9
	Above 45 years	25	7.1	7.1	100.0
	Total	350	100.0	100.0	

From the table above, the 25–34-year age group has the highest frequency with 219 individuals, representing 62% from total. The age group 35-44 years consists of 74 individuals (21%) , while the age group under 25 years old consist of 32 individuals and 9% of respondent and above 45 years of age group 25 individual 7% of respondents.

C. Table 3

What is your Designation in the organization?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hiring Manager	50	14.3	14.3	14.3
	Recruiter	181	51.7	51.7	66.0
	HR Specialist	100	28.6	28.6	94.6
	4	19	5.4	5.4	100.0
	Total	350	100.0	100.0	

From the table above, the 181 respondents are Recruiter 51% and HR specialist are 100 respondents were 28% and Hiring Manger 50 respondents are 14% in total.

D. Table 4

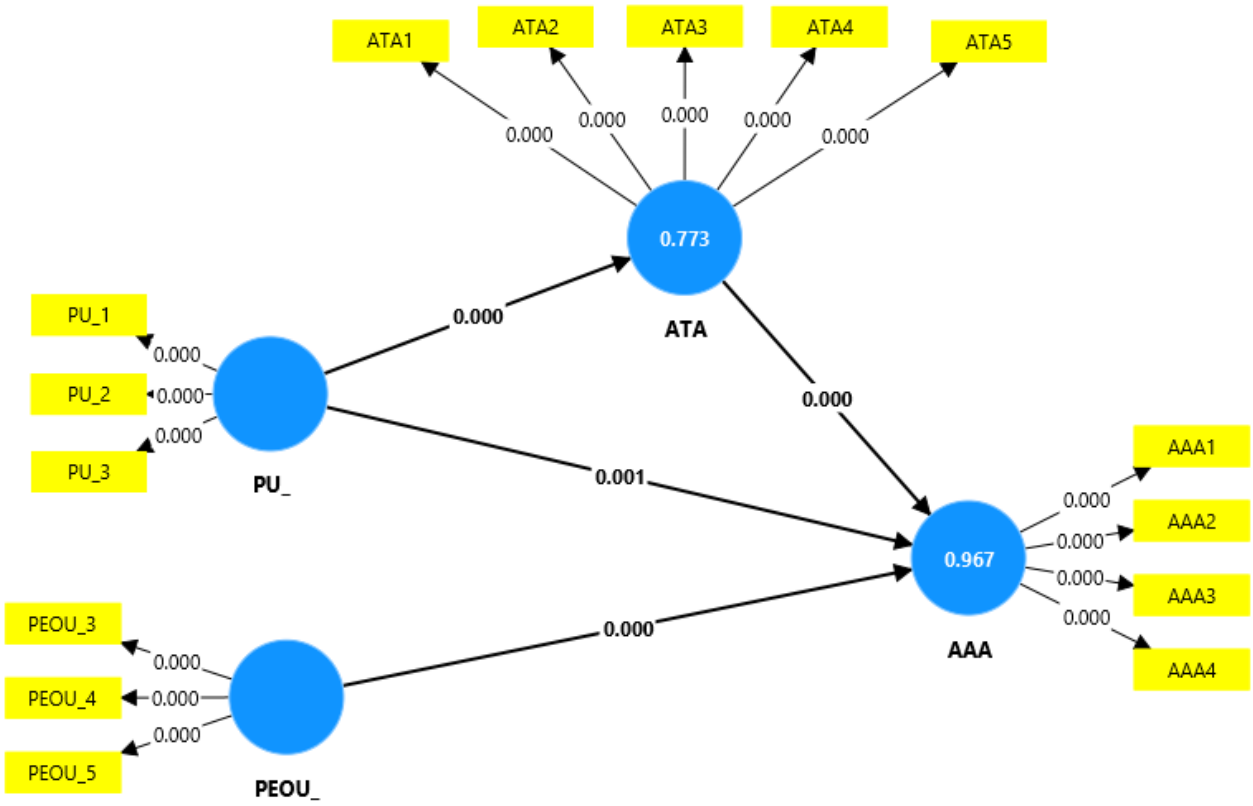
Years of Experience in Current Role					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than i Year	56	16.0	16.0	16.0
	1-3 years	74	21.1	21.1	37.1
	4-6 years	78	22.3	22.3	59.4
	7-10 years	45	12.9	12.9	72.3
	More than 10 years	97	27.7	27.7	100.0
	Total	350	100.0	100.0	

From the table above, the more than 10 years of the respondents were 97 individuals 27% and 4-6 years of experience is 78 individuals 22% and 1-3 years of experience consist of 74 individuals and 21%, 7-10 years of experience consist of 45 years of individuals 12% and less than one year experience have 56 individuals which consist of 16% in total.

Analysis Result

This research uses the structural Equation Modeling (SEM) model, this model is used to test measurement error and analyze the factors and test hypothesis. The SEM methos used is based on a variant, namely Partial Least Square (PLS), and the calculation process is assisted by the Smart PLS 4.0 software application.

This research will explain validity testing reliability testing, and hypothesis testing. Based on the criteria, the factor loading to meet the validity requirements id above 0.7 (Prof. Dr. H. Imam Ghozali, 2014).



Source : Primary Data **Theoretical Framework**

E. Table 5

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
AAA1 <- AAA	0.913	0.913	0.007	140.077	0.000
AAA2 <- AAA	0.913	0.913	0.009	105.87	0.000
AAA3 <- AAA	0.724	0.722	0.026	27.55	0.000
AAA4 <- AAA	0.913	0.913	0.007	140.077	0.000
ATA1 <- ATA	0.953	0.953	0.003	285.967	0.000
ATA2 <- ATA	0.839	0.838	0.02	42.703	0.000
ATA3 <- ATA	0.78	0.781	0.016	47.844	0.000
ATA4 <- ATA	0.953	0.953	0.003	285.967	0.000

ATA5 <- ATA	0.839	0.838	0.02	42.703	0.000
PEOU_3 <- PEOU_	0.847	0.846	0.021	40.164	0.000
PEOU_4 <- PEOU_	0.843	0.841	0.022	38.179	0.000
PEOU_5 <- PEOU_	0.8	0.801	0.022	36.878	0.000
PU_1 <- PU_	0.853	0.852	0.023	37.673	0.000
PU_2 <- PU_	0.829	0.829	0.019	43.138	0.000
PU_3 <- PU_	0.788	0.788	0.027	28.949	0.000

Source: Primary Data

Based on the summary results of the validity analysis in the table, it is known that all questions items from the 4 variables above have an outer loading value of >0.7. so, it can be said that all question items from the 4varibles meet the validity criteria so that they can be declared valid for us in further research and analysis.

Cronbach's Alpha Test

Testing the reliability of research instruments and this study uses Cronbach's Alpha correlation. The Cronbach's Alpha correlation standard determines whether a variable is considered to have internal consistency if the variable has correlation value above 07. Acceptable tolerance if a values of 0.6 and a value above 0.8 are satisfactory (Prof. Dr. H. Imam Ghozali, 2014). The table below shows that each variable has good discriminant validity.

F. Table 6

	Cronach's Alpha	**Results**
AAA	0.904	Valid
ATA	0.933	Valid
PEOU	0.815	Valid
PU	0.806	Valid

Source: Primary Data

RESULT AND DISCUSSION

In an article by (Delecraz, 11 August 2022) using AI can represent both opportunities and difficulties when setting up. On the one hand, artificial intelligence (AI) can increase productivity by helping to reduce human bias, which often affect recruitment decisions, leading to consistent and unbiased decisions. This is because making the setting process more objective and efficient can improve the overall candidate experience. As a result, the company can at tract more competent applicants, improve their reputation and attract the best talent. Additionally, they will give a positive impression of the company on potential candidates, which will make them want to apply for their wishes.

However, to successfully implement AI recruitment, HRM requires sufficient organizational support, organized information, and the ability and skills in HR data analysis (Jacob Fernandes

França, 2023) the findings of this study also support the results of (Johnson, 2020), found that AI attitudes have many advantages in application education and the tendencies of the organizations that apply them. A catboat created by AI can automatically answer basics enquires, update candidates about candidate status, improve business impressions, and minimize unfavorable answers. You can create a website to make the applicant more attractive to the company by presenting cultural values that align with the applicant's value and goals.
Candidates with certain skills may be targeted by Taylor made recruitment messages. This increases the likelihood that I will be applied. The platform uses data analysis and contract systems to determine the suitability of a company's personality to the proposed working environment and the value of the company. This objectivity and transparency can make the organization more attractive to potential candidates as it reduces distortion and increases fairness in the recruitment process (Allal-Chérif, 2021) predictive analytics allows AI to recruit streamlines for critical HR tasks, increasing productivity, reducing costs and achieving a wider talent basin. However, AI can figurations can undermine potential data protection, increase distortion, and reduce accountant for business to implement robust ways to tackle fairness, transparency and data protection issues (Rigotti, 2024)

G. Table 7

`	**Original sample (O)**	**Sample mean (M)**	**Standard deviation**	**T statistics**	**P values**	**Results**
ATA -> AAA	0.72	0.719	0.025	29.229	0	Positively Significant
PEOU -> AAA	0.238	0.236	0.022	10.651	0	Positively Significant
PU -> AAA	0.083	0.086	0.024	3.408	0.001	Positively Significant
PU -> ATA	0.879	0.88	0.017	52.121	0	Positively Significant

Source: Primary Data

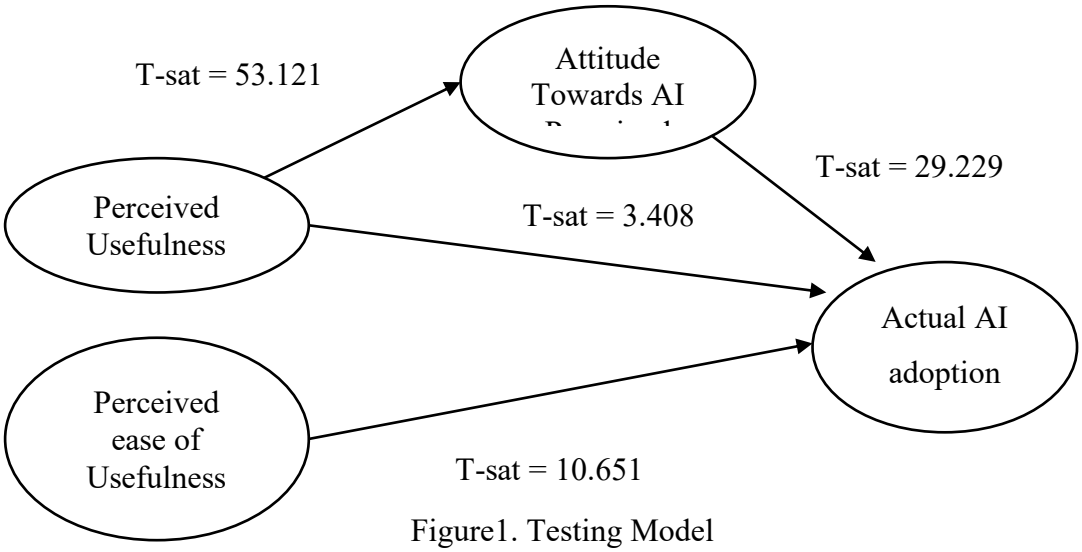


Figure1. Testing Model

IMPLICATIONS

The following effects have practical impacts on business, HR and Researchers must complete optimization of the setup process. Companies can use AI technology (Maharamah, 2023) to improve the effectiveness and efficiency of their configuration processes. As a result, screening and evaluation of applicants will result in less time and money. This will affect the organization to become more attractive as it presents positive opinions and interest in the transparency offered. (Ahmadi, 2024) so that there are potential employees. If your organization has limited technical support, you can work with third parties, such as LinkedIn, Caliver and Job Street Websites. (Maharamah, 2023).

CONCLUSION

AI configuration systems can offer a significant advantage to business as they can increase the effectiveness and potential for expanding the configuration process. Thus, system can quickly process many applications, find qualified applicants and save time and money by optimizing the first strips in the configuration process (Peña, 2023). Directed the HR department on how to use AI tools, including current systems (Dwigita, 2023). Communication is extremely important to ensure fairness and improves a applicant experience about efficient. Organizations ca successfully include AI in their attitudinal procedures by focusing on these areas (Mehrotra, 2022). AI can streamline most of the setup process, but human knowledge is still needed to provide candidates with understanding and sympathy they demand. The articles case studies (Tasheva, 2024)show how AI can improve recruitment metrics and support the idea that best results can be obtained from a hybrid strategy that combines AI with human recruiters. Ultimately, attitudes rely on in the future to improve AI and improve human judgement and interaction (Saebah, 2024). However, organizations must provide sufficient HR data analysis capabilities and robust structural support to use the full benefits of AI configuration. Maintaining ethics and personalization in the attitudinal process requires a balance between AI technology and human interaction. The best results ultimately arise from a hybrid strategy that combines AI with human recruiters to ensure that the setting process remains effective, fair and considerate.

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