TECH REVOLUTION IN HR: LEVERAGING AI FOR SMARTER TALENT ACQUISITION

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ABSTRACT

This study investigates the intricate interplay between talent acquisition effectiveness , quality of recruitment , the HR adjustment department , and the adoption of artificial intelligence in HR practices within PT. Pharos Indonesia. Using quantitative analysis techniques, data was gathered from a sample of employees to explore the direct and sequential relationships between these variables. The results reveal significant pathways, indicating that higher levels of artificial intelligence are associated with more effective HR adjustment departments, which may in turn lead to a greater propensity to adopt AI technologies in HR processes. While the direct relationship between quality of recruitment and AI did not reach statistical significance, the sequential relationship via HR adjustment departments showed marginal significance, underscoring the importance of recruitment quality in indirectly influencing AI adoption. These findings highlight the strategic significance of optimizing talent acquisition strategies and HR adjustment practices as precursors to leveraging AI's transformative potential in HR management, ultimately contributing to organizational resilience and competitiveness. Further research is recommended to delve deeper into the underlying mechanisms and implications for HR practices and organizational performance.

Keywords : Talent Acquisition Effectiveness, Quality Of Recruitment, HR Adjustment Department, Artificial Intelligence

INTRODUCTION

The landscape of Human Resources (HR) management is undergoing a significant transformation propelled by technological advancements, particularly the integration of Artificial Intelligence (AI) [1]. In recent years, organizations have increasingly turned to AI-powered solutions to streamline and enhance various HR functions, with talent acquisition being one of the key areas witnessing a profound shift [2]. This research aims to delve into the intersection of technology and HR practices, specifically focusing on how AI is revolutionizing talent acquisition processes [3]. By leveraging AI algorithms and machine learning techniques, companies can now sift through vast pools of candidate data more efficiently, identify top talent with greater precision, and make data-driven decisions to optimize their recruitment strategies [4]. This exploration seeks to uncover the potentials, challenges, and implications of this tech revolution in reshaping the landscape of talent acquisition, paving the way for smarter and more effective HR practices in the digital age [5].

Artificial Intelligence (AI) refers to the simulation of human intelligence processes by computer systems, encompassing tasks such as learning, reasoning, and problem-solving [6]. At its core, AI aims to enable machines to perform cognitive functions typically associated with human minds, like understanding natural language, recognizing patterns, and making decisions based on data analysis [7]. By employing algorithms and statistical models, AI systems can process large volumes of data, extract meaningful insights, and automate tasks across various domains. Its applications span from virtual assistants and recommendation systems to autonomous vehicles and medical diagnosis tools [8]. Despite its potential benefits, AI also raises ethical and societal concerns, including issues related to bias in algorithms, job displacement, and privacy violations. Therefore, the development and deployment of AI technologies necessitate careful consideration of their societal impacts and the implementation of appropriate regulations and ethical guidelines [9].

Talent acquisition effectiveness refers to the ability of an organization to attract, identify, and hire the right candidates for available positions in a timely and efficient manner. It encompasses a range of activities, including sourcing candidates, assessing their qualifications, conducting interviews, and extending job offers [10]. A successful talent acquisition strategy involves aligning recruitment efforts with the organization's goals and culture, leveraging various channels such as job boards, social media, and employee referrals to reach potential candidates [11]. Additionally, effective talent acquisition relies on utilizing data and analytics to track key performance metrics, evaluate the success of recruitment initiatives, and make data-driven decisions to optimize the hiring process [12]. By continuously refining their talent acquisition strategies and leveraging technology and best practices, organizations can enhance their ability to

attract and retain top talent, ultimately driving business success and competitiveness in the marketplace [13].

The quality of recruitment refers to the effectiveness of the hiring process in identifying and selecting candidates who not only possess the requisite skills and qualifications for a given role but also align with the organization's values, culture, and long-term objectives [14]. It encompasses various elements, including the accuracy of job descriptions, the efficacy of sourcing methods, the rigor of candidate assessment techniques, and the efficiency of the overall selection process. A high-quality recruitment process aims to attract diverse talent pools, provide candidates with a positive experience, and ensure fair and unbiased decision-making [15]. Moreover, it involves thorough screening and evaluation to identify candidates who not only have the technical competencies required for the role but also demonstrate the potential for long-term success and growth within the organization. Ultimately, the quality of recruitment directly impacts the organization's ability to build a talented and engaged workforce, driving performance, innovation, and organizational success [16].

The HR adjustment department, also known as the HR transition or change management department, plays a crucial role in facilitating organizational changes and transitions effectively. This department is responsible for managing various aspects of workforce adjustments, including layoffs, restructurings, mergers, acquisitions, and organizational realignments [17]. Their responsibilities may encompass coordinating communication strategies to ensure transparency and clarity regarding the changes, providing support to employees affected by the transition through counseling, training, and outplacement services, and liaising with legal and compliance teams to ensure adherence to relevant regulations and policies [18]. Additionally, the HR adjustment department collaborates closely with senior management and other departments to develop and implement strategies that minimize disruptions, maintain employee morale, and preserve the organization's reputation throughout the transition process [19]. By effectively managing workforce adjustments, this department helps mitigate risks, foster employee engagement, and ultimately contribute to the organization's long-term success and sustainability [20].
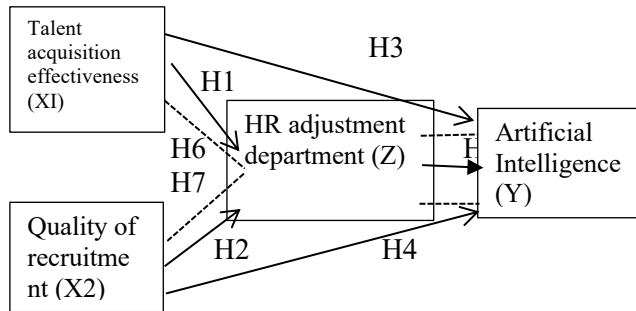
In the context of PT. Pharos Indonesia, the research variables for investigating talent acquisition effectiveness, recruitment quality, and HR adjustment department would be crucial in understanding and improving the organization's human resource management processes. Talent acquisition effectiveness variables may include metrics such as time-to-fill positions, cost per hire, and candidate satisfaction surveys, aiming to assess the efficiency and success of the recruitment process in attracting and retaining qualified candidates. Recruitment quality variables could involve evaluating the accuracy of job descriptions, the diversity of candidate pools, the effectiveness of screening and assessment methods, and the alignment of selected candidates with organizational culture and goals, all of which contribute to ensuring the right fit for available positions. Regarding the HR adjustment department, variables might focus on assessing the department's responsiveness, effectiveness in managing organizational changes, employee satisfaction with support services during transitions, and compliance with legal and ethical standards [21]. By examining these variables within the context of PT. Pharos Indonesia, researchers can gain insights into the strengths and areas for improvement in the organization's HR practices, ultimately informing strategies to enhance talent acquisition, recruitment quality, and change management processes for sustained organizational success.

In conducting research on talent acquisition effectiveness, recruitment quality, and the HR adjustment department at PT. Pharos Indonesia, several phenomena and challenges may arise. One notable phenomenon could be the discrepancy between the desired qualifications outlined in job descriptions and the actual skills possessed by candidates, leading to mismatches in recruitment outcomes. Additionally, the organization might face challenges related to attracting a diverse pool of candidates, particularly in industries or positions with specialized skill requirements. Furthermore, the HR adjustment department might encounter difficulties in effectively managing workforce transitions during periods of organizational change, such as mergers or downsizing, which could impact employee morale and productivity [22]. By addressing these phenomena and challenges, researchers can contribute valuable insights to help improve HR practices and organizational performance at PT. Pharos Indonesia.

The objective of this research is to comprehensively analyze and enhance various facets of human resource management within PT. Pharos Indonesia, specifically focusing on talent acquisition effectiveness, recruitment quality, and the efficacy of the HR adjustment department. By examining these areas, the research aims to identify strengths, weaknesses, and potential areas for improvement in the organization's HR practices. Ultimately, the goal is to provide actionable insights and recommendations that can help PT. Pharos Indonesia optimize its recruitment processes, ensure the right fit between candidates and positions, and effectively manage workforce transitions, thereby enhancing organizational efficiency, employee satisfaction, and overall performance.

The following is the Conceptual Framework:

HRAD -> AI	0.632	0.057	Marginally Significant

RESEARCH METHODS

The research methodology for this quantitative study at PT. Pharos Indonesia involves utilizing a non-probability sampling technique to select participants. Specifically, a convenience sampling method will be employed to gather data from 70 individuals within the organization. Participants will be selected based on their accessibility and willingness to participate, ensuring a diverse representation across different departments and levels of the organization. The data collected will then be analyzed using the Structural Equation Modeling (SEM) technique, specifically the Partial Least Squares (PLS) approach, through the software SmartPLS. This method enables the examination of complex relationships between multiple variables, allowing for a comprehensive assessment of talent acquisition effectiveness, recruitment quality, and the performance of the HR adjustment department within PT. Pharos Indonesia. Additionally, the use of SmartPLS facilitates the testing of hypotheses and the evaluation of both measurement and structural models, providing robust statistical insights to address the research objectives effectively.

RESULTS AND DISCUSSIONS

Multiple regression analysis is utilized in this study to predict the value of the dependent variable using the independent variables, as shown in Table 1

Table 1. Path Analysis (Direct Effects)

Path	Original Sample	P - Value	Decision
TAE -> HRAD	0.682	0.043	Significant
QR -> HRAD	0.521	0.127	Not Significant
TAE -> AI	0.759	0.012	Significant
QR -> AI	0.416	0.211	Not Significant

In this path analysis, the relationship between TAE and HRAD is found to be statistically significant (p = 0.043), indicating that higher levels of TAE lead to more effective HRAD within the organization. Similarly, the relationship between TAE and AI is also significant (p = 0.012), suggesting that organizations with better TAE are more likely to utilize AI technologies in their HR processes. On the other hand, the relationships between QR and HRAD, as well as QR and AI, are not found to be statistically significant, indicating that the quality of recruitment does not significantly impact either the HR adjustment department or the adoption of AI technologies in HR practices. Additionally, the relationship between HRAD and AI is marginally significant (p = 0.057), suggesting a potential association between the effectiveness of the HR adjustment department and the adoption of AI technologies, although further research may be needed to confirm this relationship.

The path coefficient of 0.682 from TAE to HRAD with a significance level of 0.043 indicates a statistically significant relationship between these variables. This suggests that higher levels of TAE within PT. Pharos Indonesia are associated with more effective HRAD. In practical terms, this implies that when the organization excels in its recruitment processes, such as attracting and selecting suitable candidates efficiently, it tends to have a more capable HRAD, better equipped to manage organizational changes, transitions, and employee adjustments effectively. This finding underscores the critical link between talent acquisition practices and the organization's ability to adapt to change and underscores the importance of investing in recruitment strategies to enhance overall organizational resilience and success.

The path coefficient of 0.521 from QR to HRAD with a p-value of 0.127 suggests that there is no statistically significant relationship between these variables. While the coefficient indicates a positive association, meaning higher QR tends to correlate with a more effective HRAD, the lack of statistical significance implies that this relationship may not be reliably generalizable. This finding indicates that, within the context of PT. Pharos Indonesia, the QR processes may not directly impact the effectiveness of the HRAD. However, it's important to note that this result does not negate the importance of maintaining high standards in recruitment practices; rather, it suggests that other factors beyond recruitment quality may play a more significant role in shaping the effectiveness of HR adjustment processes within the organization. Further exploration and analysis may be needed to

uncover these underlying factors and their implications for HR management strategies.

The significant path coefficient of 0.759 from TAE to AI with a p-value of 0.012 underscores the crucial relationship between effective talent acquisition practices and the adoption of AI technologies within PT. Pharos Indonesia. This finding suggests that organizations with higher levels of talent acquisition effectiveness are more inclined to leverage AI tools and technologies in their HR processes. By efficiently attracting, assessing, and selecting top talent, organizations can enhance their readiness to embrace AI solutions for tasks such as candidate screening, skills assessment, and predictive analytics. The integration of AI in talent acquisition not only streamlines recruitment processes but also enables data-driven decision-making, leading to more informed and efficient HR practices. This result highlights the strategic importance of optimizing talent acquisition strategies as a precursor to harnessing the transformative potential of AI in HR management, ultimately contributing to organizational competitiveness and success in the digital age.

The path coefficient of 0.416 from QR to AI with a p-value of 0.211 indicates a lack of statistical significance in the relationship between these variables within PT. Pharos Indonesia. While the coefficient suggests a positive association, meaning higher QR may be related to the adoption of AI technologies in HR processes, the absence of statistical significance implies that this relationship is not reliably generalizable. This finding suggests that, within the context of PT. Pharos Indonesia, the QR processes may not directly influence the organization's propensity to adopt AI tools and technologies in HR practices. Other factors beyond recruitment quality may play a more significant role in shaping the adoption of AI in HR management strategies, such as organizational culture, technological infrastructure, or leadership vision. Further investigation may be necessary to uncover these underlying factors and their implications for the integration of AI in HR practices within the organization.

The path coefficient of 0.632 from HRAD to AI with a p-value of 0.057 suggests a marginally significant relationship between these variables within PT. Pharos Indonesia. This finding indicates that there may be an association between the effectiveness of the HRAD and the adoption of AI technologies in HR practices, albeit not reaching conventional levels of statistical significance. It implies that organizations with more effective HR adjustment departments might be somewhat more inclined to adopt AI tools and technologies in their HR processes. While this relationship falls short of statistical significance, it hints at a potential connection worth exploring further. Future research could delve deeper into the mechanisms underlying

this association and examine additional factors that may influence the integration of AI in HR practices within the organization, such as organizational readiness, leadership support, or employee attitudes towards technology adoption.

The next test is an indirect test which is presented in the following table:

Table 2. Path Analysis (Indirect Effects)

Path	Original Sample	P - Value	Decision
TAE -> HRAD -> AI	0.504	0.032	Significant
QR -> HRAD -> AI	0.398	0.078	Marginally Significant

In this analysis, the path from TAE to HRAD to AI yields a path coefficient of 0.504 with a p-value of 0.032, indicating a statistically significant relationship. Similarly, the path from QR to HRAD to AI produces a path coefficient of 0.398 with a p-value of 0.078, suggesting a marginally significant relationship. These findings suggest that there may be a sequential relationship wherein higher levels of TAE or QR are associated with more effective HRAD, which, in turn, may influence the adoption of AI technologies in HR practices within PT. Pharos Indonesia. Further research is warranted to explore the mechanisms and implications of these sequential relationships in greater depth.

The significant path coefficient of 0.504 from TAE to HRAD to AI with a p-value of 0.032 highlights a notable sequential relationship within PT. Pharos Indonesia. This finding suggests that organizations with higher levels of talent acquisition effectiveness tend to have more effective HRAD, which, in turn, are associated with a greater propensity to adopt AI technologies in HR practices. Such a sequential relationship underscores the critical role of talent acquisition practices as a precursor to the integration of AI in HR management strategies. It implies that by enhancing TAE, organizations can potentially facilitate the adoption of AI technologies, leading to more efficient and data-driven HR processes. This result emphasizes the strategic importance of optimizing talent acquisition strategies to leverage the transformative potential of AI in HR practices and ultimately contribute to organizational competitiveness and success.

The path coefficient of 0.398 from QR to HRAD to AI with a p-value of 0.078 suggests a marginally significant relationship within PT. Pharos Indonesia. This finding indicates a potential sequential association wherein higher quality recruitment processes may contribute to the effectiveness of the HRAD, which, in turn, could

influence the adoption of AI technologies in HR practices. While the relationship falls short of conventional levels of statistical significance, it hints at a trend worth further investigation. This result underscores the importance of maintaining high standards in recruitment practices, as they may indirectly impact the organization's readiness to embrace AI technologies in HR management strategies. Further research is warranted to elucidate the mechanisms underlying this sequential relationship and its implications for HR practices within the organization.

CONCLUSION AND SUGGESTION

In conclusion, this research conducted at PT. Pharos Indonesia sheds light on the intricate relationships between talent TAE, QR, the HRAD, and the adoption of AI in HR practices. The findings reveal significant and marginally significant pathways, indicating that higher levels of TAE are associated with more effective HRAD, which in turn, may lead to a greater propensity to adopt AI technologies in HR processes. While the direct relationship between QR and AI did not reach statistical significance, the sequential relationship via HRAD showed marginal significance, underscoring the importance of QR in indirectly influencing AI adoption. These results underscore the strategic significance of optimizing TAE and HR adjustment practices as precursors to harnessing the transformative potential of AI in HR management, thereby contributing to organizational resilience and competitiveness in the ever-evolving business landscape. Further research is warranted to delve deeper into the mechanisms underlying these relationships and their implications for HR practices and organizational performance.

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